

HAIMER®

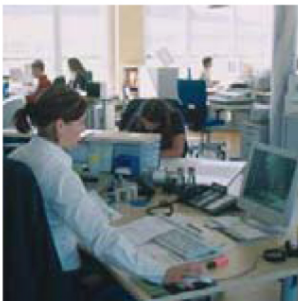
Quality Wins.

30 JAHRE/YEARS
HAIMER®





ISO 9001 zertifiziert durch



关于我们公司

位于德国Igenhausen的Haimer公司是一家中型家族企业。我们研发和生产革命性的超高精度工具和机械，专门用于机加工领域。我们的产品主要是刀柄，动平衡机，寻边器，对中仪，感应式热缩机及其附件。

在现代化的Haimer生产厂有大约150位雇员，实现了高度自动化并拥有最先进的生产工艺。众所周知高质量源于技术精湛的员工。Haimer致力于培养自己的员工以保证拥有一支高质量的队伍。同时，我们的产品研发部门不断进行实践性的革新。

Haimer公司于1977年白手起家。到1990年，我们已经发展成为高科技产品的供应商，我们的客户已经遍及航空航天工业，研究机构以及军工部门，例如卫星和安全气囊项目。从1990年公司生产机加工工具，到今天，德国市场占有率第一，并且在超精刀柄和特殊应用的非标机械设计领域被世界公认。

我们着眼于以合理价格获得高精度和顶级质量。我们的特长是以低成本高效率的产品取代昂贵的非标方案，我们以柔性应用提供了多样的标准化产品。应用革命性的生产技术，这意味着我们能为您创造无与伦比的价值。我们愿意与您携手并肩巩固市场中的优势地位。

因为，我们信赖自己的经营哲学：**以质取胜！**

About our company

Haimer is a medium-sized family business located in Igenhausen, Germany. We develop and produce innovative ultra-precision tooling and machines, primarily in the field of machine tools. Our range comprises tool holders, balancing machines, 3D sensors, centering tools, and inductive shrink machines and accessories.

A staff numbering approximately 150 is employed in our production plant with state of the art machinery, a high degree of automation and sound production methods. High quality needs skilled staff. Haimer educates its staff itself to ensure a highly qualified team for the future. Our own product development team works on practical innovations.

Haimer was founded in 1977 as a one-man business. Until 1990, we functioned as a supplier of high-tech products, supplying, among others, the aviation and space industries, research institutes and the military technology sector, for example for projects for satellites and automobile airbag technology. Since 1990 Haimer has produced machining tools, and today the company is the market leader in Germany and is also internationally recognized in the field of ultra-precision tool holders and special machines designed for specific applications.

We focus on precision and top quality at marketable prices. Our strength is a cost-effective series production: instead of costly special solutions, we offer a wide range of standard products with flexible applications. Innovative production technology means that we can offer unbeatable value for the money. Together with our customers, we want to continue to strengthen our market position in the future, in accordance with our corporate philosophy: **Quality wins!**

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HAIMER**锥柄/STEEP TAPER****设计:**

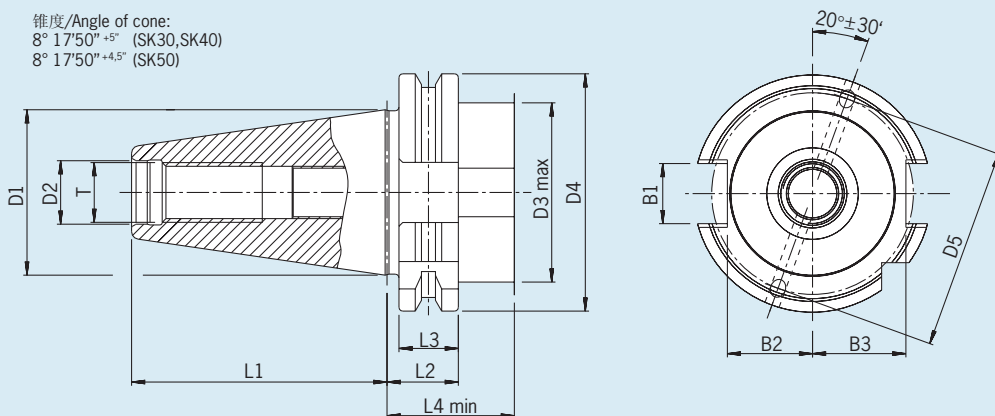
- 刀柄表面硬化处理 60 – 2 HRC
- 内核抗拉强度至少 950 N/mm²
- 锥度公差等级 AT 3
- ADB 型: 中心内冷(AD 型), 凸缘内冷(B 型)

Design:

- Toolholders case-hardened 60 – 2 HRC
- Tensile strength in the core at least 950 N/mm²
- Taper in tolerance quality AT 3
- Form ADB: interior coolant supply through centre (form AD) and through the collar (form B)

DIN 69871 SK

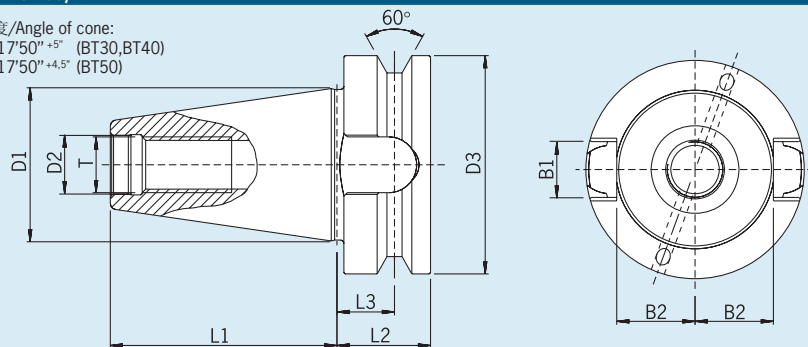
锥度/Angle of cone:
 $8^{\circ} 17'50'' \pm 5''$ (SK30, SK40)
 $8^{\circ} 17'50'' \pm 4,5''$ (SK50)



[mm]	D1	D2	D3 max.	D4	D5	L1	L2	L3	L4 min.	T	B1	B2	B3
SK30	31,75	13	43	50	–	47,8	19,1	15,9	35	M12	16,1	16,4	19
SK40	44,45	17	48	63,55	54	68,4	19,1	15,9	35	M16	16,1	22,8	25
SK50	69,85	25	78	97,5	84	101,75	19,1	15,9	35,1	M24	25,7	35,5	37,7

JIS B 6339 (MAS 403) BT

锥度/Angle of cone:
 $8^{\circ} 17'50'' \pm 5''$ (BT30, BT40)
 $8^{\circ} 17'50'' \pm 4,5''$ (BT50)



[mm]	D1	D2	D3	D4	L1	L2	L3	L4	T	B1	B2
BT 30	37,75	12,5	46	42	48,4	22	20	34,5	M12	16,1	16,3
BT 40	44,45	17	63	59	65,4	27	25	45	M16	16,1	22,6
BT 50	69,85	25	100	42	101,8	38	35	51	M24	25,7	35,4

HSK-A/HSK-E/HSK-F/HSK-C DIN 69893

比较之下 HSK 有以下优势:

- 夹持刀具到主轴时具有更高重复精度
- 通过平滑接触面轴向定位
- 适用于高速切削
- 无需拉钉

材质:

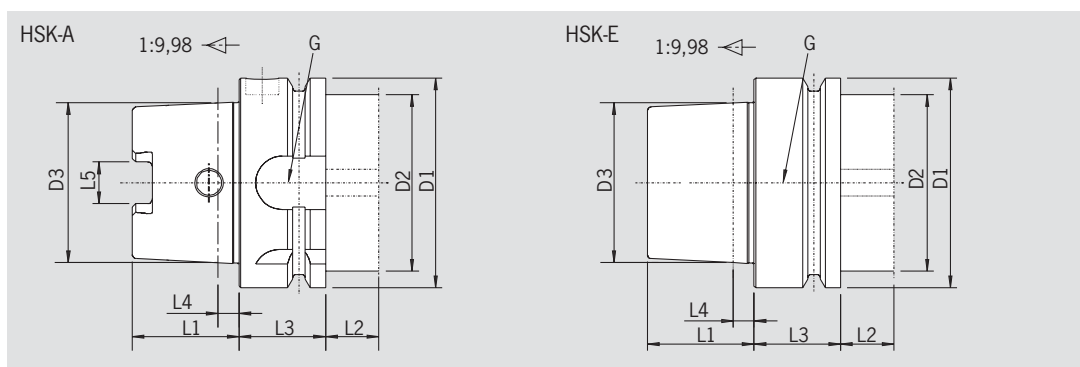
- 为得到高承力部件使用特殊表面硬化钢材
- 表面硬度: 58 – 2 HRC
- 内核抗拉强度至少 1000 N/mm²

Compared to the steep taper the HSK has the following advantages:

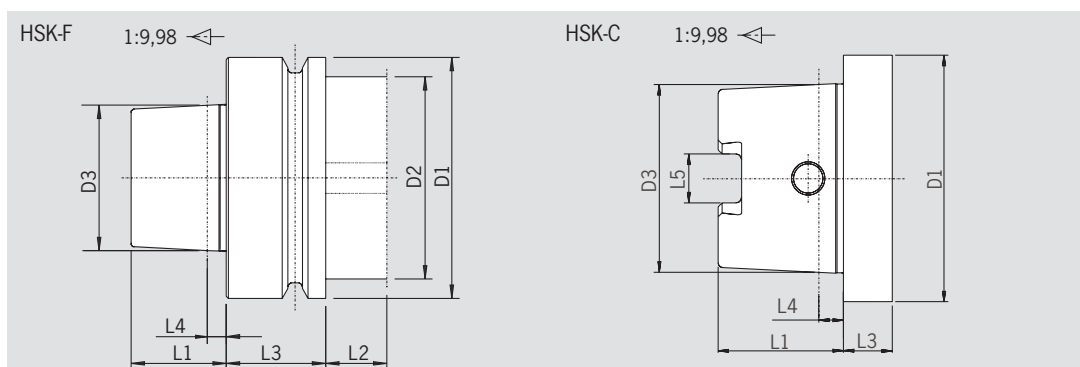
- High repetition accuracy when clamping tools into spindle
- Fix axial positioning by flat contact surface
- Suitable for high speed cutting
- No pull stud necessary

Material:

- Special case-hardening steel for highly stressed parts
- Surface hardness: 58 – 2 HRC
- Tensile strength in core min. 1000 N/mm²

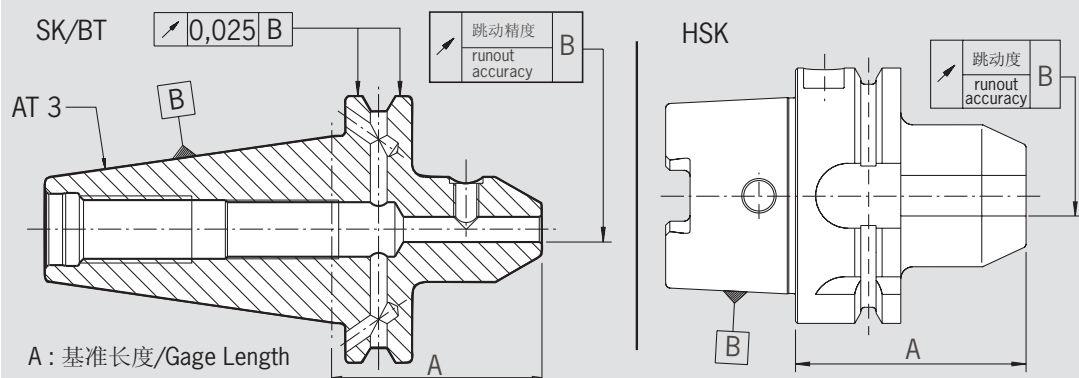


[mm]	D1	D2 max.	D3	L1	L2 min.	L3	L4	L5	G
HSK-A/E 32	32	26	24,007	16	15	20	3,2	7,05	M10x1
HSK-A/E 40	40	34	30,007	20	15	20	4	8,05	M12x1
HSK-A/E 50	50	42	38,009	25	16	26	5	10,54	M16x1
HSK-A/E 63	63	53	48,010	32	16	26	6,3	12,54	M18x1
HSK-A/E 80	80	68	60,012	40	16	26	8	16,04	M20x1,5
HSK-A/E 100	100	88	75,013	50	16	29	10	20,02	M24x1,5



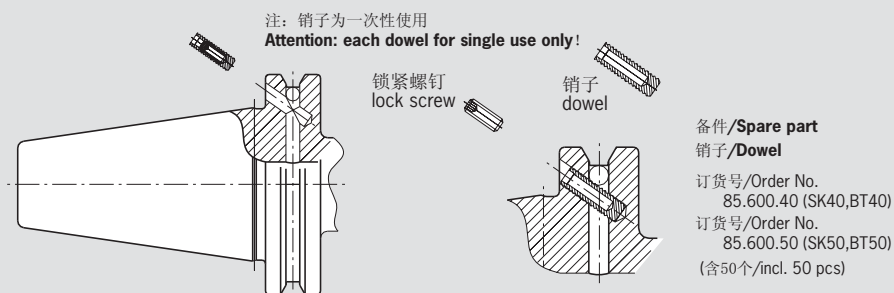
[mm]	D1	D2 max.	D3	L1	L2 min.	L3	L4	L5
HSK-F 63	63	53	38,009	25	16	26	5	–
HSK-C 40	40	–	30,007	20	–	10	4	8,05
HSK-C 50	50	–	38,009	25	–	12,5	5	10,54
HSK-C 63	63	–	48,010	32	–	12,5	6,3	12,54

HAIMER 跳动精度/RUNOUT ACCURACY



最大跳动精度 max. runout tolerance	DIN 6971 SK		JIS B 6339 (MAS403) BT		DIN 69893 HSK	
[mm]	A < 160	A ≥ 160	A < 160	A ≥ 160	A < 160	A ≥ 160
热缩刀柄/Shrink fit chuck	0.003	0.004	0.003	0.004	0.003	0.004
ER 弹簧筒夹刀柄/Collet chuck ER	0.003	0.004	0.003	0.004	0.003	0.004
HG 后拉式高精度刀柄/HG High precision chuck	见目录内详情/See details of catalog		—	—	—	—
侧固刀柄/Weldon tool holder	0.003	0.004	0.003	0.004	0.003	0.004
OZ 弹簧筒夹刀柄/Collet chuck OZ	0.003	0.004	0.003	0.004	—	—
面铣刀刀柄/Face mill arbor	0.006	0.006	0.006	0.006	0.006	0.006
壳铣刀刀柄/Combination shell end mill arbor	0.006	0.006	0.006	0.006	0.006	0.006
斜孔侧固刀柄/Whistle Notch toolholder	0.003	0.004	0.003	0.004	0.003	0.004
莫氏锥度刀柄/Adapter for Morse taper	0.008	—	0.008	—	0.008	—
转换刀柄/Adapter SK50/40	0.005	—	—	—	—	—
钻头基础柄/Drill chuck adapter	0.005	—	—	—	—	—

冷却 /COOLANT DIN 69871, JIS B 6339



3种内冷方式:

- **A型**: 无内冷
- **AD型**: 穿过预留孔的中心内冷
带中心孔的预留孔是必须的
- **B型**: 经过凸缘的侧边内冷
密封的预留孔是必须的

如无注释Haimer刀柄将按照DIN 69871或JIS B 6339的ADB型制作。

ADB型: 如无其他规定, 刀柄设置有AD型和B型的内孔, 以AD型的形式交货。凸缘上用于B型的孔被带有锁紧螺钉的塑料销子可靠密封。

如变为B型, 凸缘上的孔必须打开, 需要将锁紧螺钉旋出一半, 用钳子将锁紧螺钉同销子一同拔出。

孔还可以被重新密封。转换包包含销子和锁紧螺钉 (参考附件部分)

3 possibilities of inner coolant supply are available:

- **Form A**: no inner coolant supply
- **Form AD**: central coolant supply through retention knob.
A retention knob with centralized bore is required.
- **Form B**: lateral coolant supply via the collar.
A sealed retention knob is required.

Haimer clamping devices with taper according to DIN 69871 or JIS B 6339 are performed in form ADB unless otherwise noted.

Form ADB means: the clamping devices are equipped with bores for form AD as well as for form B. Unless otherwise stipulated, the toolholders are delivered in form AD. The bores at the collar for form B are then sealed with plastic-dowels and secured with lock screws.

For changing to form B, the bores at the collar must be opened by unscrewing the lock screw halfway. Extraction of screws together with the dowels by using pliers.

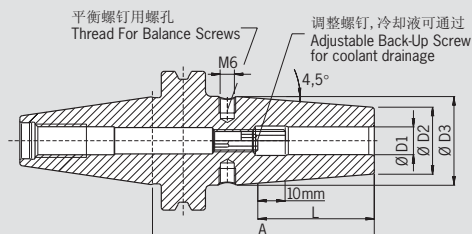
The bores also can be sealed again. A conversion kit consisting of dowels and lock screws is available (please refer to accessories).

热缩刀柄 / SHRINK FIT CHUCK

DIN 69871 · SK

质量证书 Certificate of Quality

- ✓ 刀柄精细动平衡
✓ Chuck body fine balanced
G2.5 25.000 1/min
或/or U<1gmm
- ✓ 所有功能面全部加工
✓ All functional surfaces machined
- ✓ 锥度公差 AT3
✓ Taper tolerance AT3
- ✓ 切削液供给采用 ADB 型
✓ Coolant supply form ADB



使用:
适用于所有热缩机

SK 锥柄符合 DIN 69871, 类似 DIN 69882-8

- 耐热钢
- 硬度 54-2 HRC
- 用于 HSS 和整体硬质合金刀具
- 柄部公差 h6
- 可用平衡螺钉精密动平衡
- 交货时含调整螺钉
- Cool Jet 型冷却喷嘴需额外费用

Use:
Suitable for all shrinking units

with taper SK DIN 69871, similar to DIN 69882-8

- Heat resistant hot-working steel
- Hardened 54-2 HRC
- For HSS and solid carbide tools
- Shank tolerance h6
- Fine-balancing by set screws possible
- Included in delivery: Shrink fit chuck with backup screw
- Cooling with Cool Jet against extra charge

附件/Accessories

- 热缩延长杆/Shrink fit extensions
- 动平衡螺钉/Balance screws
- 拉钉/Pull studs
- 减径套/Reduction sleeves
- 调整螺钉/Back-up screws
- Cool Jet 型冷却喷嘴/Cool Jet bores

订货号/Order No. 91.100.24

夹持直径/Clamping	Ø D1 [mm]	03	04	05	06	08	10	12	14	16	18	20	25	32
SK30	Ø D2 [mm]	10	10	10	21	21	24	24	27	27	-	-	-	-
	Ø D3 [mm]	-	-	-	27	27	32	32	34	34	-	-	-	-
	L [mm]	-	-	-	36	36	42	47	47	50	-	-	-	-
长度/Length A[mm]	短/short	80 ¹⁾	80 ¹⁾	80 ¹⁾	80	80	80	80	80	80	-	-	-	-
订货号/Order No.	30.440...	...03	...04	...05	...06	...08	...10	...12	...14	...16				
SK30	Ø D2 [mm]	10	10	10	23	23	27	27	30	30	35,5	35,5	-	-
	Ø D3 [mm]	-	-	-	-	-	-	-	-	-	40,5	40,5	-	-
	L [mm]	-	-	-	36	36	42	47	47	50	50	52	-	-
长度/Length A[mm]	超短/ultrashort	60 ¹⁾	60 ¹⁾	60 ¹⁾	60 ²⁾	60 ²⁾	60 ²⁾	65 ²⁾	65 ²⁾	70 ²⁾	70 ²⁾	-	-	-
订货号/Order No.	30.445...	...03	...04	...05	...06	...08	...10	...12	...14	...16	...18	...20		
SK40	Ø D2 [mm]	10	10	10	21	21	24	24	27	27	33	33	44	44
	Ø D3 [mm]	-	-	-	27	27	32	32	34	34	42	42	53	53
	L [mm]	-	-	-	36	36	42	47	47	50	50	52	58	58
长度/Length A[mm]	短/short	80 ¹⁾	80 ¹⁾	80 ¹⁾	80	80	80	80	80	80	80	80	100	100
订货号/Order No.	40.440...	...03	...04	...05	...06	...08	...10	...12	...14	...16	...18	...20	...25	...32
	40.440... ³⁾	-	-	-	...06.2	...08.2	...10.2	...12.2	...14.2	...15.2	...16.2	...18.2	...25.2	...32.2
长度/Length A[mm]	超短/ultrashort	-	-	-	130	130	130	130	130	130	130	130	130	-
订货号/Order No.	40.444...				...06	...08	...10	...12	...14	...16	...18	...20	...25	
长度/Length A[mm]	超长/oversize	-	-	-	160	160	160	160	160	160	160	160	160	-
订货号/Order No.	40.442...				...06	...08	...10	...12	...14	...16	...18	...20	...25	
长度/Length A[mm]	ZG200	-	-	-	200	200	200	200	200	200	200	200	200	-
订货号/Order No.	40.446...				...06	...08	...10	...12	...14	...16	...18	...20	...25	
SK50	Ø D2 [mm]	-	-	-	21	21	24	24	27	27	33	33	44	44
	Ø D3 [mm]	-	-	-	27	27	32	32	34	34	42	42	53	53
	L [mm]	-	-	-	36	36	42	47	47	50	50	52	58	58
长度/Length A[mm]	短/short	-	-	-	80	80	80	80	80	80	80	80	100	100
订货号/Order No.	50.440...				...06	...08	...10	...12	...14	...16	...18	...20	...25	...32
	50.440... ³⁾	-	-	-	...06.2	...08.2	...10.2	...12.2	...14.2	...15.2	...16.2	...18.2	...25.2	...32.2
长度/Length A[mm]	超短/ultrashort	-	-	-	130	130	130	130	130	130	130	130	130	-
订货号/Order No.	50.444...				...06	...08	...10	...12	...14	...16	...18	...20	...25	...32
长度/Length A[mm]	超长/oversize	-	-	-	160	160	160	160	160	160	160	160	160	-
订货号/Order No.	50.442...				...06	...08	...10	...12	...14	...16	...18	...20	...25	...32
长度/Length A[mm]	ZG200	-	-	-	200	200	200	200	200	200	200	200	200	-
订货号/Order No.	50.446...				...06	...08	...10	...12	...14	...16	...18	...20	...25	...32

1) 无调整螺钉, 无平衡螺钉用螺孔, 夹持孔部有用于切削液流通的缝

Without back-up screw, without threads for balancing screws, with slits along the clamping bore for cooling from outside

2) 无调整螺钉, 无平衡螺钉用螺孔/Without back-up screw, without threads for balancing screws

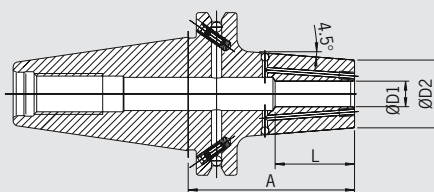
3) 标准版, 含 Cool Jet 型冷却喷嘴/Standard version, with Cool Jet

HAIMER

强力热缩刀柄 POWER SHRINK CHUCK DIN 69871 · SK40



超短/ultrashort



Certificate of Quality

- ☒ 刀柄精动平衡
- ☒ Chuck body fine balanced
G2.5 25.0001/min
或/or U<1gmm
- ☒ 所有功能面全部加工
- ☒ All functional surfaces machined
- ☒ 锥度公差 AT3
- ☒ Taper tolerance AT3
- ☒ 切削液供给采用 ADB 型
- ☒ Coolant supply form ADB
- ☒ Cool Jet, 可被密封
- ☒ Cool Jet, can be sealed

强力热缩刀柄是用于高速加工中获得最高加工能力的热缩刀柄。这种优化设计结合了缓冲振动的高刚性，因此可以给机床，主轴和刀具更多的保护。带有特殊末端渐缩的长型(A=130 和 160)尤为常用。

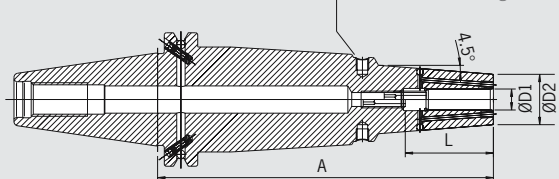
The Power Shrink Chuck is the shrink fit chuck for the highest machining capacity in high-speed manufacturing. The optimized design with better construction combines high rigidity with vibration dampening features, giving more protection to machines, spindles and tools. The long versions (A = 130 and 160) with slim tips are especially versatile to use.

- 最高跳动精度: 0,003 mm
- 提升了加工能力实现高主轴转速，高速进给和更大切深
- 更短的工时
- 抗振几何结构使运行更平稳，因此得到更好的表面加工质量，更好的保护了刀具，主轴和机床。
- 更高的加工精度
- 冷却喷射孔可被内部密封
- 高刚性
- 具有缓冲振动特性
- 高夹持力
- 既适用于高速加工又适用于重铣削
- 通用性，节省刀具库空间

- Highest runout accuracy: 0.003 mm
- Increased machining capacity due to higher spindle speed, higher feed and larger cutting depth
- Shorter processing times
- Smoother running thanks to vibration absorbing geometry, therefore better surface quality and protection of tools, spindles and machines
- Higher machining accuracy
- Cool Jet bores that can be sealed included
- High rigidity
- Vibration dampening features
- High clamping force
- Equally suited to high-speed manufacturing and heavy milling
- Universal usage, saves space in tool magazine



ZG 130/超长型/oversize



Certificate of Quality

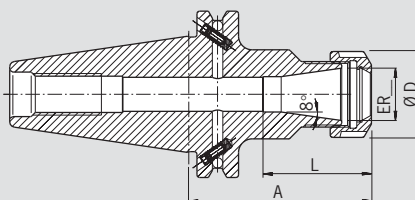
- ☒ 刀柄精动平衡
- ☒ Chuck body fine balanced
G2.5 25.0001/min
或/or U<1gmm
- ☒ 所有功能面全部加工
- ☒ All functional surfaces machined
- ☒ 锥度公差 AT3
- ☒ Taper tolerance AT3
- ☒ 切削液供给采用 ADB 型
- ☒ Coolant supply form ADB
- ☒ Cool Jet, 可被密封
- ☒ Cool Jet, can be sealed

SK 40

夹持直径/Clamping Ø D1 [mm]		06	08	10	12	14	16	18	20	25	32
Ø D2 [mm]		22	22	26,5	26,5	29,5	29,5	35,5	35,5	45,5	45,5
L [mm]		22	26	31	36	48	51	50	56,5	58,5	63
长度/Length A [mm]	超短/ultrashort	65	65	65	65	65	65	65	65	75	80
订货号/Order No.	40.444...	...06.3	...08.3	...10.3	...12.3	...14.3	...16.3	...18.3	...20.3	...25.3	...32.3
Ø D2 [mm]		21	21	24	24	27	27	33	33	44	44
L [mm]		36	36	42	47	47	50	50	52	58	58
长度/Length A [mm]	ZG130	130	130	130	130	130	130	130	130	130	130
订货号/Order No.	40.444...	...06.3	...08.3	...10.3	...12.3	...14.3	...16.3	...18.3	...20.3	...25.3	...32.3
长度/Length A [mm]	超长/oversize	160	160	160	160	160	160	160	160	160	160
订货号/Order No.	40.442...	...06.3	...08.3	...10.3	...12.3	...14.3	...16.3	...18.3	...20.3	...25.3	...32.3

ER 弹簧筒夹刀柄 / COLLET CHUCK ER DIN 69871 · SK

质量证书 Certificate of Quality
✓ 刀柄精细动平衡 ✓ Chuck body fine balanced G2.5 22.0001/min
✓ 所有功能面全部加工 ✓ All functional surfaces machined
✓ 锥度公差 AT3 ✓ Taper tolerance AT3
✓ 切削液供给采用 ADB 型 ✓ Coolant supply form ADB



使用:

搭配符合 DIN 6499 的弹簧筒夹用于夹持圆柱直柄刀具

ADB型SK 锥柄符合 DIN 69871

ADB型含义: 中心冷却及能被再次密封的凸缘冷却通路

- 交货时含锁紧螺母(经动平衡, 为获得更高夹持力的防滑涂层)
- HS型锁紧螺母(高速, 精密动平衡, 防滑涂层)需额外费用
- 加大尺寸L需要额外费用

Use:

For clamping tools with cylindrical shank in collets according to DIN 6499

with taper **SK form ADB** DIN 69871

form ADB means: central coolant supply and coolant channel on the collar which can be sealed again

- Included in delivery: locknut (balanced, with slide coating for higher clamping forces)
- Locknut type HS (High-Speed, fine balanced, with slide coating for higher clamping forces) against extra charge
- Enlarging of size L against extra charge

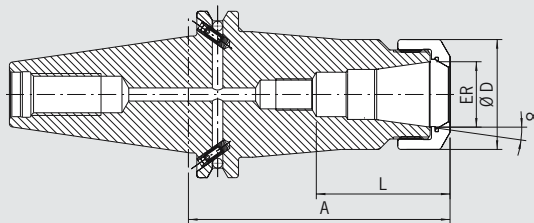
附件/Accessories	ER 16	ER 25	ER 32	ER 40
弹簧筒夹/Collets				
锁紧螺母(预平衡)/Locknut(pre-balanced)				
订货号/Order No. 83.912...	...16	...25	...32	...40
HS型锁紧螺母(精密平衡) /Locknut HS (fine-balanced)				
订货号/Order No. 83.912...	...16.HS	...25.HS	...32.HS	...40.HS
开口扳手/Fork wrench				
订货号/Order No. 84.200...	...16	-	-	-
爪型扳手/Clamping wrench				
订货号/Order No. 84.200...	-	...25	...32	...40
平衡环/Balancing index rings				
短/short				
订货号/Order No. 79.350...	...28	-	-	-
长/long, 超长/oversize, ZG200				
订货号/Order No. 79.350...	...28	...42	...48	...50
拉钉/Pull studs				
热缩延长杆/Shrink fit extensions				

Ø D [mm]	ER 16	ER 25	ER 30	ER 40
夹持范围 /Clamping range [mm]	28 0,5-10,0	42 1,0-16,0	50 1,5-20,0	63 2,5-26,0
SK 40				
L [mm]	2)	62	64	73
长度/Length A [mm] 短/short	70 ¹⁾	70 ¹⁾	70	70
订货号/Order No. 40.320...	...16	...25	...32	...40
L [mm]	2)	57	64	73
长度/Length A [mm] 长/long	100 ¹⁾	100 ¹⁾	100	100
订货号/Order No. 40.321...	...16	...25	...32	...40
长度/Length A [mm] 超长/oversize	160 ¹⁾	160 ¹⁾	160	160
订货号/Order No. 40.322...	...16	...25	...32	...40
长度/Length A [mm] ZG200	200 ¹⁾	200 ¹⁾	200	-
订货号/Order No. 40.326...	...16	...25	...32	-
SK 50				
L [mm]	2)	62	64	73
长度/Length A [mm] 短/short	70 ¹⁾	70 ¹⁾	70 ¹⁾	70 ¹⁾
订货号/Order No. 50.320...	...16	...25	...32	...40
L [mm]	2)	57	64	73
长度/Length A [mm] 长/long	100 ¹⁾	100 ¹⁾	100 ¹⁾	100 ¹⁾
订货号/Order No. 50.321...	...16	...25	...32	...40
长度/Length A [mm] 超长/oversize	160 ¹⁾	160 ¹⁾	160 ¹⁾	160
订货号/Order No. 50.322...	...16	...25	...32	...40
长度/Length A [mm] ZG200	200 ¹⁾	200 ¹⁾	200 ¹⁾	200
订货号/Order No. 50.326...	...16	...25	...32	...40

1) 也适用于ANSI-CAT/Also suitable for ANSI-CAT
2) 通孔/Drilled through

HAIMER

强力弹簧筒夹刀柄/POWER COLLET CHUCK DIN 69871 · SK40



质量证书 Certificate of Quality	
☒	刀柄精细动平衡 Chuck body fine balanced G2.5 25.000 1/min 或/or U<1gmm
☒	所有功能面全部加工 All functional surfaces machined
☒	锥度公差 AT3 Taper tolerance AT3
☒	切削液供给采用 ADB 型 Coolant supply form ADB

强力弹簧筒夹刀柄用于在高速加工中获得最高加工能力。这种优化设计结合了缓冲振动的高刚性，因此可以给机床，主轴和刀具更多的保护。通用强力弹簧筒夹刀柄是无与伦比的高性能刀柄，且可使用标准弹簧筒夹。

The Power Collet Chuck is the collet chuck for the highest machining capacity in high-speed manufacturing. The optimized design with better construction combines high rigidity with vibration dampening features, giving more protection to machines, spindles and tools. The universal Power Collet Chuck is a unique high performance chuck that can also be used with standard collets.

- 高跳动精度: 在3 x D处为0,005 mm
- 标准ER筒夹符合ISO15488(旧标准DIN6499)
- 高刚性
- 抗振几何结构使运行更平稳，因此得到更好的表面加工质量，更好的保护了刀具，主轴和机床
- 提升了加工能力实现高主轴转速，高进给和大切深度

- High runout accuracy: 0.005 mm at 3 x D with Haimer Power Collets
- Also for standard collets ER according to ISO 15488 (formerly DIN 6499)
- High rigidity
- Smoother running thanks to vibration absorbing geometry, therefore better surface quality and protection of tools, spindles and machines
- Increased machining capacity due to higher spindle speed, higher feed and larger cutting depth
- Shorter processing times
- Higher machining accuracy
- High clamping force
- Equally suited to high-speed manufacturing and heavy milling

- 最短的工时
- 更高加工精度
- 更高夹持力
- 既适合于高速加工又适于重切削

	ER 16	ER25	ER32
Ø D [mm]	28	42	48
夹持范围/Clamping range [mm]	2,0-10,0	2,0-16,0	2,0-20,0
L [mm]	43	61,5	62
长度/Length A [mm] 短/short	70	70	70
订货号/Order No. 40.320...	...16.3	...25.3	...32.3
L [mm]	43	51	53
长度/Length A [mm] 长/long	100	100	100
订货号/Order No. 40.321...	...16.3	...25.3	...32.3
长度/Length A [mm] 超长/oversize	160	160	160
订货号/Order No. 40.322...	...16.3	...25.3	...32.3

附件/Accessories

HAIMER强力弹簧筒夹/HAIMER Power Collets

ER 16 (2,0-10,0)

夹持 Ø/Clamping Ø

订货号/Order No. 81.163...



02	03	04	05	06	08	10	-	-	-	-	-
...02	...03	...04	...05	...06	...08	...10					

ER 25 (2,0-16,0)

夹持 Ø/Clamping Ø

订货号/Order No. 81.253...



02	03	04	05	06	08	10	12	14	16	-	-
...02	...03	...04	...05	...06	...08	...10	...12	...14	...16		

ER 32 (2,0-20,0)

夹持 Ø/Clamping Ø

订货号/Order No. 81.323...



02	03	04	05	06	08	10	12	14	16	18	20
...02	...03	...04	...05	...06	...08	...10	...12	...14	...16	...18	...20

ER标准弹簧筒夹/Collet ER standard



强力筒夹锁紧螺母(精密平衡)/Power Collet Locknut (fine-balanced)

规格/Size

订货号/Order No. 83.914...



ER 16

...16

ER 25

...25

ER 32

...32

强力筒夹用夹紧扳手/Power Collet Clamping wrench

规格/Size

订货号/Order No. 84.650...



ER 16

...16

ER 25

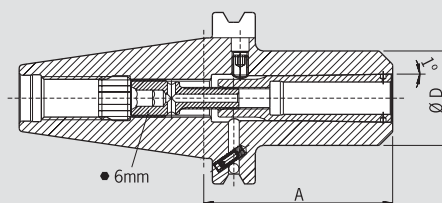
...25

ER 32

...32

HG 高精度后拉式刀柄 / HIGH-PRECISION CHUCK DIN 69871 · SK

质量证书 Certificate of Quality
✓ 刀柄精动平衡 ✓ Chuck body fine balanced G2.5 25.000 1/min
✓ 所有功能面全部加工 ✓ All functional surfaces machined
✓ 锥度公差 AT3 ✓ Taper tolerance AT3
✓ 切削液供给采用 ADB 型 ✓ Coolant supply form ADB



使用:
用特殊弹簧筒夹高精度夹持圆柱直柄刀具。也可用于带有夹持平面的圆柱直柄刀具。非常适于高速加工

ADB型SK 锥柄符合 DIN 69871

ADB型含义: 中心冷却及能被再次密封的凸缘冷却通路

— 含: HG 型高精度刀柄, 紧固螺钉和后拉钩, 无筒夹

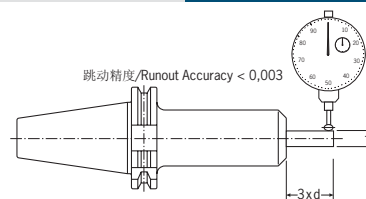
— 柄部公差 h6

Use:

For high-precision clamping of tools with cylindrical shank with special collets.

Also for shanks with clamping flats. Very useful for high-speed machining with taper **SK form ADB** DIN 69871

form ADB means: central coolant supply and coolant channels on the collar which can be sealed again



跳动精度/Runout Accuracy < 0,003

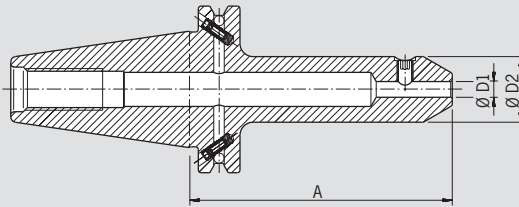
- Delivery comprises: high-precision chuck with clamping screw and pull-out hook without collet
- Shank tolerance h6

			HG 01						HG 02			HG 03		
Ø D [mm]			30						35			48		
夹持直径 Ø/clamping diameter			2	3	4	5	6	8	10	12	14	16	18	20
SK40														
长度/Length A [mm]	短/short		65 ¹⁾						70 ¹⁾			75		
订货号/Order No.	40.420...		...01						...02			...03		
长度/Length A [mm]	长/long		100 ¹⁾						100 ¹⁾			100		
订货号/Order No.	40.421...		...01						...02			...03		
长度/Length A [mm]	超长/oversize		160 ¹⁾						160 ¹⁾			160		
订货号/Order No.	40.422...		...01						...02			...03		
SK50														
长度/Length A [mm]	短/short		65 ¹⁾						70 ¹⁾			75 ¹⁾		
订货号/Order No.	50.420...		...01						...02			...03		
长度/Length A [mm]	长/long		100 ¹⁾						100 ¹⁾			100 ¹⁾		
订货号/Order No.	50.421...		...01						...02			...03		
长度/Length A [mm]	超长/oversize		160 ¹⁾						160 ¹⁾			160 ¹⁾		
订货号/Order No.	50.422...		...01						...02			...03		

附件/Accessories		HG 01	HG 02	HG 03
筒夹/Collets				
紧固螺钉/Clamping screw				
短/short				
订货号/Order No. 82.560...		...03	...02	...02
长/long				
订货号/Order No. 82.560...		...04	...01	...05
超长/oversize				
订货号/Order No. 82.560...		...08	...06	...07
后拉钩/Pull-out hook				
订货号/Order No. 82.570...		...00	...00	...00
平衡环/Balancing index rings				
订货号/Order No. 79.350...		...30	...35	...48
拉钉/Pull studs				
热缩延长杆/Shrink fit extensions				
Cool Jet型冷却喷孔/Cool Jet bores				
订货号/Order No. 91.100.24				

1) 适用于ANSI-CAT/Also suitable for ANSI-CAT

HAIMER

侧固刀柄/WELDON TOOLHOLDER
DIN 69871 · SK质量证书
Certificate of Quality

- ☒ 刀柄精细动平衡
- ☒ Chuck body fine balanced G2.5 22.000 1/min
- ☒ 所有功能面全部加工
- ☒ All functional surfaces machined
- ☒ 锥度公差 AT3
- ☒ Taper tolerance AT3
- ☒ 切削液供给采用 ADB 型
- ☒ Coolant supply form ADB

使用:

夹持符合 DIN 1835-B 和 DIN 6535-HB 的
圆柱直柄且具有紧固平面的刀具

符合 DIN 6359-2, **ADB**型**SK**锥柄符合 DIN 69871

ADB型含义: 中心冷却及能被再次密封的凸缘冷却通路

含: 紧固螺钉

- 超短型只能用AD型
- 短型依据需要带有喷射孔
- Cool Jet型冷却喷嘴需要额外费用

Use:

For clamping cutters with cylindrical shank and Weldon flat according
to DIN 1835-B and DIN 6535-HB

according to DIN 6359-2 with taper **SK form ADB** DIN 69871

form ADB means: central coolant supply and coolant channels
on the collar which can be sealed again

Delivery: with clamping screw

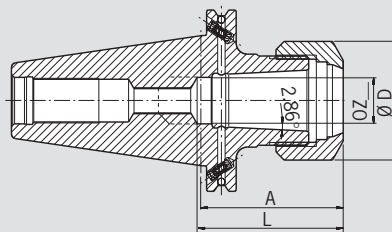
- Ultra short design only available in form AD
- Short version with spray nozzles on request
- Cooling with Cool Jet against extra charge

夹持直径 /Clamping	Ø D1 [mm]	06	08	10	12	14	16	18	20	25	32	40
	Ø D2 [mm]	25	28	35	42	42	48	48	52	65	72	78
SK40												
长度/Length A [mm]	短/short	50 ¹⁾	50 ¹⁾	50 ¹⁾	50 ¹⁾	50 ¹⁾	63	63	63	100	100	-
订货号/Order No.	40.300...	...06	...08	...10	...12	...14	...16	...18	...20	...25	...32	-
	40.300... ²⁾	...06.2	...08.2	...10.2	...12.2	...14.2	...16.2	-	...20.2	...25.2	-	-
长度/Length A [mm]	长/long	100 ¹⁾	100 ¹⁾	100 ¹⁾	100 ¹⁾	100 ¹⁾	100	100	100	-	-	-
订货号/Order No.	40.301...	...06	...08	...10	...12	...14	...16	...18	...20	-	-	-
长度/Length A [mm]	超长/oversize	160 ¹⁾	160 ¹⁾	160 ¹⁾	160 ¹⁾	160 ¹⁾	160	160	160	160	-	-
订货号/Order No.	40.302...	...06	...08	...10	...12	...14	...16	...18	...20	...25	-	-
长度/Length A [mm]	超短/ultrashort	-	-	-	-	-	35	35	40	60	70	-
订货号/Order No.	40.305...	-	-	-	-	-	...16	...18	...20	...25	...32	-
SK50												
长度/Length A [mm]	短/short	63 ¹⁾	63 ¹⁾	63 ¹⁾	63 ¹⁾	63 ¹⁾	63 ¹⁾	63 ¹⁾	63 ¹⁾	80 ¹⁾	100	100
订货号/Order No.	50.300...	...06	...08	...10	...12	...14	...16	...18	...20	...25	...32	...40
	50.300... ²⁾	-	-	...10.2	...12.2	-	...16.2	-	...20.2	-	-	-
长度/Length A [mm]	长/long	100 ¹⁾	100 ¹⁾	100 ¹⁾	100 ¹⁾	100 ¹⁾	100 ¹⁾	100 ¹⁾	100 ¹⁾	100 ¹⁾	-	-
订货号/Order No.	50.301...	...06	...08	...10	...12	...14	...16	...18	...20	...25	-	-
长度/Length A [mm]	ZG130	130 ¹⁾	130 ¹⁾	130 ¹⁾	130 ¹⁾	130 ¹⁾	130 ¹⁾	130 ¹⁾	130 ¹⁾	130 ¹⁾	130	130
订货号/Order No.	50.304...	...06	...08	...10	...12	...14	...16	...18	...20	...25	...32	...40
长度/Length A [mm]	超长/oversize	160 ¹⁾	160 ¹⁾	160 ¹⁾	160 ¹⁾	160 ¹⁾	160 ¹⁾	160 ¹⁾	160 ¹⁾	160	160	160
订货号/Order No.	50.302...	...06	...08	...10	...12	...14	...16	...18	...20	...25	...32	...40
长度/Length A [mm]	ZG200	200 ¹⁾	200 ¹⁾	200 ¹⁾	200 ¹⁾	200 ¹⁾	200 ¹⁾	200 ¹⁾	200 ¹⁾	-	-	-
订货号/Order No.	50.306...	...06	...08	...10	...12	...14	...16	...18	...20	-	-	-
附件/Accessories												
用于夹持直径 Ø/For clamping Ø		06	08	10	12	14	16	18	20	25	32	40
夹紧螺钉/Clamping screw												
订货号/Order No.	85.100...	...06	...08	...10	...12	...12	...14	...14	...16	...18	...20	...20
平衡环/Balancing index rings												
长/long, ZG130, 超长/oversize, ZG200												
订货号/Order No.	79.350...	...25	...28	...35	...42	...42	...48	...48	...52	...65	...72	...78
拉钉/Pull studs												
Cool Jet型冷却喷嘴/Cool Jet bores												
订货号/Order No.	91.100.24											

1) 适用于ANSI-CAT/Also suitable for ANSI-CAT
2) 有Cool Jet冷却喷嘴/with Cool Jet

OZ 弹簧筒夹刀柄 / COLLET CHUCK OZ DIN 69871 · SK

质量证书 Certificate of Quality
☒ 刀柄精细动平衡 ☒ Chuck body fine balanced G2.5 22.000 1/min
☒ 所有功能面全部加工 ☒ All functional surfaces machined
☒ 锥度公差 AT3 ☒ Taper tolerance AT3
☒ 切削液供给采用 ADB 型 ☒ Coolant supply form ADB



使用:

搭配符合 DIN 6388 的弹簧筒夹适于夹持圆柱直柄刀具

依据 DIN 6391

ADB 型 SK 锥柄符合 DIN 69871

ADB 型含义: 中心冷却及能被再次密封的凸缘冷却通路

- 交货时含: 球轴承锁紧螺母
- 加大尺寸 L 需额外费用

Use:

For clamping tools with cylindrical shank in collets according to DIN 6388

according to DIN 6391 with taper

SK form ADB DIN 69871

form ADB means: central coolant supply and coolant channels on the collar which can be sealed again

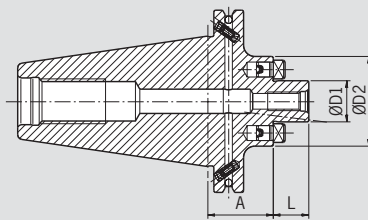
- Included in delivery: ball bearing locknut
- Enlarging of size L against extra charge

夹持范围/Clamping range [mm]			2-16	2-25	6-40
Ø D [mm]			43	60	85
L [mm]			62	72	94
SK40					
长度/Length A [mm]	短/short		70 ¹⁾	70	
订货号/Order No.	40.310...		...16	...25	
长度/Length A [mm]	长/long		100 ¹⁾	100	
订货号/Order No.	40.311...		...16	...25	
长度/Length A [mm]	超长/oversize		-	160	
订货号/Order No.	40.312...			...25	
SK50					
长度/Length A [mm]	短/short		70 ¹⁾	70 ¹⁾	90
订货号/Order No.	50.310...		...16	...25	...40
长度/Length A [mm]	长/long		100 ¹⁾	100 ¹⁾	-
订货号/Order No.	50.311...		...16	...25	

附件/Accessories	用于夹持直径范围/for clamping dia. range	2-16	2-25	6-40
弹簧筒夹/Collets				
紧固螺母/Locknut				
订货号/Order No.	83.920...	...16	...25	...40
钩扳手/Hook key				
订货号/Order No.	84.300...	...16	...25	...40
平衡环/Balancing index rings				
短/short				
订货号/Order No.	79.350...	...35	-	...70
长/long, 超长/oversize, /ZG 20				
订货号/Order No.	79.350...	...43	...60 ²⁾	...78
拉钉/Pull studs				
热缩延长杆/Shrink fit extensions				

1) 适用于 ANSI-CAT / Also suitable for ANSI-CAT
2) 订货号/Order No. 79.350.48 用于 /for SK40

HAIMER

面铣刀刀柄 / FACE MILL ARBOR
DIN 69871 · SK质量证书
Certificate of Quality

☒	刀柄精细动平衡
☒	Chuck body fine balanced
☒	G2.5 22,000 1/min
☒	所有功能面全部加工
☒	All functional surfaces machined
☒	锥度公差 AT3
☒	Taper tolerance AT3
☒	切削液供给采用 ADB 型
☒	Coolant supply form ADB

使用:

用于夹持符合 DIN 1880 的面铣刀和带有径向驱动槽的刀具，
也可夹持符合 DIN 2079 直径超过 40 的刀盘 (4 个附加的螺孔)
符合 DIN 6753

ADB 型 SK 锥柄符合 DIN 69871

ADB 型含义: 中心冷却及能被再次密封的凸缘冷却通路

— 交货时含: 拉紧螺钉

— 冷却喷孔需额外费用

Use:

For holding face mill cutters and cutters with radial driving slot DIN 1880
and exceeding clamping diameter 40 clamping according to DIN 2079 is
possible, too (4 additional tapping holes)

according to DIN 6357 with taper

SK 50 form ADB DIN 69871

form ADB means: central coolant supply and coolant channels
on the collar which can be sealed again

— Included in delivery: tightening bolt

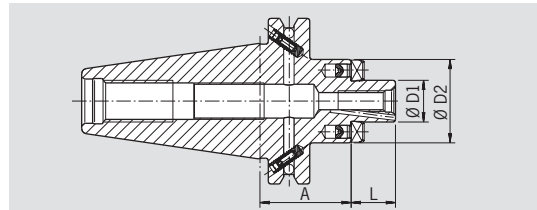
— Coolant bores against extra charge

附件/Accessories 用于/for D1	22	27	32	40	50	60
拉紧螺钉/Tightening bolt						
订货号/Order No. 85.300...	...22	...27	...32	...40	...50	...60
扳手/Wrench						
订货号/Order No. 84.400...	...22	...27	...32	...40	...50	...60
平衡环/Balancing index rings						
短/short						
订货号/Order No. 79.350...	...48	...60 ²⁾	—	—	—	—
长/long, 超长/oversize						
订货号/Order No. 79.350...	...48	...60	...78	...89 ³⁾	—	—
拉钉/Pull studs						
冷却喷孔/Coolant bores						
订货号/Order No. 91.100.03						

夹持直径/Clamping Ø D1 [mm]	16	22	27	32	40	50	60
L [mm]	17	19	21	24	27	30	40
SK40 Ø D2 [mm]	36	48	60 ⁴⁾	78	87	120	127
长度/Length A [mm] 短/short	35	35	35	50	50	—	—
订货号/Order No. 40.350...	...16	...22	...27	...32	...40	—	—
长度/Length A [mm] 长/long	100	100	100	100	—	—	—
订货号/Order No. 40.351...	...16	...22	...27	...32	—	—	—
长度/Length A [mm] 超长/oversize	—	160	160	160	—	—	—
订货号/Order No. 40.352...	—	...22	...27	...32	—	—	—
SK50 Ø D2 [mm]	—	48	60	78	89	120	127
长度/Length A [mm] 短/short	—	35 ¹⁾	35 ¹⁾	35	50	70	70
订货号/Order No. 50.350...	—	...22	...27	...32	...40	...50	...60
长度/Length A [mm] 长/long	—	100 ¹⁾	100 ¹⁾	100	100	—	—
订货号/Order No. 50.351...	—	...22	...27	...32	...40	—	—
长度/Length A [mm] 超长/oversize	—	160 ¹⁾	160 ¹⁾	160	160	—	—
订货号/Order No. 50.352...	—	...22	...27	...32	...40	—	—

端面带冷却喷孔的面铣刀刀柄 DIN 69871 · SK40
FACE MILL ARBOR with coolant exit bores on the end face

附件/Accessories 用于/for D1	16	22	27	32	40
拉紧螺钉/Tightening bolt					
订货号/Order No. 85.300...	...16	...22	...27	...32	...40
扳手/Wrench					
订货号/Order No. 84.400...	...16	...22	...27	...32	...40
平衡环/Balancing index rings					
短/short					
订货号/Order No. 79.350...	...32	—	—	—	—
拉钉/Pull studs					



夹持直径/Clamping Ø D1 [mm]	16	22	27	32	40
Ø D2 [mm]	32	40	48	78	87
L [mm]	17	19	21	24	27
长度/Length A [mm] 短/short	35 ¹⁾	35	35	50	—
订货号/Order No. 40.350...	...16.1.KKB	...22.KKB	...27.KKB	...32.KKB	—

1) 适用于 ANSI-CAT/Also suitable for ANSI-CAT

2) 订货号/Order No. 79.350.48 用于/For SK40

3) 订单号/Order No. 79.350.87 用于/for SK40

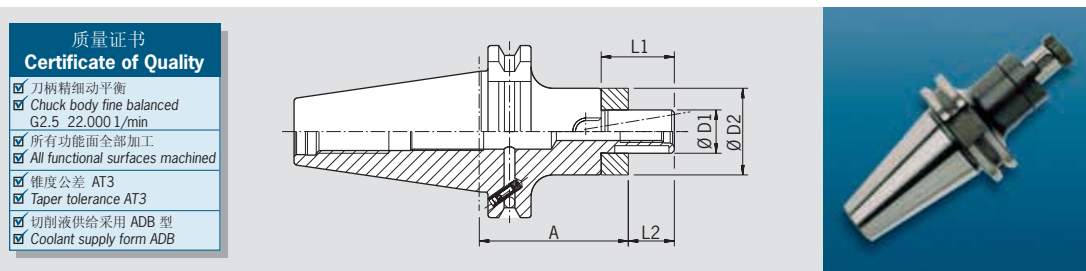
4) 用于夹持直径 Ø27 时, 短型 Ø D2 = 48mm

For clamping ØD1 = 27, short version Ø D2 = 48mm

规格如有变更恕不另行通知

Technical data subject to change without prior notice

壳铣刀刀柄/COMBINATION SHELL END MILL ARBOR DIN 69871 · SK



质量证书 Certificate of Quality

- ✓ 刀柄精细动平衡
✓ Chuck body fine balanced
G2.5 22.000 1/min
- ✓ 所有功能面全部加工
✓ All functional surfaces machined
- ✓ 锥度公差 AT3
✓ Taper tolerance AT3
- ✓ 切削液供给采用 ADB 型
✓ Coolant supply form ADB

使用:

用于符合 DIN 841 和 DIN 1880 的壳铣刀, 也可用于符合 DIN 842 的角度铣刀和符合 DIN 1830 的刀具

依据 DIN 6358, ADB 型 SK 锥柄符合 DIN 69871

ADB 型含义: 中心冷却及能被再次密封的凸缘冷却通路

- 交货时含: 拉紧螺钉, 传动环和滑键
- 前端冷却喷嘴需额外费用

Use:

For clamping shell end mills DIN 841 and DIN 1880 as well as angular milling cutters DIN 842 and cutters DIN 1830 according to DIN 6358 with taper

SK 40 form ADB DIN 69871

form ADB means: central coolant supply and coolant channels on the collar which can be sealed again

- Included in delivery: tightening bolt, driving ring and feather key
- Coolant bores on front side against extra charge

夹持直径/Clamping Ø D1 [mm]	16	22	27	32	40	50
Ø D2 [mm]	32	40	48	58	70	90
L1 [mm]	27	31	33	38	41	46
L2 [mm]	17	19	21	24	27	30

SK40

长度/Length A [mm]	短/short		55 ¹⁾	55 ¹⁾	55	60	60	-
订货号/Order No.	40.340...		...16	...22	...27	...32	...40	
长度/Length A [mm]	长/long		100 ¹⁾	100 ¹⁾	100	100	100	-
订货号/Order No.	40.341...		...16	...22	...27	...32	...40	
长度/Length A [mm]	ZG130		130 ¹⁾	130 ¹⁾	130	130	-	-
订货号/Order No.	40.344...		...16	...22	...27	...32		
长度/Length A [mm]	超长/oversize		160 ¹⁾	160 ¹⁾	160	160	-	-
订货号/Order No.	40.342...		...16	...22	...27	...32		
长度/Length A [mm]	ZG200		200 ¹⁾	200 ¹⁾	200	-	-	-
订货号/Order No.	40.346...		...16	...22	...27			

SK50

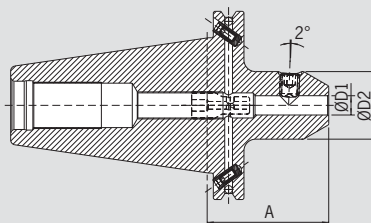
长度/Length A [mm]	短/short		55 ¹⁾	55 ¹⁾	55 ¹⁾	55 ¹⁾	55 ¹⁾	70
订货号/Order No.	50.340...		...16	...22	...27	...32	...40	...50
长度/Length A [mm]	长/long		100 ¹⁾	100 ¹⁾	100 ¹⁾	100 ¹⁾	100 ¹⁾	100
订货号/Order No.	50.341...		...16	...22	...27	...32	...40	...50
长度/Length A [mm]	ZG130		130 ¹⁾	130 ¹⁾	130 ¹⁾	130 ¹⁾	130 ¹⁾	130
订货号/Order No.	50.344...		...16	...22	...27	...32	...40	...50
长度/Length A [mm]	超长/oversize		160 ¹⁾	160 ¹⁾	160 ¹⁾	160 ¹⁾	160 ¹⁾	160
订货号/Order No.	50.342...		...16	...22	...27	...32	...40	...50
长度/Length A [mm]	ZG200		200 ¹⁾	200 ¹⁾	200 ¹⁾	200 ¹⁾	200 ¹⁾	200
订货号/Order No.	50.346...		...16	...22	...27	...32	...40	...50

附件/Accessories	用于/For	Ø D1	16	22	27	32	40	50
拉紧螺钉/Tightening bolt								
订货号/Order No.	85.300...		...16	...22	...27	...32	...40	...50
扳手/Wrench								
订货号/Order No.	84.400...		...16	...22	...27	...32	...40	...50
滑键/Feather Key								
订货号/Order No.	85.400...		...16	...22	...27	...32	...40	...50
驱动环/Driving Ring								
订货号/Order No.	85.200...		...16	...22	...27	...32	...40	...50
平衡环/Balancing index rings								
长/long, 超长/oversize								
订货号/Order No.	79.350...		...32	...40	...48	...58	...70	...90
拉钉/Pull studs								
冷却喷嘴/Coolant bores								
订货号/Order No.	91.100.03							

1) 适用于 ANSI-CAT/Also suitable for ANSI-CAT

HAIMER

斜孔侧固刀柄/WHISTLE NOTCH TOOLHOLDER DIN 69871 · SK



质量证书 Certificate of Quality	
☒	刀柄精动平衡 Chuck body fine balanced
	G6.3 8.000 1/min
☒	所有功能面全部加工 All functional surfaces machined
☒	锥度公差 AT3 Taper tolerance AT3
☒	切削液供给采用 ADB 型 Coolant supply form ADB

使用:

夹持符合 DIN 1835-E 和 DIN 6535-HE 的
圆柱直柄且具有紧固平面的刀具

符合 DIN 6359-2

ADB型SK 锥柄符合 DIN 69871

ADB型含义: 中心冷却及能被再次密封的凸缘冷却通路

含: 紧固螺钉和调整螺钉

- 精密动平衡需额外费用

- Cool Jet型冷却喷嘴需要额外费用

Use:

For clamping cutters with cylindrical shank and inclined flat according
to DIN 1835-E and DIN 6535-HE

DIN 6359-2 with taper

SK 50 form ADB DIN 69871

form ADB means: central coolant supply and coolant channels
on the collar which can be sealed again

Delivery: with clamping screw and adjusting screw

- Fine-balancing against extra charge

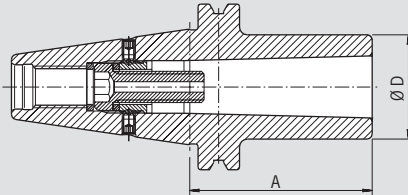
- Cooling with Cool Jet against extra charge

夹持直径/Clamping Ø D1 [mm]	06	08	10	12	14	16	18	20	25	32	40
Ø D2 [mm]	25	28	35	42	42	48	48	52	65	72	78
SK40											
长度/Length A[mm]	短/short										
订货号/Order No.	40.330...										
SK50											
长度/Length A[mm]	短/short										
订货号/Order No.	50.330...										

附件/Accessories	用于/For	Ø D1	06	08	10	12	14	16	18	20	25	32	40
锁紧螺钉/Clamping Screw													
订货号/Order No.	85.100...		...06	...08	...10	...12	...12	...14	...14	...16	...18	...20	...20
调整螺钉/Adjusting Screw													
SK40 短/short			...01	...01	...01	...01	...01	...01	...01	...01	...03	...03	-
订货号/Order No.	85.150...												
SK40 长/short			...04	...04	...04	...04	...04	...04	...04	...04	-	-	-
订货号/Order No.	85.150...												
SK40 ZG130			...05	...05	...05	...05	...05	...05	...05	...05	...08	...08	-
订货号/Order No.	85.150...												
SK40 超长/oversize			...07	...07	...07	...06	...06	...07	...07	...07	...06	...06	-
订货号/Order No.	85.150...												
SK50 短/short			...03	...03	...03	...01	...01	...01	...01	...01	...02	...03	...02
订货号/Order No.	85.150...												
SK50 长/short			...04	...04	...04	...04	...04	...04	...04	...04	...03	-	-
订货号/Order No.	85.150...												
SK50 ZG130			...05	...05	...05	...05	...05	...05	...05	...05	...08	...08	...08
订货号/Order No.	85.150...												
SK50 超长/oversize			...07	...07	...07	...07	...07	...06	...06	...06	...06	...06	...05
订货号/Order No.	85.150...												
平衡环/Balancing index rings													
长/long, 超长/oversize, ZG130			...25	...28	...35	...42	...42	...48	...48	...52	...65	...72	...78
订货号/Order No.	79.350...												
拉钉/Pull studs													
Cool Jet 型冷却喷嘴/Cool Jet bores													
订货号/Order No.	91.100.24												

带螺孔的莫氏锥度刀柄 DIN 69871 · SK ADAPTER FOR MORSE TAPER WITH THREAD

质量证书 Certificate of Quality
☒ 刀柄精细动平衡 ☒ Chuck body fine balanced G6.3 8.000 1/min
☒ 所有功能面全部加工 ☒ All functional surfaces machined
☒ 锥度公差 AT3 ☒ Taper tolerance AT3

**使用:**

适用于夹持DIN 228-1 A型锁牙式莫氏锥柄刀具

类似DIN 6383,
AD型SK锥柄符合 DIN 69871

- 交货时含:拉紧螺钉
- 精密动平衡需额外费用

MK03(SK40)和MK04无扁尾孔

Use:

For clamping tools with Morse taper with drawbar thread according to DIN 228/1 form A

similar to DIN 6383 with taper

SK 40 form AD DIN 69871

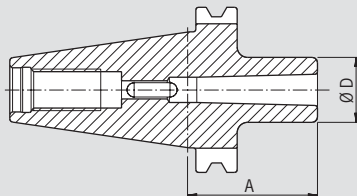
- Included in delivery: tightening bolt
- Fine-balancing against extra charge

MK03(SK40) and MK04 without bore for tang

莫氏锥度/Morse Taper			MK01	MK02	MK03	MK04
Ø D [mm]			25	32	40	48
SK40						
长度/Length A[mm]	短/short		-	50 ¹⁾	70 ¹⁾	95
订货号/Order No.	40.430...			...02	...03	...04
SK50						
长度/Length A[mm]	短/short		-	60 ¹⁾	65 ¹⁾	70 ¹⁾
订货号/Order No.	50.430...			...02	...03	...04
附件/Accessories			MK01	MK02	MK03	MK04
平衡环/Balancing index rings						
订货号/Order No.	79.350...		...25	...32	...40	...48
拉钉/Pull studs						

带扁尾孔的莫氏锥度刀柄 DIN 69871 · SK ADAPTER FOR MORSE TAPER WITH TANG

质量证书 Certificate of Quality
☒ 刀柄精细动平衡 ☒ Chuck body fine balanced G6.3 8.000 1/min
☒ 所有功能面全部加工 ☒ All functional surfaces machined
☒ 锥度公差 AT3 ☒ Taper tolerance AT3

**使用:**

适用于夹持DIN 228-1 B型带扁尾的莫氏锥柄刀具

类似DIN 6383,
AD型SK锥柄符合 DIN 69871

- 精密动平衡需额外费用

Use:

For holding tools with Morse tapers and tang according to DIN 228-1 form B

similar to DIN 6383 with taper

SK 40 form AD DIN 69871

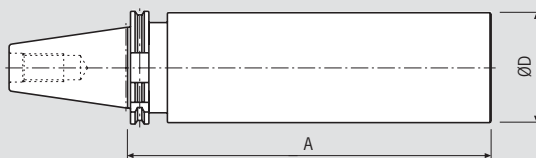
- Fine-balancing against extra charge

莫氏锥度/Morse Taper			MK01	MK02	MK03	MK04
Ø D [mm]			25	32	40	48
SK40						
长度/Length A[mm]	短/short		50 ¹⁾	50 ¹⁾	70 ¹⁾	95
订货号/Order No.	40.380...		...01	...02	...03	...04
SK50						
长度/Length A[mm]	短/short		-	60 ¹⁾	65 ¹⁾	70 ¹⁾
订货号/Order No.	50.380...			...02	...03	...04
附件/Accessories			MK01	MK02	MK03	MK04
平衡环/Balancing index rings						
订货号/Order No.	79.350...		...25	...32	...40	...48
拉钉/Pull studs						

1) 适用于ANSI-CAT/Also suitable for ANSI-CAT

HAIMER

刀柄毛坯 / BLANK ADAPTER DIN 69871 · SK



质量证书 Certificate of Quality	
☒	所有功能面全部加工 All functional surfaces machined
☒	锥度公差 AT3 Taper tolerance AT3
☒	切削液供给采用 ADB 型 Coolant supply form ADB

附件/Accessories

拉钉/Pull studs



SK40	Ø D [mm]	63
长度/Length A [mm]	ZG230	230 ¹⁾
订货号/Order No.	40.390...	...63
长度/Length A [mm]	ZG100	100 ¹⁾
订货号/Order No.	40.395...	...63
SK50	Ø D [mm]	95
长度/Length A [mm]	ZG315	315 ¹⁾
订货号/Order No.	50.390...	...95

使用:

用于加工特殊刀具

设计:

锥柄和槽硬化并精磨, 圆柱部分未硬化

ADB型SK 锥柄符合 DIN 69871

ADB型含义: 中心冷却及能被再次密封的凸缘冷却通路

Use:

For manufacturing special tools in your factory

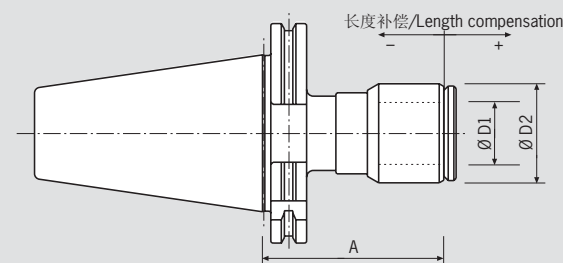
Design:

Taper and groove are hardened and ground, the cylindrical part is soft with taper

SK 50 form ADB DIN 69871

form ADB means: central coolant supply and coolant channels on the collar which can be sealed again

快换攻丝刀柄 / QUICK CHANGE TAPPING CHUCKS DIN 69871 · SK



质量证书 Certificate of Quality	
☒	所有功能面全部加工 All functional surfaces machined
☒	锥度公差 AT3 Taper tolerance AT3
☒	内部高压冷却达到50bar Interior high-pressure cooling up to 50 bar

附件/Accessories

拉钉/Pull studs



快换插件/Quick Change Inserts



紧固螺钉/Clamping screw



订货号/Order No. 140/11.00.020402

类型/Type	FH01	FH03
SK40		
Ø D1 [mm]	20	28
Ø D2 [mm]	36	44
长度/Length A [mm]	71 ¹⁾	80 ¹⁾
订货号/Order No.	...01	...03
用于丝锥/For taps	M3 – M14	M4,5 – M24
长度补偿/Length compensation	± 3	± 3
SK50		
Ø D1 [mm]	-	28
Ø D2 [mm]	-	44
长度/Length A [mm]	-	80 ¹⁾
订货号/Order No.	50.370...	...03
用于丝锥/For taps	-	M4,5 – M24
长度补偿/Length compensation	-	± 3

使用:

非常适于数控铣床。通过张紧压力进行轴向长度补偿

ADB型SK 锥柄符合 DIN 69871

ADB型含义: 中心冷却及能被再次密封的凸缘冷却通路

优点: 特别研发的系统, 内冷压力高达50bar, 高对中精度,

高压夹持系统(高压冷却下的安全夹紧), 利于所有丝锥的快速

换刀(不适于BILZ系统)

– 精密动平衡需额外费用

Use:

For tapping preferably on NC milling machines. Axial

length compensation on tension and pressure

with steep taper SK 50 form ADB DIN 69871

form ADB means: central coolant supply and coolant channels

on the collar which can be sealed again

Advantages: Specially developed system, interior coolant supply up to

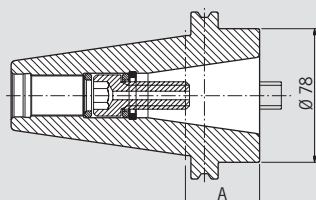
50 bar, high centering precision, high pressure clamping system (safe

clamping for high-pressure cooling) and advantageous quick change

inserts for all available taps (not compatible for system BILZ)

– Fine-balancing against extra charge

SK50转换刀柄 / ADAPTER DIN 69871 · SK50



夹持/Holding	SK40
长度/Length A [mm] 短/short	43
订货号/Order No.	50.360...
附件/Accessories	
拉钉/Pull studs	

质量证书 Certificate of Quality	
☒	刀柄精细动平衡 Chuck body fine balanced G6.3 8.000 1/min
☒	所有功能面全部加工 All functional surfaces machined
☒	锥度公差 AT3 Taper tolerance AT3

使用:

用于夹持符合DIN 69871 AD SK 40和JIS B 6339 BT 40的锥柄

ADB型SK50 锥柄符合 DIN 69871

– 含: 安装好的拉紧螺钉

– 精密动平衡需额外费用

Use:

For holding tapers according to DIN 69871 AD SK 40

and JIS B 6339 BT 40

with taper SK 50 form AD DIN 69871

– Included in delivery: mounted tightening bolt

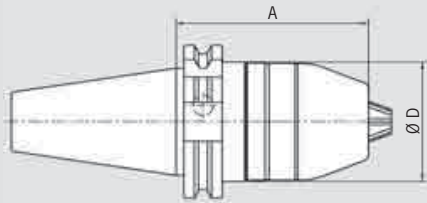
– Fine-balancing against extra charge

规格如有变更恕不另行通知

Technical data subject to change without prior notice

短钻夹头刀柄 / SHORT DRILL CHUCK DIN 69871 · SK

质量证书 Certificate of Quality
☒ 刀柄精细动平衡 ☒ Chuck body fine balanced G2.5 22.000 1/min
☒ 所有功能面全部加工 ☒ All functional surfaces machined
☒ 锥度公差 AT3 ☒ Taper tolerance AT3
☒ 切削液供给采用 ADB 型 ☒ Coolant supply form ADB



使用:

用于左右手旋向夹持圆柱直柄刀具，用内六角扳手锁紧及拧松
ADB型SK 锥柄符合 DIN 69871 ADB

Use:

For clamping tools with cylindrical shank, for left and right hand turn, clamping and loosening with a hexagon socket wrench with taper
SK form ADB DIN 69871 ADB

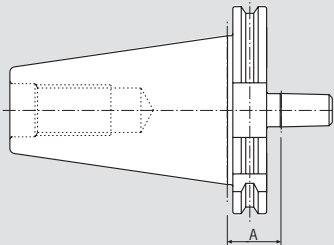
附件/Accessories

拉钉/Pull studs

夹持范围/Clamping range Ø D [mm]	0,5-13 48,5
SK40	
长度/Length A [mm]	80
订货号/Order No.	40.410... ...13
SK50	
长度/Length A [mm]	110
订货号/Order No.	50.410... ...13

钻夹头基础柄 / DRILL CHUCK ADAPTER DIN 69871 · SK

质量证书 Certificate of Quality
☒ 刀柄精细动平衡 ☒ Chuck body fine balanced G6.3 8.000 1/min
☒ 所有功能面全部加工 ☒ All functional surfaces machined
☒ 锥度公差 AT3 ☒ Taper tolerance AT3



使用:

用于夹持如符合DIN 6349等的三爪夹头
依据DIN 238

A型SK 锥柄符合DIN 69871
- 精密动平衡需额外费用

Use:

For holding chucks with three jaws e.g. according to DIN 6349 according to DIN 238 with taper SK50 form A DIN 69871
- Fine-balancing against extra charge

附件/Accessories

拉钉/Pull studs

SK40	夹头/Holding chuck	B16
长度/Length A [mm]		26 ¹⁾
订货号/Order No.	40.400...	...16
SK50	夹头/Holding chuck	B16
长度/Length A [mm]		26 ¹⁾
订货号/Order No.	50.400...	...16

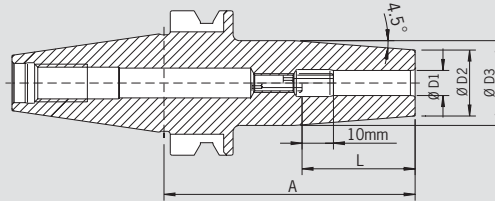
1) 适用于ANSI-CAT/Also suitable for ANSI-CAT

HAIMER

热缩刀柄/SHRINK FIT CHUCK JIS B 6339 (MAS 403) · BT

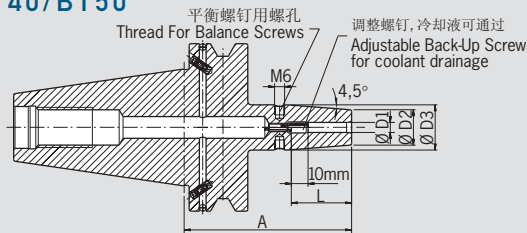


BT30



质量证书 Certificate of Quality	
☒	刀柄精细动平衡 Chuck body fine balanced G2.5 25.000 1/min
☒	所有功能面全部加工 All functional surfaces machined
☒	锥度公差 AT3 Taper tolerance AT3

BT40/BT50



质量证书 Certificate of Quality	
☒	刀柄精细动平衡 Chuck body fine balanced G2.5 25.000 1/min
☒	所有功能面全部加工 All functional surfaces machined
☒	锥度公差 AT3 Taper tolerance AT3
☒	切削液供给采用 ADB 型 Coolant supply form ADB

使用:

适用于所有热缩设备

JIS B 6339(MAS 403) BT ADB型
类似DIN 69882-8

ADB型含义: 中心冷却及能被再次密封的凸缘冷却通路

- 耐热钢
- 硬度 54-2 HRC
- 用于HSS和整体硬质合金刀具
- 柄部公差 h6
- 交货时含调整螺钉
- 可用平衡螺钉精密动平衡
- Cool Jet型冷却喷嘴需额外费用

Use:

Suitable for all shrinking units

JIS B 6339(MAS 403) BT form ADB
similar to DIN 69882-8

Form ADB means: central coolant supply and coolant channels through the flange which can be sealed again

- Heat resistant hot-working steel
- Hardened 54-2 HRC
- For HSS and solid carbide tools
- Shank tolerance h6
- Included in delivery: Shrink fit chuck with back-up screw
- Fine-balancing by set screws – see accessories
- Cooling with Cool Jet against extra charge

附件/Accessories

热缩延长杆/Shrink fit extensions	
平衡螺钉/Balance screws	
螺钉/Pull studs	
减径套/Reduction sleeves	
调整螺钉/Back-up screws	
Cool Jet型冷却喷嘴/Cool Jet bores	
订货号/Order No. 91.100.24	

夹持直径/Clamping Ø D1	03	04	05	06	08	10	12	14	16	18	20	25	32
Ø D2 [mm]	10	10	10	21	21	24	24	27	27	33	33	44	44
Ø D3 [mm]	-	-	-	27	27	32	32	34	34	42	42	53	53
L [mm]	-	-	-	36	36	42	47	47	50	50	52	58	58

BT30 (无平衡螺钉用螺孔/without threads for balancing screws)

长度/Length A [mm]	短/short		80 ¹⁾	80 ¹⁾	80 ¹⁾	80	80	80	80	80	90	90	-	-
订单号/Order No.	30.640...		...03	...04	...05	...06	...08	...10	...12	...14	...16	...18	...20	...
长度/Length A [mm]	超短/ultrashort		60 ¹⁾	60 ¹⁾	60 ¹⁾	60	60	60	60	65	65	70	70	-
订单号/Order No.	30.645...		...03	...04	...05	...06	...08	...10	...12	...14	...16	...18	...20	...

BT40

长度/Length A [mm]	短/short		90 ¹⁾	90 ¹⁾	90 ¹⁾	90	90	90	90	90	90	90	100	100
订单号/Order No.	40.640...		...03	...04	...05	...06	...08	...10	...12	...14	...16	...18	...20	...32
长度/Length A [mm]	超短/ultrashort		-	-	-	130	130	130	130	130	130	130	130	130
订单号/Order No.	40.644...		-	-	-	...06	...08	...10	...12	...14	...16	...18	...20	...25
长度/Length A [mm]	超长/extralong160		-	-	-	160	160	160	160	160	160	160	160	160
订单号/Order No.	40.642...		-	-	-	...06	...08	...10	...12	...14	...16	...18	...20	...25
长度/Length A [mm]	超长/extralong200		-	-	-	200	200	200	200	200	200	200	200	200
订单号/Order No.	40.646...		-	-	-	...06	...08	...10	...12	...14	...16	...18	...20	...25

BT50

长度/Length A [mm]	短/short		90 ¹⁾	90 ¹⁾	90 ¹⁾	100	100	100	100	100	100	100	100	100
订单号/Order No.	50.640...		...03	...04	...05	...06	...08	...10	...12	...14	...16	...18	...20	...32
长度/Length A [mm]	超短/ultrashort		-	-	-	130	130	130	130	130	130	130	130	130
订单号/Order No.	50.644...		-	-	-	...06	...08	...10	...12	...14	...16	...18	...20	...25
长度/Length A [mm]	超长/extralong160		-	-	-	160	160	160	160	160	160	160	160	160
订单号/Order No.	50.642...		-	-	-	...06	...08	...10	...12	...14	...16	...18	...20	...25
长度/Length A [mm]	超长/extralong200		-	-	-	200	200	200	200	200	200	200	200	200
订单号/Order No.	50.646...		-	-	-	...06	...08	...10	...12	...14	...16	...18	...20	...25

1) 无调整螺钉, 无平衡螺钉用螺孔, 夹持孔部有用于切削液流通的缝

Without back-up screw, without threads for balancing screws, with slits along the clamping bore for cooling from outside

2) 带有Cool Jet型冷却喷嘴/with Cool Jet

规格如有变更恕不另行通知

Technical data subject to change without prior notice

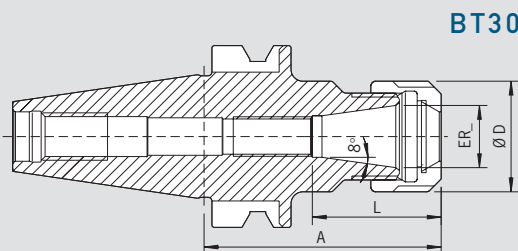
ER 弹簧筒夹刀柄 / COLLET CHUCK ER JIS B 6339 (MAS 403) · BT

质量证书 Certificate of Quality

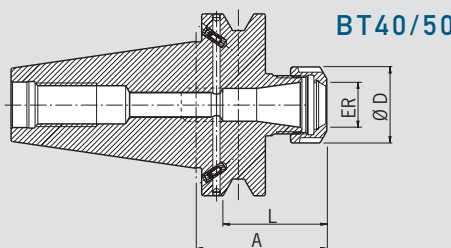
- ✓ 刀柄精细平衡
✓ Chuck body fine balanced
G2.5 25.000 1/min
或/or U<1gmm
- ✓ 所有功能面全部加工
✓ All functional surfaces machined
- ✓ 锥度公差 AT3
✓ Taper tolerance AT3

质量证书 Certificate of Quality

- ✓ 刀柄精细平衡
✓ Chuck body fine balanced
G2.5 25.000 1/min
或/or U<1gmm
- ✓ 所有功能面全部加工
✓ All functional surfaces machined
- ✓ 锥度公差 AT3
✓ Taper tolerance AT3
- ✓ 切削液供给采用 ADB 型
✓ Coolant supply form ADB



BT30



BT40/50



使用:

搭配符合DIN 6499 的弹簧筒夹适用于夹持圆柱直柄刀具

ADB型BT锥柄符合 JIS B 6339 (MAS 403)

ADB型含义: 中心冷却及能被再次密封的凸缘冷却通路

- 交货时含锁紧螺母(经动平衡, 为获得更高夹持力的防滑涂层)

- HS型锁紧螺母(高速, 精密动平衡, 防滑涂层)需额外费用

- 加大尺寸L需要额外费用

Use:

For clamping tools with cylindrical shank in collets according to DIN 6499

with taper

JIS B 6339 (MAS 403) BT 40 form ADB

form ADB means: central coolant supply and coolant channels on the collar which can be sealed again

- Included in delivery: locknut (balanced, with slide coating for higher clamping forces);

- Locknut type HS (High-Speed, fine balanced, with slide coating for higher clamping forces) against extra charge

- Enlarging of size L against extra charge

附件/Accessories

弹簧筒夹/Collets

锁紧螺母 (预平衡)

/Locknut (pre-balanced)

订货号/Order No. 83.912... ..11 ...16 ...20 ...25 ...32 ...40

HS型锁紧螺母 (精密平衡)

/Locknut HS (fine-balanced)

订货号/Order No. 83.912... - ...16.HS ...20.HS ...25.HS ...32.HS ...40.HS

开口扳手/Fork wrench

订货号/Order No. 84.200... ..11 ...16 ...20 - - -

爪型扳手/Clamping wrench

订货号/Order No. 84.200... - - - ...25 ...32 ...40

平衡环/Balancing index rings

长/long, 超长/oversize

订货号/Order No. 79.350... - ...28 ...34 ...42 ...48²⁾ ...52³⁾

拉钉/Pull studs

热缩延长杆/Shrink fit extensions

	ER 11	ER 16	ER 20	ER 25	ER 32	ER 40
Ø D [mm]	19	28	34	42	50	63
夹持范围/Clamping range [mm]	0,5-7,0	0,5-10,0	1,5-13,0	1,0-16,0	1,5-20,0	2,5-26,0
L [mm]	27	33 ¹⁾	39	41	64	73

BT30

长度/Length A [mm] 超短/ultrashort

订货号/Order No. 30.525...

长度/Length A [mm] 短/short

订货号/Order No. 30.520...

长度/Length A [mm] 长/long

订货号/Order No. 30.521...

BT40

长度/Length A [mm] 短/short

订货号/Order No. 40.520...

长度/Length A [mm] 长/long

订货号/Order No. 40.521...

长度/Length A [mm] 超长/oversize

订货号/Order No. 40.522...

BT50

长度/Length A [mm] 短/short

订货号/Order No. 50.520...

长度/Length A [mm] 长/long

订货号/Order No. 50.521...

长度/Length A [mm] 超长/oversize

订货号/Order No. 50.522...

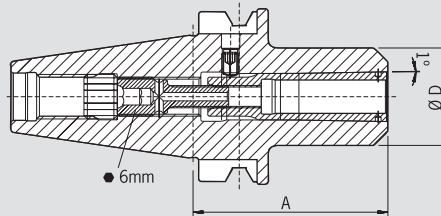
1) BT40和BT50 通孔/Drilled through for BT40 and BT50

2) BT50长刀柄除外/Except BT50 long

3) 订货号/Order No. 79.350.63 用于/for BT50

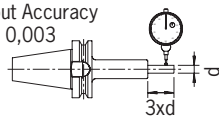
HAIMER

HG 高精度后拉式刀柄 / HIGH-PRECISION CHUCK JIS B 6339 (MAS 403) · BT



质量证书 Certificate of Quality	
☒	刀柄精细动平衡 Chuck body fine balanced G2.5 25.0001/min
☒	所有功能面全部加工 All functional surfaces machined
☒	锥度公差 AT3 Taper tolerance AT3
☒	切削液供给采用 ADB 型 Coolant supply form ADB

跳动精度/Runout Accuracy
< 0,003



使用:

用特殊弹簧筒夹高精度夹持圆柱直柄刀具, 非常适于高速加工

ADB型BT锥柄符合 JIS B 6339 (MAS 403)

ADB型含义: 中心冷却及能被再次密封的凸缘冷却通路

— 含: HG 型高精度刀柄, 紧固螺钉和后拉钩, 无筒夹

— 柄部公差 h6

Use:

For highly precise clamping of tools with cylindrical shank with special collets, very useful for high-speed machining with taper

JIS B 6339 (MAS 403) BT form ADB

form ADB means: central coolant supply and coolant channels on the collar which can be sealed again

— Included in delivery: HG chuck with clamping screw and pull-out hook without collet

— Shank tolerance h6

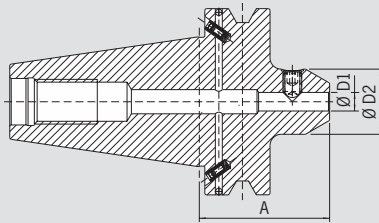
							HG 01		HG 02			HG 03						
Ø D [mm]							30		35			48						
夹持直径 Ø/clamping diameter							2	3	4	5	6	8	10	12	14	16	18	20
BT40																		
长度/Length A [mm]		短/short				65		70			75							
订货号/Order No.		40.620...				...01		...02			...03							
长度/Length A [mm]		长/long				100		100			100							
订货号/Order No.		40.621...				...01		...02			...03							
长度/Length A [mm]		超长/oversize				160		160 ¹⁾			—							
订货号/Order No.		40.622...				...01		...02										
BT50																		
长度/Length A [mm]		短/short				65		70			75							
订货号/Order No.		50.620...				...01		...02			...03							
长度/Length A [mm]		长/long				100		100			—							
订货号/Order No.		50.621...				...01		...02										
长度/Length A [mm]		超长/oversize				160		160			—							
订货号/Order No.		50.622...				...01		...02										

附件/Accessories		HG 01	HG 02	HG 03
筒夹/Collets				
紧固螺钉/Clamping screw				
短/short				
订货号/Order No. 82.560...		...03	...02	...02
长/long				
订货号/Order No. 82.560...		...04	...01	...05
超长/oversize				
订货号/Order No. 82.560...		...08	...06	...07
后拉钩/Pull-out hook				
订货号/Order No. 82.570...		...00	...00	...00
平衡环/Balancing index rings				
订货号/Order No. 79.350...		...30	...35	...48
拉钉/Pull studs				
热缩延长杆/Shrink fit extensions				
Cool Jet型冷却喷嘴/Cool Jet bores				
订货号/Order No. 91.100.24				

侧固刀柄 / WELDON TOOLHOLDER

JIS B 6339 (MAS 403) · BT

质量证书 Certificate of Quality	
☒	刀柄精动平衡 Chuck body fine balanced
☒	G2.5 22,000 1/min
☒	所有功能面全部加工 All functional surfaces machined
☒	锥度公差 AT3 Taper tolerance AT3
☒	切削液供给采用 ADB 型 Coolant supply form ADB



使用:

夹持符合 DIN 1835-B 和 DIN 6535-HB 的
圆柱直柄且具有紧固平面的刀具

类似 DIN 6359 ,
ADB型BT锥柄符合 JIS B 6339 (MAS 403)

ADB型含义: 中心冷却及能被再次密封的凸缘冷却通路

- Cool Jet型冷却喷孔需要额外费用
- 含: 紧固螺钉
- 超短型只能用AD型

Use:

For clamping cutters with cylindrical shank and Weldon flat according
to DIN 1835-B and DIN 6535-HB

similar to DIN 6359 with taper
JIS B 6339 (MAS 403) BT form ADB

Form ADB means: central coolant supply and coolant channels through
the flange which can be sealed again

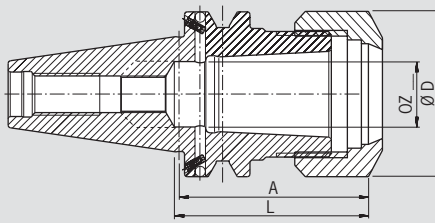
- Cooling with Cool Jet against extra charge
- Delivery: with clamping screw
- Extra short design only available in form AD

夹持直径 / Clamping	Ø D1 [mm]	06	08	10	12	14	16	18	20	25	32
	Ø D2 [mm]	25	28	35	42	44	48	50	52	65	72
BT40											
长度/Length A [mm]	短/short	50	50	63	63	63	63	63	63	90	100
订货号/Order No.	40.500...	...06	...08	...10	...12	...14	...16	...18	...20	...25	...32
长度/Length A [mm]	长/long	100	100	100	100	-	100	-	100	100	-
订货号/Order No.	40.501...	...06	...08	...10	...12	-	...16	-	...20	...25	-
长度/Length A [mm]	超长/oversize	160	160	160	160	-	160	-	160	160	-
订货号/Order No.	40.502...	...06	...08	...10	...12	-	...16	-	...20	...25	-
长度/Length A [mm]	超短/ultrashort	-	-	-	-	-	35	35	35	60	65
订货号/Order No.	40.505...	-	-	-	-	-	...16	...18	...20	...25	...32
BT50											
长度/Length A [mm]	短/short	63	63	70	80	-	80	-	80	100	105
订货号/Order No.	50.500...	...06	...08	...10	...12	-	...16	-	...20	...25	...32
长度/Length A [mm]	长/long	-	-	100	100	-	100	-	100	-	-
订货号/Order No.	50.501...	-	-	...10	...12	-	...16	-	...20	-	-
长度/Length A [mm]	超长/oversize	160	160	160	160	-	160	-	160	160	160
订货号/Order No.	50.502...	...06	...08	...10	...12	-	...16	-	...20	...25	...32

附件/Accessories	用于夹持直径 Ø/For clamping Ø	06	08	10	12	14	16	18	20	25	32
夹紧螺钉/Clamping screw		...	...	...	...	...	...	...	...	...	...
订货号/Order No.	85.100...	...06	...08	...10	...12	...12	...14	...14	...16	...18	...20
平衡环/Balancing index rings		...	...	...	...	...	...	...	...	...	...
长/long, ZG130, 超长/oversize, ZG200		...	...	...	...	...	...	...	...	...	...
订货号/Order No.	79.350...	...25	...28	...35	...42	...44	...48	...50	...52	...65	...72
拉钉/Pull studs		...	...	...	...	...	...	...	...	...	...
Cool Jet型冷却喷孔/Cool Jet bores		...	...	...	...	...	...	...	...	...	...
订货号/Order No.	91.100.24	...	...	...	...	...	...	...	...	...	...

HAIMER

OZ 弹簧筒夹刀柄 / COLLET CHUCK OZ
JIS B 6339 (MAS 403) · BT 40



质量证书 Certificate of Quality	
☒	刀柄精细动平衡 Chuck body fine balanced G2.5 22.000 1/min
☒	所有功能面全部加工 All functional surfaces machined
☒	锥度公差 AT3 Taper tolerance AT3
☒	切削液供给采用 ADB 型 Coolant supply form ADB

使用:

搭配符合DIN 6388的弹簧筒夹适于夹持圆柱直柄刀具

依据DIN 6391

ADB型BT40锥柄符合JIS B 6339 (MAS 403)

ADB型含义: 中心冷却及能被再次密封的凸缘冷却通路

- 交货时含: 球轴承锁紧螺母
- 加大尺寸L需额外费用

Use:

For clamping tools with cylindrical shank in collets according to DIN 6388

similar to DIN 6391 with taper

JIS B 6339 (MAS 403) BT 40 form ADB

form ADB means: central coolant supply and coolant channels on the collar which can be sealed again

- Included in delivery: ball bearing locknut
- Enlarging of size L against extra charge

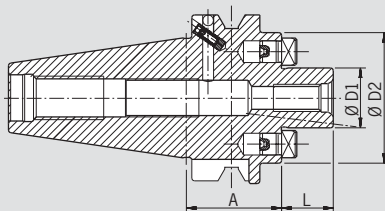
夹持范围/Clamping range [mm]		2-16		2-25	
Ø D [mm]		43		60	
L [mm]		50		60	
BT40					
长度/Length A [mm]	短/short		70		70
订货号/Order No.	40.510...		...16		...25
长度/Length A [mm]	长/long		100		100
订货号/Order No.	40.511...		...16		...25

附件/Accessories	用于夹持直径范围/for clamping dia. range	2-16	2-25
弹簧筒夹/Collets			
紧固螺母/Locknut			
订货号/Order No.	83.920...	...16	...25
钩扳手/Hook key			
订货号/Order No.	84.300...	...16	...25
平衡环/Balancing index rings			
短/short	订货号/Order No.	79.350...	...
长/long, 超长/oversize, /ZG 20	订货号/Order No.	79.350...	...
拉钉/Pull studs			
热缩延长杆/Shrink fit extensions			

面铣刀刀柄 / FACE MILL ARBOR JIS B 6339 (MAS 403) · BT

质量证书 Certificate of Quality

- ☒ 刀柄精细动平衡
- ☒ Chuck body fine balanced
G2.5 22.000 1/min
- ☒ 所有功能面全部加工
- ☒ All functional surfaces machined
- ☒ 锥度公差 AT3
- ☒ Taper tolerance AT3
- ☒ 切削液供给采用 ADB 型
- ☒ Coolant supply form ADB



使用:

用于夹持符合 DIN 1880 的面铣刀和带有径向驱动槽的刀具，也可夹持符合 DIN 2079 直径超过 40 的刀盘 (4 个附加的螺孔)

类似 DIN 6753

ADB 型 BT 锥柄符合 JIS B 6339 (MAS 403)

ADB 型含义：中心冷却及能被再次密封的凸缘冷却通路

- 交货时含：拉紧螺钉
- 冷却喷孔需额外费用

Use:

For holding face mill cutters and milling cutters with radial driving slot
DIN 1880 and exceeding Ø 40 clamping according to DIN 2079 (4 additional thread holes)

similar to DIN 6357 with taper

JIS B 6339 (MAS 403) BT form ADB

form ADB means: central coolant supply and coolant channels
on the collar which can be sealed again

- Included in delivery: complete with tightening bolt
- Coolant bores on front side against extra charge

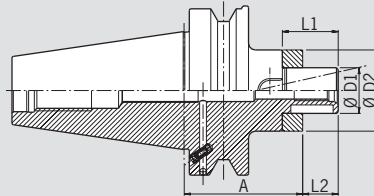
夹持直径 / Clamping Ø D1 [mm]			22	27	32	40
L [mm]			19	21	24	27
BT40 Ø D2 [mm]			48	48	78	87
长度 / Length A [mm]	短 / short		35	35	65	70
订货号 / Order No.	40.550...		...22	...27	...32	...40
BT50 Ø D2 [mm]			48	60	78	89
长度 / Length A [mm]	短 / short		55	55	55	55
订货号 / Order No.	50.550...		...22	...27	...32	...40
长度 / Length A [mm]	长 / long		100	100	100	-
订货号 / Order No.	50.551...		...22	...27	...32	

附件/Accessories		用于/for D1	22	27	32	40
拉紧螺钉/Tightening bolt						
Größe/Size D1						
订货号/Order No.	85.300...		...22	...27	...32	...40
扳手/Wrench						
订货号/Order No.	84.400...		...22	...27	...32	...40
平衡环/Balancing index rings						
短/short			—	—	...78	...89
订货号/Order No.	79.350...					
长/long						
订货号/Order No.	79.350...		...48	...60	...78	...87 ¹⁾
拉钉/Pull studs						
						
冷却喷孔/Coolant bores						
订货号/Order No.	91.100.03					

1) 订货号 / Order No. 79.350.89 用于 / For BT50

HAIMER

壳铣刀刀柄

**COMBINATION SHELL END MILL ADAPTER
JIS B 6339 (MAS 403) · BT 50**

质量证书 Certificate of Quality	
☒	刀柄精细动平衡 Chuck body fine balanced
☒	G2.5 22.000 1/min
☒	所有功能面全部加工 All functional surfaces machined
☒	锥度公差 AT3 Taper tolerance AT3
☒	切削液供给采用 ADB 型 Coolant supply form ADB

使用:

用于符合 DIN 841 和 DIN 1880 的壳铣刀，也可用于符合 DIN 842 的角度铣刀和符合 DIN 1830 的刀具

类似 DIN 6358

ADB 型 BT 锥柄符合 JIS B 6339 BT (MAS 403)

ADB 型含义：中心冷却及能被再次密封的凸缘冷却通路

- 交货时含：拉紧螺钉，传动环和滑键
- 前端冷却喷嘴需额外费用

Use:

For clamping shell end mills DIN 841 and DIN 1880 as well as angular milling cutters DIN 842 and cutters DIN 1830

similar to DIN 6358 with taper

JIS B 6339 (MAS 403) BT form ADB

form ADB means: central coolant supply and coolant channels on the collar which can be sealed again

- Included in delivery: complete with tightening bolt, driving ring and feather key
- Coolant bores on front side against extra charge

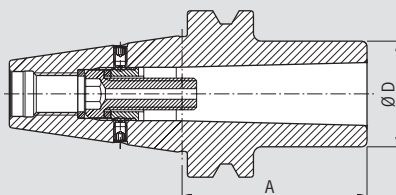
夹持直径 / Clamping Ø D1 [mm]			16	22	27	32	40
Ø D2 [mm]			32	40	48	58	70
L1 [mm]			27	31	33	38	41
L2 [mm]			17	19	21	24	27
BT40							
长度 / Length A [mm]	短 / short		55	55	55	60	70
订货号 / Order No.	40.540...		...16	...22	...27	...32	...40
长度 / Length A [mm]	长 / long		100	100	100	100	—
订货号 / Order No.	40.541...		...16	...22	...27	...32	—
长度 / Length A [mm]	超长 / oversize		160	160	160	—	—
订货号 / Order No.	40.542...		...16	...22	...27	—	—
BT50							
长度 / Length A [mm]	短 / short		70	70	70	70	70
订货号 / Order No.	50.540...		...16	...22	...27	...32	...40
长度 / Length A [mm]	长 / long		100	100	100	100	100
订货号 / Order No.	50.541...		...16	...22	...27	...32	...40
长度 / Length A [mm]	超长 / oversize		160	160	160	160	160
订货号 / Order No.	50.542...		...16	...22	...27	...32	...40

附件 / Accessories		用于 / For	Ø D1	16	22	27	32	40
拉紧螺钉 / Tightening bolt								
订货号 / Order No.	85.300...			...16	...22	...27	...32	...40
扳手 / Wrench								
订货号 / Order No.	84.400...			...16	...22	...27	...32	...40
滑键 / Feather Key								
订货号 / Order No.	85.400...			...16	...22	...27	...32	...40
驱动环 / Driving Ring								
订货号 / Order No.	85.200...			...16	...22	...27	...32	...40
平衡环 / Balancing index rings								
SK50 长 / long, 超长 / oversize								
订货号 / Order No.	79.350...			...32	...40	...48	...58	...70
拉钉 / Pull studs								
冷却喷嘴 / Coolant bores								
订货号 / Order No.	91.100.03							

带螺孔的莫氏锥度刀柄 JIS B 6339 (MAS 403) · BT 40 ADAPTER FOR MORSE TAPER WITH THREAD

质量证书 Certificate of Quality

- ☒ 刀柄精细动平衡
Chuck body fine balanced
G6.3 8.000 1/min
- ☒ 所有功能面全部加工
All functional surfaces machined
- ☒ 锥度公差 AT3
Taper tolerance AT3



使用:

适用于夹持 DIN 228-1 A 型锁牙式莫氏锥柄刀具
类似 DIN 6383,

AD 型 BT 锥柄符合 JIS B 6339 (MAS 403)

- 交货时含: 拉紧螺钉
- 精密动平衡需额外费用

MK03 和 MK04 无扁尾孔

Use:

For clamping tools with Morse taper and thread according to DIN 228-1 form A

similar to DIN 6383 with taper

JIS B 6339 (MAS 403) BT form AD

- Included in delivery: tightening bolt
- Fine-balancing against extra charge

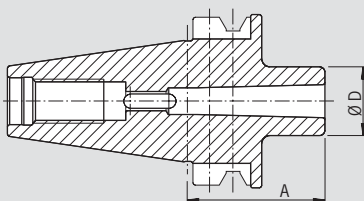
MK03 and MK04 without bore for tang

莫氏锥度/Morse Taper	MK01	MK02	MK03	MK04
Ø D [mm]	25	32	40	48
BT40				
长度/Length A [mm]	短/short	50	50	70
订货号/Order No.	40.630...	...01	...02	...03
BT50				
长度/Length A [mm]	短/short	-	60	65
订货号/Order No.	50.630...	...01	...02	...03
附件/Accessories				
平衡环/Balancing index rings	MK01	MK02	MK03	MK04
订货号/Order No.	79.350...	...25	...32	...40
拉钉/Pull studs				

带扁尾孔的莫氏锥度刀柄 JIS B 6339 (MAS 403) · BT 40 ADAPTER FOR MORSE TAPER WITH TANG

质量证书 Certificate of Quality

- ☒ 刀柄精细动平衡
Chuck body fine balanced
G6.3 8.000 1/min
- ☒ 所有功能面全部加工
All functional surfaces machined
- ☒ 锥度公差 AT3
Taper tolerance AT3



使用:

适用于夹持 DIN 228-1 B 型带扁尾的莫氏锥柄刀具
类似 DIN 6383,

AD 型 BT 锥柄符合 JIS B 6339 (MAS 403)

- 精密动平衡需额外费用

Use:

For holding tools with Morse taper and tang according to DIN 228-1 form B

similar to DIN 6383 with taper

JIS B 6339 (MAS 403) BT 40 form AD

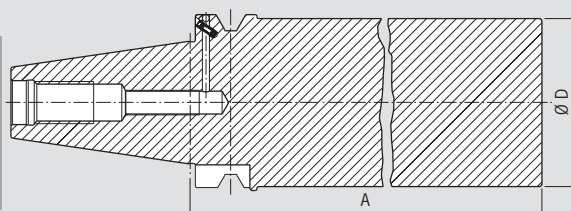
- Fine-balancing against extra charge

莫氏锥度/Morse Taper	MK01	MK02	MK03	MK04
Ø D [mm]	25	32	40	48
BT40				
长度/Length A [mm]	短/short	50	50	70
订货号/Order No.	40.580...	...01	...02	...03
BT50				
长度/Length A [mm]	短/short	-	60	65
订货号/Order No.	50.580...	...01	...02	...03
附件/Accessories				
平衡环/Balancing index rings	MK01	MK02	MK03	MK04
订货号/Order No.	79.350...	...25	...32	...40
拉钉/Pull studs				

刀柄毛坯/BLANK ADAPTER JIS B 6339 (MAS 403) · BT 50

质量证书 Certificate of Quality

- ☒ 所有功能面全部加工
All functional surfaces machined
- ☒ 锥度公差 AT3
Taper tolerance AT3
- ☒ 切削液供给采用 ADB 型
Coolant supply form ADB



使用:

用于加工特殊刀具

设计:

锥柄和槽硬化并精磨, 圆柱部分未硬化

ADB 型 BT50 锥柄符合 JIS B 6339 (MAS 403)

ADB 型含义: 中心冷却及能被再次密封的凸缘冷却通路

Use:

For manufacturing special tools in your own factory

Design:

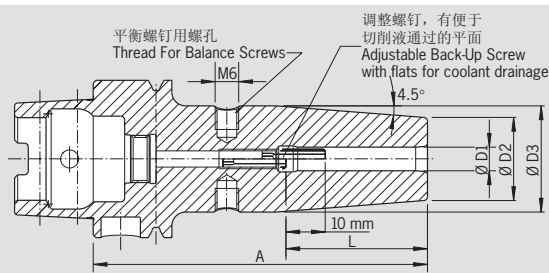
Taper and groove are hardened and ground, the cylindrical part is soft
form ADB means: central coolant supply and coolant channels
on the collar which can be sealed again

Ø D [mm]	95
长度/Length A [mm]	315
订货号/Order No.	50.590...
附件/Accessories	
拉钉/Pull studs	

规格如有变更恕不另行通知
Technical data subject to change without prior notice

HAIMER

热缩刀柄 /SHRINK FIT CHUCK HSK-A / DIN 69893



A型/Form A

质量证书

Certificate of Quality

- ☒ 刀柄精动平衡
- ☒ Chuck body fine balanced
- G2.5 25.000 1/min
- 或/或 U<1gmm
- ☒ 所有功能面全部加工
- ☒ All functional surfaces machined
- ☒ 精度高于DIN标准
- ☒ More accurate than DIN

使用:

适用于所有热缩机

DIN 69893-1, 类似DIN 69882-8

- 可用平衡螺钉精密动平衡
- 交货时含调整螺钉, 无冷却管
- 耐热钢
- 硬度 54-2 HRC
- 用于HSS和整体硬质合金刀具
- 柄部公差 h6
- Cool Jet型冷却喷嘴需额外费用

Use:

Suitable for all shrinking units

DIN 69893-1, similar to DIN 69882-8

- Fine-balancing by set screws possible
- Included in delivery: Shrink fit chuck with backup screw, without coolant tube
- Heat resistant hot-working steel
- Hardened 54-2 HRC
- For HSS and solid carbide tools
- Shank tolerance h6
- Cooling with Cool Jet against extra charge

附件/Accessories

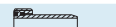
热缩延长杆/Shrink fit extensions



平衡螺钉/Balance Screws



冷却管/Coolant tube



订货号/Order No. 85.700...⁴⁾

减径套/Reduction sleeves



调整螺钉/Back up Screws



Cool Jet型冷却喷嘴/Cool Jet bores



订货号/Order No. 91.100.24

夹持直径 /Clamping Ø D1 [mm]	03	04	05	06	08	10	12	14	16	18	20	25	32
Ø D2 [mm]	10	10	10	21	21	24	24	27	27	33	33	44	44
Ø D3 [mm]	-	-	-	27	27	32	32	34	34	42	42	53	53
L [mm]	-	-	-	36	36	42	47	47	50	50	52	58	58
HSK-A 32													
长度/Length A [mm] 短/short	60 ¹⁾	60 ¹⁾	60 ¹⁾	70 ²⁾	70 ²⁾	80 ²⁾	-	-	-	-	-	-	-
订货号/Order No. A 32.140...	...03	...04	...05	...06	...08	...10	-	-	-	-	-	-	-
长度/Length A [mm] 长/long	-	-	-	100 ²⁾	100 ²⁾	-	-	-	-	-	-	-	-
订货号/Order No. A 32.141...	-	-	-	...06	...08	-	-	-	-	-	-	-	-
HSK-A 40													
长度/Length A [mm] 短/short	60 ¹⁾	60 ¹⁾	60 ¹⁾	80	80	80	90	90	90	-	-	-	-
订货号/Order No. A 40.140...	...03	...04	...05	...06	...08	...10	...12	...14	...16	-	-	-	-
长度/Length A [mm] ZG130	-	-	-	130	130	130	130	-	-	-	-	-	-
订货号/Order No. A 40.144...	-	-	-	...06	...08	...10	...12	-	-	-	-	-	-
HSK-A 50													
长度/Length A [mm] 短/short	-	60 ¹⁾	60 ¹⁾	80	80	85	90	90	95	-	-	-	-
订货号/Order No. A 50.140...	-	...04	...05	...06	...08	...10	...12	...14	...16	-	-	-	-
长度/Length A [mm] ZG130	-	-	-	130	130	130	130	-	130	-	-	-	-
订货号/Order No. A 50.144...	-	-	-	...06	...08	...10	...12	...16	...16	-	-	-	-
HSK-A 63													
长度/Length A [mm] 短/short	80 ¹⁾	80 ¹⁾	80 ¹⁾	80	80	85	90	90	95	95	100	115	120
订货号/Order No. A 63.140...	...03	...04	...05	...06	...08	...10	...12	...14	...16	...18	...20	...25	...32
长度/Length A [mm] ZG130	-	-	-	130	130	130	130	130	130	130	130	130	-
订货号/Order No. A 63.144...	-	-	-	...06	...08	...10	...12	...14	...16	...18	...20	...25	...32
长度/Length A [mm] 超长/oversize	-	-	-	160	160	160	160	160	160	160	160	160	160
订货号/Order No. A 63.142...	-	-	-	...06	...08	...10	...12	...14	...16	...18	...20	...25	...32
长度/Length A [mm] ZG200	-	-	-	200	200	200	200	200	200	200	200	200	200
订货号/Order No. A 63.146...	-	-	-	...06	...08	...10	...12	...14	...16	...18	...20	...25	...32
HSK-A 80													
长度/Length A [mm] 短/short	-	-	-	85	85	90	95	95	100	100	105	115	120
订货号/Order No. A 80.140...	-	-	-	...06	...08	...10	...12	...14	...16	...18	...20	...25	...32
HSK-A 100													
长度/Length A [mm] 短/short	-	-	-	85	85	90	95	95	100	100	105	115	120
订货号/Order No. A 10.140...	-	-	-	...06	...08	...10	...12	...14	...16	...18	...20	...25	...32
长度/Length A [mm] ZG130	-	-	-	130	130	130	130	130	130	130	130	130	130
订货号/Order No. A 10.144...	-	-	-	...06	...08	...10	...12	...14	...16	...18	...20	...25	...32
长度/Length A [mm] 超长/oversize	-	-	-	160	160	160	160	160	160	160	160	160	160
订货号/Order No. A 10.142...	-	-	-	...06	...08	...10	...12	...14	...16	...18	...20	...25	...32
长度/Length A [mm] ZG200	-	-	-	200	200	200	200	200	200	200	200	200	200
订货号/Order No. A 10.146...	-	-	-	...06	...08	...10	...12	...14	...16	...18	...20	...25	...32

1) 无调整螺钉, 无平衡螺钉用螺孔, 夹持孔部有用于切削液流通的缝

Without back-up screw, without threads for balancing screws, with slits along the clamping bore for cooling from outside

2) 无平衡螺钉用螺孔/Without threads for balancing screws

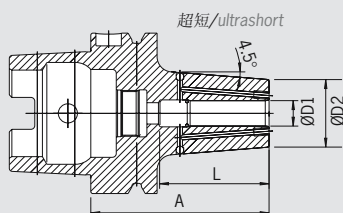
3) 含Cool Jet型冷却喷嘴/with Cool Jet 4) 锥度规格/Taper Size (32 = HSK-32)

规格如有变更恕不另行通知

Technical data subject to change without prior notice

强力热缩刀柄/POWER SHRINK CHUCK HSK-A63/DIN 69893

质量证书 Certificate of Quality
☒ 刀柄精细动平衡 ☒ Chuck body fine balanced G2.5 25.000 1/min 或/或 U<1gmm
☒ 所有功能面全部加工 ☒ All functional surfaces machined
☒ 精度高于DIN标准 ☒ More accurate than DIN
☒ Cool Jet冷却喷嘴可被密封 ☒ Cool Jet, can be sealed



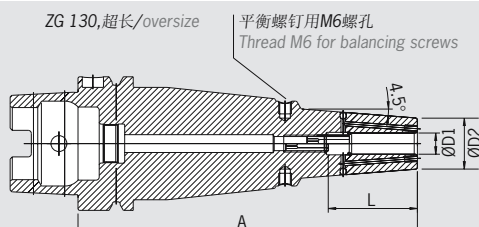
强力热缩刀柄是用于高速加工中获得最高加工能力的热缩刀柄。这种优化设计结合了缓冲振动的高刚性，因此可以给机床、主轴和刀具更多的保护。带有特殊末端渐缩的长型（A=130及160）尤为常用。

The Power Shrink Chuck is the shrink fit chuck for the highest machining capacity in high-speed manufacturing. The optimized design with better construction combines high rigidity with vibration dampening features, giving more protection to machines, spindles and tools. The long versions (A = 130 and 160) with slim tips are especially versatile to use.

- 最高跳动精度: 0,003 mm
- 提升了加工能力实现高主轴转速，高速进给和更大切深
- 更短的工时
- 抗振几何结构使运行更平稳，因此得到更好的表面加工质量，更好的保护了刀具，主轴和机床。
- 更高的加工精度
- 冷却喷射孔可被内部密封
- 高刚性
- 具有缓冲振动特性
- 高夹持力
- 既适用于高速加工又适用于重铣削
- 通用性，节省刀具库空间

- Highest runout accuracy: 0.003 mm
- Increased machining capacity due to higher spindle speed, higher feed and larger cutting depth
- Shorter processing times
- Smoother running thanks to vibration absorbing geometry, therefore better surface quality and protection of tools, spindles and machines
- Higher machining accuracy
- Cool Jet bores that can be sealed included
- High rigidity
- Vibration dampening features
- High clamping force
- Equally suited to high-speed manufacturing and heavy milling
- Universal usage, saves space in tool magazine

质量证书 Certificate of Quality
☒ 刀柄精细动平衡 ☒ Chuck body fine balanced G2.5 25.000 1/min 或/或 U<1gmm
☒ 所有功能面全部加工 ☒ All functional surfaces machined
☒ 精度高于DIN标准 ☒ More accurate than DIN
☒ Cool Jet冷却喷嘴可被密封 ☒ Cool Jet, can be sealed



HSK-A 63

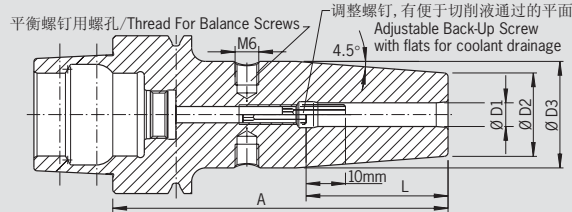
夹持直径/Clamping Ø D1 [mm]	06	08	10	12	14	16	18	20	25	32
Ø D2 [mm]	22	22	26,5	26,5	29,5	29,5	35,5	35,5	45	45
L [mm]	38	38	43	46	46	49	49	49	57	59
超短/Length A [mm]	70	70	70	70	70	75	75	75	85	85
订货号/Order No.	A63.145...	...	...	...	...	...	...	...	...	...
Ø D2 [mm]	21	21	24	24	27	27	33	33	44	44
L [mm]	36	36	42	47	47	50	50	52	58	58
超短/Length A [mm]	130	130	130	130	130	130	130	130	130	130
订货号/Order No.	A63.144...	...	...	...	...	...	...	...	...	...
超短/Length A [mm]	160	160	160	160	160	160	160	160	160	160
订货号/Order No.	A63.142...	...	...	...	...	...	...	...	...	...

HAIMER

热缩刀柄/SHRINK FIT CHUCK



DIN 69893-5, 类似/similar to DIN 69882-8



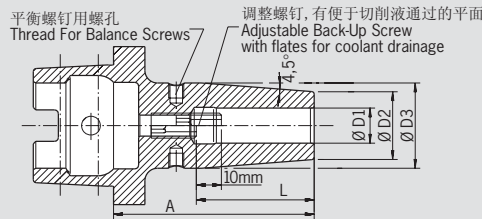
E 型/Form E

质量证书
Certificate of Quality

- ☒ 刀柄精细动平衡
- ☒ Chuck body fine balanced
- ☒ G2.5 25.000 1/min
- ☒ 或/or U<1gmm
- ☒ 所有功能面全部加工
- ☒ All functional surfaces machined
- ☒ 精度高于DIN标准
- ☒ More accurate than DIN



DIN 69893, 类似/similar to DIN 69882-8



C 型/Form C

质量证书
Certificate of Quality

- ☒ 刀柄精细动平衡
- ☒ Chuck body fine balanced
- ☒ G2.5 25.000 1/min
- ☒ 或/or U<1gmm
- ☒ 所有功能面全部加工
- ☒ All functional surfaces machined
- ☒ 精度高于DIN标准
- ☒ More accurate than DIN

使用:

适用于所有热缩机

- 耐热钢
- 硬度 54-2 HRC
- 用于HSS和整体硬质合金刀具
- 柄部公差 h6
- Cool Jet型冷却喷嘴需额外费用
- 可用平衡螺钉精密动平衡
- 交货时含调整螺钉

Use:

Suitable for all shrinking units

- Heat resistant hot-working steel
- Hardened 54-2 HRC
- For HSS and solid carbide tools
- Shank tolerance h6
- Cooling with Cool Jet against extra charge
- Fine-Balancing by balance screws
- Included in delivery: Shrink fit chuck with back-up screw

附件/Accessories

热缩延长杆/Shrink fit extensions



平衡螺钉/Balance Screws



调整螺钉/Back up Screws



Cool Jet型冷却喷嘴/Cool Jet bores



订货号/Order No. 91.100.24

夹持直径/Clamping Ø D1 [mm]	03	04	05	06	08	10	12	14	16	18	20	25	32
L [mm]	-	-	-	36	36	42	47	47	50	50	52	58	58
Ø D2 [mm]	10	10	10	21	21	24	24	27	27	33	33	44	44
Ø D3 [mm]	-	-	-	27	27	32	32	34	34	42	42	53	53
HSK-E 32													
长度/Length A [mm] 短/short	60 ¹⁾	60 ¹⁾	60 ¹⁾	70 ³⁾	70 ³⁾	80 ³⁾	-	-	-	-	-	-	-
订货号/Order No. E 32.140...	...03	...04	...05	...06	...08	...10	-	-	-	-	-	-	-
长度/Length A [mm] 长/long	-	-	-	100 ³⁾	100 ³⁾	-	-	-	-	-	-	-	-
订货号/Order No. E 32.141...	-	-	-	...06	...08	-	-	-	-	-	-	-	-
HSK-E 40													
长度/Length A [mm] 短/short	60 ¹⁾	60 ¹⁾	60 ¹⁾	80	80	80	90	90	90	-	-	-	-
订货号/Order No. E 40.140...	...03	...04	...05	...06	...08	...10	...12	...14	...16	-	-	-	-
HSK-E 50													
长度/Length A [mm] 短/short	60 ¹⁾	60 ¹⁾	60 ¹⁾	80	80	85	90	90	95	-	-	-	-
订货号/Order No. E 50.140...	...03	...04	...05	...06	...08	...10	...12	...14	...16	-	-	-	-
长度/Length A [mm] ZG130	-	-	-	130	130	130	130	130	130	-	-	-	-
订货号/Order No. E 50.144...	-	-	-	...06	...08	...10	...12	...14	...16	-	-	-	-
长度/Length A [mm] 超长/oversize	-	-	-	160	160	160	160	160	160	-	-	-	-
订货号/Order No. E 50.142...	-	-	-	...06	...08	...10	...12	...14	...16	-	-	-	-
HSK-C 40													
长度/Length A [mm] 短/short	60 ¹⁾	60 ¹⁾	60 ¹⁾	70	70	70	80	80	80	-	-	-	-
订货号/Order No. C40.140...	...03	...04	...05	...06	...08	...10	...12	...14	...16	-	-	-	-
HSK-C 50													
长度/Length A [mm] 短/short	60 ¹⁾	60 ¹⁾	60 ¹⁾	70	70	75	80	80	85	85	90	-	-
订货号/Order No. C50.140...	...03	...04	...05	...06	...08	...10	...12	...14	...16	...18	...20	-	-
HSK-C 63													
长度/Length A [mm] 短/short	-	-	-	70	70	75	80	80	85	85	90	100	110
订货号/Order No. C63.140...	-	-	-	...06	...08	...10	...12	...14	...16	...18	...20	...25	...32
HSK-E 40													
Ø D2 [mm]	10	10	10	21	21	24	24	27	27	33	33	44	44
Ø D3 [mm]	-	-	-	27	27	32	32	34	34	42	42	53	53
长度/Length A [mm] 短/short	-	-	-	60 ²⁾	60 ²⁾	60 ²⁾	60 ²⁾	60 ²⁾	60 ²⁾	-	-	-	-
订货号/Order No. E 40.140...	-	-	-	...06	...08	...10	...12	...14	...16	-	-	-	-

1) 无调整螺钉, 无平衡螺钉用螺孔, 夹持孔部有用于切削液流通的缝

Without back-up screw, without threads for balancing screws, with slits along the clamping bore for cooling from outside

2) 无调整螺钉, 无平衡螺钉用螺孔/Without back-up screw, without threads for balancing screws

3) 无平衡螺钉用螺孔/Without threads for balancing screws

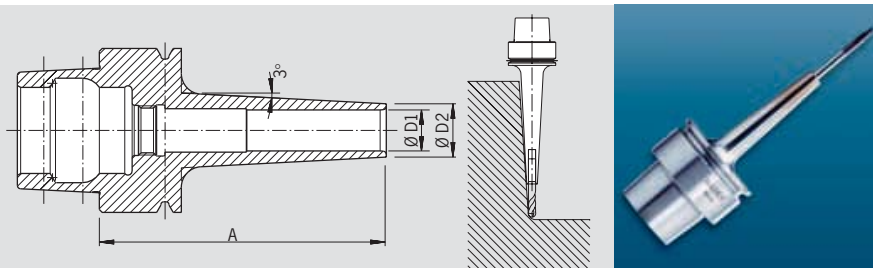
规格如有变更恕不另行通知

Technical data subject to change without prior notice

迷你热缩刀柄 / MINI SHRINK FIT CHUCK HSK-E 40/HSK-E 50/HSK-A 63

质量证书 Certificate of Quality

- ✓ 刀柄精细动平衡
✓ Chuck body fine balanced
G2.5 25,000 1/min
或/or U<1gmm
- ✓ 所有功能面全部加工
✓ All functional surfaces machined
- ✓ 精度高于DIN标准
✓ More accurate than DIN

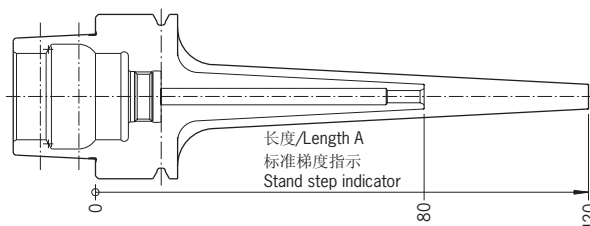


HSK

- 最高跳动精度: 3 µm
- 标准: 具有高夹持力
- 超细: 用于精加工及难触及处的加工
- 交货时不含冷却管
- 注意: 加热时一定要用加热冷却安装套

HSK

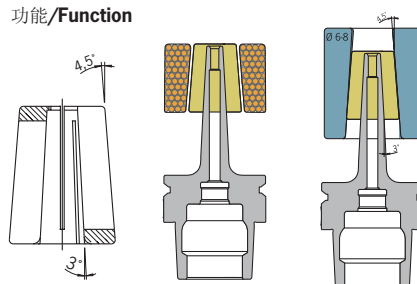
- Highest runout accuracy: 3 µm
- **Standard version:** with high clamping force
- **Extra slim version:** extremely slim for fine machining and for jobs very difficult to reach
- Delivery without coolant tube
- Attention: Shrinking only with shrink and cooling fitting sleeves



超细/Extra slim										标准/Standard									
夹持直径/Clamping		Ø D1 [mm]	03	04	05	06	08	10	12	Clamping Ø D1 [mm]		03	04	05	06	08	10	12	
		Ø D2 [mm]	09	10	11	12	14	16	18			09	10	11	12	14	16	18	
HSK-E 40 DIN 69893-5										HSK-E 40 DIN 69893-5									
长度/Length A [mm]	超短/ultrashort		60	60	60	60	60	60	60	长度/Length A [mm]	超短/ultrashort	60	60	60	60	60	60	60	60
订货号/Order No.	E40.175...		...03	...04	...05	...06	...08	...10	...12	订货号/Order No.	E40.185...	...03	...04	...05	...06	...08	...10	...12	
长度/Length A [mm]	短/short		70	70	70	70	70	70	70	长度/Length A [mm]	短/short	70	70	70	70	70	70	70	70
订货号/Order No.	E40.170...		...03	...04	...05	...06	...08	...10	...12	订货号/Order No.	E40.180...	...03	...04	...05	...06	...08	...10	...12	
长度/Length A [mm]	ZG 80		80	80	80	80	80	80	80	长度/Length A [mm]	ZG 80	80	80	80	80	80	80	80	80
订货号/Order No.	E40.173...		...03	...04	...05	...06	...08	...10	...12	订货号/Order No.	E40.183...	...03	...04	...05	...06	...08	...10	...12	
HSK-E 50 DIN 69893-5										HSK-E 50 DIN 69893-5									
长度/Length A [mm]	超短/ultrashort		70	70	70	70	70	70	70	长度/Length A [mm]	超短/ultrashort	70	70	70	70	70	70	70	70
订货号/Order No.	E50.170...		...03	...04	...05	...06	...08	...10	...12	订货号/Order No.	E50.180...	...03	...04	...05	...06	...08	...10	...12	
长度/Length A [mm]	ZG 80		80	80	80	80	80	80	80	长度/Length A [mm]	ZG 80	80	80	80	80	80	80	80	80
订货号/Order No.	E50.173...		...03	...04	...05	...06	...08	...10	...12	订货号/Order No.	E50.183...	...03	...04	...05	...06	...08	...10	...12	
长度/Length A [mm]	ZG 100		-	-	100	100	100	100	100	长度/Length A [mm]	ZG 100	-	-	100	100	100	100	100	100
订货号/Order No.	E50.171...				...05	...06	...08	...10	...12	订货号/Order No.	E50.181...			...05	...06	...08	...10	...12	

HSK-A 63		超细/Extra slim	DIN 69893				
夹持直径/Clamping		Ø D1 [mm]	06	08	10	12	
		Ø D2 [mm]	12	14	16	18	
长度/Length A [mm]	ZG 80		80	80	80	80	
订货号/Order No.	A63.173...		...06	...08	...10	...12	
长度/Length A [mm]	长/long		100	100	100	100	
订货号/Order No.	A63.177...		...06	...08	...10	...12	

功能/Function



加热
使用加热冷却
安装套

Heat up
With shrink and
cooling fitting sleeve

冷却
使用加热冷却安装套
和 Ø 6-8 mm 冷却套

Cool down
With shrink and cooling
fitting sleeve and cooling
body Ø 6-8 mm

迷你热缩加热冷却安装套

- 防止迷你热缩刀柄过热
- 延长迷你热缩刀柄寿命
- 保证使用者操作安全
- 使全部迷你热缩刀柄有统一的参数设定
- 配用标准冷却套冷却

Mini Shrink shrink and cooling fitting sleeve

- Protects Mini Shrink chucks from overheating
- Extends lifetime of shrink fit chucks
- Secure and user friendly handling
- Only one parameter setting for all Mini Shrink chucks
- Cooling with standard cooling body

迷你热缩刀柄用安装套

Fitting sleeves for Mini Shrink chucks

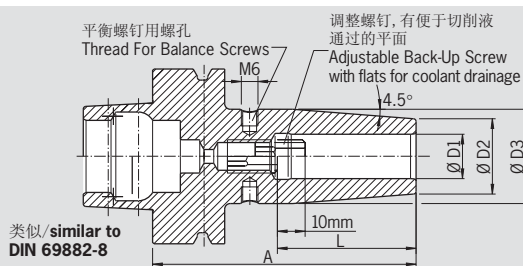
用于/For ØD1 [mm]	03	04	05	06	08	10	12
超细/Extraslim							
订货号/Order No.	80.105.14...	...2.01	...2.02	...2.03	...2.05	...2.05	...2.06
标准/Standard							
订货号/Order No.	80.105.14...	...2.04	...2.08	...2.05	...2.09	...2.10	...2.11
木质基座/Wood base							
带木质基座的组件 (12个)/set with wood base (12 pcs)							
订货号/Order No.	80.105.14.2.00						



规格如有变更恕不另行通知
Technical data subject to change without prior notice

HAIMER

热缩刀柄 / SHRINK FIT CHUCK HSK-F 63 / DIN 69893-6



F 型/Form F

质量证书 Certificate of Quality

- ☒ 刀柄精细动平衡
Chuck body fine balanced
G2.5 25.000 1/min
或/ or U<1gmm
- ☒ 所有功能面全部加工
All functional surfaces machined
- ☒ 精度高于DIN标准
More accurate than DIN

使用:

- 适用于所有热缩机
- 可用平衡螺钉精密动平衡
- 交货时含调整螺钉
- 耐热钢
- 硬度 54-2 HRC
- 用于HSS和整体硬质合金刀具
- 柄部公差 h6
- Cool Jet型冷却喷嘴孔需额外费用

Use:

- Suitable for all shrinking units
- Fine-balancing by set screws possible
- Included in delivery: Shrink fit chuck with backup screw
- Heat resistant hot-working steel
- Hardened 54-2 HRC
- For HSS and solid carbide tools
- Shank tolerance h6
- Cooling with Cool Jet against extra charge

附件/Accessories

热缩延长杆/Shrink fit extensions



平衡螺钉/Balance Screws



调整螺钉/Back up Screws



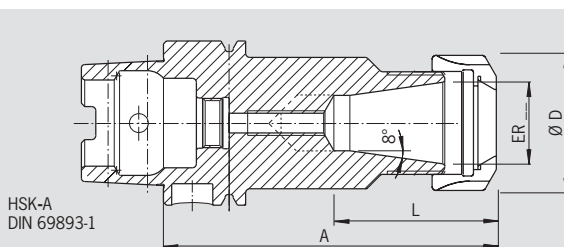
Cool Jet型冷却喷嘴孔/Cool Jet bores

订货号/Order No. 91.100.24



夹持直径/Clamping	Ø D1 [mm]	03	04	05	06	08	10	12	16	20	25
Ø D2 [mm]		10	10	10	21	21	24	24	27	33	44
Ø D3 [mm]		-	-	-	27	27	32	32	34	42	53
L [mm]		-	-	-	36	36	42	47	50	52	58
长度/Length A [mm]	短/short	80 ²⁾	80 ²⁾	80 ²⁾	80	80	85	90	95	100	115
订货号/Order No.	F 63.140...	...03	...04	...05	...06	...08	...10	...12	...16	...20	...25
长度/Length A [mm]	ZG130	-	-	-	130	130	130	130	130	130	130
订货号/Order No.	F 63.144...	-	-	-	...06	...08	...10	...12	...16	...20	...25

ER 弹簧筒夹刀柄 / COLLET CHUCK ER HSK-A / HSK-E / HSK-F



A 型/Form A

质量证书 Certificate of Quality

- ☒ 刀柄精细动平衡
Chuck body fine balanced
G2.5 25.000 1/min
或/ or U<1gmm
- ☒ 所有功能面全部加工
All functional surfaces machined
- ☒ 精度高于DIN标准
More accurate than DIN

使用:

- 搭配符合DIN 6499 的弹簧筒夹适用于夹持圆柱直柄刀具
- DIN 69882-6**
- 交货时含锁紧螺母 (经动平衡, 为获得更高夹持力的防滑涂层) 无冷却管
- HS型锁紧螺母 (高速, 精密动平衡, 防滑涂层) 需额外费用
- 加大尺寸L需要额外费用

Use:

- For clamping tools with cylindrical shank in collets according to DIN 6499
- DIN 69882-6**
- Included in delivery: locknut (balanced, with slide coating for higher clamping forces); without coolant tube
- Locknut type HS (High-speed, fine balanced, with slide coating for higher clamping forces) against extra charge
- Enlarging of size L against extra charge

夹持范围/Clamping range [mm]	ER 11	ER 16	ER 25	ER 32	ER 40
Ø D [mm]	0,5-7,0	0,5-10,0	1,0-16,0	1,5-20,0	2,5-26,0
L [mm]	19	28	42	50	63
	27	33	41	47	53
HSK-A 32					
长度/Length A [mm]	超短/ultrashort	55 ¹⁾	-	-	-
订货号/Order No.	A 32.025...	...16	-	-	-
长度/Length A [mm]	短/short	80	80	-	-
订货号/Order No.	A 32.020...	...16	...25	-	-
HSK-A 40					
长度/Length A [mm]	超短/ultrashort	60 ¹⁾	70 ¹⁾	70 ¹⁾	-
订货号/Order No.	A 40.025...	...11	...16	...25	...32
长度/Length A [mm]	短/short	80	80	-	-
订货号/Order No.	A 40.020...	-	...16	...25	-
HSK-A 50					
长度/Length A [mm]	超短/ultrashort	60 ¹⁾	70 ¹⁾	80 ¹⁾	80 ¹⁾
订货号/Order No.	A 50.025...	...11	...16	...25	...32
长度/Length A [mm]	短/short	-	100	100	120
订货号/Order No.	A 50.020...	-	...16	...25	...40

1) 无调整螺钉用螺孔/Without thread for back-up screw

2) 无调整螺钉, 无平衡螺钉用螺孔, 夹持孔部有用于切削液流通的缝

Without back-up screw, without threads for balancing screws, with slits along the clamping bore for cooling from outside

规格如有变更恕不另行通知

Technical data subject to change without prior notice

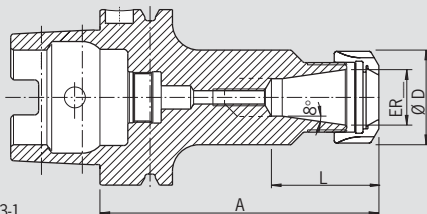
ER弹簧筒夹刀柄/COLLET CHUCK ER HSK-A / HSK-E/HSK-F

A 型/Form A

质量证书 Certificate of Quality

- ☒ 刀柄精细动平衡
- ☒ Chuck body fine balanced
G2.5 25.000 1/min
或/or U<1gmm
- ☒ 所有功能面全部加工
- ☒ All functional surfaces machined
- ☒ 精度高于DIN标准
- ☒ More accurate than DIN

HSK-A
DIN 69893-1

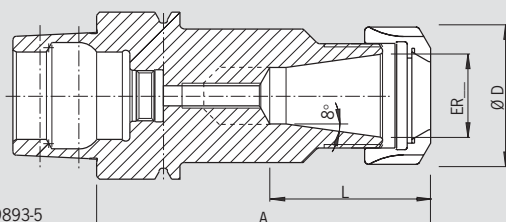


E 型/Form E

质量证书 Certificate of Quality

- ☒ 刀柄精细动平衡
- ☒ Chuck body fine balanced
G2.5 25.000 1/min
或/or U<1gmm
- ☒ 所有功能面全部加工
- ☒ All functional surfaces machined
- ☒ 精度高于DIN标准
- ☒ More accurate than DIN

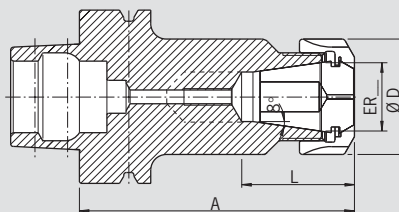
HSK-E
DIN 69893-5



夹持范围/Clamping range [mm] Ø D [mm]			ER 11	ER 16	ER 20	ER 25	ER 32	ER 40
			0,5–7,0 19	0,5–10,0 28	1,5–13,0 34	1,0–16,0 42	1,5–20,0 50	2,5–26,0 63
HSK-A 63								
L [mm]				47		48	47	53
长度/Length A [mm]	超短/ultrashort		75 ¹⁾	75 ¹⁾	–	75 ¹⁾	75 ¹⁾	85 ¹⁾
订货号/Order No.	A 63.025...		...11	...16		...25	...32	...40
L [mm]				33		41	47	53
长度/Length A [mm]	短/short		100	100	–	100	100	120
订货号/Order No.	A 63.020...		...11	...16		...25	...32	...40
长度/Length A [mm]	超长/oversize		–	160	–	160	160	160
订货号/Order No.	A 63.022...			...16		...25	...32	...40
HSK-A 80								
L [mm]				33		41	47	53
长度/Length A [mm]	短/short		–	100	–	100	100	–
订货号/Order No.	A 80.020...			...16		...25	...32	
HSK-A 100								
L [mm]				33		41	47	53
长度/Length A [mm]	短/short		–	100	–	100	100	120
订货号/Order No.	A 10.020...			...16		...25	...32	...40
长度/Length A [mm]	超长/oversize		–	160	–	160	160	160
订货号/Order No.	A 10.022...			...16		...25	...32	...40
HSK-E 32								
L [mm]				33		41		
长度/Length A [mm]	短/short		–	80	–	80	–	–
订货号/Order No.	E 32.020...			...16		...25		
长度/Length A [mm]	长/long		–	100	–	–	–	–
订货号/Order No.	E 32.021...			...16				
HSK-E 40								
L [mm]			27	33		41	47	
长度/Length A [mm]	超短/ultrashort		60 ¹⁾	60 ¹⁾	–	70 ¹⁾	70 ¹⁾	–
订货号/Order No.	E 40.025...		...11	...16		...25	...32	
长度/Length A [mm]	短/short		–	80	–	80	–	–
订货号/Order No.	E 40.020...			...16		...25		
HSK-E 50								
L [mm]			27	33	44	41	47	53
长度/Length A [mm]	超短/ultrashort		60 ¹⁾	60 ¹⁾	70 ¹⁾	70 ¹⁾	80 ¹⁾	–
订货号/Order No.	E 50.025...		...11	...16	...20	...25	...32	
长度/Length A [mm]	短/short		–	100	–	100	100	–
订货号/Order No.	E 50.020...			...16		...25	...32	

1) 无调整螺钉用螺孔/Without thread for back-up screw

HAIMER ER 弹簧筒夹刀柄 / COLLET CHUCK ER HSK-A / HSK-E/HSK-F

HSK-F
DIN 69893-6

F 型/Form F

质量证书
Certificate of Quality

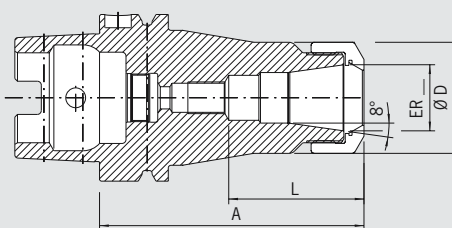
☒ 刀柄精细动平衡
☒ Chuck body fine balanced G2.5 25.000 1/min 或/or U<1gmm
☒ 所有功能面全部加工
☒ All functional surfaces machined
☒ 精度高于DIN标准
☒ More accurate than DIN

夹持范围/Clamping range [mm] Ø D [mm]	E 11	ER 16	ER 20	ER 25	ER 32	ER 40
	0,5-7,0 19	0,5-10,0 28	1,5-13,0 34	1,0-16,0 42	1,5-20,0 50	2,5-26,0 63
HSK-F 63						
L [mm]	49	33	39	41	47	53
长度/Length A [mm] 超短/ultrashort	75 ¹⁾	75 ¹⁾	75 ¹⁾	75 ¹⁾	75 ¹⁾	75 ¹⁾
订货号/Order No. F 63.025...	...11	...16	...20	...25	...32	...40
L [mm]	24	33	39	41	47	53
长度/Length A [mm] 短/short	100 ¹⁾	100	100	100	100	120
订货号/Order No. F 63.020...	...11	...16	...20	...25	...32	...40

附件/Accessories	用于/For	ER11	ER16	ER20	ER25	ER32	ER40
弹簧筒夹/Collets							
锁紧螺母(预平衡)/Locknut (pre-balanced)							
订货号/Order No. 83.912...		...11	...16	...20	...25	...32	...40
HS型锁紧螺母(高速), 精密平衡/Chuck nut HS (Highspeed), Fine-balanced							
订货号/Order No. 83.912...		-	...16.HS	...20.HS	...25.HS	...32.HS	...40.HS
开口扳手/Fork wrench							
订货号/Order No. 84.200...		...11	...16	...20	-	-	-
爪型扳手/Clamping wrench							
订货号/Order No. 84.200...		-	-	-	...25	...32	...40
平衡环/Balancing index rings							
短/short (HSK-F), 超长/oversize							
订货号/Order No. 79.350...		...19	...28	...34	...42	...48	...50
冷却管/Coolant Tube							
订货号/Order No. 85.700...							
调整螺钉/Adjusting Screw							
订货号/Order No. 85.800...		-	...34	...34	...34	...35	...35
热缩延长杆/Shrink fit extensions							



强力弹簧筒夹刀柄 / POWER COLLET CHUCK HSK-A/DIN 69893-1

质量证书
Certificate of Quality

☒ 刀柄精细动平衡
☒ Chuck body fine balanced G2.5 25.000 1/min 或/or U<1gmm
☒ 所有功能面全部加工
☒ All functional surfaces machined
☒ 精度高于DIN标准
☒ More accurate than DIN

- 高跳动精度: 在3 x D处为0,005 mm
- 标准ER筒夹符合ISO15488
- 抗振几何结构使运行更平稳, 因此得到更好的表面加工质量, 更好的保护了刀具, 主轴和机床
- 提升了加工能力实现高主轴转速, 高进给和大切深度
- 更高加工精度
- 既适合于高速加工又适于重切削
- High runout accuracy: 0.005 mm at 3 x D
- Also for standard collets ER according to ISO 15488
- Smoother running thanks to vibration absorbing geometry, therefore better surface quality and protection of tools, spindles and machines
- Increased machining capacity due to higher spindle speed, higher feed and larger cutting depth
- Higher machining accuracy
- Equally suited to high-speed manufacturing and heavy milling

	ER 16	ER 25	ER 36
夹持范围/Clamping range [mm] Ø D [mm]	2,0-10,0 28	2,0-16,0 42	2,0-20,0 48
L [mm]	43	50	47,5
长度/Length A [mm] 超短/ultrashort	75	75	75
订货号/Order No. A63.025...	...16.3	...25.3	...32.3
L [mm]	43	51	53
长度/Length A [mm] 短/short	100	100	100
订货号/Order No. A63.020...	...16.3	...25.3	...32.3
长度/Length A [mm] 超长/oversize	160	160	160
订货号/Order No. A63.022...	...16.3	...25.3	...32.3

POWER COLLET CHUCK / 强力弹簧筒夹刀柄 HSK-A / DIN 69893-1

附件/Accessories

HAIMER强力弹簧筒夹/HAIMER Power Collets

夹持直径/Clamping Ø	02	03	04	05	06	08	10	12	14	16	18	20
ER 16 (2,0-10,0)												
订货号/Order No. 81.163...	...02	...03	...04	...05	...06	...08	...10	-	-	-	-	-
ER 25 (2,0-16,0)												
订货号/Order No. 81.253...	...02	...03	...04	...05	...06	...08	...10	...12	...14	...16	-	-
ER 32 (2,0-20,0)												
订货号/Order No. 81.323...	...02	...03	...04	...05	...06	...08	...10	...12	...14	...16	...18	...20

ER标准弹簧筒夹/Collet ER standard

强力筒夹锁紧螺母(精密平衡)

Power Collet Locknut (fine-balanced)

订货号/Order No. 83.914...

用于/For

ER 16

ER 25

ER 32

强力筒夹用夹紧扳手/Power Collet Clamping wrench

订货号/Order No. 84.650...

...16

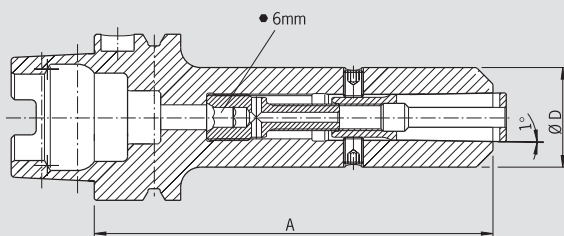
...25

...32

HG高精度后拉式刀柄/HIGH-PRECISION CHUCK HSK-A / DIN 69893-1

质量证书
Certificate of Quality

- ☒ 刀柄精细动平衡
- ☒ Chuck body fine balanced
- G2.5 25,000 1/min
- 或/or U<1gmm
- ☒ 所有功能面全部加工
- ☒ All functional surfaces machined
- ☒ 精度高于DIN标准
- ☒ More accurate than DIN



使用:

用特殊弹簧筒夹高精度夹持圆柱直柄刀具。也可用于带有夹持平面的圆柱直柄刀具。非常适于高速加工。

— 含: HG 型高精度刀柄, 紧固螺钉和后拉钩, 无筒夹

— 柄部公差 h6

Use:

For high-precision clamping of tools with cylindrical shank with special collets.

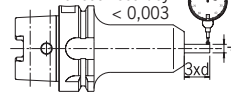
Also for shanks with clamping flats. Very useful for high-speed machining

- Delivery comprises: high-precision chuck with clamping screw and pull-out hook without collet
- Shank tolerance h6

跳动精度

Runout Accuracy

< 0,003



夹持直径 Ø D [mm] Clamping diameter	HG 01						HG 02			HG 03		
	2	3	4	5	6	8	10	12	14	16	18	20
HSK-A 63												
长度/Length A [mm]	短/short						120			120		
订货号/Order No.	A 63.120...						...01			...02		
长度/Length A [mm]	超长/oversize						160			160		
订货号/Order No.	A 63.122...						...01			...02		
HSK-A 100												
长度/Length A [mm]	短/short						120			120		
订货号/Order No.	A 80.120...						...01			...02		
HSK-A 63												
长度/Length A [mm]	短/short						120			120		
订货号/Order No.	A 10.120...						...01			...02		
长度/Length A [mm]	超长/oversize						160			160		
订货号/Order No.	A 10.122...						...01			...02		

附件/Accessories

筒夹/Collets

紧固螺钉/Clamping screw

短/short

订货号/Order No. 82.560...

超长/oversize 用于/for HSK-A 63

订货号/Order No. 82.560...

超长/oversize 用于/for HSK-A 80,100

订货号/Order No. 82.560...

后拉钩/Pull-out hook

订货号/Order No. 82.570...

平衡环/Balancing index rings

订货号/Order No. 79.350...

冷却管/Coolant tube 订货号/Order No. 85.700...¹⁾

热缩延长杆/Shrink fit extensions

Cool Jet型冷却喷嘴/Cool Jet bores

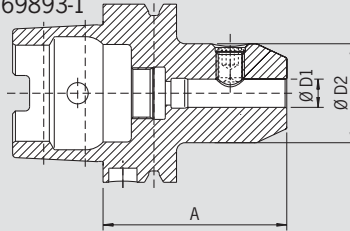
订货号/Order No. 91.100.24

1) 锥度规格/Taper size (32 = HSK-32)

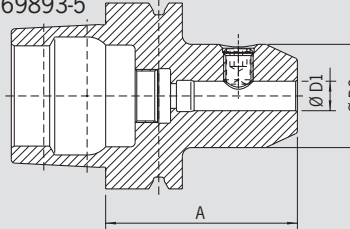
HAIMER

侧固刀柄/WELDON TOOLHOLDER
HSK-A/HSK-E

HSK-A DIN 69893-1



HSK-E DIN 69893-5



A 型/Form A

质量证书
Certificate of Quality

- ☒ 刀柄精动平衡
- ☒ Chuck body fine balanced
G2.5 25.000 1/min
或/or U<1gmm
- ☒ 所有功能面全部加工
- ☒ All functional surfaces machined
- ☒ 精度高于DIN标准
- ☒ More accurate than DIN

E 型/Form E

质量证书
Certificate of Quality

- ☒ 刀柄精动平衡
- ☒ Chuck body fine balanced
G2.5 25.000 1/min
或/or U<1gmm
- ☒ 所有功能面全部加工
- ☒ All functional surfaces machined
- ☒ 精度高于DIN标准
- ☒ More accurate than DIN

使用:

夹持符合 DIN 1835-B 和 DIN 6535-HB 的圆柱直柄且具有
紧固平面的刀具

DIN 69882-4

- 含: 紧固螺钉, 无冷却管
- Cool Jet型冷却喷嘴需要额外费用

Use:

For clamping cutters with cylindrical shank and Weldon flat according
to DIN 1835-B and DIN 6535-HB

DIN 69882-4

- Comprising: Clamping screw, without coolant tube
- Cooling with Cool Jet against extra charge

夹持直径/Clamping	Ø D1 [mm]	06	08	10	12	14	16	18	20	25	32
Ø D2 [mm]		25	28	35	42	44	48	50	52	65	72
HSK-A 32											
长度/Length A [mm]	短/short	60	60	65	-	-	-	-	-	-	-
订货号/Order No.	A 32.000...	...06	...08	...10							
HSK-A 40											
长度/Length A [mm]	短/short	60	60	60	70	75	75	-	-	-	-
订货号/Order No.	A 40.000...	...06	...08	...10	...12	...14	...16				
HSK-A 50											
长度/Length A [mm]	短/short	65	65	65	80	-	80	-	80	-	-
订货号/Order No.	A 50.000...	...06	...08	...10	...12		...16		...20		
HSK-A 63											
长度/Length A [mm]	短/short	65	65	65	80	80	80	80	80	110	110
订货号/Order No.	A 63.000...	...06	...08	...10	...12	...14	...16	...18	...20	...25	...32
长度/Length A [mm]	长/long	100	100	100	-	-	-	-	-	-	-
订货号/Order No.	A 63.001...	...06	...08	...10							
长度/Length A [mm]	超长/oversize	160	160	160	160	160	160	160	160	160	160
订货号/Order No.	A 63.002...	...06	...08	...10	...12	...14	...16	...18	...20	...25	...32
HSK-A 80											
长度/Length A [mm]	短/short	80	80	80	80	-	100	-	100	100	110
订货号/Order No.	A 80.000...	...06	...08	...10	...12		...16		...20	...25	...32
HSK-A 100											
长度/Length A [mm]	短/short	80	80	80	80	80	100	100	100	100	100
订货号/Order No.	A 10.000...	...06	...08	...10	...12	...14	...16	...18	...20	...25	...32
长度/Length A [mm]	超长/oversize	160	160	160	160	160	160	160	160	160	160
订货号/Order No.	A 10.002...	...06	...08	...10	...12	...14	...16	...18	...20	...25	...32
HSK-E 32											
长度/Length A [mm]	短/short	60	60	65	-	-	-	-	-	-	-
订货号/Order No.	E 32.000...	...06	...08	...10							
HSK-E 40											
长度/Length A [mm]	短/short	60	60	60	70	75	75	-	-	-	-
订货号/Order No.	E 40.000...	...06	...08	...10	...12	...14	...16				
HSK-E 50											
长度/Length A [mm]	短/short	65	65	65	80	-	80	-	80	-	-
订货号/Order No.	E 50.000...	...06	...08	...10	...12		...16		...20		

附件/Accessories

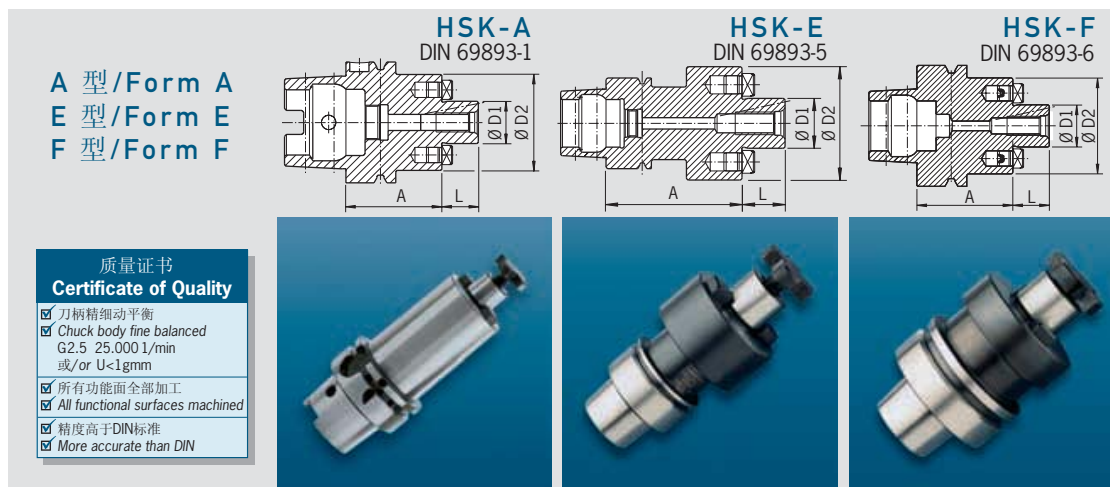
用于夹持直径/For clamping Ø D1

	06	08	10	12	14	16	18	20	25	32
夹紧螺钉/Clamping screw										
订货号/Order No. 85.100...	...06	...08	...10	...12	...12	...14	...14	...16	...18	...20
平衡环/Balancing index rings										
短/short 用于/for HSK-A 80,100						...48	...50	...52	-	-
订货号/Order No. 79.350...						...48	...50	...52	...65	...72
长/long, 超长/oversize						...44	...48	...50	...52	...65
订货号/Order No. 79.350...	...25	...28	...35	...42	...44	...48	...50	...52	...65	...72
冷却管/Coolant tube										
订货号/Order No. 85.700... ¹⁾										
Cool Jet型冷却喷嘴/Cool Jet bores										
订货号/Order No. 91.100.24										

1) 锥度规格/Taper size (32 = HSK-32)

规格如有变更恕不另行通知
Technical data subject to change without prior notice

面铣刀刀柄 /FACE MILL ARBOR HSK-A / HSK-E / HSK-F



使用:

用于夹持符合DIN 1880的面铣刀和带有径向驱动槽的刀具，
也可夹持符合DIN 2079直径超过40的刀盘(4个附加的螺孔)

DIN 69882-3

- 交货时含: 拉紧螺钉, 无冷却管
- 冷却喷嘴需额外费用

Use:

For holding face mill cutters and milling cutters with radial driving slot
DIN 1880 and exceeding Ø 40 clamping according to DIN 2079
(4 additional thread holes)

DIN 69882-3

- Comprising: Tightening bolt, without coolant tube
- Coolant bores on front side against extra charge

附件/Accessories	用于/for	Ø D1	16	22	27	32	40	50
拉紧螺钉/Tightening bolt								
订货号/Order No.	85.300...		...16	...22	...27	...32	...40	...50
扳手/Wrench								
订货号/Order No.	84.400...		...16	...22	...27	...32	...40	...50
平衡环/Balancing index rings								
订货号/Order No.	79.350...		...40	...50	...60	...78	...87	...120
冷却喷嘴/Coolant bores								
订货号/Order No.	91.100.03							

Ø D1 [mm]			16	22	27	32	40	50
Ø D2 [mm]			36	50	60	78	87	120
L [mm]			17	19	21	24	27	30
HSK-A 40								
长度/Length A [mm]	短/short		50	60	-	-	-	-
订货号/Order No.	A 40.050...		...16	...22				
HSK-A 50								
长度/Length A [mm]	短/short		50	60	60	-	-	-
订货号/Order No.	A 50.050...		...16	...22	...27			
长度/Length A [mm]	长/long		100	100	100	-	-	-
订货号/Order No.	A 50.051...		...16	...22	...27			
HSK-A 63								
长度/Length A [mm]	短/short		50	50	60	60	60	-
订货号/Order No.	A 63.050...		...16	...22	...27	...32	...40	
长度/Length A [mm]	长/long		-	100	100	100	100	-
订货号/Order No.	A 63.051...			...22	...27	...32	...40	
长度/Length A [mm]	超长/oversize		-	160	160	160	-	-
订货号/Order No.	A 63.052...			...22	...27	...32		
HSK-A 100								
长度/Length A [mm]	短/short		50	50	50	50	60	-
订货号/Order No.	A 10.050...		...16	...22	...27	...32	...40	
长度/Length A [mm]	长/long		100	100	100	100	100	-
订货号/Order No.	A 10.051...		...16	...22	...27	...32	...40	
长度/Length A [mm]	超长/oversize		160	160	160	160	160	-
订货号/Order No.	A 10.052...		...16	...22	...27	...32	...40	
HSK-E 40								
长度/Length A [mm]	短/short		50	60	-	-	-	-
订货号/Order No.	E 40.050...		...16	...22				
HSK-E 50								
长度/Length A [mm]	短/short		50	60	60	-	-	-
订货号/Order No.	E 50.050...		...16	...22	...27			
HSK-F 63								
长度/Length A [mm]	短/short		-	50	60	-	-	-
订货号/Order No.	F 63.050...			...22	...27			

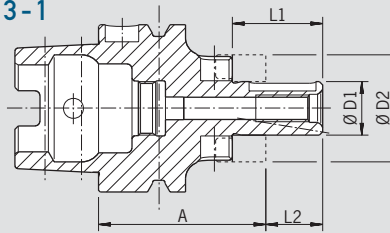
规格如有变更恕不另行通知
Technical data subject to change without prior notice

HAIMER

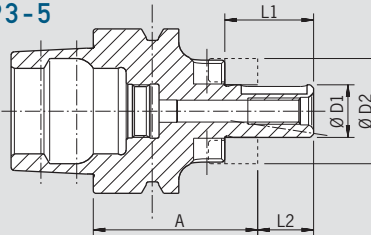
壳铣刀刀柄/COMBINATION SHELL END MILL ADAPTER HSK-A/HSK-E



DIN 69893-1



DIN 69893-5



HSK-A

质量证书
Certificate of Quality

- ✓ 刀柄精细动平衡
- ✓ Chuck body fine balanced
G2.5 25.000 1/min
或/or U<1gmm
- ✓ 所有功能面全部加工
- ✓ All functional surfaces machined
- ✓ 精度高于DIN标准
- ✓ More accurate than DIN

HSK-E

质量证书
Certificate of Quality

- ✓ 刀柄精细动平衡
- ✓ Chuck body fine balanced
G2.5 25.000 1/min
或/or U<1gmm
- ✓ 所有功能面全部加工
- ✓ All functional surfaces machined
- ✓ 精度高于DIN标准
- ✓ More accurate than DIN

使用:

用于符合DIN 841和DIN 1880的壳铣刀, 也可用于符合DIN 842的角度铣刀和符合DIN 1830的刀具

DIN 69882-2

- 交货时含: 拉紧螺钉, 传动环和滑键
- 前端冷却喷孔需额外费用

Use:

For clamping shell end mills DIN 841 and DIN 1880 as well as angular milling cutters DIN 842 and cutters DIN 1830

DIN 69882-2

- Comprising: Tightening bolt, driving ring and feather key, without coolant tube
- Coolant bores on front side against extra charge

附件/Accessories	用于/For	Ø D1	16	22	27	32	40
拉紧螺钉/Tightening bolt							
订货号/Order No.	85.300...		...16	...22	...27	...32	...40
扳手/Wrench							
订货号/Order No.	84.400...		...16	...22	...27	...32	...40
滑键/Feather Key							
订货号/Order No.	85.400...		...16	...22	...27	...32	...40
驱动环/Driving Ring							
订货号/Order No.	85.200...		...16	...22	...27	...32	...40
平衡环/Balancing index rings							
长/long, 超长/oversize							
订货号/Order No.	79.350...		...32	...40	...48	...58	...70
冷却喷孔/Coolant bores							
订货号/Order No.	91.100.03						

Ø D1 [mm]			16	22	27	32	40
Ø D2 [mm]			32	40	48	58	70
L1 [mm]			27	31	33	38	41
L2 [mm]			17	19	21	24	27
HSK-A 32							
长度/Length A [mm]	短/short		55	55	-	-	-
订货号/Order No.	A 32.040...		...16	...22			
HSK-A 40							
长度/Length A [mm]	短/short		50	50	-	-	-
订货号/Order No.	A 40.040...		...16	...22			
HSK-A 50							
长度/Length A [mm]	短/short		50	50	65	-	-
订货号/Order No.	A 50.040...		...16	...22	...27		
HSK-A 63							
长度/Length A [mm]	短/short		60	60	60	60	70
订货号/Order No.	A 63.040...		...16	...22	...27	...32	...40
长度/Length A [mm]	长/long		100	100	100	100	100
订货号/Order No.	A 63.041...		...16	...22	...27	...32	...40
长度/Length A [mm]	超长/oversize		160	160	160	160	160
订货号/Order No.	A 63.042...		...16	...22	...27	...32	...40
HSK-A 100							
长度/Length A [mm]	短/short		60	60	60	60	70
订货号/Order No.	A 10.040...		...16	...22	...27	...32	...40
长度/Length A [mm]	长/long		100	100	100	100	100
订货号/Order No.	A 10.041...		...16	...22	...27	...32	...40
长度/Length A [mm]	超长/oversize		160	160	160	160	160
订货号/Order No.	A 10.042...		...16	...22	...27	...32	...40
HSK-E 32							
长度/Length A [mm]	短/short		55	55	-	-	-
订货号/Order No.	E 32.040...		...16	...22			
HSK-E 40							
长度/Length A [mm]	短/short		50	50	-	-	-
订货号/Order No.	E 40.040...		...16	...22			
HSK-E 50							
长度/Length A [mm]	短/short		50	50	-	-	-
订货号/Order No.	E 50.040...		...16	...22			

规格如有变更恕不另行通知

Technical data subject to change without prior notice

斜孔侧固刀柄/WHISTLE NOTCH TOOLHOLDER

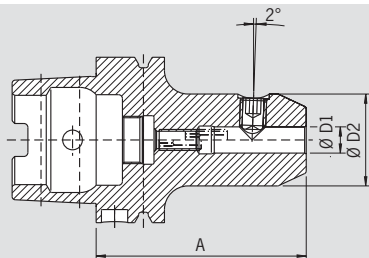
HSK-A / DIN 69893-1

HAIMER

A 型/Form A

质量证书
Certificate of Quality

- ✓ 刀柄精细动平衡
- ✓ Chuck body fine balanced
G6.3 8.000 1/min
- ✓ 所有功能面全部加工
- ✓ All functional surfaces machined
- ✓ 精度高于DIN标准
- ✓ More accurate than DIN



使用:

夹持符合 DIN 1835-E 和 DIN 6535-HE 的
圆柱直柄且具有紧固平面的刀具

DIN 69882-5

- 含: 紧固螺钉和调整螺钉, 无冷却管
- 精密动平衡需额外费用
- Cool Jet型冷却喷嘴孔需要额外费用

Use:

For clamping cutters with cylindrical shank inclined surfaces according to
DIN 1835-E and DIN 6535-HE

DIN 69882-5

- Comprising: Clamping screw and adjusting screw, without coolant tube
- Fine-balancing against extra charge
- Cooling with Cool Jet against extra charge

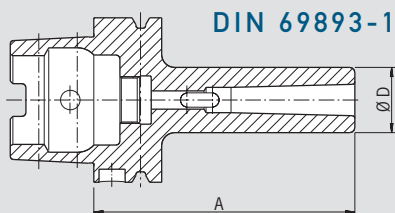
夹持直径/Clamping	Ø D1 [mm]	06	08	10	12	14	16	18	20	25	32
Ø D2 [mm]		25	28	35	42	44	48	50	52	65	72
HSK-A 63											
长度/Length A[mm]	短/short	80	80	80	90	—	100	—	100	110	110
订货号/Order No.	A 63.030...	...06	...08	...10	...12	—	...16	—	...20	...25	...32
HSK-A 100											
长度/Length A[mm]	短/short	90	90	90	100	100	100	100	110	120	120
订货号/Order No.	A 10.030...	...06	...08	...10	...12	...14	...16	...18	...20	...25	...32
附件/Accessories 用于/For Ø D1											
锁紧螺钉/Clamping Screw											
订货号/Order No.	85.100...	...06	...08	...10	...12	...12	...14	...14	...16	...18	...20
调整螺钉/Adjusting Screw											
订货号/Order No.	85.810...	...12	...15	...19	...24	...24	...28	...28	...37	...37	...37
平衡环/Balancing index rings											
长/long,超长/oversize											
订货号/Order No.	79.350...	...25	...28	...35	...42	...44	...48	...50	...52	...65	...72
冷却管/Coolant tube											
订货号/Order No.	85.700... ¹⁾										
Cool Jet 型冷却喷嘴孔/Cool Jet bores											
订货号/Order No.	91.100.24										

带扁尾孔的莫氏锥度刀柄/ADAPTER FOR MORSE TAPER WITH TANG

A 型/Form A

质量证书
Certificate of Quality

- ✓ 刀柄精细动平衡
- ✓ Chuck body fine balanced
G6.3 8.000 1/min
- ✓ 所有功能面全部加工
- ✓ All functional surfaces machined
- ✓ 精度高于DIN标准
- ✓ More accurate than DIN



使用:

适用于夹持DIN 228-1 B型带扁尾的莫氏锥柄刀具
- 精密动平衡需额外费用

Use:

For holding tools with morse taper and tang
according to DIN 228-1 form B
- Fine-balancing against extra charge

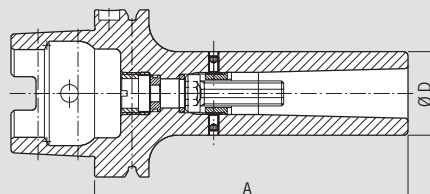
莫氏锥度/Morse Taper	MK01	MK02	MK03	MK04
Ø D [mm]	25	32	40	48
HSK-A 63				
长度/Length A[mm]	100	120	140	160
订货号/Order No.	A 63.080...	...02	...03	...04
HSK-A 100				
长度/Length A[mm]	110	120	150	170
订货号/Order No.	A 10.080...	...02	...03	...04
附件/Accessories				
平衡环/Balancing index rings				
订货号/Order No.	79.350...	...32	...40	...48
冷却管/Coolant tube				
订货号/Order No.	85.700... ¹⁾			

1) 锥度规格/Taper size (32 = HSK-32)

规格如有变更恕不另行通知
Technical data subject to change without prior notice

HAIMER

带螺孔的莫氏锥度刀柄/ADAPTER FOR MORSE TAPER WITH THREAD HSK-A / DIN 69893-1



A 型/Form A

质量证书

Certificate of Quality

- ☒ 刀柄精细动平衡
- ☒ Chuck body fine balanced
- ☒ G6.3 8.000 1/min
- ☒ 所有功能面全部加工
- ☒ All functional surfaces machined
- ☒ 精度高于DIN标准
- ☒ More accurate than DIN

使用:

适用于夹持DIN 228-1 A型锁牙式莫氏锥柄刀具

- 精密动平衡需额外费用
- 含:拉紧螺钉, 无冷却管

Use:

For holding tools with morse taper with thread according to DIN 228-1 form A

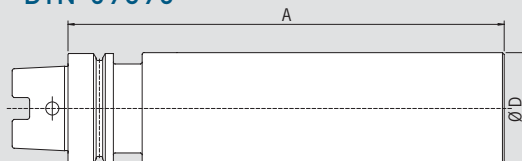
- Fine-balancing against extra charge
- Delivery with tightening bolt without coolant tube

莫氏锥度/Morse Taper		MK01	MK02	MK03	MK04
Ø D [mm]		25	32	40	48
HSK-A 63					
长度/Length A[mm]	短/short	—	120	140	160
订货号/Order No.	A 63.130...		...02	...03	...04
HSK-A 100					
长度/Length A[mm]	短/short	110	120	150	170
订货号/Order No.	A 10.130...	...01	...02	...03	...04
附件/Accessories		MK01	MK02	MK03	MK04
平衡环/Balancing index rings					
订货号/Order No.	79.350...	...25	...32	...40	...48
冷却管/Coolant tube					
订货号/Order No.	85.700... ¹⁾				

刀柄毛坯/BLANK ADAPTER



DIN 69893



A 型/Form A

质量证书

Certificate of Quality

- ☒ 所有功能面全部加工
- ☒ All functional surfaces machined
- ☒ 精度高于DIN标准
- ☒ More accurate than DIN

Ø D [mm]		64	78	83
HSK-A 63				
长度/Length A[mm]	ZG 250	250	—	—
订货号/Order No.	A 63.090...	...64		
HSK-A 80				
长度/Length A[mm]	ZG 250	—	250	—
订货号/Order No.	A 80.090...		...78	
HSK-A 100				
长度/Length A[mm]	ZG 250	—	—	250
订货号/Order No.	A 10.090...			...83

使用:

用于加工特殊刀具

设计:

HSK部硬化并精磨, 圆柱部分未硬化

Use:

For manufacturing special tools in your own factory

Design:

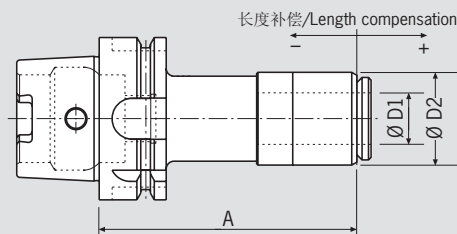
HSK is hardened and ground, the cylindrical part is soft

快换攻丝刀柄/QUICK CHANGE TAPPING CHUCKS

HSK-A 63 / DIN 69893-1

A 型/Form A

质量证书 Certificate of Quality
☒ 所有功能面全部加工
☒ All functional surfaces machined
☒ 精度高于DIN标准
☒ More accurate than DIN
☒ 内部高压冷却达到50bar
☒ Interior high-pressure cooling up to 50 bar



使用:
非常适于数控铣床攻丝。

优点:

- 可进行轴向长度补偿
- 内部高压冷却达 50 bar
- 实现高压内冷的安全夹持
- 高对中精度

- 不适用于BILZ系统
- 精密动平衡需额外费用
- 不含冷却管

Use:
For tapping preferably on NC-milling machines

Advantages:

- axial length compensation
- interior high-pressure cooling up to 50 bar
- safe clamping for high-pressure cooling
- high centering precision

- Not compatible with system BILZ!
- Fine-balancing against extra charge
- Delivery without coolant tube

类型/Type	FH01	FH03
Ø D1 [mm]	20	28
Ø D2 [mm]	36	44
HSK-A 63		
长度/Length A [mm]	短/short	100
订货号/Order No.	A63.070...	...01
用于丝锥/For taps	M3 – M14	M4,5 – M24
长度补偿/Length compensation	± 3	± 3

附件/Accessories	用于/For	FH 01	FH 03
冷却管/Coolant tube			
订货号/Order No.	85.700...	...63	...63
快换插件/Quick Change Inserts			
紧固螺钉/Clamping screw			
订货号/Order No.	140/11.00.020402		

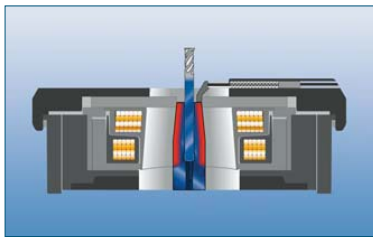
HAIMER 新型POWER CLAMP HAIMER POWER CLAMP NEW GENERATION 感应式热缩机/INDUCTIVE SHRINK FIT MACHINE

专有的智能感应线圈技术：
线圈自适应刀柄高度和直径。因此
只有刀柄的热缩区被加热。装卸和
冷却更快。



更高效，更灵活，
更容易操作

- 可自适应刀柄的线圈
- 通过线圈长度的调整
获得最佳电磁流
- 通过线圈长度的调整
获得最佳的热力分布
- 低能耗加热
- 更短的热装时间
- 更短的冷却时间
- 简单的操作
- 不再需要接触盘
- 适用于T型槽铣刀
- 适用于超短刀柄
- 适用于特型刀具刀柄



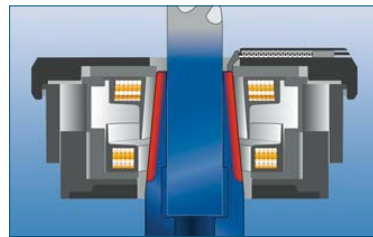
小刀具/ Small tool

Intelligent patented coil technology:
The coil adjusts itself to the chuck in length
and diameter. Therefore only the shrinking
area of the chuck will be warmed – nothing
else. Shrinking and cooling will be much
faster.



**Even more efficiency, more flexibility,
easier handling.**

- Coil adjusts itself to the chuck
- Perfect magnetic flow due to length
adjustment of the coil
- Optimal heat distribution due to length
adjustment of the coil
- Lower chuck warming
- Shorter shrinking time
- Shorter cooling time
- Simple operation
- No contact discs necessary any more
- Suitable for T-shaped groove milling cutters
- Suitable for ultra-short chucks
- Suitable for special shape



大刀具/ Big tool

- 单手操控
- 单手即可将线圈放到位
并调节加热
 - 最高效能
 - 最小能耗加热

- Single hand operation**
- Positioning of coil and regulation of
heating with one hand
 - Highest efficiency
 - Minimum heating of the chuck

- 旋转工作台
- 快速高效的工作
 - 双工位同时完成
加热和冷却
 - 无间歇
- The turning table**
- Work fast and efficient
 - Heating and cooling at the same time
on 2 stations
 - No idle periods

- 冷却控制器
- 自动开关Speed Cooler
冷却器
 - 增加冷却可靠性
 - 节省冷却装置
(不连续操作)

- The Cooling Manager**
- Switches Speed Cooler on and
off automatically
 - Always reliable cooling
 - Saves the cooling unit
(no continuous operation)



冷却控制器/ The Cooling Manager

- 适用于3个刀柄的支撑盘
- 适合所有规格刀柄
 - 也可用于不同规格刀柄的组合

- Chuck support for 3 chucks**
- For all actual tapers
 - Also different tapers combined
possible



刀柄支撑盘/Chuck support

HAIMER.

用于快速冷却的冷却套
- 刀具保持干燥
- 无腐蚀
- 加热区被覆盖，
无人身伤害的危险
- 加热部分无需置于手中

Cooling bodies for rapid cooling

- Chucks remain dry
- No rust
- Hot spots always covered,
no danger of injury
- Hot parts need not to be taken
into the hand

显示屏

- 友好的用户操作界面
- 清晰，紧凑且易于操作

The display

- User-friendly operating panel
- Clear, compact and easy to handle

刀具托盘

- 用于安放刀具
- 集成于基板上

The tool tray

- For laying down cutting tools
- Integrated in base plate

旋出式工具箱

- 用于安放附件
- 随手开合

The craning boxes

- For accessories
- Everything close at hand

工作车

- 制作精良，外形美观

The design cart

- Best technics, but also best look

抽屉

- 有仿形嵌入穴用于安放附件
- 每件物品皆有固定位置

The drawer

- Profiled inserts for accessories
- Everything in its place



HAIMER

模块化系统 THE MODULAR SYSTEM



Power Clamp		订货号/ Order No.
Power Clamp 经济型 Power Clamp Economic	无冷却的单刀柄系统，含有一个刀柄支持座 Single-chuck-system without cooling incl. 1 Base holder	80.110.00NG
Speed-Cooler 升级设备 Speed-Cooler upgrading set (= Power Clamp经济增强型/Power Clamp Economic Plus)	带有背板的Speed-Cooler冷却器，含5个冷却套 Speed-Cooler with Rear wall incl. 5 cooling bodies	80.115.00NG
旋转工作台升级设备 Rotary table Upgrading set (=Power Clamp舒适型/Power Clamp Comfort)	带有旋转工作台的基板，含旋出式工具箱 Base plate with rotary table for 3 chucks incl. craning boxes	80.116.00NG
升级设备 Preset Upgrading set Preset	测试台，高度规，2个精密标准刀柄支持座含旋出式工具箱 Measuring plate, height gage, 2 precision base holder incl. craning boxes	80.117.00NG
Power Clamp 舒适型 Power Clamp Comfort	包括冷却系统和含旋出式工具箱的旋转工作台 Complete with cooling system and rotary table incl. craning boxes	80.100.00NG
Power Clamp 强效增强型 Power Clamp Profi Plus	含20 kW 高能热缩设备的强效增强型，其他配置同舒适型 High powered shrink fit unit Profi Plus, 20 kW, equipment like Comfort	80.100.10NG

POWER CLAMP 规划 POWER CLAMP PROGRAM



最有用的配置方案- 高效能源于：明日科技。

步入热缩技术的起点在于：低成本感应线圈的现状。由此出现的问题不是“是否投资于热缩技术”，而是“何时投资于热缩技术”。对于这种未来科技，投资的时机到了。

我们的模块化系统为您提供了完美的配置方案。

A most useful start-up program – effective supplement: Tomorrow's technology.

A start into modern shrink fit technology:

State of the art coil technology at low costs.

The question is not “Should I invest in shrink fit technology” but rather “When will I invest in shrink fit technology”. It is now time to invest in the technology of the future.

Our modular system offers the ideal start-up solution.

Power Clamp 经济型，无冷却系统，无旋转工作台，刀具托盘是可选件
Power Clamp Economic without cooling, without rotary table, tool tray optional



Power Clamp 经济增强型，有冷却系统，无旋转工作台，刀具托盘是可选件

Power Clamp Economic Plus with cooling, without rotary table, tool tray optional



Power Clamp 舒适型，有冷却系统，有旋转工作台，含旋出式工具箱

Power Clamp Comfort with cooling, and rotary table, incl. craning boxes



Power Clamp 强效增强型
高能热缩机

- 加热功率 20 kW
- 适用于直径 3–50 mm 刀具的热装
- 适用于材质为HSS或硬质合金的刀具
- 用于 Ø 40–50 mm 的大线圈(可选件)
- 含安放附件的旋出式工具箱

Power Clamp Profi Plus High power shrink fit machine

- Heating power 20 kW
- For shrinking of tools from diameter 3–50 mm
- For HSS and solid carbide tools
- Big coil for Ø 40–50 mm (optional)
- Craning boxes for accessories

技术详情/Technical details

舒适型系列和经济型系列的基本设备的电源情况 Power info of basic unit Comfort and Economic	3x400–480 Volt, 50–60 Hz, 10 kW
热缩刀柄的最大长度 (更长的刀柄需要非标订做) Maximum lenght of shrink fit chuck (longer chucks upon request)	550 mm
尺寸约为/Dimensions approx.	500x670x700 mm
重量约为/Weight approx.	45 kg
Speed-Cooler 制冷机的电源情况/ Power info of Speed-Cooler unit	230 Volt/50 Hz, 1 kW
尺寸/ Dimensions	565x440x335 mm
重量/ Weight	45 kg
含工具车的整体尺寸/Overall dimensions incl. cart	600x1000x1530 mm
含工具车的整体重量约为/Overall weight incl. cart approx.	100 kg

规格如有变更恕不另行通知
Technical data subject to change without prior notice

HAIMER**POWER CLAMP MINI**

感应式热缩技术的入门级机型:

简单, 经济, 快速.

对于不是频繁使用热缩刀具, 而又想凭借现代感应加热技术优势的用户而言, Power Clamp Mini 型是一种无与伦比的经济机型。

- 适用于 $\varnothing 3 - 16$ mm 直径的整体硬质合金刀具
- 能够用于任何有单项电源供电的地方
- 电源输入: 230 V, 50 - 60 Hz
- 电源: 约为 3 kW
- 简单的操作

**The way in to inductive shrink fit technology:
Simple, inexpensive, quick.**

The Power Clamp Mini is the inexpensive alternative for users who do not shrink in tools often, however, do not want to miss out on all the advantages of the modern inductive technology.

- For solid carbide tools diam. 3-16 mm
- Can be used anywhere due to one phase power supply
- Electricity supply: 230 V, 50 - 60 Hz
- Power: approx. 3 kW
- Simple handling

订货号/Order No. **80.140.00**



SHOWER COOLER

热缩刀柄的水冷/WATER-COOLING FOR SHRINK FIT CHUCKS

使用Shower Cooler喷淋式冷却器可以用于任何形状的热缩刀柄。

- 所有热缩机的附加设备
- 适用于所有形状的刀柄
- 由旋转的空气喷嘴进行干燥
- 对现有冷却系统的补充
- 对于异形刀柄而言, 是一种简单的不二之选
- 冷却时间 < 1 min

With the Shower Cooler, shrink fit chucks can be cooled regardless of their outside contours.

- Additional device for all shrink fit machines
- Suitable for all contours
- Drying by rotating air nozzels
- Supplementing existing cooling systems
- Simple alternative for cooling regardless of contour
- Cooling time < 1 min

订货号/Order No. **80.145.00**



技术详情/Technical details		订货号/Order No.
Power Clamp Mini 型电源情况/Power info of Power Clamp Mini	230 Volt, 50-60 Hz, 16 Ampere, 3 kW	80.140.00
热缩刀柄的最大长度/Maximum Lenght of shrink fit chuck	350 mm	
尺寸/Dimensions	500x565x890 mm	
重量/Weight	35 kg	
Shower Cooler 型冷却器输入情况/Input info of Shower Cooler	230 Volt, 50-60 Hz, 6 bar	80.145.00
尺寸/Dimensions	350x620x850 mm	
重量/Weight	40 kg	
热缩刀柄最大长度/Maximum Lenght of shrink fit chuck	350 mm	
热缩刀柄最大直径/Maximum Ø of shrink fit chuck	120 mm	
附件/Accessories		
单刀柄系统的刀柄支撑盘/Chuck support for single-chuck system		
类型/Type	SK 40 SK 50 HAK 32 HSK 40 HSK 50 HSK 63 HSK 80 HSK 100	
订货号/Order No. 80.11...	...2.40 ...2.50 ...3.32 ...33.40 ...3.50 ...3.63 ...3.80 ...3.10	

新一代POWER CLAMP PRESET POWER CLAMP PRESET NEW GENERATION 集成了高度预调功能的热缩机 SHRINK FIT MACHINE WITH INTEGRATED LENGTH PRESETTING

简单, 快速, 精确

- 单座型, 10 kW
- 可调整刀尖位置的挡盘
- 预调长度最大500 mm
- 调整精度 ± 0.02 mm
- 无需热缩刀柄内的限位螺钉
- 不受刀长的约束
- 冷却系统含有Speed Cooler冷却器和5个冷却套
- 可以存放所含的附件
- 含有打印机接口
- 简单明了的操作

Simple, quick and precise

- Single station version, 10 kW
- Adjustable stop for tool tip
- Length presetting, max. 500 mm
- Adjusting accuracy ± 0.02 mm
- No set screw in the shrink fit chuck necessary
- Independent from tool length
- Cooling with Speed Cooler and 5 cooling bodies
- Storage for accessories included
- Interface for printer
- Easy and clearly handling



用于预调高度的张紧弹簧
Tension spring for length presetting

- 新品: 用于高度预调的张紧弹簧
- 弹簧被放置于夹持孔
 - 弹簧挤压刀具顶靠挡盘
 - 适合所有通用热缩刀柄
 - 可保留刀柄内的限位螺钉

New: Tension spring for length presetting

- Spring is set into clamping bore
- Spring presses tool against stop disc
- Fits all common shrink fit chucks
- Backup screw can remain in chuck



易于读数 (0.01 mm), 能以英制显示
Good readability (0.01 mm), Inch version also possible

能进行微调
Fineadjustment possible

塑胶挡盘(防止损坏硬质合金刀具刃口)
Plastic stop disc (no damaging of carbide cutting edges)

Preset型标准刀柄支撑座
Base holder Preset

精密刀柄支撑盘
Precision chuck support



Power Clamp Preset		订货号/Order No.									
Power Clamp Preset		带冷却和预调功能的单刀柄系统/Single chuck system with cooling and presetting									
Power Clamp Preset Inch		测量单位可调 (Inch/mm)/Measuring adjustable (Inch/mm)									
Power Clamp Preset用精密刀柄支撑盘/Precision chuck support for Power Clamp Preset											
类型/Type		SK 30	SK 40	SK 50	HSK 25	HSK 32	HSK 40	HSK 50	HSK 63	HSK 80	HSK 100
订货号/Order No.	80.13...	...2.30	...2.40	...2.50	...3.25	...3.32	...3.40	...3.50	...3.63	...3.80	...3.10
Power Clamp Preset用标准刀柄支撑座/Base holder for Power Clamp Preset		80.131.00									
张紧弹簧/Tension spring		Ø 6	Ø 8	Ø 10	Ø 12	Ø 14	Ø 16	Ø 18	Ø 20	Ø 25	Ø 32
订货号/Order No.	85.830...	...06	...08	...10	...12	...14	...16	...18	...20	...25	...32
张紧弹簧组 (每种尺寸10 个)/ Tension spring set (10 pcs. of each size)		85.830.00									

HAIMER

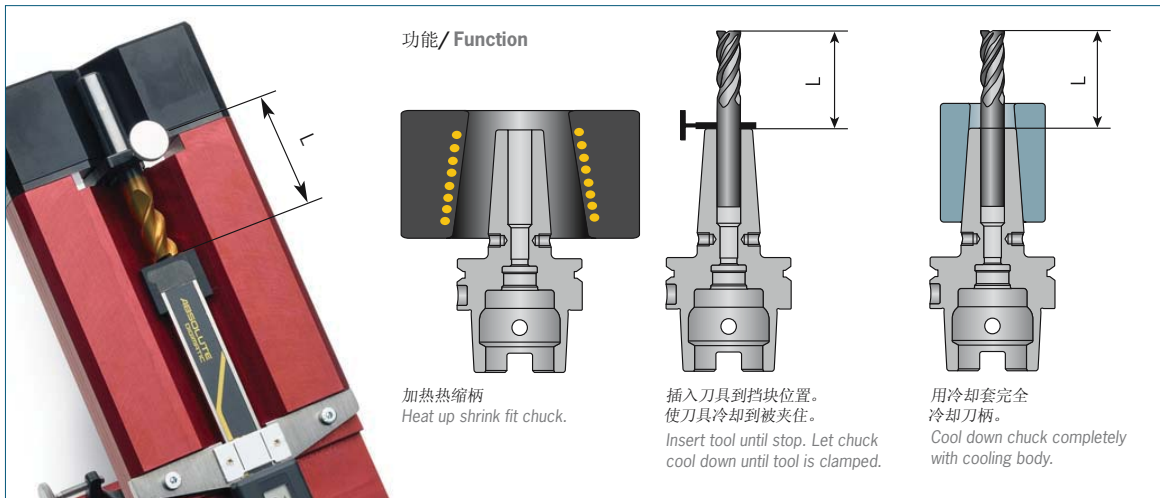
简易预调装置EASY SET SIMPLE PRESETTING EASY SET

简易预调

- 快速简单预调刀具伸出长度
- 最大伸出长度: 150 mm
- 精度: $\pm 0,05$ mm
- 适用于所有热缩柄和热缩机
(火焰, 热风, 接触, 感应)
- 节省空间
- 价格和性能间完美的平衡
- 可随时补充
- 交货时含有3个夹持挡块
($\varnothing$ 3–12, $\varnothing$ 12–20, $\varnothing$ 16–25 mm)

Simple presetting

- Quick and simple presetting of the protruding length of the tool
- Maximum protruding length: 150 mm
- Accuracy: ± 0.05 mm
- Suitable for all shrink fit chucks and machines
(flame, hot air, contact, induction)
- Space saving
- Excellent relationship between price and efficiency
- Can be added at any time
- Included in delivery: 3 stop clips
($\varnothing$ 3–12, $\varnothing$ 12–20, $\varnothing$ 16–25 mm)



Easy Set		订货号/Order No.
Easy Set [mm]	100 mm 伸出长度/100 mm protruding length	80.123.00
Easy Set [Inch/mm]	100 mm 伸出长度/100 mm protruding length	80.123.10
Easy Set [mm]	150 mm 伸出长度/150 mm protruding length	80.125.00
Easy Set [Inch/mm]	150 mm 伸出长度/150 mm protruding length	80.125.10
夹持挡块/ Stop clip	用于夹持 $\varnothing$ 3–12 mm/For clamping $\varnothing$ 3–12 mm	80.123.01
夹持挡块/ Stop clip	用于夹持 $\varnothing$ 12–20 mm/For clamping $\varnothing$ 12–20 mm	80.123.02
夹持挡块/ Stop clip	用于夹持 $\varnothing$ 16–25 mm/For clamping $\varnothing$ 16–25 mm	80.123.03
夹持挡块/ Stop clip	用于夹持 $\varnothing$ 25–32 mm/For clamping $\varnothing$ 25–32 mm	80.123.04

热缩设备附件 ACCESSORIES For Shrink Fit Unit

平衡螺钉组

用于热缩刀柄（内有安装平衡螺钉的螺纹孔）的动平衡。详情见附件。
交货时含有：工具箱，内装11种M6螺钉，每种10个，及1把螺丝刀。

Set of Balancing Screws

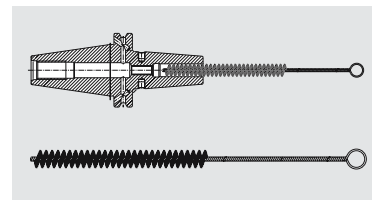
For fine balancing of shrink fit chucks.
(Thread integrated in the shrink fit chucks).
Detailed information see accessories.
Included in delivery: case with 11x10 pcs. balancing screws M6, 1 screw driver



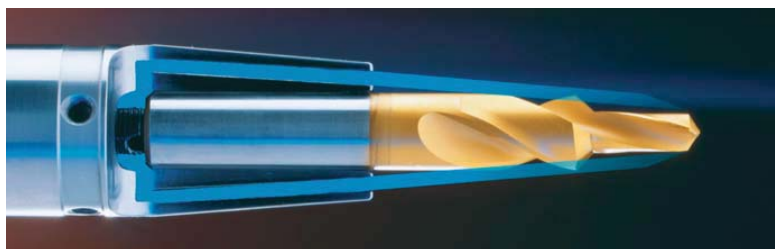
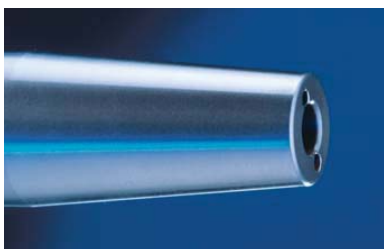
热缩设备用Design Cart型工具车
Design Cart for shrink fit unit



热缩设备用Cart型工具车
Cart for shrink fit unit



热缩柄清洁刷
Shrink fit brush



Cool Jet 型冷却喷嘴- 最适合热缩柄上冷却刀具/Cool Jet – Optimum tool cooling on shrink fit chucks

附件/ Accessories		订货号/Order No.												
平衡螺钉组/Set of Balancing Screws		80.203.00												
Design Cart 型工具车/Design Cart for shrink fit unit		80.124.00												
Cart 型工具车/ Cart for shrink fit unit		80.106.00												
Cool Jet 型冷却喷嘴		91.100.24												
热缩柄清洁刷/Shrink fit brush														
夹持直径/Clamping Ø [mm]		Ø 3	Ø 3.5	Ø 4	Ø 4.5	Ø 5	Ø 6	Ø 8	Ø 10	Ø 12	Ø 14	Ø 16	Ø 18	Ø 20
订货号/Order No.	86.200...	...01	...02	...02	...02	...02	...03	...03	...04	...04	...06	...06	...07	...07

规格如有变更恕不另行通知
Technical data subject to change without prior notice



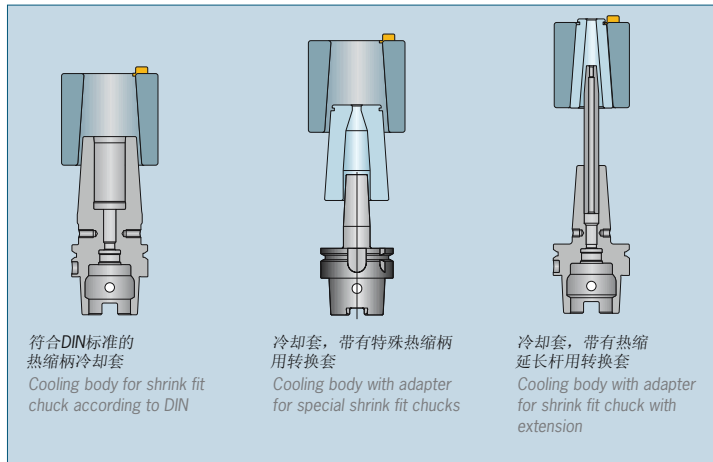
热缩设备附件 ACCESSORIES For Shrink Fit Unit

通过使用转换套所有结构的热缩柄都能被冷却。转换套插入冷却套锁定。然后就可以置于热缩柄上了。

- 用于直径 14–16 mm 和 25–32 mm 带有侧固锁的冷却套
- 用于现行所有Haimer标准热缩机

By using adapters all forms of shrink fit chucks can be cooled. The adapter is inserted into the cooling body and locked. Then it can be placed onto the shrink fit chuck.

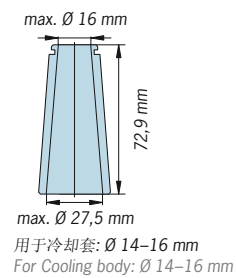
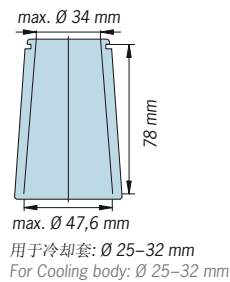
- Cooling bodies for diam. 14–16 mm and diam. 25–32 mm with side lock
- Now standard in all Haimer shrink fit machines



冷却转换套坯料
用于使用者对每支热缩柄的独立定制

Cooling adapter blanks

for individual adaption to each shrink fit chuck by the user.



冷却转换套组

- 用于冷却套 Ø 14–16 mm
- 用于热缩延长杆和超细热缩柄的冷却

Cooling adapter-set

- For cooling body Ø 14–16 mm
- For cooling of shrink fit extensions and slim shrink fit chucks



冷却控制器

兼容所有感应式热缩机

- 自动开关Speed Cooler冷却器
- 节省冷却装置(不连续操作)
- 低能耗污染，减少冷却器维护

Cooling Manager

Compatible with all inductive shrink fit units

- Switches Speed Cooler on and off automatically
- Saves the cooling unit (no continuous operation)
- Low maintenance efforts for the cooler due to low contamination



热缩拆卸装置 UNSHRINKING DEVICE



Design Cart型工具车抽屉的插件/ Insert for drawer for Design Cart
Power Clamp 和 Power Clamp Preset 型热缩机用/For Power Clamp and Power Clamp Preset



热缩拆卸装置/Unshrinking device
用于损坏的刀具/For broken tools

旋出式工具箱/Craining box

附件/Accessories							订货号/Order No.		
类型/Type	SK 40	SK 50	HSK 32	HSK 40	HSK 50	HSK 63	HSK 80	HSK 100	
单刀柄系统用刀柄支持座/Chuck support for single-chuck system									
订货号/Order No.	80.11...	...2.40	...2.50	...3.32	...3.40	...3.50	...3.63	...3.80	...3.10
旋转工作台用刀柄支撑盘[可放3个刀柄]/Chuck support for rotary table (3 adapter discs each)									
订货号/Order No.	80.10...	...2.40	...2.50	...3.32	...3.40	...3.50	...3.63	...3.80	...3.10
Ø3-32mm整体硬质合金和HSS刀具用线圈/Coil for dia. 3 to 32 mm useable for solid carbide and HSS								80.101.00NG	
Ø40-50mm用线圈 (专供强效增强型热缩机)/Coil for dia. 40 to 50 mm (only for Profi Plus)								80.101.10NG	
Power Clamp经济型和增强型用标准刀柄支持座/Base holder for Power Clamp Economic and Economic Plus								113004-0008	
旋出式工具箱(舒适型和强效增强型用)/Craining box (for Comfort and Profi Plus)								80.134.00	
1副防护手套/Protective gloves 1 pair of								80.108.00	
克丝钳/Combination pliers								80.107.00	
Ø14-16mm冷却套用冷却转换套坯料/Cooling adapter blanks for cooling body Ø 14-16 mm								80.105.14.0	
Ø25-32mm冷却套用冷却转换套坯料/Cooling adapter blanks for cooling body Ø 25-32 mm								80.105.16.0	
冷却转换套组合/Cooling adapter-set including									
Ø12mm/Ø16mm延长杆用冷却转换套/Cooling adapter for extensions Ø 12 mm/Ø 16 mm								80.105.14.1.1	
Ø20mm延长杆用冷却转换套/Cooling adapter for extensions Ø 20 mm								80.105.14.1.2	
Ø3mm/Ø5mm热缩柄用冷却转换套/Cooling adapter for shrink fit chucks Ø 3-5 mm								80.105.14.1.3	
冷却转换套用木质基座/Wood base for cooling adapters								80.105.14.1.99	
冷却控制器/Cooling Manager								80.127.00	
热缩拆卸装置/Unshrinking device								80.126.00	
Power Clamp热缩机抽屉使用的仿形插件/Profiled inserts for drawers Power Clamp								80.124.03	
Power Clamp Preset热缩机抽屉使用的仿形插件/Profiled inserts for drawers Power Clamp Preset								80.124.02	

HAIMER

POWER CLAMP 基本型
POWER CLAMP BASIC

经济价位的热缩机

Power Clamp基本型具有10 kW的热装能力。使其可以在临界条件热装HSS刀具。公认的感应线圈技术连同简单的设计使其具有无可比拟的性价比。

- 适用直径 $\varnothing 3-32$ mm
- 适用于硬质合金或HSS
- 公认的线圈，含5个挡盘
- 热缩输出功率10kW
- 单刀柄操作
- 只能用Shower Cooler型喷淋湿冷却器冷却，非接触式冷却
- 可选择增加标准刀柄支持座进行同时加热或冷却
- 挡盘可分别选购
- 不可升级为可调式线圈

Shrinking at a low price.

The Power Clamp Basic has a shrink fit performance of 10 kW. This makes possible shrinking HSS tools, even in the Basic Line. The proven coil technology in connection with the simple design are what make possible the unbeatable price-performance ratio.

- From diameter 3 to 32 mm
- Solid carbide and HSS
- Proven coil with 5 stop disks
- Shrink fit output 10 kW
- Single chuck operation
- Cooling only in combination with Shower Cooler, no contact cooling
- Additional base holders for simultaneous heating and cooling are optional
- Divided stop disks optional
- No upgrade possible with adjustable coil



技术详情/Technical details										订货号/Order No.			
Power Clamp 基本型/Power Clamp Basic										80.150.00			
电源情况/Power info				3x360-500 Volt, 16 Ampere, 10 kW									
刀具材质/Tools				整体硬质合金和HSS/solid carbide and HSS									
刀具直径/Tool diameter				3-32 mm									
热缩刀柄最大长度/Maximum Length of shrink fit chuck				350 mm									
尺寸/Dimensions				500x565x890 mm									
重量/Weight				35 kg									
附件/Accessories													
单刀柄系统刀的柄支撑盘/Chuck support for single-chuck system													
类型/Type				SK 30	SK 40	SK 50	HSK 32	HSK 40	HSK 50	HSK 63	HSK 80	HSK 100	
订货号/Order No.				80.11...	...2.30	...2.40	...2.50	...3.32	...3.40	...3.50	...3.63	...3.80	...3.10

TOOL DYNAMIC TD 1002/刀具动平衡机 TD 1002 动平衡系统/BALANCING SYSTEM

用于平衡刀具的单面和双面动平衡机

- 合理的价格 (无PC)
- 桌面型平衡机
- 模具制造行业理想的选择
- 用于小批量, 单个以及标准刀柄
- 带自动夹持系统的转换套

Balancing Machine to balance tools on 1 and 2 planes

- At reasonable price (no PC)
- Table and complementary machine
- Ideal for mould makers
- For small batch lots, single application and standard chucks
- Adapter with automatic clamping system



集成显示屏上可进行用户友好菜单导航的简易自解释操作。多语言可用。
Simple and self explaining operation due to user friendly menu guidance on integrated display. All languages possible.



带有中心孔的转子转换套
(如, 砂轮等)。
Adapters for rotors with a center bore
(e.g. grinding wheels).



可视激光直接标识刀具上的不平衡位置。
Optical laser marking of unbalance
directly on the tool.



技术详情/Technical Details	
尺寸/Dimensions [mm]	500x680x820
重量/ Weight [kg]	200
主轴转速/ Spindle Speed [rpm]	300-1100
测量精度/Measuring accuracy [gmm]	< 1 (可选 Option < 0,5)
电源要求/ Power requirements [V/Hz]	230/50-60
电源功率/ Power usage [kW]	0,4
压缩空气/ Compressed air [bar]	6
最大被测物长度/ max. tool length [mm]	360
最大被测物直径/ max. tool-Ø [mm]	340
最大被测物重量/ max. tool weight [kg]	15
订单号/Order No.	80.250.00

规格如有变更恕不另行通知
Technical data subject to change without prior notice

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TOOL DYNAMIC TD 2002 / 刀具动平衡机 TD 2002 模块化动平衡系统/MODULAR BALANCING SYSTEM

完美的动平衡如同孩子游戏般简单

刀具动平衡机TD 2002 由HAIMER制造的一种模块化动平衡系统，专门设计适用于刀柄及砂轮的动平衡。它使动平衡如同孩子游戏般简单。它操作简单，能快速完成动平衡。

它价格经济而测量精度无人能及。现在起，让动平衡在您掌控中吧！
因为：质量取胜！

Perfect balance is a child's play

Tool Dynamic TD 2002 is a modular balancing system made by Haimer, specially designed for tool holders and grinding wheels. It makes balancing a child's play. It can be implemented fast, because of its easy handling.

Its costs are low and its measuring accuracy can not be topped. Take balancing from now on right into your own hands!

Because: **Quality wins!**

■ 刀具动平衡机 TD 2002 舒适型 **Tool Dynamic TD 2002 Comfort**

假如经常使用刀具动平衡机且想尽可能缩短平衡时间，最好选用舒适型。它配有一台PC，键盘，鼠标和显示器。

If you want to use the Tool Dynamic frequently and keep the balancing time as short as possible, you should decide on the Comfort machine. It's equipped with a PC, keyboard, mouse and monitor.

■ 刀具动平衡机 TD 2002 舒适增强型 **Tool Dynamic TD 2002 Comfort Plus**

配备PC，键盘，鼠标和平面显示器

It's equipped with PC, keyboard, mouse and flatscreen.



舒适型
Comfort

■ Tool Dynamic TD 2002 Economic Plus 刀具动平衡机 TD 2002 经济增强型

适用于双平面测量（动态）。长刀具必须用双平面动平衡以偶不平衡。由精心设计的集成键盘及屏幕完成相应操作。经济增强型还进一步设计有附件抽屉。

For measuring in two planes (dynamic). Long tools must be balanced in two planes in order to eliminate the couple unbalance. The handling is done by an integrated keyboard and screen, which is clearly designed. Furthermore the Economic Plus has an integrated drawer for accessories.



经济增强型 Economic Plus

■ Tool Dynamic TD 2002 Economic 刀具动平衡机 TD 2002 经济型

精度高并带有转换套系统以适用于各类刀柄。单平面测量（静态）。很明显它尤其适用于短刀柄，因为偶不平衡量很小。通过集成键盘及屏幕完成简单操作。

Works very precisely and with an adapter system which can be used for all kinds of tool holders. Measurement in one plane (static). Particularly very sensible for short tool holders, because of the couple unbalance being very low. Easy handling with integrated keyboard and screen.



经济型 Economic



舒适增强型
特殊防护罩子
Comfort Plus
with special hood

技术详情/Technical details				
刀具动平衡机 TD 2002 Tool Dynamic TD 2002				
	舒适增强型 Comfort Plus	舒适型 Comfort	经济增强型 Economic Plus	经济型 Economic
尺寸/Dimensions b x h x t [mm]	1100x1500x820	1100x1500x820	500x1500x820	500x1500x820
重量/Weight [kg]	450	450	450	450
主轴转速/Spindle speed [rpm]	300-1100	300-1100	300-1100	300-1100
测量精度/Measuring accuracy [gmm]	< 0,5	< 0,5	< 0,5	< 0,5
电源要求/Power requirements [V/Hz]	230/50-60	230/50-60	230/50-60	230/50-60
使用功率/Power usage [kW]	0,4	0,4	0,4	0,4
压缩空气/Compressed air [bar]	6	6	6	6
被测物最大长度/max. tool length [mm]	400	400	400	400
可选/optional	700	700	700	700
被测物最大直径Ø/max. tool diameter [mm]	380	380	380	380
可选/optional	425	425	425	425
被测物最大重量/max. tool weight [kg]	30	30	30	30
订货号/Order No.	80.226.00	80.224.00	80.222.00	80.220.00

规格如有变更恕不另行通知
Technical data subject to change without prior notice

HAIMER

安全第一：用刀具动平衡系统 高效快捷的对刀具进行动平衡

ON THE SAFE SIDE: BALANCE YOUR TOOLS QUICKLY AND EFFICIENTLY WITH THE TOOL DYNAMIC SYSTEM.

可靠，快捷和高效——用于刀柄，砂轮和转子的完美平衡系统

- 模块化结构，柔性升级
4种型号，针对不同需求提供最佳解决方案
- 单面平衡或双面平衡
- 独特的带自动夹持系统的高精度主轴转换套，适用于全部通用刀具刀柄系统
- 极高的测量精度和重复精度
甚至是廉价刀柄（低精度的夹持锥部）也能通过弹性对心实现精确夹持
- 适用于带中心孔的转子（如，砂轮）的转换套
- 通过钻，铣，平衡环或配重修正不平衡
- 使用安装部件（如，带有螺纹的平衡螺钉）修正不平衡量
- 采用带插入式连接器的模块化结构便于维护
- 用于测试系统控制的校准功能符合ISO 9001
- 由于采用高硬度轴承技术（用于强制测量的立式平衡机）全部刀具只需一次永久校准

简易自解释操作。PC屏幕或集成显示器上人性化用户菜单导航。多语言版适用性更强。

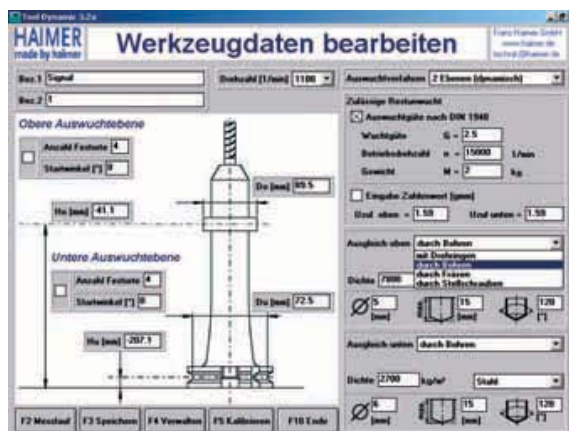
- 价格和效能间达到最佳的平衡
- 针对不同用途的多种测试方法：
简易测试—分度测试—带主轴补偿的测试—带零点设置的测试
- 超过5000只刀具的刀具管理
储存最终平衡结果
- 本地计算机网络接口
- 以平衡的质量等级（G oder Q）输入平衡公差
- 图形显示测量结果
- 以标签或证书形式打印测试结果
- 如达到平衡公差要求将清除的显示
- 指示实际的平衡质量等级和许用主轴转速
- 可视的辅助指引：屏幕显示实际的不平衡位置
- 主轴自动定位于不平衡位置
- 光学激光在刀具上直接标识不平衡位置
- 错误诊断
- 集成了不同比重材质的密度功能

Reliable, quick and efficient – the perfect balancing system for tool holders, grinding wheels and rotors.

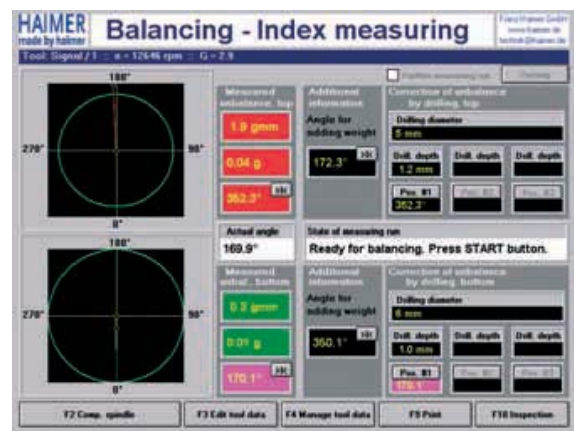
- Flexibility for future requirements due to modular construction
4 versions available, offering a perfect solution for every need
- Balancing in 1 or 2 planes
- Unique high precision spindle taper adapter system with automatic clamping for all common tooling systems and tapers
- Highest measuring accuracy and repeatability
Even low cost chucks (steep taper with low precision) can be clamped accurately due to elastic centering
- Adapters for rotors with a center bore (e.g. grinding wheels)
- Unbalance correction by drilling, milling, balancing rings and weights
- Unbalance correction using fixed components (e.g. balancing screws in threads)
- Easy service due to modular construction with plug connectors
- Calibration function for testing equipment control according to ISO 9001
- Permanent calibration once for all tools due to hard bearing technology (force measuring vertical balancing machine)

Simple and self explaining operation. User friendly menu guidance on PC screen or integrated display. All languages possible.

- Excellent relationship between price and efficiency
- Multiple methods of measuring for each purpose: simple measuring – index measuring – measuring with spindle compensation – measuring with zero setting
- Tool management for more than 5.000 tools, storing the last balancing result
- Interface to the local computer network
- Input of balancing tolerance in balancing quality grades (G or Q)
- Graphical indication of measuring result
- Printout of measuring result on label or certificate
- Clear indication if balancing tolerance has been reached
- Indication of actual balancing quality grade and permissible spindle speed
- Optical indexing aid: actual position of unbalance visible on screen
- Automatic positioning of spindle at position of unbalance
- Optical laser marking of unbalance directly on the tool
- Error diagnosis
- Density function with integrated list of materials with different specific weights



修改刀具数据 / Edit tool data



测试结果 / Result of measurement

平衡转换套/BALANCING ADAPTER



- 为了获得更高的测量精度和重复精度采用 μm 级精密夹持
- 紧凑设计实现了方便快捷的更换
- 有无拉钉均可夹持

- μm precise clamping for highest measuring accuracy and repeatability
- Easy and quickest changing due to compact design
- Clamping with and without pull stud possible

带自动夹持系统的HSK转换套

HSK Clamping adapter with automatic clamping system

订货号/Order No.	适用刀柄的规格/for taper size
80.201.E25.00	HSK-A/C/E 25 B/D/F 32
80.201.A32.00	HSK-A/C 32
80.201.E32.00	HSK-A/C/E 32 B/D/F 40
80.201.A40.00	HSK-A/C 40
80.201.E40.00	HSK-A/C/E 40 B/D/F 50
80.201.A50.00	HSK-A/C 50
80.201.E50.00	HSK-A/C/E 50 B/D/F 63

带自动夹持系统的HSK转换套

HSK Clamping adapter with automatic clamping system

订货号/Order No.	适用刀柄的规格/for taper size
80.201.E50.00	HSK-A/C/E 50 B/D/F 63
80.201.A63.00	HSK-A/C 63
80.201.E63.00	HSK-A/C/E 63 B/D/F 80
80.201.A80.00	HSK-A/C 80
80.201.E80.00	HSK-A/C/E 80 B/D/F 100
80.201.A100.00	HSK-A/C 100
80.201.E100.00	HSK-A/C/E 100 B/D/F 120

带有自动夹持系统的SK/BT/CAT转换套

SK/BT/CAT Clamping adapter with automatic clamping system

订货号/Order No.	适用的刀柄规格/for taper size	配用拉钉/for pull stud
80.201.330.01	SK 30/BT30	螺纹/thread M12
80.201.330.01.IN	CAT 30	螺纹/thread 1/2"-13
80.201.330.02	SK 30/BT30	DIN 69872/MAS 30°/45°/90°
80.201.330.04	SK 30	ISO 7388
80.201.140.01	SK 40	DIN 2080 螺纹/thread M16
80.201.340.01	SK 40/BT40	螺纹/thread M16
80.201.340.01.IN	CAT 40	螺纹/thread 5/8"-11
80.201.340.02	SK 40/BT40	DIN 69872/JIS B6339
80.201.340.04	SK 40	ISO 7388
80.201.340.06	BT 40	MAS 30°/45°/90°
80.201.150.01	SK 50	DIN 2080 螺纹/thread M24
80.201.350.01	SK 50/BT50	螺纹/thread M24
80.201.350.01.IN	CAT 50	螺纹/thread 1"-8
80.201.350.02	SK 50/BT50	DIN 69872/JIS B6339
80.201.350.04	SK 50	ISO 7388
80.201.350.06	BT 50	MAS 30°/45°/90°

带自动夹持系统的Capto转换套

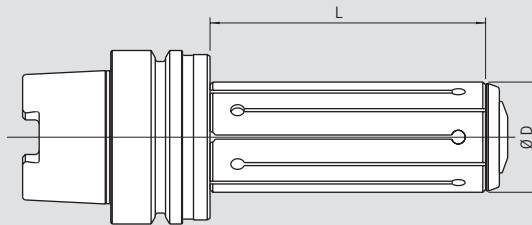
Capto Clamping adapter with automatic clamping system

订货号/Order No.	适用的刀柄规格/for taper size
80.201.9C3.10	Capto C3
80.201.9C4.10	Capto C4
80.201.9C5.10	Capto C5
80.201.9C6.10	Capto C6
80.201.9C8.10	Capto C8

适用于Weinig刀柄的转换套

Clamping adapter for Weinig-Tool holder

订货号/Order No.	适用的刀柄规格/for taper size
80.201.W63.00	HSK-W 63

HAIMER**平衡心轴/BALANCING ARBOUR**

- 用于平衡带有圆柱孔的被测物
- 未获得高重复精度采用精密对心夹持
- 精密动平衡<1gmm
- 可单独使用

- To balance tools with cylindrical bore
- Precise centrically clamping for highest repeatability
- Fine balanced to < 1gmm
- Individual useable

平衡心轴 Balancing arbour	夹持范围 ØD Clamping range ØD	L L	弹簧筒夹 Collet
订货号/Order No.			订货号/Order No.
80.250.A63.070	Ø25 – 25,5	100	80.250.07.25
	Ø26 – 26,5	100	80.250.07.26
	Ø28 – 28,5	100	80.250.07.28
	Ø30 – 30,5	100	80.250.07.30
	Ø32 – 32,5	100	80.250.07.32
	Ø34 – 34,5	100	80.250.07.34
80.250.A63.080	Ø35 – 35,5	100	80.250.08.35
	Ø36 – 36,5	100	80.250.08.36
	Ø38 – 38,5	100	80.250.08.38
	Ø40 – 40,5	100	80.250.08.40
	Ø42 – 42,5	100	80.250.08.42
	Ø44 – 44,5	100	80.250.08.44
80.250.A63.090	Ø45 – 45,5	125	80.250.09.45
	Ø48 – 48,5	125	80.250.09.48
	Ø50 – 50,5	125	80.250.09.50
	Ø52 – 52,5	125	80.250.09.52
	Ø54 – 54,5	125	80.250.09.54

上表按照平衡心轴和弹簧筒夹的配合分类排序/By ordering you need one balancing arbour and one collet

木材加工业的应用实例/Examples in woodworking industry

附件 ACCESSORIES



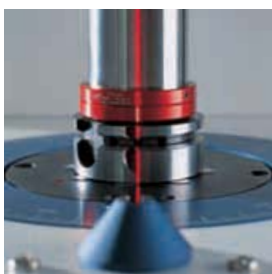
校准工具
用于校准平衡机；
由定位管和校准配重组成

Calibration tool
for calibrating the balancing machine; consisting of positioning tube and calibration weight



平衡螺钉组
用于精密动平衡带有M6
平衡螺孔的所有刀柄（
如，HAIMER的热装刀柄）

Set of balancing screws
for fine-balancing of all tool holders with balancing threads M 6 (e.g. shrink fit chucks from HAIMER)



激光标识
在刀具上精确可视标记
不平衡位置

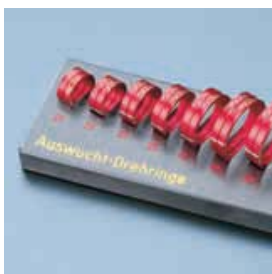
Laser marking
exact optical marking of the unbalance positions on the tool



平衡心轴
用于夹持带
有圆柱孔的
转子（如，
砂轮）



Balancing arbor
for clamping rotors with cylindrical bore (e.g. grinding wheels)



平衡环
用于在平衡机上进行快速
平衡和重复性的平衡

Balancing rings
for quick and repeatable balancing on the balancing machine



转换套
带有夹持系统

Adapter
with clamping system



**用于所有转子的
专用转换套**

**Special adapters for
all rotors**

适用于SK/BT/CAT 25–50刀柄的转换套
Adapter for steep taper SK/BT/CAT 25–50
– 多种夹持系统/various clamping systems
– 有拉钉的夹持/clamping with retention knob
– 无拉钉的夹持/clamping without retention knob

适用于HSK 25–100刀柄的转换套/**Adapter for HSK 25 to HSK 100**
– 带有自动夹持系统/with automatic clamping system
– HSK A–F所有类型/ all forms A–F

适用于Sandvik公司Capto刀柄的转换套/**Adapter for Sandvik Capto**

HAIMER

TOOL DYNAMIC AUTODRILL/刀具动平衡机 AUTODRILL 带有自动钻削模块的动平衡机 BALANCER WITH AUTOMATIC DRILLING UNIT

刀具不平衡-怎么办?

刀具动平衡机 Autodrill自动通过铣削去除不平衡量。测试不平衡量之后，软件计算出为去除它需要钻削的深度。平衡主轴旋转到适当的位置。组合钻床主轴抵达预选的动平衡面并自动加工出适当深度的一个或多个孔。

动平衡变得既快捷又简便。可以在正确的位置以恰当的深度钻孔。以往在刀具上由于不当加工及被忽略的不当钻孔深度导致的错误，不再是问题。

- 首先测量并去除不平衡量
- 迅速，便捷，经济
- 转子上的错误钻孔不再出现
- 能够集成于自动生产线
- 适用于全部HAIMER平衡转换套

订货号: **80.260.00**

Tool is unbalanced – and then what?

The Tool Dynamic Autodrill automatically removes the unbalance by drilling the material. After measuring the unbalance, the software calculates how deep it must drill in order to remove the unbalance. The balancing spindle turns in the correct position. The integrated drill spindle reaches the pre-selected balancing plane and automatically produces one or more holes with the correct depth. Finished.

Balancing could not be any more quick or easy. The holes are always in the right place and have the right depth. Errors, such as those caused by incorrect marking on the tool or through inadvertently incorrect drilling depths, are no longer an issue.

- Measures and removes unbalance in one step
- Rapid, easy and economical
- No incorrect drilling on the rotor
- Integration into automatic production lines is possible
- All Haimer balancing adapters can be used

Order No. **80.260.00**



刀具动平衡软件 TDCONTROL TOOL DYNAMIC SOFTWARE TDCONTROL

新智能平衡软件

动平衡变得更加便捷和方便。用户界面完全图形化。很多地方用带图标的按钮代替文本框。功能按钮取代选择框，通过点击鼠标或触摸屏完成操作。

保留了老界面那种被公认的简易设计。了解动平衡机的人使用新软件毫无问题。

New intelligent balancing software.

Balancing is now even easier and more user-friendly. The user interface is now completely made up of graphics. Buttons with symbols replace the text fields in most locations. Selection can take place using function buttons, by clicking the mouse or by touching the screen.

The proven simple design of the old interface has been kept. Anyone who already knows the Tool Dynamic can work with the new software without any problems.

另外，有一系列高级功能。

能通过用户管理分配不同的访问权限。例如，一个用户可以创建新的刀具数据并确定平衡公差，而另一个用户只能调用已有的数据执行平衡作业流程。

帮助功能使新用户和临时用户操作简化。如有需要，功能简述会以提示的形式出现。助手功能为全部功能过程提供向导，因此平衡操作变得更简便。

In addition, there is a series of further functions.

User management makes it possible to assign different access rights. For example, one user can create new tool data and determine balance tolerances while another may only call up the existing data and carry out the balancing procedure.

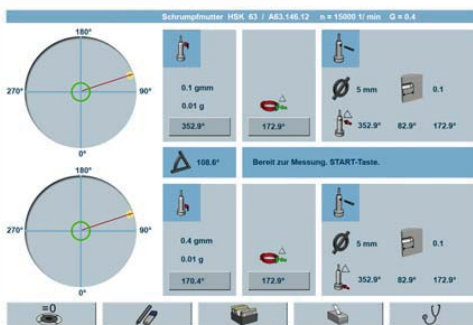
A help function makes operation easier for new and occasional users. If required, a short function description can be displayed as a reminder. An assistant function guides through all function processes, so that balancing is made even easier.

对于车间的重要性：
不再需要外部PC。键盘，鼠标，显示屏及打印机可以直接连接于机器。

Important for the shop: an external PC is no longer necessary. Keyboard, mouse, screen and printer are directly connected to the balancing electronics.

- 新设计-更人性化
- 通过触摸屏（可选）操作
- 带权限的用户管理
- 能与外部数据表关联
- 按钮的帮助功能
- 重要步骤的助手功能
- 通过机型分配平衡精度
- 带数据库的刀具管理
- 文档结构的刀具管理
- 与其他系统的简易数据交换，如刀具管理系统
- 无需外部PC

- New design – even more user-friendly
- Operation with touch screen (optional)
- User management with access rights
- Connection to external scales possible
- Help function for buttons
- Assistant function for the most important processes
- Allocation of balance tolerances by machine type
- Tool management with database
- Tool data management in folder structure
- Simple data exchange with other systems, e.g. tool data management
- No external PC required



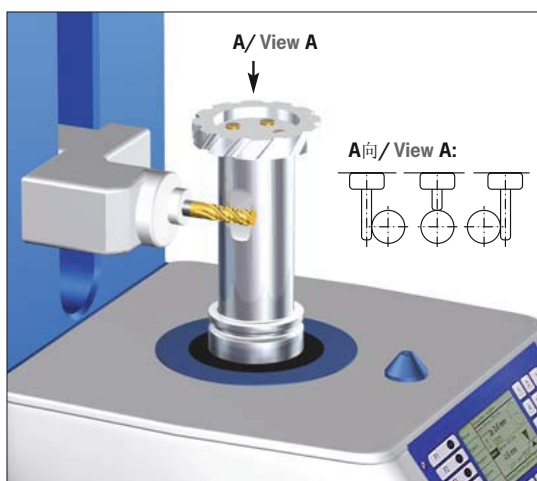
测试运行—分度测试
Measuring run – index measuring



刀具设置/Tool setup

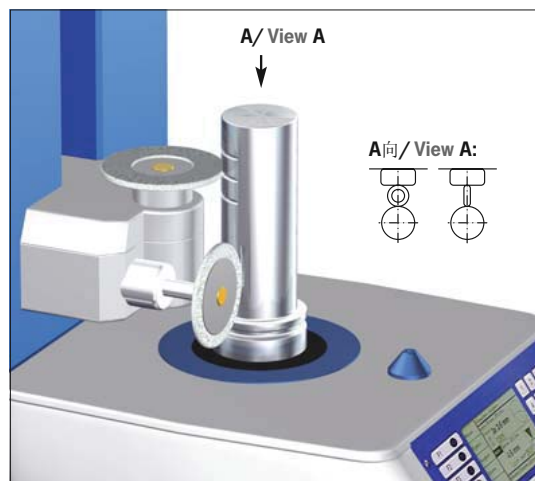
通过磨削—钻削—铣削去除材料进行平衡

Balancing by material removal through grinding – drilling – milling



侧边去除材料的方法/**Material removal sideways by:**

- 钻削/drilling
- 铣削/milling
- 磨削/grinding



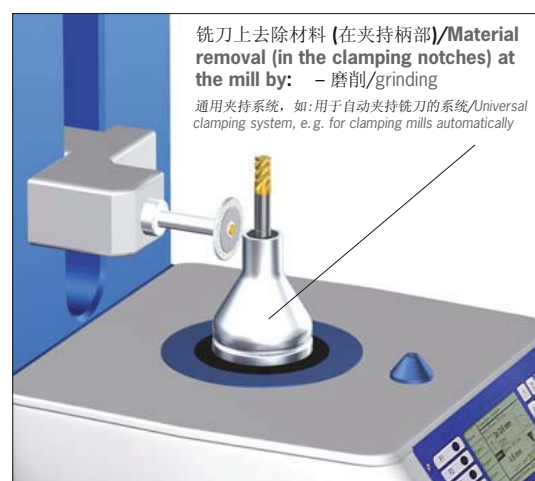
去除材料的方法/**Material removal by:**

- 磨削，垂直方向也可/grinding, also vertically



铣刀头上去除材料的方法
/Material removal at the milling head by:

- 钻削/drilling
- 铣削/milling
- 磨削/grinding



TOOL DYNAMIC PRESET

测量及平衡综合系统

COMBINED MEASURING AND BALANCING SYSTEM**尖端革新——领先技术**

平衡和预调是现代化生产的关键因素。结合这两种过程显然是很好的理念。Tool Dynamic Preset是集成Haimer平衡技术与Zoller测量技术的最佳组合。刀具被夹持于含Haimer特供转换套系统的高精度平衡主轴。这种一次夹持节省了时间提高了精度。

- 领先技术体现了尖端科技发展水准
- 通过2种工作平台的组合实现了最高效能
- Haimer平衡转换套实现了超高精度精确夹持
- 合理的性价比
- 节约占地空间
- 节省时间
- 简易逻辑操控
- 适用于各种接口的转换套
- 最高的测量舒适性

订货号: **80.240.00****Forward looking innovations by technology leaders**

Balancing and presetting are key elements of modern manufacturing. It is obviously a good idea to combine these two procedures. The Tool Dynamic Preset is a perfect combination of Haimer's balancing technology and Zoller's measuring technology. The tool is clamped in the high precision balancing spindle fitted with Haimer's proven adapter system. This saves time and increases accuracy because the tool does not have to be re-clamped.

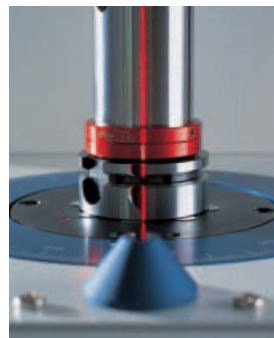
- Forward-looking state-of-the-art technology by technology leaders
- Highest efficiency by combining two production stages
- Utmost precision due to high precision clamping in Haimer's balancing adapters
- Reasonable price and efficiency ratio
- Needs little space
- Time saving
- Simple and logical operation
- Adapter for all interfaces
- Highest possible measuring comfort

Order No. **80.240.00**

Preset

激光标识
在刀具上精确可视标记
不平衡位置

Laser marking
exact optical marking of the
unbalance positions on the tool

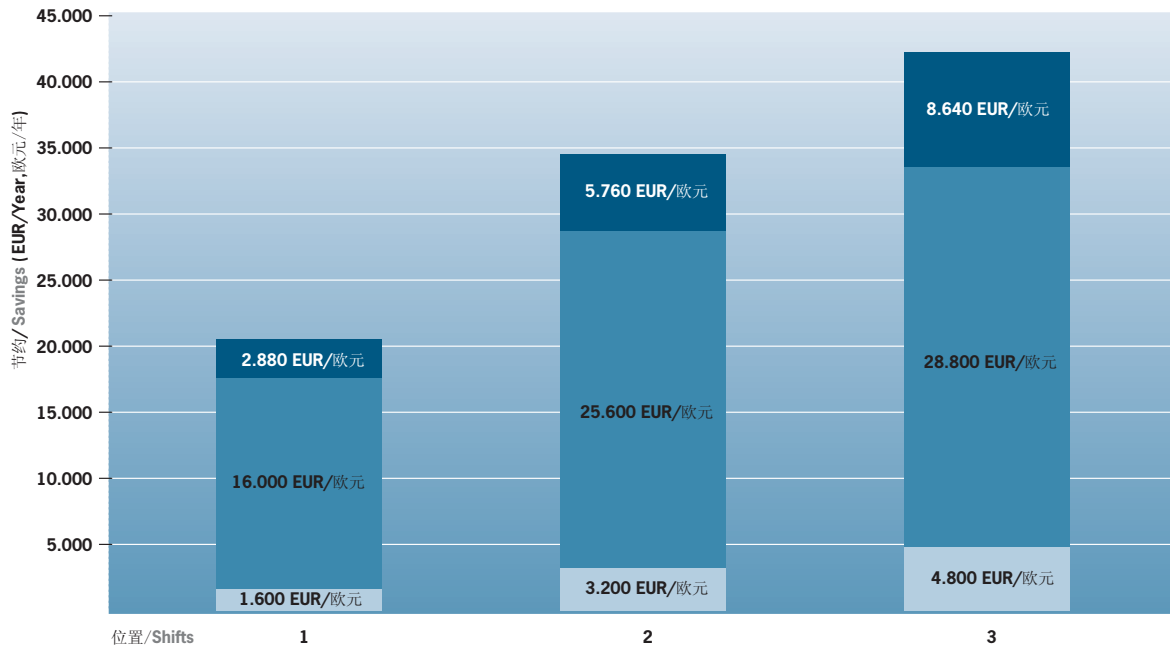


预调
测量系统具有高分辨率摄像机且可进行数字
图像处理

Presetting
Measuring system with high resolution camera
and digital photo processing

HAIMER

通过(每台加工中的)平衡刀柄降低成本/ COST REDUCTION BY THE USE OF BALANCED TOOL HOLDERS (PER MACHINING CENTER)



- 通过延长100%主轴寿命节约成本
- 通过增加10%切削量节约成本
- 通过延长10%刀具寿命节约成本

- Savings by raising spindle lifetime by 100%
- Savings by raising cutting volume by 10%
- Savings by extending tool life by 10%

计算基本参数/Basics of the calculation			
	运行时间 小时/年间 runtime h/year	运行成本 欧元/小时 cost rate EUR/h	刀具成本 欧元/小时 tooling costs EUR/h
位置 1/ 1 shift	1600	100	10
位置 2/ 2 shift	3200	80	10
位置 3/ 3 shift	4800	60	10

主轴寿命($n_{\text{最大}} = 15.000$ 转/分钟):

不平衡刀具: 5.000 小时

平衡刀具: 10.000 小时

主轴更换成本: 18.000 欧元

Spindle lifetime ($n_{\text{max}} = 15.000$ rpm):

Tools not balanced: 5.000 h

Tools balanced: 10.000 h

Cost for spindle replacement: 18.000 EUR

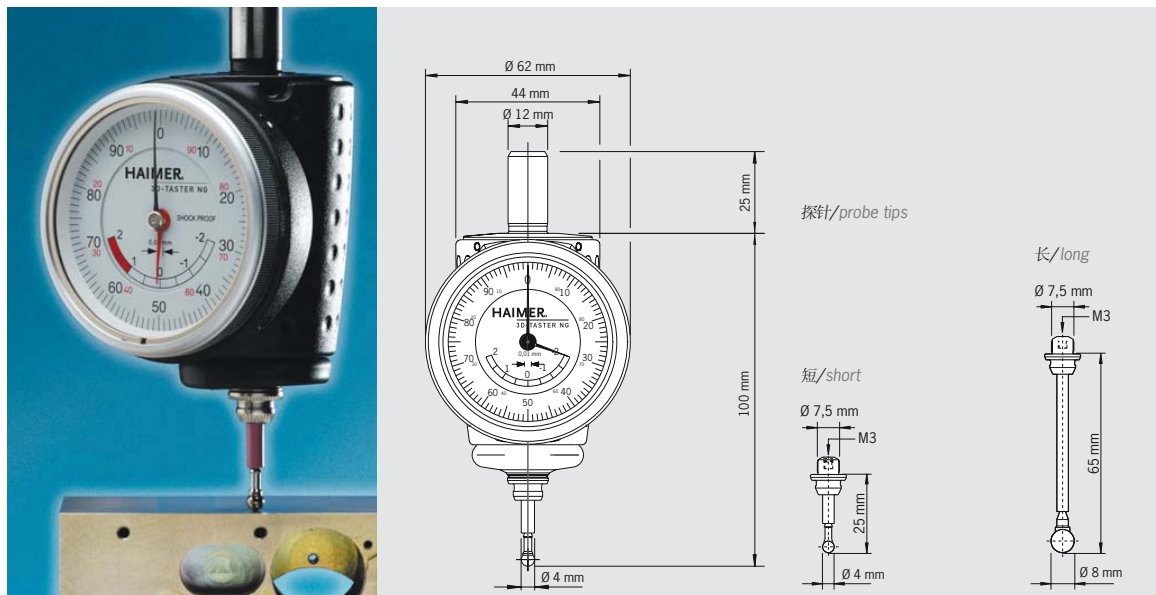
未计入的情况:

- 提高表面质量
- 计划外的停机成本(如, 更换主轴导致的停机)
- 提高了精度

Not taken into account:

- Improved surface quality
- Costs for unplanned still stand of the machine (for replacing spindle)
- Improved accuracy

新一代3D寻边器 3D-SENSOR NEW GENERATION



新一代3D寻边器

德国 HAIMER 公司的新一代3D寻边器是在世界公认的通用3D寻边器的基础上进一步研发的产品。其显著的特征是改进的机械结构以及新的紧凑结构设计。

特点:

- 紧凑且便于夹持的壳体，工作区域无限制
- 0.01mm分度表盘精确显示主轴位置（2表针）
- 最大精度0.01mm（使用HAIMER原厂探针）
- 标有过行程距离（安全距离）

功能:

- 校准机床主轴到工件边和参照边（x-, y-, z-轴）
- 设置零点
- 孔和轴的对心
- 测量长度和深度
- 检测直线度和表面水平度
- 工件和虎钳的找正
- 快捷，无需计算，无正负号错误

3D-Sensor New Generation

The 3D-Sensor NG is a further development of our worldwide accepted and proven Universal 3D-Sensor. Its distinguishing features are improved mechanics and a new and compact design.

Advantages:

- Compact and easy to grip casing, no restriction to working area
- Precise display of spindle position with large 1/100 mm dial gauge (2 hands)
- Utmost precision of 0.01 mm (when using original Haimer probe tips)
- Marked overrun distance (safety distance)

Functions:

- Aligning machine spindles to work piece edges and reference edges (x-, y-, z-axis)
- Set zeros
- Centre borings and shafts
- Measuring lengths and depths
- Checking straightness and levelness of surfaces
- Aligning work pieces and vices
- Quick, without calculations, no mistakes with algebraic signs

技术详情/Technical details

3D寻边器 NG，带 Ø 12 mm 夹持杆，含有短探针/ 3D-Sensor NG with clamping shank, diam. 12 mm including short probe tip

精度/Accuracy	0,01 mm
不含夹持杆的长度/Length without clamping shank	100 mm
订货号/Order No.	80.360.00NG

附件/Accessories

Ø 4 mm球头短探针/Short Probe tip Ø 4 mm

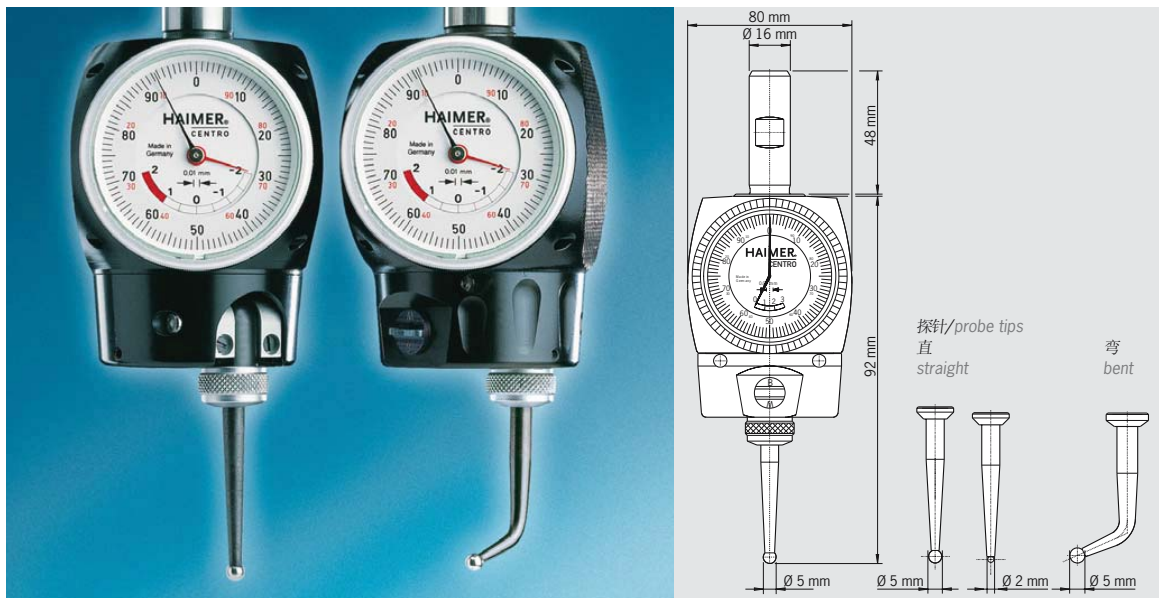
订货号/Order No. 80.362.00

Ø 8 mm球头长探针/Long Probe tip Ø 8 mm

订货号/Order No. 80.363.00

HAIMER

对中仪 CENTRO



对中仪

内孔和外圆的快速精密对中

装卡于铣床主轴，定位于所需轴线的附近。调整探针，使测头接触内孔表面或外圆表面。

刻度表盘总位于观察范围

探针沿着工件表面低速滑动。其移动由刻度盘上的指针显示。对中仪主体不随主轴旋转，因此刻度表盘总是在操作者视线内。

对中仪确实可用于寻找所需轴线

当主轴与轴线不重合的时候指针偏转。调整主轴位置使指针不再摆动。所需轴线被找到。

进一步的优势:

- 检测表面相对于主轴的面跳动度
- 补偿主轴和刀柄的同心误差
- >> 不必调整
- 超大表盘避免了刻度阅读数的不精确
- 可换探针

Centro

Quick and precise centering of bores and arbors

Clamped into the spindle of the milling machine, the Centro will be positioned close to the wanted axis. The probe tip is adjusted so that the sensing ball touches the surface of the bore or arbor.

Dial gauge always in sight

The probe tip slides at low spindle speed along the surface of the workpiece. Its movement is transferred to the pointers of the dial gauge. The housing of the Centro does not rotate with the spindle and thus the dial gauge always stays within sight of the operator.

Centro finds the axis you wanted. For sure.

The pointers deflect as long as the spindle and the wanted axis do not coincide. Now the position of the spindle can be corrected until the pointers come to a standstill. The wanted axis is found.

Further advantages:

- Checking face run of surface to spindle
- Concentricity errors of spindle and chuck will be compensated
- >> Adjustment not necessary
- The unusual big sized dial gauge eliminates every single imprecision
- Replaceable probe

技术详情/Technical details

对中仪带有直探针，Ø 5 mm，夹持杆 Ø 16 mm

Centro with straight probe tip, Ø 5 mm, clamping shank Ø 16 mm

对中精度/Centering accuracy	0,003 mm
最大转速/Max. rotation speed	150 1/min
内径测量范围/Measuring range interior diameter (drill hole)	3-125 mm
外径测量范围(使用弯探针)/Measuring range exterior diameter (shaft, with probe tip bent)	0-125 mm
订货号/Order No.	80.300.00

附件/Accessories

Ø 5 mm球头直探针/Probe tip straight with diameter of ball 5 mm

订货号/Order No. **80.301.00**

Ø 5 mm球头弯探针/Probe tip bent with diameter of ball 5 mm

订货号/Order No. **80.302.00**

Ø 2 mm球头直探针，用于小孔

Probe tip straight with diameter of ball 2 mm, for small bores

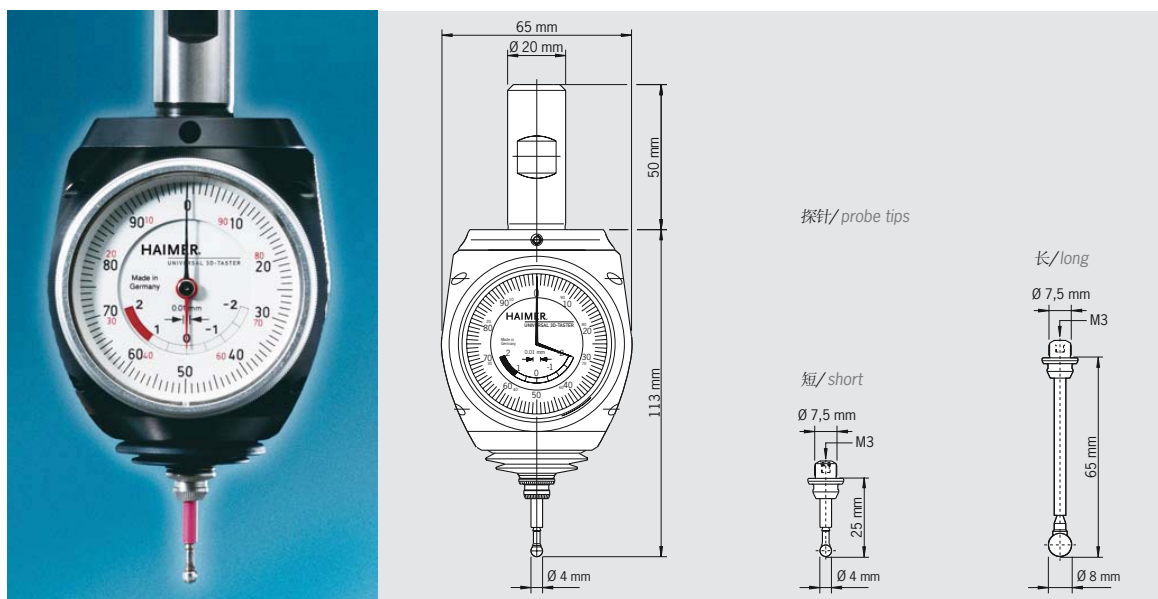
订货号/Order No. **80.303.00**

建议使用的HAIMER刀柄

Recommended Haimer Tool Holders

用于对中仪 for Centro	订货号 Order No.
BT 40	40.500.16
BT 50	50.500.16
SK 40	40.300.16
SK 50	50.300.16
HSK-A 40	A40.000.16
HSK-E 40	E40.000.16
HSK-A 50	A50.000.16
HSK-E 50	E50.000.16
HSK-A 63	A63.000.16
HSK-A 100	A10.000.16

通用3D寻边器 UNIVERSAL 3D-SENSOR

HAIMER


通用3D寻边器

对于铣削和EDM(使用绝缘探针)加工设备而言,通用3D寻边器属于高精度、万能检测仪器。也是车间必备的一种仪器。通用3D寻边器由刀柄夹持装于机床主轴。一旦装入机床主轴,跳动度(T.I.R.)完全指向零之后,就会发现主轴轴线精确定位于工件边上。因此零点设置和长度测量都可以方便快捷的进行。可以从任何方向(X, Y, Z轴, 因此称为“3D寻边器”)接近工件。当刻度盘指零的时候,主轴轴线精确的与工件边重合。只有HAIMER 3D寻边器无需试验就可寻边。不必计算探针球头直径——可忽略不计。由于排除了数学计算的问题,因此对操作者有一定容错度。我们的3D寻边器快捷方便,减少了非生产时间,提高了生产力及操作者的准确度。

有长短两种探针可用。无需工具便可更换寻边器探针。更换后无需重新校准。只要指针指零,无论任何一支探针都表示那就是所寻之边。实现了在线检测判断工件合格性。安装虎钳,找内孔中心,寻边及检验部件——用HAIMER 3D寻边器全部可以实现。它有很大的行程同时通过完全的预置破坏点临界检测,以此保证寻边器寿命。全部通用3D寻边器在装配中实现全检及调整以此达到最大测量精度。

Universal 3D-Sensor

The Universal 3D-Sensor is a very precise and versatile measuring instrument for milling and EDM machines (insulated probe). It is an instrument that no shop can do without. The 3D-Sensor is clamped into a tool holder and inserted into a milling spindle. Once clamped into the machine spindle, the run-out (T.I.R.) is fully adjustable to zero. Then, you are able to find exact positioning of the spindle axis on the edges of the workpiece. This allows for zeros to be set and the length to be measured quickly and easily. You may approach in any direction (X, Y, Z-axis – hence the name “3D-Sensor”). When the dial gage shows zero, the spindle axis is exactly on the workpiece edge. Only the Haimer 3D-Sensor allows for the edge to be found on the first attempt. No calculating of the probe's ball diameter is necessary – just zero it out! Problems with mathematics or calculations are eliminated, allowing for fewer operator errors. Our 3D-Sensor is quick and easy, reducing the non productive time, increasing the productivity and accuracy of the operator.

Short and long probes are available. The sensor probes may be changed without any tool. No re-calibration of the unit is needed after change of the probe. Simply bring the needle to zero, and that is your edge with any probe. The accuracy is such that you are able to inspect your parts right on the machine. Tram vises, find the center of your bore, find your edge and inspect parts – it is all possible with the Haimer 3D-Sensor. The unit has a large overrun distance in connection with the fully tested preset breaking points giving the sensor long life. All Universal 3D-Sensors are individually tested and adjusted when being assembled in order to achieve a maximum of measuring precision.

技术详情/Technical details

通用3D寻边器 含 Ø 20 mm夹持杆及短探针

Universal 3D-Sensor including clamping shank Ø 20 mm short probe tip

精度/Accuracy	0,01 mm
不含夹持杆的长度/Length without clamping shank	113 mm
订货号/Order No.	80.360.00

附件/Accessories

Ø 4 mm球头短探针/Short probe tip Ø 4 mm

订货号/Order No. **80.362.00**

Ø 8 mm球头长探针/Long probe tip Ø 8 mm

订货号/Order No. **80.363.00**

建议使用的HAIMER刀柄

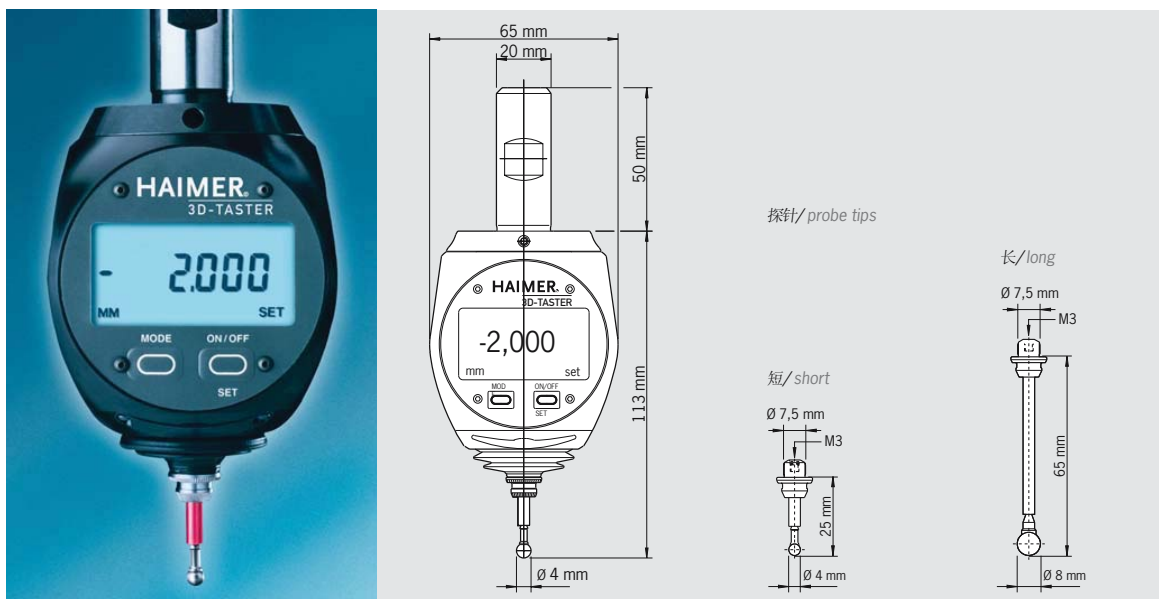
Recommended Haimer Tool Holders

用于通用3D寻边器 for Universal 3D-Sensor	订货号 Order No.
带有SK 40锥部 with integrated taper SK 40	80.364.40
SK 40短刀柄 short chuck SK 40	40.305.20
SK 50	50.300.20
BT 40	40.500.20
BT 50	50.500.20
HSK-A 50	A50.000.20
HSK-E 50	E50.000.20
HSK-A 63	A63.000.20
HSK-A 80	A80.000.20
HSK-A 100	A10.000.20

规格如有变更恕不另行通知
Technical data subject to change without prior notice

HAIMER

数显3D寻边器 3D-SENSOR DIGITAL



数显3D寻边器

数显3D寻边器是经过时间考验的机械3D寻边器的进一步发展。用于铣削和EDM加工设备上的工件寻边。机床主轴能够快速安全的定位于参照边。这种操作能够精确的显示于数字屏幕上。无需调试即可找零。由于机床主轴精确定位于接触边因此这种机床调整系统不通过计算进行设置。

数显屏幕大数字显示最小分辨率0.001mm。能够远距离(就是当它安装在大型加工中心的时候)方便的读取数值。屏幕是防溅防尘设计因此可以直接存放于刀具库。

Digital 3D-Sensor

The Digital 3D-Sensor is a further development of the time proven mechanical 3D-Sensor. It serves for approaching workpiece edges on milling and EDM machines. The spindle may be positioned quickly and safely on the references edge. The approaching operation can be exactly monitored on the digital display. The 0-position is found on the first try. The machine coordinate system can be set without any calculations because the spindle axis is positioned exactly on the approached edge.

The digital display has large numbers that measure in increments of 0.001mm. It can be easily read from a long distance (i.e. when mounted on a large machining center). The digital display is splash-proof and dust-proof and can be stored in the tool magazine of the machine.

技术详情/Technical details

数显3D寻边器, 含 Ø 4 mm 球头短探针

3D-Sensor Digital with short probe tip Ø 4 mm

分辨率/Smallest unit of measure	0,001 mm
重复精度/Repeatability	0,001 mm
测量精度/Measuring accuracy	0,005 mm
显示屏/Display	
显示模式	mm/Inch 互换
Display mode	May be switched to inch or metric
显示屏尺寸/Display size	45x23 mm
字符高度/Height of numbers	8,5 mm
电池寿命(不间断使用) 大约	3000 hr
Service life of battery (continuous operation) approx.	3000 hrs
订货号/Order No.	80.460.00

附件/Accessories

Ø 4 mm 球头短探针/Short probe tip Ø 4 mm

订货号/Order No. **80.362.00**

Ø 8 mm 球头长探针/Long probe tip Ø 8 mm

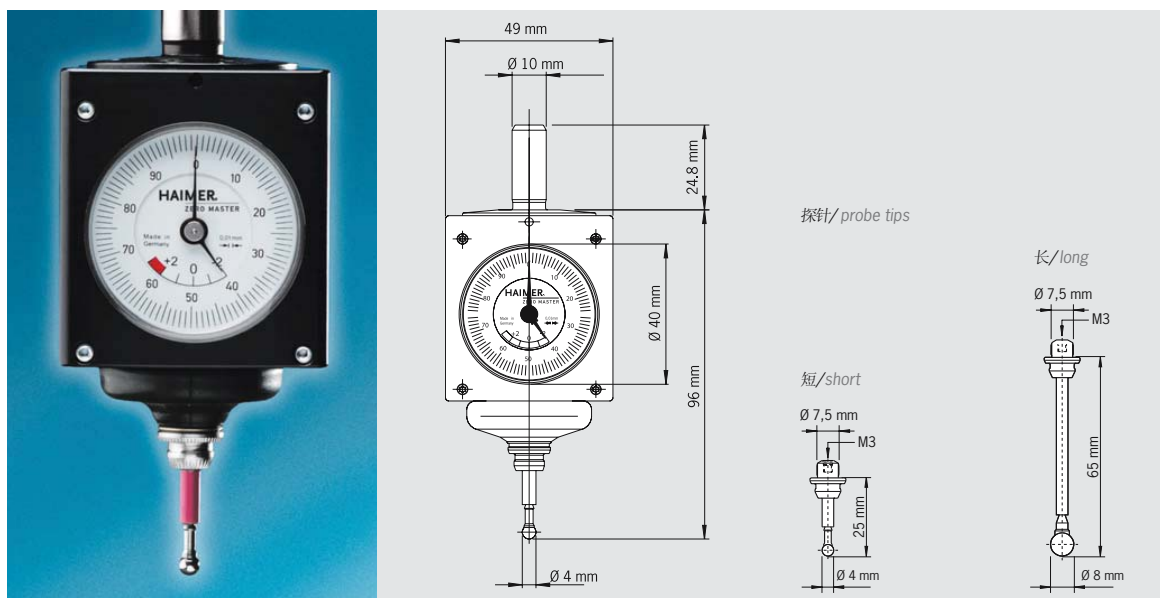
订货号/Order No. **80.363.00**

建议使用的HAIMER刀柄

Recommended Haimer Tool Holders

数显3D寻边器 3D-Sensor Digital	订货号 Order No.
带有SK 40锥部 with integrated taper SK 40	80.464.40
SK 40短刀柄 short chuck SK 40	40.305.20
SK 50	50.300.20
BT 40	40.500.20
BT 50	50.500.20
HSK-A 50	A50.000.20
HSK-E 50	E50.000.20
HSK-A 63	A63.000.20
HSK-A 80	A80.000.20
HSK-A 100	A10.000.20

超小型3D寻边器 ZERO MASTER ANALOG



Zero Master

尺寸小巧外形优美

Zero Master是世界上最小的3D寻边器。使用，功能和精度与通用型3D寻边器相同。Zero Master适用于小机床。夹持直径为10mm。因此他能用于ISO30或小型HSK主轴的机床上。本体缩短且不能突出主轴太远因此可用于测量平整的大工件。Zero Master能通过类似的小表盘读数。

Zero Master可安装球头直径 $\varnothing 4$ mm的短探针或球头直径 $\varnothing 8$ mm的长探针。这些探针与其他HAIMER 3D寻边器兼容。

请注意：

只有使用HAIMER原厂探针才能保证测量精度达到0,01 mm。

Zero Master

Small but nice

The Zero Master is the smallest 3D-Sensor worldwide. Usage, function and accuracy are equal to the Universal 3D-Sensor. The size of the Zero Master is adapted to small machines. The clamping shank has a diameter of 10 mm. Thus it can be also used on machines with ISO 30 or with small HSK spindles. The housing is shortened and does not protrude far out of the spindle so that even big work pieces can be measured. The Zero Master can be read with a small analog dial gauge.

The Zero Master can be equipped with a short (ball diam. 4 mm) and a long (ball diam. 8 mm) probe tip. The probe tips of course are compatible to all other Haimer 3D-Sensors.

Please take note:

The given measuring precision of 0.01 mm only applies if the original Haimer probe tips are used.

技术详情/Technical details

Zero Master, 带有 $\varnothing 10$ mm夹持杆, 并含短探针/Zero Master Analog with clamping shank $\varnothing 10$ mm including short probe tip

精度/Accuracy	0,01 mm
不含夹持杆的长度/Length without clamping shank	96 mm
订货号/Order No.	80.960.00

附件/Accessories

$\varnothing 4$ mm球头短探针/Short Probe tip $\varnothing 4$ mm

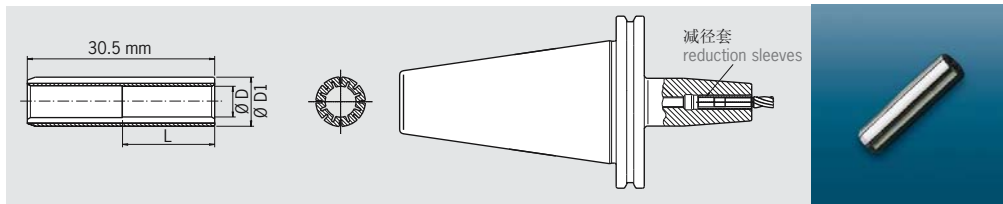
订货号/Order No. **80.362.00**

$\varnothing 8$ mm球头长探针/Long Probe tip $\varnothing 8$ mm

订货号/Order No. **80.363.00**

HAIMER

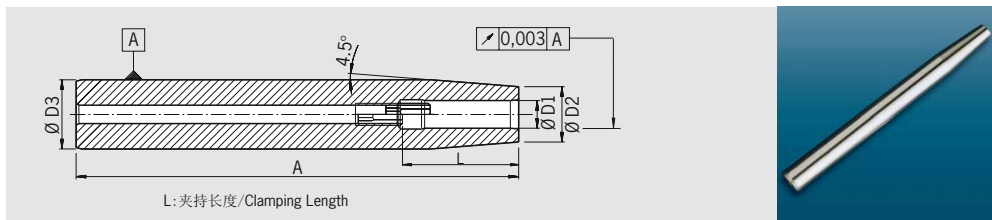
减径套/REDUCTION SLEEVES



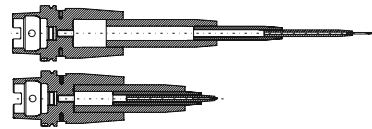
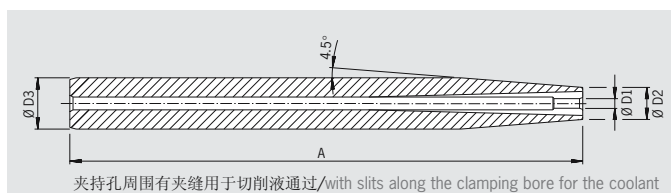
订货号/Order No.	Ø D [mm]	Ø D1 [mm]	L [mm]
79.100.02.5	2,5	8	7,5
79.100.3	3	8	9
79.100.03.5	3,5	8	10,5
79.100.4	4	8	12
79.100.04.5	4,5	8	13,5
79.100.5	5	8	15
79.100.05.5	5,5	8	16,5



热缩延长杆/SHRINK FIT EXTENSIONS

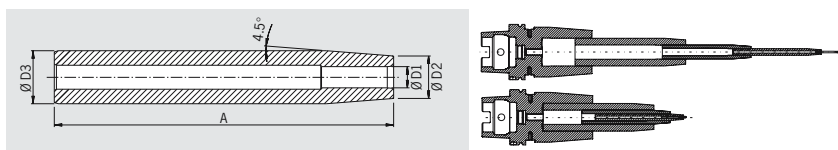


订货号/Order No.	A [mm]	D3 [mm]	夹持部公差 Shank tolerance	D1 [mm]	D2 [mm]	L [mm]	适用冷却套 Cooling body	适用冷却转换套 Adapter
78.160.06	160	16	h6	6	10	36	Ø 14-16	80.105.14.1.1
78.200.06	160	20	h6	6	14	36	Ø 14-16	80.105.14.1.2
78.200.08	160	20	h6	8	14	36	Ø 14-16	80.105.14.1.2
78.250.08	160	25	h6	8	19	36	Ø 6- 8	-
78.250.10	160	25	h6	10	20	42	Ø 6- 8	-
78.250.12	160	25	h6	12	20	47	Ø 6- 8	-
78.250.14	160	25	h6	14	20	47	Ø 6- 8	-
78.250.16	160	25	h6	16	22	50	Ø 6- 8	-
78.320.10	160	32	h6	10	24	42	Ø 14-16	-
78.320.12	160	32	h6	12	24	47	Ø 14-16	-
78.320.14	160	32	h6	14	27	47	Ø 14-16	-
78.320.16	160	32	h6	16	27	50	Ø 14-16	-
78.320.18	160	32	h6	18	27	50	Ø 14-16	-
78.320.20	160	32	h6	20	27	52	Ø 14-16	-

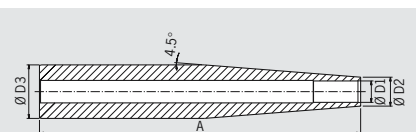


订货号/Order No.	A [mm]	D3 [mm]	夹持部公差 Shank tolerance	D1 [mm]	D2 [mm]	适用冷却套 Cooling body	适用冷却转换套 Adapter
78.120.03.2	160	12	h6	3	8	Ø 14-16	80.105.14.1.1
78.120.035.2	160	12	h6	3,5	8	Ø 14-16	80.105.14.1.1
78.120.04.2	160	12	h6	4	8	Ø 14-16	80.105.14.1.1
78.120.045.2	160	12	h6	4,5	8	Ø 14-16	80.105.14.1.1
78.160.03.2	160	16	h6	3	10	Ø 14-16	80.105.14.1.1
78.160.035.2	160	16	h6	3,5	10	Ø 14-16	80.105.14.1.1
78.160.04.2	160	16	h6	4	10	Ø 14-16	80.105.14.1.1
78.160.045.2	160	16	h6	4,5	10	Ø 14-16	80.105.14.1.1
78.160.05.2	160	16	h6	5	10	Ø 14-16	80.105.14.1.1
78.200.05.2	160	20	h6	5	14	Ø 14-16	80.105.14.1.2

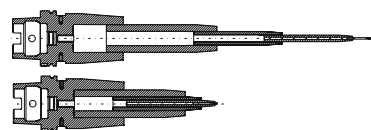
热缩延长杆/SHRINK FIT EXTENSIONS



订货号/Order No.	A[mm]	D3 [mm]	柄部公差 Shank tolerance	D1 [mm]	D2 [mm]	适用冷却套 Cooling body	适用冷却转换套 Adapter
78.120.03.1	160	12	h4	3	8	Ø 14-16	80.105.14.1.1
78.120.04.1	160	12	h4	4	8	Ø 14-16	80.105.14.1.1
78.160.03.1	160	16	h4	3	10	Ø 14-16	80.105.14.1.1
78.160.04.1	160	16	h4	4	10	Ø 14-16	80.105.14.1.1
78.160.05.1	160	16	h4	5	10	Ø 14-16	80.105.14.1.1
78.160.06.1	160	16	h6	6	10	Ø 14-16	80.105.14.1.1
78.200.05.1	160	20	h4	5	14	Ø 14-16	80.105.14.1.2
78.200.06.1	160	20	h6	6	14	Ø 14-16	80.105.14.1.2
78.200.08.1	160	20	h6	8	14	Ø 14-16	80.105.14.1.2
78.250.08.1	160	25	h6	8	19	Ø 6- 8	-
78.250.10.1	160	25	h6	10	20	Ø 6- 8	-
78.250.12.1	160	25	h6	12	20	Ø 6- 8	-
78.250.14.1	160	25	h6	14	20	Ø 6- 8	-
78.250.16.1	160	25	h6	16	22	Ø 6- 8	-
78.320.10.1	160	32	h6	10	24	Ø 14-16	-
78.320.12.1	160	32	h6	12	24	Ø 14-16	-
78.320.14.1	160	32	h6	14	27	Ø 14-16	-
78.320.16.1	160	32	h6	16	27	Ø 14-16	-
78.320.18.1	160	32	h6	18	27	Ø 14-16	-
78.320.20.1	160	32	h6	20	27	Ø 14-16	-
78.201.06.1	300	20	h6	6	14	Ø 14-16	80.105.14.1.2
78.201.08.1	300	20	h6	8	14	Ø 14-16	80.105.14.1.2
78.251.08.1	300	25	h6	8	19	Ø 6- 8	-
78.251.10.1	300	25	h6	10	20	Ø 6- 8	-
78.251.12.1	300	25	h6	12	20	Ø 6- 8	-
78.251.14.1	300	25	h6	14	20	Ø 6- 8	-
78.251.16.1	300	25	h6	16	22	Ø 6- 8	-
78.321.10.1	300	32	h6	10	24	Ø 14-16	-
78.321.12.1	300	32	h6	12	24	Ø 14-16	-
78.321.14.1	300	32	h6	14	27	Ø 14-16	-
78.321.16.1	300	32	h6	16	27	Ø 14-16	-
78.321.20.1	300	32	h6	20	27	Ø 14-16	-



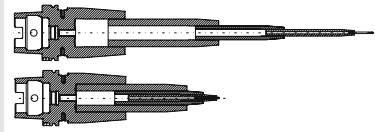
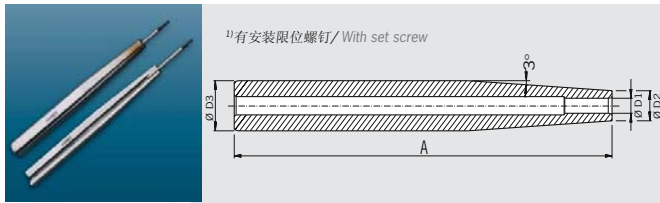
专供Power Clamp强效增强型热缩机使用/Shrinking only with Power Clamp Profi Plus



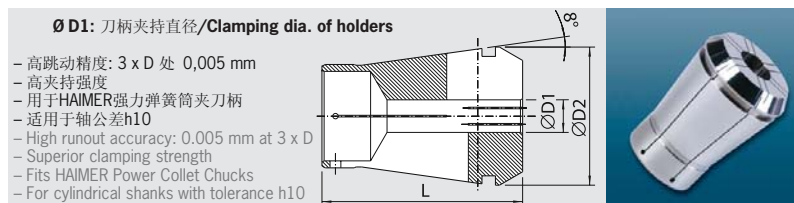
订货号/Order No.	A[mm]	D3 [mm]	柄部公差 Shank tolerance	D1 [mm]	D2 [mm]	适用冷却套 Cooling body
78.501.10.1	300	50	h6	10	24	Ø 10-12
78.501.12.1	300	50	h6	12	24	Ø 14-16
78.501.14.1	300	50	h6	14	27	Ø 14-16
78.501.16.1	300	50	h6	16	27	Ø 14-16
78.501.18.1	300	50	h6	18	27	Ø 14-16
78.501.20.1	300	50	h6	20	33	Ø 25-32
78.501.25.1	300	50	h6	25	44	Ø 25-32
78.501.32.1	300	50	h6	32	44	Ø 25-32

HAIMER

迷你型热缩延长杆/MINI SHRINK EXTENSIONS



订货号/Order No.	A[mm]	D3 [mm]	柄部公差 Shank tolerance	D1 [mm]	D2 [mm]	适用冷却套 Cooling body	适用冷却装换套 Adapter
77.162.03	160	16	h6	3	9	Ø 6-8	80.105.14.2.04
77.162.04	160	16	h6	4	10	Ø 6-8	80.105.14.2.08
77.162.05	160	16	h6	5	11	Ø 6-8	80.105.14.2.05
77.162.06 ¹⁾	160	16	h6	6	12	Ø 6-8	80.105.14.2.09
77.162.08 ¹⁾	160	16	h6	8	14	Ø 6-8	80.105.14.2.10
77.162.10 ¹⁾	160	16	h6	10	16	Ø 6-8	80.105.14.2.11
77.202.06	200	20	h6	6	12	Ø 6-8	80.105.14.2.09
77.202.08	200	20	h6	8	14	Ø 6-8	80.105.14.2.10
77.202.10	200	20	h6	10	16	Ø 6-8	80.105.14.2.11
77.202.12	200	20	h6	12	18	Ø 6-8	80.105.14.2.12
77.160.03	160	16	h6	3	6	Ø 6-8	80.105.14.2.01
77.160.04	160	16	h6	4	7	Ø 6-8	80.105.14.2.02
77.160.05	160	16	h6	5	8	Ø 6-8	80.105.14.2.03
77.160.06 ¹⁾	160	16	h6	6	9	Ø 6-8	80.105.14.2.04
77.160.08 ¹⁾	160	16	h6	8	11	Ø 6-8	80.105.14.2.05
77.160.10 ¹⁾	160	16	h6	10	13	Ø 6-8	80.105.14.2.06
77.200.06	200	20	h6	6	9	Ø 6-8	80.105.14.2.04
77.200.08	200	20	h6	8	11	Ø 6-8	80.105.14.2.05
77.200.10	200	20	h6	10	13	Ø 6-8	80.105.14.2.06
77.200.12	200	20	h6	12	15	Ø 6-8	80.105.14.2.07

HAIMER强力刀柄用弹簧筒夹
COLLET FOR HAIMER POWER COLLET CHUCK

ER 32 用/For ER 32	Ø D1 [mm]	Ø D2 L
81.323.02	2	32,48 45
81.323.03	3	32,48 45
81.323.04	4	32,48 45
81.323.05	5	32,48 45
81.323.06	6	32,48 45
81.323.08	8	32,48 45
81.323.10	10	32,48 45
81.323.12	12	32,48 45
81.323.14	14	32,48 45
81.323.16	16	32,48 45
81.323.18	18	32,48 45
81.323.20	20	32,48 45

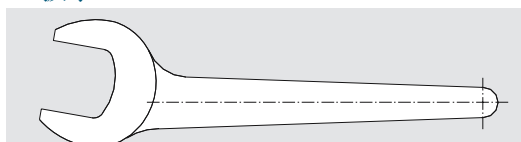
ER 16 用/For ER 16	Ø D1 [mm]	Ø D2 L
81.163.02	2	16,45 30
81.163.03	3	16,45 30
81.163.04	4	16,45 30
81.163.05	5	16,45 30
81.163.06	6	16,45 30
81.163.08	8	16,45 30
81.163.10	10	16,45 30
ER 25 用/For ER 25		
81.253.02	2	25,45 37
81.253.03	3	25,45 37
81.253.04	4	25,45 37
81.253.05	5	25,45 37
81.253.06	6	25,45 37
81.253.08	8	25,45 37
81.253.10	10	25,45 37
81.253.12	12	25,45 37
81.253.14	14	25,45 37
81.253.16	16	25,45 37

HAIMER强力弹簧筒夹刀柄用锁紧扳手和扭力扳手 CLAMPING AND TORQUE WRENCH FOR HAIMER POWER COLLET CHUCK



附件用于/Accessories For	ER 16	ER 25	ER 32
强力弹簧筒夹刀柄用锁紧扳手/Clamping wrench			
订货号/Order No. 84.650...	...16	...25	...32
扭力扳手/Torque wrench			
订货号/Order No. 84.600.00			
扭力扳手插件/Torque wrench inserts			
强力弹簧筒夹刀柄用/For Power Collet Chucks			
订货号/Order No. 84.610...	...16	...25	...32
标准ER刀柄用/For standard ER chucks			
订货号/Order No. 84.620...	...16	...25	...32

扳手/WRENCHES



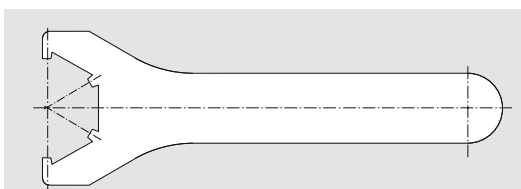
ER 16, ER 20 锁紧螺母用扳手/Wrench for locknuts ER 16 and ER 20

用于锁紧螺母/For Locknuts	ER 16	ER 20
订货号/Order No. 84.200...	...16	...20



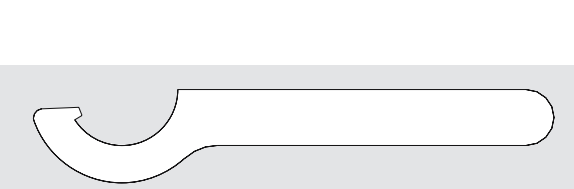
用于 Ø 16–60 面铣刀端面锁紧螺钉或组合壳铣刀用扳手/Wrench for tightening bolts for face mill arbors and combination shell end mill adapters Ø 16–60

用于 Ø/For Ø	16	22	27	32	40	50	60
订货号/Order No. 84.400...	...16	...22	...27	...32	...40	...50	...60



ER 25–40 锁紧螺母用扳手/Wrench for locknuts ER 25–40

用于锁紧螺母/For LocknutsE	ER 25	ER 32	ER 40
订货号/Order No. 84.200...	...25	...32	...40



OZ 锁紧螺母用扳手/Wrench for locknuts OZ

用于锁紧螺母/For Locknuts	OZ 16	OZ 25	OZ 32	OZ 40
订货号/Order No. 84.300...	...16	...25	...32	...40

HAIMER

用于不同接口的刀具安装设备 **TOOL CLAMP** **TOOL ASSEMBLY DEVICE TOOL CLAMP WITH VARIOUS ADAPTERS**

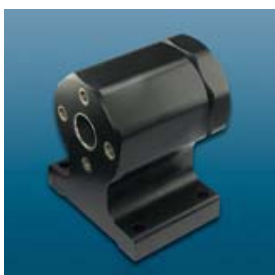


新装刀设备:

- 进行可靠的刀具安装
- 所需锁紧力最小
- 适于不同锥柄的快换功能——无附加工具
- 进行刀具无事故安装
- 具有弹簧承载锁定销
- 具有机械安全销
- 具有更符合人体工学的夹持槽
- 所需占地140x100mm

The new tool assembly device:

- Secure tool assembling
- Minimum locking force needed
- Quick-change function for different taper interfaces – without additional tooling
- Accident-free assembling of cutting tools
- Spring-loaded locking pin
- Mechanical security pin
- Better tool clamping thanks to optimum ergonomics
- Replaceable brass tool pots protect the taper surface
- Required space 140x100 mm



Tool Clamp

无刀具夹持器, 含有4x90° 定位销
 without tool holder, 4x90° indexable

订货号/Order No.

84.700.00



刀具夹持器 **SK** / Tool holder **SK**

(DIN/MAS-BT/CAT)

订货号/Order No.

类型/Type

84.701.30

SK/ISO 30

84.701.40

SK/ISO 40

84.701.50

SK/ISO 50



刀具夹持器 **HSK-A** / Tool holder **HSK-A**

(DIN 69893/1)

订货号/Order No.

类型/Type

84.702.40

HSK-A 40

84.702.50

HSK-A 50

84.702.63

HSK-A 63

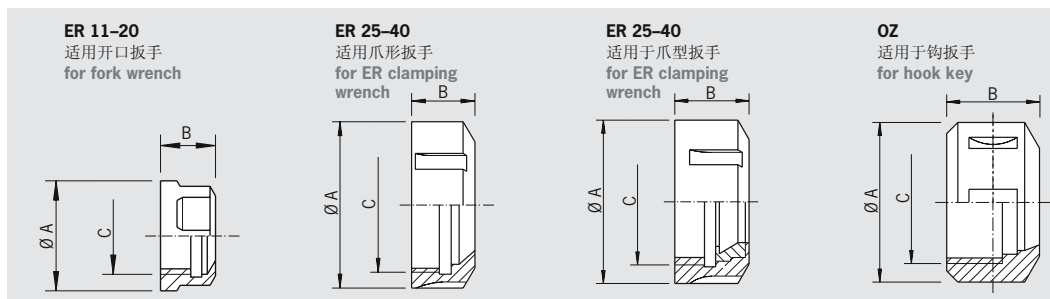
84.702.80

HSK-A 80

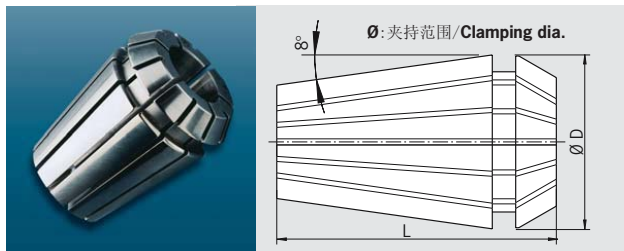
84.702.10

HSK-A 100

弹簧筒夹刀柄用锁紧螺母/LOCKNUTS FOR COLLET CHUCKS



ER	ER 11	ER 16	ER 20	ER 25	ER 32	ER 40
订货号/Order No. 83.912...	...11	...16	...20	...25	...32	...40
		ER 16 HS	ER 20 HS	ER 25 HS	ER 32 HS	ER 40 HS
订货号/ Order No. 83.912...		...16.HS	... 20.HS	...25.HS	...32.HS	...40.HS
Ø A	19	28	34	42	50	63
B	11,3	17	19	20	22,3	25,3
C	M 14 x 0,75	M 22 x 1,5	M 25 x 1,5	M 32 x 1,5	M 40 x 1,5	M 50 x 1,5
ER (带有滑动轴承/with slide bearing)				ER 25	ER 32	ER 40
订货号/Order No. 83.913...				...25	...32	...40
Ø A				42	50	63
B				22	26	29
C				M 32 x 1,5	M 40 x 1,5	M 50 x 1,5
OZ (带有滑动轴承/with slide bearing)		OZ 16		OZ 25	OZ 32	OZ 40
订货号/Order No. 83.920...		...16		...25	...32	...40
Ø A		43		60	72	85
B		24		30	33,5	37
C		M 33 x 1,5		M 48 x 2	M 60 x 2,5	M 68 x 2,5

高精度ER型弹簧筒夹/
HIGH PRECISION COLLETS ER

ER 20 用/For ER 20				
	Ø	ØD	L	
81.200.02	1.50 ... 2.00	21	31,5	
81.200.03	2.00 ... 3.00	21	31,5	
81.200.04	3.00 ... 4.00	21	31,5	
81.200.05	4.00 ... 5.00	21	31,5	
81.200.06	5.00 ... 6.00	21	31,5	
81.200.07	6.00 ... 7.00	21	31,5	
81.200.08	7.00 ... 8.00	21	31,5	
81.200.09	8.00 ... 9.00	21	31,5	
81.200.10	9.00 ... 10.00	21	31,5	
81.200.11	10.00 ... 11.00	21	31,5	
81.200.12	11.00 ... 12.00	21	31,5	
81.200.13	12.00 ... 13.00	21	31,5	

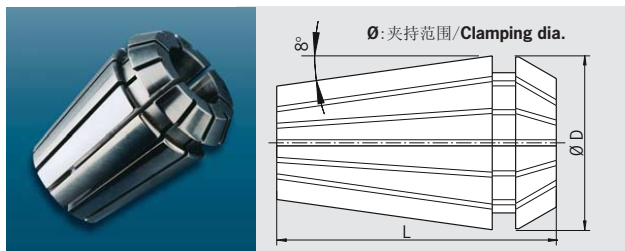
ER 11 用/For ER 11			
	Ø	ØD	L
81.110.01	0.50 ... 1.00	11,5	18
81.110.1.5	1.00 ... 1.50	11,5	18
81.110.02	1.50 ... 2.00	11,5	18
81.110.2.5	2.00 ... 2.50	11,5	18
81.110.03	2.50 ... 3.00	11,5	18
81.110.3.5	3.00 ... 3.50	11,5	18
81.110.04	3.50 ... 4.00	11,5	18
81.110.4.5	4.00 ... 4.50	11,5	18
81.110.05	4.50 ... 5.00	11,5	18
81.110.5.5	5.00 ... 5.50	11,5	18
81.110.06	5.50 ... 6.00	11,5	18
81.110.6.5	6.00 ... 6.50	11,5	18
81.110.07	6.50 ... 7.00	11,5	18

ER 16 用/For ER 16			
	Ø	ØD	L
81.160.01	0.50 ... 1.00	17	27
81.160.1.5	1.00 ... 1.50	17	27
81.160.02	1.50 ... 2.00	17	27
81.160.2.5	2.00 ... 2.50	17	27
81.160.03	2.50 ... 3.00	17	27
81.160.04	3.00 ... 4.00	17	27
81.160.05	4.00 ... 5.00	17	27
81.160.06	5.00 ... 6.00	17	27
81.160.07	6.00 ... 7.00	17	27
81.160.08	7.00 ... 8.00	17	27
81.160.09	8.00 ... 9.00	17	27
81.160.10	9.00 ... 10.00	17	27

规格如有变更恕不另行通知
Technical data subject to change without prior notice

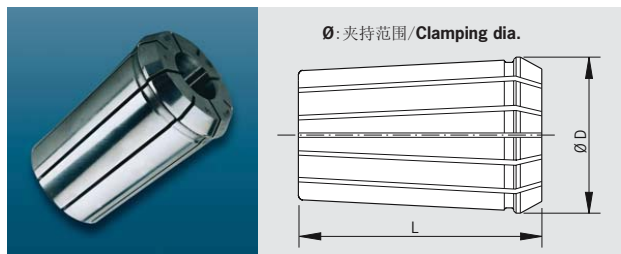
HAIMER

高精度ER型弹簧筒夹 HIGH PRECISION COLLETS ER



ER 40 用/For ER 40				
	Ø	ØD	L	
81.400.03	2.50 ... 3.00	41	46	
81.400.04	3.00 ... 4.00	41	46	
81.400.05	4.00 ... 5.00	41	46	
81.400.06	5.00 ... 6.00	41	46	
81.400.07	6.00 ... 7.00	41	46	
81.400.08	7.00 ... 8.00	41	46	
81.400.09	8.00 ... 9.00	41	46	
81.400.10	9.00 ... 10.00	41	46	
81.400.11	10.00 ... 11.00	41	46	
81.400.12	11.00 ... 12.00	41	46	
81.400.13	12.00 ... 13.00	41	46	
81.400.14	13.00 ... 14.00	41	46	
81.400.15	14.00 ... 15.00	41	46	
81.400.16	15.00 ... 16.00	41	46	
81.400.17	16.00 ... 17.00	41	46	
81.400.18	17.00 ... 18.00	41	46	
81.400.19	18.00 ... 19.00	41	46	
81.400.20	19.00 ... 20.00	41	46	
81.400.21	20.00 ... 21.00	41	46	
81.400.22	21.00 ... 22.00	41	46	
81.400.23	22.00 ... 23.00	41	46	
81.400.24	23.00 ... 24.00	41	46	
81.400.25	24.00 ... 25.00	41	46	
81.400.26	25.00 ... 26.00	41	46	

OZ型弹簧筒夹/COLLETS OZ

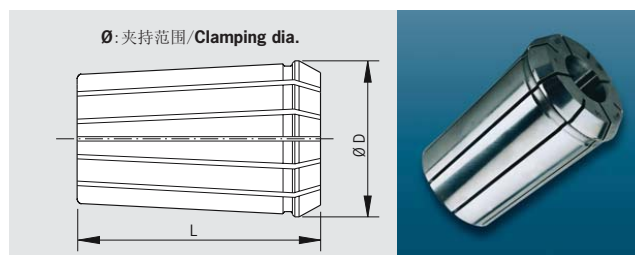


ER 25 用/For ER 25				
	Ø	ØD	L	
81.250.1.5	1.00 ... 1.50	26	35	
81.250.02	1.50 ... 2.00	26	35	
81.250.2.5	2.00 ... 2.50	26	35	
81.250.03	2.50 ... 3.00	26	35	
81.250.04	3.00 ... 4.00	26	35	
81.250.05	4.00 ... 5.00	26	35	
81.250.06	5.00 ... 6.00	26	35	
81.250.07	6.00 ... 7.00	26	35	
81.250.08	7.00 ... 8.00	26	35	
81.250.09	8.00 ... 9.00	26	35	
81.250.10	9.00 ... 10.00	26	35	
81.250.11	10.00 ... 11.00	26	35	
81.250.12	11.00 ... 12.00	26	35	
81.250.13	12.00 ... 13.00	26	35	
81.250.14	13.00 ... 14.00	26	35	
81.250.15	14.00 ... 15.00	26	35	
81.250.16	15.00 ... 16.00	26	35	

ER 32 用/For ER 32				
	Ø	ØD	L	
81.320.02	1.50 ... 2.00	33	40	
81.320.2.5	2.00 ... 2.50	33	40	
81.320.03	2.50 ... 3.00	33	40	
81.320.04	3.00 ... 4.00	33	40	
81.320.05	4.00 ... 5.00	33	40	
81.320.06	5.00 ... 6.00	33	40	
81.320.07	6.00 ... 7.00	33	40	
81.320.08	7.00 ... 8.00	33	40	
81.320.09	8.00 ... 9.00	33	40	
81.320.10	9.00 ... 10.00	33	40	
81.320.11	10.00 ... 11.00	33	40	
81.320.12	11.00 ... 12.00	33	40	
81.320.13	12.00 ... 13.00	33	40	
81.320.14	13.00 ... 14.00	33	40	
81.320.15	14.00 ... 15.00	33	40	
81.320.16	15.00 ... 16.00	33	40	
81.320.17	16.00 ... 17.00	33	40	
81.320.18	17.00 ... 18.00	33	40	
81.320.19	18.00 ... 19.00	33	40	
81.320.20	19.00 ... 20.00	33	40	

OZ 16 用/For OZ 16 DIN 6388 A			
	Ø	ØD	L
82.160.02	2	25,5	40
82.160.2.5	2,5	25,5	40
82.160.03	3	25,5	40
82.160.04	4	25,5	40
82.160.05	5	25,5	40
82.160.06	6	25,5	40
82.160.07	7	25,5	40
82.160.08	8	25,5	40
82.160.09	9	25,5	40
82.160.10	10	25,5	40
82.160.11	11	25,5	40
82.160.12	12	25,5	40
82.160.13	13	25,5	40
82.160.14	14	25,5	40
82.160.15	15	25,5	40
82.160.16	16	25,5	40

OZ 型弹簧筒夹 / COLLETS OZ



OZ 25 用 / For OZ 25 DIN 6388 A

	Ø	ØD	L
82.250.02	2	35,5	52
82.250.03	3	35,5	52
82.250.04	4	35,5	52
82.250.05	5	35,5	52
82.250.06	6	35,5	52
82.250.07	7	35,5	52
82.250.08	8	35,5	52
82.250.09	9	35,5	52
82.250.10	10	35,5	52
82.250.11	11	35,5	52
82.250.12	12	35,5	52
82.250.13	13	35,5	52
82.250.14	14	35,5	52
82.250.15	15	35,5	52
82.250.16	16	35,5	52
82.250.17	17	35,5	52
82.250.18	18	35,5	52
82.250.19	19	35,5	52
82.250.20	20	35,5	52
82.250.21	21	35,5	52
82.250.22	22	35,5	52
82.250.23	23	35,5	52
82.250.24	24	35,5	52
82.250.25	25	35,5	52

OZ 32 用 / For OZ 32 DIN 6388 A

	Ø	ØD	L
82.320.02	2	44	60
82.320.05	5	44	60
82.320.06	6	44	60
82.320.07	7	44	60
82.320.08	8	44	60
82.320.09	9	44	60
82.320.10	10	44	60
82.320.11	11	44	60
82.320.12	12	44	60
82.320.13	13	44	60
82.320.14	14	44	60
82.320.15	15	44	60
82.320.16	16	44	60
82.320.18	18	44	60
82.320.20	20	44	60
82.320.25	25	44	60
82.320.32	32	44	60

OZ 25 用 / For OZ 25 DIN 6388 B

	Ø	ØD	L
82.251.4.0	3.50 ... 4.00	35,5	52
82.251.4.5	4.00 ... 4.50	35,5	52
82.251.5.0	4.50 ... 5.00	35,5	52
82.251.5.5	5.00 ... 5.50	35,5	52
82.251.6.0	5.50 ... 6.00	35,5	52
82.251.6.5	6.00 ... 6.50	35,5	52
82.251.7.0	6.50 ... 7.00	35,5	52
82.251.7.5	7.00 ... 7.50	35,5	52
82.251.8.0	7.50 ... 8.00	35,5	52
82.251.8.5	8.00 ... 8.50	35,5	52
82.251.9.0	8.50 ... 9.00	35,5	52
82.251.9.5	9.00 ... 9.50	35,5	52
82.251.10.0	9.50 ... 10.00	35,5	52
82.251.10.5	10.00 ... 10.50	35,5	52
82.251.11.0	10.50 ... 11.00	35,5	52
82.251.11.5	11.00 ... 11.50	35,5	52
82.251.12.0	11.50 ... 12.00	35,5	52
82.251.12.5	12.00 ... 12.50	35,5	52
82.251.13.0	12.50 ... 13.00	35,5	52
82.251.13.5	13.00 ... 13.50	35,5	52
82.251.14.0	13.50 ... 14.00	35,5	52
82.251.14.5	14.00 ... 14.50	35,5	52
82.251.15.0	14.50 ... 15.00	35,5	52
82.251.15.5	15.00 ... 15.50	35,5	52
82.251.16.0	15.50 ... 16.00	35,5	52
82.251.16.5	16.00 ... 16.50	35,5	52
82.251.17.0	16.50 ... 17.00	35,5	52
82.251.17.5	17.00 ... 17.50	35,5	52
82.251.18.0	17.50 ... 18.00	35,5	52
82.251.18.5	18.00 ... 18.50	35,5	52
82.251.19.0	18.50 ... 19.00	35,5	52
82.251.19.5	19.00 ... 19.50	35,5	52
82.251.20.0	19.50 ... 20.00	35,5	52
82.251.20.5	20.00 ... 20.50	35,5	52
82.251.21.0	20.50 ... 21.00	35,5	52
82.251.21.5	21.00 ... 21.50	35,5	52
82.251.22.0	21.50 ... 22.00	35,5	52
82.251.22.5	22.00 ... 22.50	35,5	52
82.251.23.0	22.50 ... 23.00	35,5	52
82.251.23.5	23.00 ... 23.50	35,5	52
82.251.24.0	23.50 ... 24.00	35,5	52
82.251.24.5	24.00 ... 24.50	35,5	52
82.251.25.0	24.50 ... 25.00	35,5	52

OZ 16 用 / For OZ 16 DIN 6388 B

	Ø	ØD	L
82.161.4.0	3.50 ... 4.00	25,5	40
82.161.4.5	4.00 ... 4.50	25,5	40
82.161.5.0	4.50 ... 5.00	25,5	40
82.161.5.5	5.00 ... 5.50	25,5	40
82.161.6.0	5.50 ... 6.00	25,5	40
82.161.6.5	6.00 ... 6.50	25,5	40
82.161.7.0	6.50 ... 7.00	25,5	40
82.161.7.5	7.00 ... 7.50	25,5	40
82.161.8.0	7.50 ... 8.00	25,5	40
82.161.8.5	8.00 ... 8.50	25,5	40
82.161.9.0	8.50 ... 9.00	25,5	40
82.161.9.5	9.00 ... 9.50	25,5	40
82.161.10.0	9.50 ... 10.00	25,5	40
82.161.10.5	10.00 ... 10.50	25,5	40
82.161.11.0	10.50 ... 11.00	25,5	40
82.161.11.5	11.00 ... 11.50	25,5	40
82.161.12.0	11.50 ... 12.00	25,5	40
82.161.12.5	12.00 ... 12.50	25,5	40
82.161.13.0	12.50 ... 13.00	25,5	40
82.161.13.5	13.00 ... 13.50	25,5	40
82.161.14.0	13.50 ... 14.00	25,5	40
82.161.14.5	14.00 ... 14.50	25,5	40
82.161.15.0	14.50 ... 15.00	25,5	40
82.161.15.5	15.00 ... 15.50	25,5	40
82.161.16.0	15.50 ... 16.00	25,5	40

HAIMER

OZ 型弹簧筒夹 / COLLETS OZ

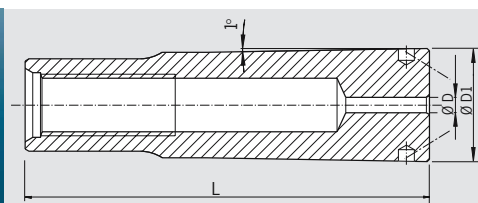
OZ 40 用/For OZ 40 DIN 6388 B			
	Ø	ØD	L
82.401.8.0	7.50 ... 8.00	52,7	68
82.401.8.5	8.00 ... 8.50	52,7	68
82.401.9.0	8.50 ... 9.00	52,7	68
82.401.9.5	9.00 ... 9.50	52,7	68
82.401.10.0	9.50 ... 10.00	52,7	68
82.401.10.5	10.00 ... 10.50	52,7	68
82.401.11.0	10.50 ... 11.00	52,7	68
82.401.11.5	11.00 ... 11.50	52,7	68
82.401.12.0	11.50 ... 12.00	52,7	68
82.401.12.5	12.00 ... 12.50	52,7	68
82.401.13.0	12.50 ... 13.00	52,7	68
82.401.13.5	13.00 ... 13.50	52,7	68
82.401.14.0	13.50 ... 14.00	52,7	68
82.401.14.5	14.00 ... 14.50	52,7	68
82.401.15.0	14.50 ... 15.00	52,7	68
82.401.15.5	15.00 ... 15.50	52,7	68
82.401.16.0	15.50 ... 16.00	52,7	68
82.401.16.5	16.00 ... 16.50	52,7	68
82.401.17.0	16.50 ... 17.00	52,7	68
82.401.17.5	17.00 ... 17.50	52,7	68
82.401.18.0	17.50 ... 18.00	52,7	68
82.401.18.5	18.00 ... 18.50	52,7	68
82.401.19.0	18.50 ... 19.00	52,7	68
82.401.19.5	19.00 ... 19.50	52,7	68
82.401.20.0	19.50 ... 20.00	52,7	68
82.401.20.5	20.00 ... 20.50	52,7	68
82.401.21.0	20.50 ... 21.00	52,7	68
82.401.21.5	21.00 ... 21.50	52,7	68
82.401.22.0	21.50 ... 22.00	52,7	68
82.401.22.5	22.00 ... 22.50	52,7	68
82.401.23.0	22.50 ... 23.00	52,7	68
82.401.23.5	23.00 ... 23.50	52,7	68
82.401.24.0	23.50 ... 24.00	52,7	68
82.401.24.5	24.00 ... 24.50	52,7	68
82.401.25.0	24.50 ... 25.00	52,7	68
82.401.25.5	25.00 ... 25.50	52,7	68
82.401.26.0	25.50 ... 26.00	52,7	68
82.401.26.5	26.00 ... 26.50	52,7	68
82.401.27.0	26.50 ... 27.00	52,7	68
82.401.27.5	27.00 ... 27.50	52,7	68
82.401.28.0	27.50 ... 28.00	52,7	68
82.401.28.5	28.00 ... 28.50	52,7	68
82.401.29.0	28.50 ... 29.00	52,7	68
82.401.29.5	29.00 ... 29.50	52,7	68
82.401.30.0	29.50 ... 30.00	52,7	68
82.401.30.5	30.00 ... 30.50	52,7	68
82.401.31.0	30.50 ... 31.00	52,7	68
82.401.31.5	31.00 ... 31.50	52,7	68
82.401.32.0	31.50 ... 32.00	52,7	68
82.401.32.5	32.00 ... 32.50	52,7	68
82.401.33.0	32.50 ... 33.00	52,7	68
82.401.33.5	33.00 ... 33.50	52,7	68
82.401.34.0	33.50 ... 34.00	52,7	68
82.401.34.5	34.00 ... 34.50	52,7	68
82.401.35.0	34.50 ... 35.00	52,7	68
82.401.35.5	35.00 ... 35.50	52,7	68
82.401.36.0	35.50 ... 36.00	52,7	68
82.401.36.5	36.00 ... 36.50	52,7	68
82.401.37.0	36.50 ... 37.00	52,7	68
82.401.37.5	37.00 ... 37.50	52,7	68
82.401.38.0	37.50 ... 38.00	52,7	68
82.401.38.5	38.00 ... 38.50	52,7	68
82.401.39.0	38.50 ... 39.00	52,7	68
82.401.39.5	39.00 ... 39.50	52,7	68
82.401.40.0	39.50 ... 40.00	52,7	68

OZ 32 用/For OZ 32 DIN 6388 B			
	Ø	ØD	L
82.321.6.0	5.50 ... 6.00	44	60
82.321.6.5	6.00 ... 6.50	44	60
82.321.7.0	6.50 ... 7.00	44	60
82.321.7.5	7.00 ... 7.50	44	60
82.321.8.0	7.50 ... 8.00	44	60
82.321.8.5	8.00 ... 8.50	44	60
82.321.9.0	8.50 ... 9.00	44	60
82.321.9.5	9.00 ... 9.50	44	60
82.321.10.0	9.50 ... 10.00	44	60
82.321.10.5	10.00 ... 10.50	44	60
82.321.11.0	10.50 ... 11.00	44	60
82.321.11.5	11.00 ... 11.50	44	60
82.321.12.0	11.50 ... 12.00	44	60
82.321.12.5	12.00 ... 12.50	44	60
82.321.13.0	12.50 ... 13.00	44	60
82.321.13.5	13.00 ... 13.50	44	60
82.321.14.0	13.50 ... 14.00	44	60
82.321.14.5	14.00 ... 14.50	44	60
82.321.15.0	14.50 ... 15.00	44	60
82.321.15.5	15.00 ... 15.50	44	60
82.321.16.0	15.50 ... 16.00	44	60
82.321.16.5	16.00 ... 16.50	44	60
82.321.17.0	16.50 ... 17.00	44	60
82.321.17.5	17.00 ... 17.50	44	60
82.321.18.0	17.50 ... 18.00	44	60
82.321.18.5	18.00 ... 18.50	44	60
82.321.19.0	18.50 ... 19.00	44	60
82.321.19.5	19.00 ... 19.50	44	60
82.321.20.0	19.50 ... 20.00	44	60
82.321.20.5	20.00 ... 20.50	44	60
82.321.21.0	20.50 ... 21.00	44	60
82.321.21.5	21.00 ... 21.50	44	60
82.321.22.0	21.50 ... 22.00	44	60
82.321.22.5	22.00 ... 22.50	44	60
82.321.23.0	22.50 ... 23.00	44	60
82.321.23.5	23.00 ... 23.50	44	60
82.321.24.0	23.50 ... 24.00	44	60
82.321.24.5	24.00 ... 24.50	44	60
82.321.25.0	24.50 ... 25.00	44	60
82.321.25.5	25.00 ... 25.50	44	60
82.321.26.0	25.50 ... 26.00	44	60
82.321.26.5	26.00 ... 26.50	44	60
82.321.27.0	26.50 ... 27.00	44	60
82.321.27.5	27.00 ... 27.50	44	60
82.321.28.0	27.50 ... 28.00	44	60
82.321.28.5	28.00 ... 28.50	44	60
82.321.29.0	28.50 ... 29.00	44	60
82.321.29.5	29.00 ... 29.50	44	60
82.321.30.0	29.50 ... 30.00	44	60
82.321.30.5	30.00 ... 30.50	44	60
82.321.31.0	30.50 ... 31.00	44	60
82.321.31.5	31.00 ... 31.50	44	60
82.321.32.0	31.50 ... 32.00	44	60

规格如有变更恕不另行通知

Technical data subject to change without prior notice

HG型弹簧筒夹/HG COLLETS



附件/ Accessories

后拉钩/Pull-out hook

订货号/Order No. **82.570.00**

润滑膏/Lubricating paste

订货号/Order No. **82.585.00**

Cool Jet型冷却喷嘴/Cool Jet bores

订货号/Order No. **91.100.24**

HG 01	Ø D [mm]	2	2,5	3	4	4,5	5	5,5	5,6 ¹⁾	6	6,3	7	7,1 ¹⁾	8	9
	Ø D1 [mm]	14,7	14,7	14,7	14,7	14,7	14,7	14,7	14,7	14,7	14,7	14,7	14,7	14,7	14,7
	L [mm]	52,5	52,5	52,5	52,5	52,5	52,5	52,5	52,5	52,5	52,5	52,5	52,5	52,5	52,5
订货号/Order No.	82.510...	...02	...02.5	...03	...04	...04.5	...05	...05.5	...05.6	...06	...06.3	...07	...07.1	...08	...09
HG 02	Ø D [mm]	10	11	12	12,5	14									
	Ø D1 [mm]	17,87	17,87	17,87	17,87	17,87									
	L [mm]	64,2	64,2	64,2	64,2	64,2									
订货号/Order No.	82.520...	...10	...11	...12	...12.5	...14									
HG 03	Ø D [mm]	16	18	20											
	Ø D1 [mm]	26,147	26,147	26,147											
	L [mm]	69,7	69,7	69,7											
订货号/Order No.	82.530...	...16	...18	...20											

清洁器/Cone Wiper

清洁器

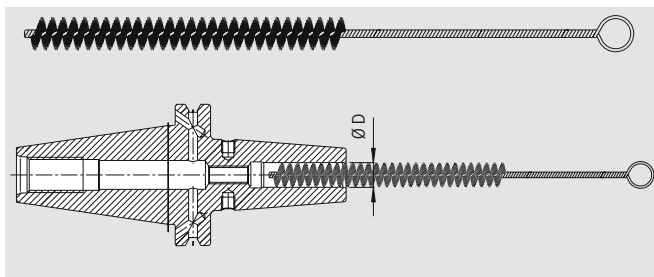
Cone wiper

用于清洁HG型刀柄内锥面

For cleaning tool holder I.D. of HG chuck

用于/For	HG 01	HG 02	HG 03
订货号/Order No.	82.590... ...01	...02	...03

热缩清洁刷/SHRINK FIT BRUSH

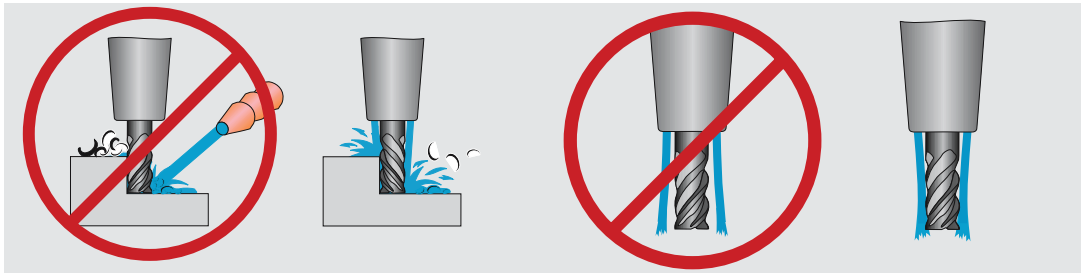


用于/For	ØD[mm]
订货号/Order No. 86.200.01	3
86.200.02	3,5
86.200.02	4
86.200.02	4,5
86.200.02	5
86.200.03	6
86.200.03	8
86.200.04	10
86.200.04	12
86.200.06	14
86.200.06	16
86.200.07	18
86.200.07	20
86.200.08	25

规格如有变更恕不另行通知
Technical data subject to change without prior notice

HAIMER

COOL JET型冷却喷孔/COOL JET



- 冷却液直接作用于切削刃
- 延长刀具寿命100%
- 更高的切削可靠性
- 减少刀尖积屑瘤

- Coolant directly to the cutting edge
- Extended tool life up to 100%
- Higher reliability of cutting process
- No more balls of chips on tool

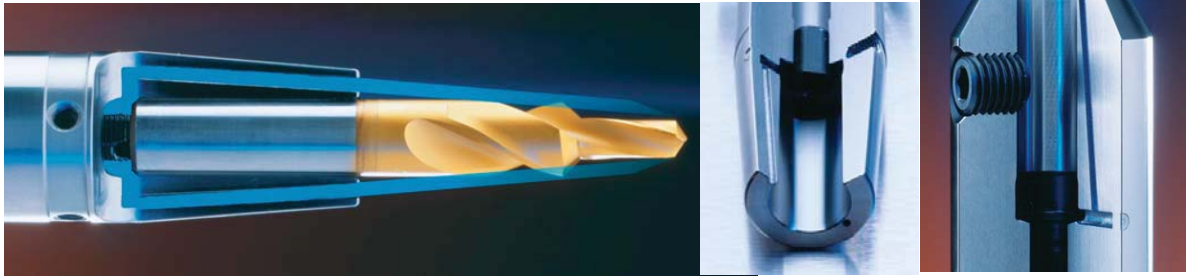
高主轴转速功能

- 优化前的冷却喷孔：直的
- 优化后的冷却喷孔：瞄准中心

Function at high spindle speed

- Previous coolant bores: straight
- Optimized coolant bores: aimed at center

例子/Examples



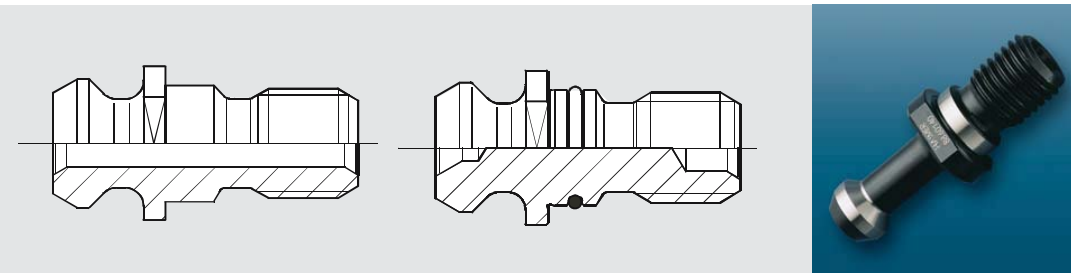
Cool Jet 型冷却喷孔

订货号/Order No. 91.100.24

刀柄夹持直径/Clamping dia. of holders	Ø [mm]	06	08	10	12	14	16	18	20	25	32
侧固刀柄/Weldon Tool Holder · DIN 69871 · SK40											
长度/Length	短/short	50 ¹⁾	50 ¹⁾	50 ¹⁾	50 ¹⁾	50 ¹⁾	63	—	63	100	—
订货号/Order No.	40.300...	...06.2	...08.2	...10.2	...12.2	...14.2	...16.2		...20.2	...25.2	
热缩刀柄/Shrink Fit Chuck · DIN 69871 · SK40											
长度/Length	短/short	80	80	80	80	80	80	80	80	100	100
订货号/Order No.	40.440...	...06.2	...08.2	...10.2	...12.2	...14.2	...16.2	...18.2	...20.2	...25.2	...32.2
热缩刀柄/Shrink Fit Chuck · BT 40 · JIS B 6339											
长度/Length	短/short	90	90	90	90	90	90	—	90	100	—
订货号/Order No.	40.640...	...06.2	...08.2	...10.2	...12.2	...14.2	...16.2		...20.2	...25.2	
热缩刀柄/Shrink Fit Chuck · DIN 69871 · SK50											
长度/Length	短/short	—	—	63 ¹⁾	63 ¹⁾	—	63 ¹⁾	—	63 ¹⁾	—	—
订货号/Order No.	50.300...			...10.2	...12.2		...16.2		...20.2		
热缩刀柄/Shrink Fit Chuck · DIN 69871 · SK50											
长度/Length	短/short	80	80	80	80	80	80	80	80	100	100
订货号/Order No.	50.440...	...06.2	...08.2	...10.2	...12.2	...14.2	...16.2	...18.2	...20.2	...25.2	...32.2
热缩刀柄/Shrink Fit Chuck · DIN 69893 · HSK-A 63											
长度/Length	短/short	80	80	85	90	90	95	95	100	115	120
订货号/Order No.	A63.140...	...06.2	...08.2	...10.2	...12.2	...14.2	...16.2	...18.2	...20.2	...25.2	...32.2
长度/Length	ZG130	130	130	130	130	130	130	130	130	130	—
订货号/Order No.	A63.144...	...06.2	...08.2	...10.2	...12.2	...14.2	...16.2	...18.2	...20.2	...25.2	

拉钉/PULL STUDS

HAIMER



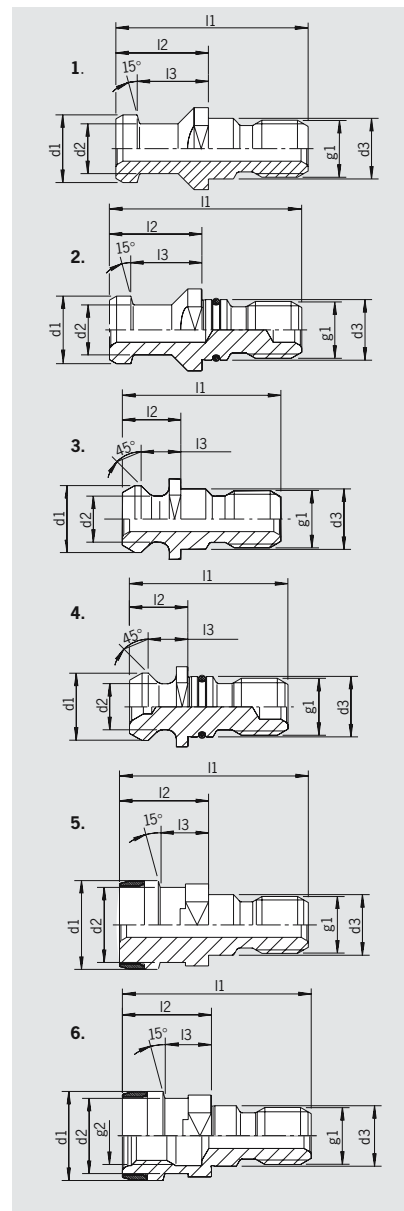
拉钉是机床与刀具之间连接的重要部件。要求有极高的精度，刚度和可靠性。
低质量的拉钉不仅影响机床的性能，甚至成为安全隐患。拉钉一旦出问题就可能造成机床和工件的损坏，甚至是人身伤害。

- 特种钢材制造，高刚度
- 经过多次高成本的热处理
- 经过特殊超高压回火
- 高耐冲击强度
- 硬化处理后，全部更能面精加工
- 极高的安全性和可靠性

Pull studs are an important link between machine and tool. The requirements concerning accuracy, rigidity and reliability are very high.

Pull studs of minor quality not only decrease the performance of the machine, they are even a safety risk. A breaking pull stud might cause severe damage on machine and workpiece and even injuries on persons.

- Made of special steel with high rigidity
- Costly heat treatment in several steps
- Spots with highest stress tempered specifically
- High impact strength
- All functional surfaces fine finished after hardening
- Highest security and reliability



1.DIN 69872 A 带通孔/with drill through

	d1	d2	d3	l1	l2	l3	g1
SK 40							
订货号/Order No.	88.200.40	19	14	17	54	26	M16
SK 50							
订货号/Order No.	88.200.50	28	21	25	74	34	M24

2.DIN 69872 B 密封的/sealed

		d1	d2	d3	l1	l2	l3	g1
SK 40								
订货号/Order No.	88.202.40	19	14	17	54	26	20	M16
SK 50								
订货号/Order No.	88.202.50	28	21	25	74	34	25	M24

3.ISO 7388 B 带通孔/with drill through

	d1	d2	d3	l1	l2	l3	g1
SK 40							
订货号/Order No.	88.400.40	18,95	12,95	17	44,5	16,4	M16
SK 50							
订货号/Order No.	88.400.50	29,1	19,6	25	65,5	25,55	M24

4.ISO 7388 B 密封的/sealed

		d1	d2	d3	l1	l2	l3	g1
SK 40								
订货号/Order No.	88.402.40	18,95	12,95	17	44,5	16,4	11,15	M16
SK 50								
订货号/Order No.	88.402.50	29,1	19,6	25	65,5	25,55	17,95	M24

5.Ott-groove 带通孔/with drill through

		d1	d2	d3	l1	l2	l3	g1
SK 40								
订货号/Order No.	88.300.40	25	21,1	17	53	25	13,6	M16
SK 50								
订货号/Order No.	88.300.50	39,3	32	25	65	25	13,35	M24

SK 40 带黄铜保护环/with protective ring of brass

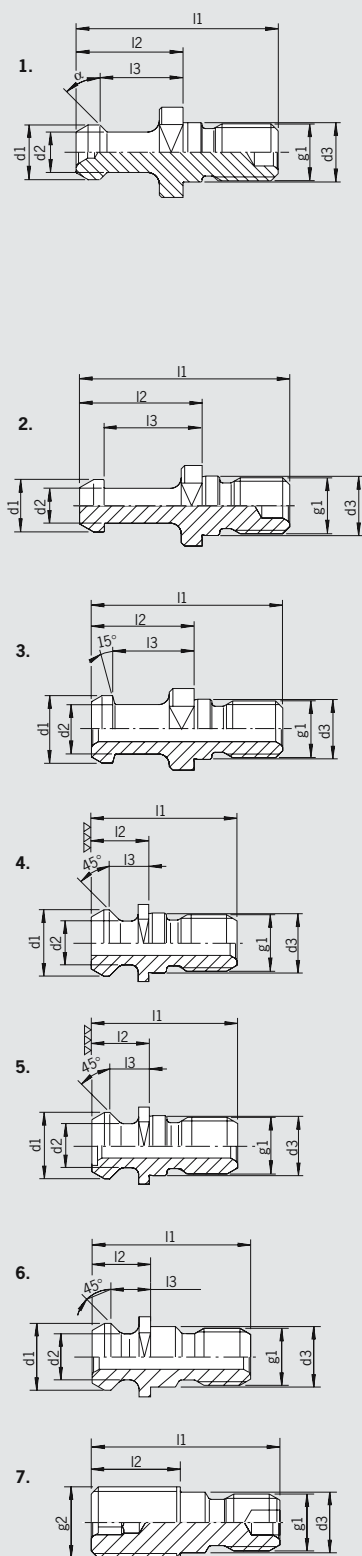
6.Ott-groove 带内螺纹/with inner thread

	d1	d2	d3	l1	l2	l3	g1	g2
SK 40								
订货号/Order No.	88.303.40	25	21,1	17	53	25	13,6	M16 M16
SK 50								
订货号/Order No.	88.303.50	39,3	32	25	65	25	13,35	M24 M24

SK 40 带黄铜保护环/with protective ring of brass

规格如有变更恕不另行通知
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HAIMER 拉钉/PULL STUDS



1. MAS 403 30°/45°

	d1	d2	d3	l1	l2	l3	g1	α
BT 30 30°								
订货号/Order No. 88.604.30	11	7	12,5	43	23	18	M12	30°
BT 40 45°								
订货号/Order No. 88.601.40	15	10	17	60	35	28	M16	45°
BT 40 45° 缩短/shortened								
订货号/Order No. 88.601.40.1	15	10	17	57,15	32,15	25,15	M16	45°
BT 40 45° 带孔/with bore Ø 3,5								
订货号/Order No. 88.603.40	15	10	17	60	35	28	M16	45°
BT 40 30°								
订货号/Order No. 88.604.40	15	10	17	60	35	28	M16	30°
BT 50 45°								
订货号/Order No. 88.601.50	23	17	25	85	45	35	M24	45°
BT 50 30°								
订货号/Order No. 88.604.50	23	17	25	85	45	35	M24	30°

2. MORI – SEIKI/森精机 MAS 90°

	d1	d2	d3	l1	l2	l3	g1
BT 40							
订货号/Order No. 88.101.40	15	10	17	60	35	28	M16
BT 50							
订货号/Order No. 88.101.50	23	17	25	85	45	35	M24

3. JIS B 6339 带通孔/with drill through

	d1	d2	d3	l1	l2	l3	g1
BT 40							
订货号/Order No. 88.700.40	19	14	17	54	29	23	M16
BT 50							
订货号/Order No. 88.700.50	28	21	25	74	34	25	M24

4. ANSI – CAT 40 (MAZAK牧野) 带通孔/with drill through

	d1	d2	d3	l1	l2	l3	g1
CAT 40							
订货号/Order No. 88.500.40	18,796	12,446	17	41,256	16,256	11,176	M16
带端面密封/with sealing on face side							

5. ANSI – CAT 50 (MAZAK牧野) 带通孔/with drill through

	d1	d2	d3	l1	l2	l3	g1
CAT 50							
订货号/Order No. 88.500.50	28,956	20,828	25	65,4	25,4	17,78	M24
带有与O型环配合的槽/with groove for o-ring							

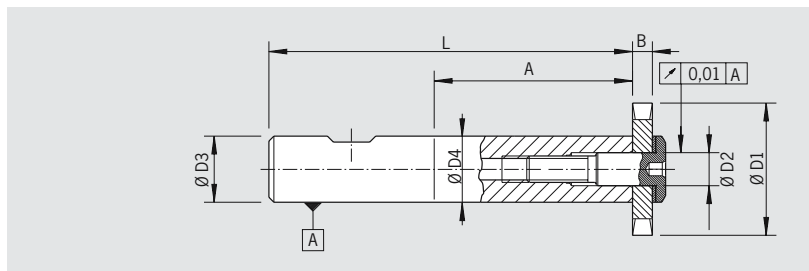
6. ANSI – CAT 40 (MAZAK牧野)

	d1	d2	d3	l1	l2	l3	g1
CAT 40 加长/extended							
订货号/Order No. 88.900.40.1	18,796	12,446	17	44,106	19,106	14,026	M16
带端面密封/with sealing on face side							

7. 带锯齿螺纹 S 20 x 2/with saw thread S 20 x 2

	d1	d2	d3	l1	l2	l3	g1	g2
SK 40								
订货号/Order No. 88.600.40	–	–	17	53	25	–	M16	S20x2

锯片夹持器/SAWBLADE HOLDER



使用:用于侧固刀柄上夹持锯片

柄部设计符合 **DIN 1835-B**

– 交货时含: 锁紧螺钉和垫圈

– Cool Jet冷却喷嘴需要额外费用

Use: For holding sawblades on Weldon toolholders

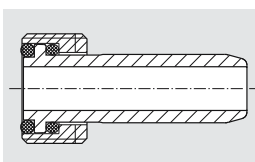
Design of shank according to **DIN 1835-B**

– Included in delivery: completely with tightening bolt and intermediate disk

– Cooling with Cool Jet against extra charge

用于锯片/For Sawblade	Ø D1 [mm]	B 0,2 mm – 6 mm	20	25	32	40	50	63
Ø D2 [mm]			5	8	8	10	13	16
Ø D3 [mm]			20	20	20	20	25	25
Ø D4 [mm]			10	13	16	20	25	25
L [mm]			90	100	105	110	136	136
A [mm]			40	50	55	60	80	80
订货号/Order No.	79.200...		...20	...25	...32	...40	...50	...63
工具盒, 含全部6种锯片夹持器/Tool box incl. 6 pcs. sawblade adapter								
订货号/Order No.	79.200.00							
附件/Accessories								
锁紧螺钉/Tightening bolt								
订货号/Order No.	79.250...		...20	...25	...32	...40	...50	...63
垫片/Disk								
订货号/Order No.	79.260...		...20	...25	...32	...40	...50	...63
Cool Jet冷却喷射孔/Cool Jet bores								
订货号/Order No.	91.100.24							

冷却管/COOLANT TUBES



- 防止主轴损坏
- 切削液通过HSK主轴用
- 双O型环设计使管可以微动
- 在超光表面上进行特殊热处理
- 不损坏密封系统
- 适于所有HSK刀柄

- Prevents spindle from being spoiled
- Must be used with all coolant through HSK spindles
- Dual o-ring design makes tube slightly movable
- Special coating with extremely smooth surface
- No damaging of the sealing system
- Fits all brands of HSK holders

冷却管用于/ Coolant tube For	HSK-A 32	HSK-A 40	HSK-A 50	HSK-A 63	HSK-A 80	HSK-A 100
含2个O型/with 2 O-ring	HSK-E 32	HSK-E 40	HSK-E 50			
订货号/Order No.	85.700...	...32	...40	...50	...63	...80
附件/Accessories						
扳手/Wrench						
订货号/Order No.	84.500...	...32	...40	...50	...63	...80

平衡螺钉组/SET OF BLANCING SCREWS

用于带有M6平衡用螺孔的所有刀柄
(如, HAIMER热缩刀柄).

这些螺钉经过精密计算具有不同重量。旋入刀柄的相应螺孔进行不平衡量的补偿。

- 组件含11种不同尺寸和重量的螺钉
- 使用时, 将螺钉旋到螺孔底部并拧紧
- 实现了快速和精确的平衡操作
- 不损坏刀柄
- 必要时可以重复使用
- 适于所有类型刀柄
- 平衡机(如, HAIMER刀具动平衡机)计算出必要的重量
- 含1个工具箱, 内装每组10个共11组螺钉, 及1把螺丝刀

For fine-balancing of all tool holders with balancing threads M6(e.g. shrink fit chucks from HAIMER)

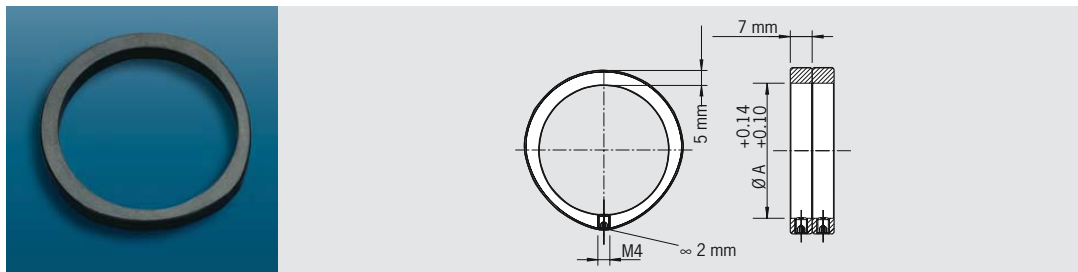
- The screws have different weights in a fine graduation. They are screwed into the balancing threads of the tool holder so that their weight compensates the unbalance of the tool holder.
- Set consisting of screws of 11 different sizes and weights
- Screws are screwed to the ground of the thread and tightened.
- Balancing quickly and precisely
- No damage of tool holders
- Can be repeated as often as necessary
- Suitable for tool holders of all brands
- The balancing machine calculates the necessary weight of the screws (e.g. HAIMER TOOL DYNAMIC)
- Included in delivery: Case with 11 x 10 balancing screws
- Screw driver

订货号/Order No. 80.203.00



规格如有变更恕不另行通知
Technical data subject to change without prior notice

HAIMER 平衡环/BALANCING RINGS



用于外部圆柱直径ØA的全部刀柄的精密动平衡

平衡分度环本身具有设置好的不平衡量。将他们旋转到某个位置以此补偿刀柄的不平衡量。每个平衡面需要2个环配合使用。

- 实现了快速和精确的平衡操作
- 不损坏刀柄
- 必要时可以重复使用
- 用紧固螺钉简单安装
- 适合所有品牌刀柄
- 平衡机确定环的位置
(如, HAIMER动平衡机)

-含1组共2个带有紧固螺钉的平衡环,
不含内六角扳手

For fine-balancing of all tool holders with cylindrical outer diameter (diam. A)

The balancing index rings have a defined unbalance in themselves. They are turned in such a position that the unbalance of the tool holder will be compensated. There are always 2 rings needed per balancing plane.

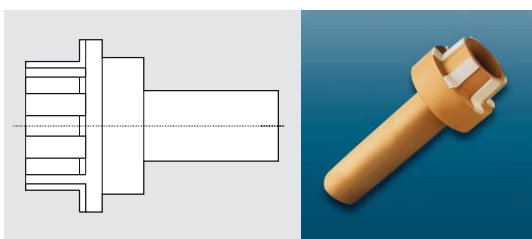
- Balancing quickly and precisely
- No damage of tool holder
- Can be repeated as often as necessary
- Simply fixed by clamping screw
- Suitable for tool holders of all brands
- The balancing machine determines the position of the rings
(e.g. HAIMER TOOL DYNAMIC)

- Included in delivery: 2 balancing rings with clamping screws
without hex wrench

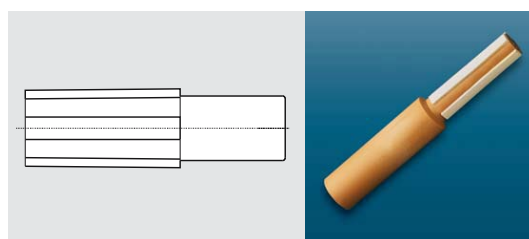
	Ø A [mm]	不平衡量 Unbalance
订货号/ Order No. 79.350.15	15	9 g·mm
79.350.17	17	12 g·mm
79.350.19	19	16 g·mm
79.350.20	20	17 g·mm
79.350.22	22	20 g·mm
79.350.24	24	27 g·mm
79.350.25	25	32 g·mm
79.350.26	26	33 g·mm
79.350.27	27	33 g·mm
79.350.28	28	40 g·mm
79.350.30	30	45 g·mm
79.350.32	32	36 g·mm
79.350.34	34	40 g·mm
79.350.35	35	48 g·mm
79.350.36	36	47 g·mm
79.350.38	38	53 g·mm
79.350.40	40	57 g·mm
79.350.42	42	65 g·mm
79.350.43	43	65 g·mm
79.350.44	44	68 g·mm
79.350.46	46	75 g·mm
79.350.48	48	81 g·mm
79.350.50	50	87 g·mm
79.350.52	52	94 g·mm
79.350.53	53	86 g·mm
79.350.54	54	91 g·mm
79.350.55	55	94 g·mm

	Ø A [mm]	不平衡量 Unbalance
订货号/ Order No. 79.350.56	56	100 g·mm
79.350.58	58	106 g·mm
79.350.60	60	110 g·mm
79.350.62	62	120 g·mm
79.350.63	63	123 g·mm
79.350.64	64	126 g·mm
79.350.65	65	129 g·mm
79.350.66	66	120 g·mm
79.350.68	68	135 g·mm
79.350.70	70	145 g·mm
79.350.72	72	152 g·mm
79.350.74	74	160 g·mm
79.350.76	76	168 g·mm
79.350.78	78	178 g·mm
79.350.80	80	186 g·mm
79.350.82	82	199 g·mm
79.350.84	84	215 g·mm
79.350.86	86	224 g·mm
79.350.87	87	225 g·mm
79.350.88	88	226 g·mm
79.350.89	89	231 g·mm
79.350.90	90	237 g·mm
79.350.92	92	247 g·mm
79.350.94	94	253 g·mm
79.350.96	96	267 g·mm
79.350.98	98	277 g·mm
79.350.100	100	285 g·mm

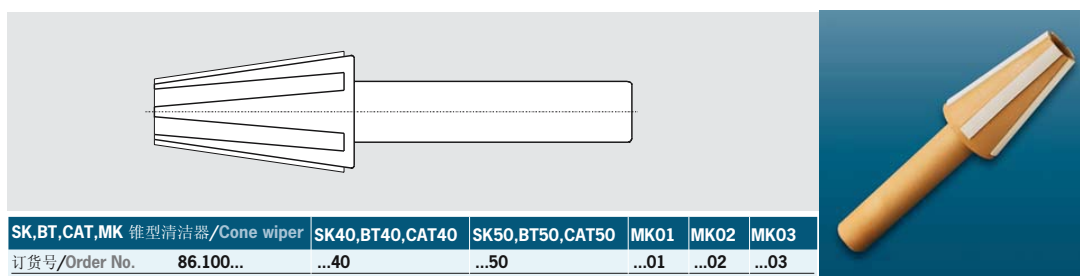
锥形清洁器/CONE WIPER



HSK 锥型清洁器/Cone wiper	HSK32	HSK40	HSK50	HSK63	HSK80	HSK100	
订货号/Order No.	85.820...	...32	...40	...50	...63	...80	...100

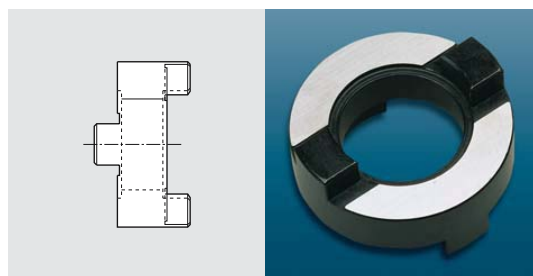


HG 锥型清洁器/Cone wiper	HG01	HG02	HG03
订货号/Order No. 82.590...	...01	...02	...03



SK,BT,CAT,MK 锥型清洁器/Cone wiper	SK40,BT40,CAT40	SK50,BT50,CAT50	MK01	MK02	MK03	
订货号/Order No.	86.100...	...40	...50	...01	...02	...03

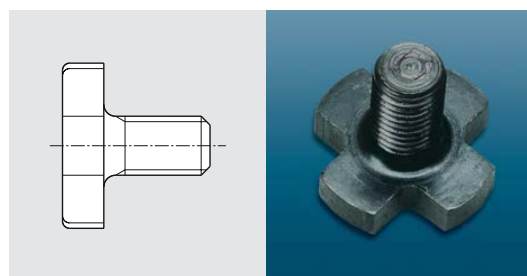
传动环/DRIVING RINGS



传动环 DIN 6366/1 用于组合壳铣刀
Driving rings DIN 6366/1 for combination shell and mill adapters

用于刀柄/Tool holder	Ø	16	22	27	32	40	50
订货号/Order No.	85.200...	...16	...22	...27	...32	...40	...50

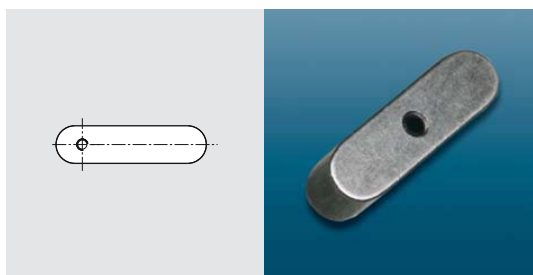
拉紧螺钉/TIGHTENING BOLTS



拉紧螺钉 DIN 6367 用于组合壳铣刀和面铣刀
Tightening bolts DIN 6367 for combination shell end mill adapters and face mill arbors

用于刀柄/Tool holder	Ø	16	22	27	32	40	50	60
订货号/Order No.	85.300...	...16	...22	...27	...32	...40	...50	...60

滑键/FEATHER KEYS



滑键 DIN 6885 带有防松螺钉 用于组合壳铣刀
Feather keys DIN 6885 with loosening screw for combination shell end mill adapters

用于刀柄/Tool holder	Ø	16	22	27	32	40	50
订货号/Order No.	85.400...	...16	...22	...27	...32	...40	...50

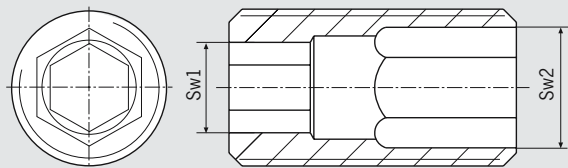
转换包 AD-B
CONVERSION KIT AD-B

从AD型到B型的转换包, 含50个密封销和锁紧螺钉
Conversion kit form AD/form B comprising each 50 sealing dowels and lock screws

用于刀柄/Tool holder	SK40	SK50
订货号/Order No.	85.600... ...40	...50



HAIMER 热缩刀柄用调整螺钉/BACK UP SCREWS FOR SHRINK FIT CHUCKS



- 双端内六角插槽
- 侧边铣有平面用于切削液流通
- 高精度细螺纹
- Hexagon socket on each end
- Flats on sides for optimized coolant drainage
- Fine thread for maximum accuracy

刀柄夹持直径 Clamping	刀柄类型/ Type of Chucks	SK 40/50 BT 40/50	HSK-A 32/E 32 A 40/E 40	HSK-A 50/ E 50	HSK-A 63	HSK-F 63	HSK-A 80	HSK-A 100
		订单号/Order No.						
6		85.810.12.1						
8		85.810.15.1						
10	短型/short	85.810.18.2						
	其他/other	85.810.36.2						
12	短型/short	85.810.24.2	85.810.24.2 ²⁾	85.810.39.2			85.810.21.2	
	其他/other							
14	短型/short				85.810.39.2		85.810.21.2	
	超长型/oversize							
16	短型/short	85.810.46.2	85.810.27.2	85.810.25.2			85.810.27.2	85.810.40.1
	超长型/oversize				85.810.38.2	85.810.46.2		
18	短型/short				85.810.25.2		85.810.27.2	85.810.40.1
	超长型/oversize	85.810.46.2 ¹⁾					85.810.46.2	
20	短型/short	85.810.52.2 ³⁾					85.810.51.2 ⁷⁾	85.810.51.2 ⁶⁾
	超长型/oversize				85.810.52.2 ³⁾	85.810.52.2 ³⁾		
25	短型/short							
	超长型/oversize							
32	短型/short							
	超长型/oversize							

热缩刀柄长调整螺钉/BACK UP SCREWS LONG FOR SHRINK FIT CHUCKS

刀柄夹持直径 Clamping	刀柄类型/ Type of Chucks	SK 40/50 BT 40/50	HSK-A 32/E 32 A 40/E 40	HSK-A 50/ E 50	HSK-A 63	HSK-F 63	HSK-A 80	HSK-A 100
		订单号/Order No.						
6		85.810.12.4						
8		85.810.15.4						
10		85.810.18.4						
12		85.810.21.4	85.810.21.4 ⁸⁾					
14								
16	短型/short	85.810.37.4	85.810.27.4	85.810.25.4	85.810.27.4 85.810.40.4			
	超长型/oversize			85.810.37.4				
18	短型/short			85.810.37.4	85.810.27.4	85.810.40.4		
	超长型/oversize			85.810.37.4				
20	短型/short	85.810.52.4 ⁹⁾		85.810.52.4 ¹⁰⁾				
	超长型/oversize			85.810.52.4 ⁹⁾				
25								
32								

订货号/Order No.	SW1	SW2	螺纹/Thread	订货号/Order No.	SW1	SW2	螺纹/Thread	订货号/Order No.	SW1	SW2	螺纹/Thread
85.810.12.1	SW2,5	SW2,5	M5x0,8x16	85.810.21.2	SW4	SW5	M10x1x16	85.810.12.4	SW2,5	SW2,5	M5x0,8x24
85.810.15.1	SW3	SW3	M6x1x16	85.810.38.2	SW5	SW6	M12x1x22	85.810.15.4	SW3	SW3	M6x1x24
85.810.18.2	SW3	SW4	M8x1x16	85.810.39.2	SW4	SW5	M10x1x18	85.810.18.4	SW3	SW4	M8x1x24
85.810.24.2	SW4	SW5	M10x1x20	85.810.40.1	SW6	SW6	M12x1x16	85.810.21.4	SW4	SW5	M10x1x28
85.810.37.2	SW6	SW8	M12x1x22	85.810.43.2	SW5	SW8	M12x1x18	85.810.37.4	SW6	SW8	M12x1x34
85.810.46.2	SW6	SW8	M12x1x20	85.810.44.2	SW5	SW8	M12x1x22	85.810.43.4	SW5	SW8	M12x1x34
85.810.25.2	SW5	SW6	M12x1x18	85.810.45.2	SW6	SW8	M12x1x18	85.810.25.4	SW5	SW6	M12x1x34
85.810.27.2	SW4	SW6	M12x1x18	85.810.51.2	SW5	SW8	M16x1x18	85.810.27.4	SW4	SW6	M12x1x34
85.810.36.2	SW3	SW4	M8x1x20	85.810.52.2	SW6	SW8	M16x1x22	85.810.52.4	SW6	SW8	M16x1x34

1) BT 40 Ø 18 超长型 = 订货号/Order No. 85.810.37.2

2) HSK-32 Ø 12 = 订货号/Order No. 85.810.36.2

3) 用于旧标准/for old Standard 订货号/Order No. 85.810.37.2

4) 用于旧标准/for old Standard 订货号/Order No. 85.810.43.2

5) 用于旧标准/for old Standard 订货号/Order No. 85.810.44.2

6) 用于旧标准/for old Standard 订货号/Order No. 85.810.45.2

7) 用于旧标准/for old Standard 订货号/Order No. 85.810.46.2

8) HSK-A 32 Ø 12 = 订货号/Order No. 85.810.18.4

9) 用于旧标准/for old Standard 订货号/Order No. 85.810.37.4

10) 用于旧标准/for old Standard 订货号/Order No. 85.810.43.4

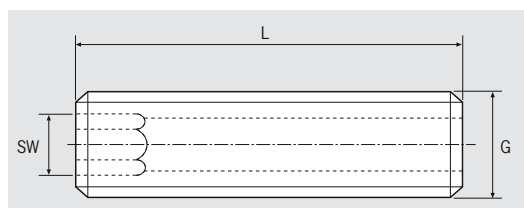
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弹簧筒夹刀柄用调整螺钉

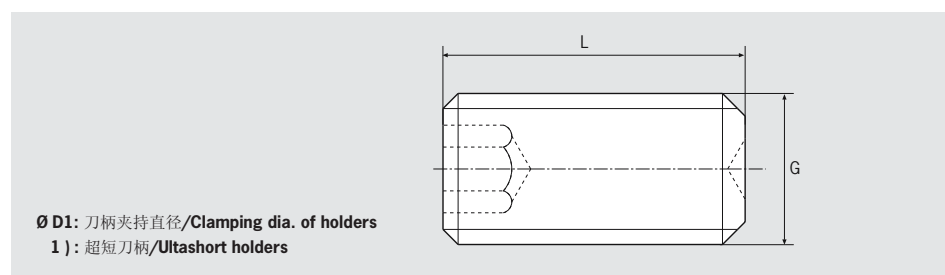
BACK UP SCREWS FOR COLLET CHUCKER



适用于 /For	HSK-32, 40, 50, 63, 80, 100	SW	L [mm]	螺纹/ Thread
订货号/Order No.				
ER 16	85.800.34	3	25	M6
ER 20	85.800.34	3	25	M6
ER 25	85.800.34	3	25	M6
ER 32	85.800.35	5	25	M10
ER 40	85.800.35	5	25	M10

侧固和斜孔侧固刀柄用紧固螺钉

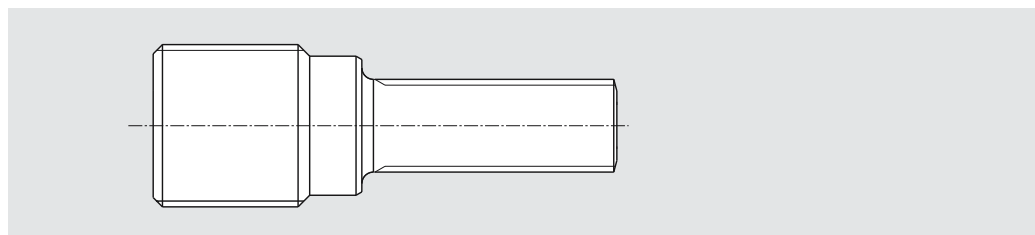
CLAMPING SCREWS FOR WELDON AND WHISTLE NOTCH HOLDER



Ø D1 [mm]	06	08	10	12	14	16	18	20	25	25	32	40
订货号/Order No. 85.100...	...06	...08	...10	...12	...12	...14	...14	...16	...18	...18.1	...20	...20
G	M6	M8	M10	M12	M12	M14	M14	M16	M18x2	M18x2	M20x2	M20x2
L	10	10	12	16	16	16	16	16	20	13	20	20

HG型刀柄用紧固螺钉

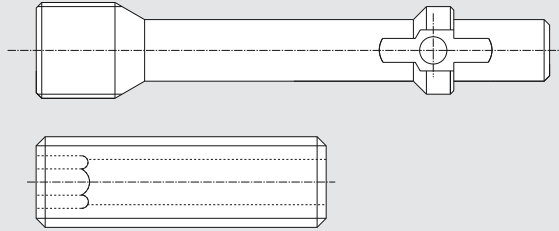
CLAMPING SCREWS FOR HG CHUCK



长度类型 Length type	HG类型 HG type	SK 40 DIN 69871	SK 50 DIN 69871	BT 40 MAS	BT 50 MAS	HSK-A 63	HSK-F 63	HSK-A 80	HSK-A 100
订货号/Order No. 82.560...									
短 short	HG01	...03	...03	...03	—	...12	...02	...02	...02
	HG02	...02	...02	...02	—	...14	...14	...14	...14
	HG03	...02	...02	...02	—	...14	...14	...14	...14
长 long	HG01	...04	...04	...04	...04	—	—	—	—
	HG02	...01	...01	...01	...01	—	—	—	—
	HG03	...05	...05	...05	...17	—	—	—	—
超长 extralong	HG01	...08	...08	...08	...08	...04	—	...04	...04
	HG02	...06	...06	...06	...06	...01	—	...05	...05
	HG03	...07	...07	...07	...07	...01	—	...05	...05

HAIMER

斜孔侧固刀柄用调整螺钉

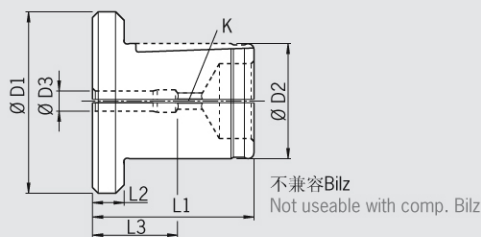
BACK UP SCREWS FOR WHISTLE NOTCH TOOL HOLDER

Ø D1: 刀柄夹持直径/Clamping dia. for the holder

Ø D1 [mm]	刀柄类型/ Type of Chucks	DIN 69871, SK 40	DIN 69871, SK 50	JIS B 6339, BT 40	JIS B 6339, BT 50	DIN 69893, HSK-A 63 HSK-A 80, HSK-A 100
订货号/Order No.						
6	短/short	85.150.01	85.150.03	85.150.01	85.150.03	85.810.02
6	长/long	85.150.04	85.150.04	85.150.04	85.150.04	85.810.12.1
6	ZG 130	85.150.05	85.150.05	-	-	-
6	超长/oversize	85.150.07	85.150.07	85.150.07	85.150.07	85.810.02
8	短/short	85.150.01	85.150.03	85.150.01	85.150.03	85.810.05
8	长/long	85.150.04	85.150.04	85.150.04	85.150.04	85.810.15.1
8	ZG 130	85.150.05	85.150.05	-	-	-
8	超长/oversize	85.150.07	85.150.07	85.150.07	85.150.07	85.810.05
10	短/short	85.150.01	85.150.03	85.150.02	85.150.03	85.810.09
10	长/long	85.150.04	85.150.04	85.150.04	85.150.04	85.810.18.2
10	ZG 130	85.150.05	85.150.05	-	-	-
10	超长/oversize	85.150.07	85.150.07	85.150.07	85.150.07	85.810.36.2
12	短/short	85.150.01	85.150.01	85.150.01	85.150.02	85.810.14
12	长/long	85.150.04	85.150.04	85.150.04	85.150.04	85.810.24.2
12	ZG 130	85.150.05	85.150.05	-	-	-
12	超长/oversize	85.150.06	85.150.07	85.150.06	85.150.07	85.810.14
14	短/short	85.150.01	85.150.01	85.150.01	85.150.02	85.810.14
14	长/long	85.150.04	85.150.04	85.150.04	85.150.04	85.810.24.2
14	ZG 130	85.150.05	85.150.05	-	-	-
14	超长/oversize	85.150.06	85.150.06	85.150.06	85.150.07	85.810.14
16	短/short	85.150.01	85.150.01	85.150.01	85.150.02	85.810.18
16	长/long	85.150.04	85.150.04	85.150.04	85.150.04	85.810.46.2
16	ZG 130	85.150.05	85.150.05	-	-	-
16	超长/oversize	85.150.07	85.150.06	85.150.06	85.150.06	85.810.18
18	短/short	85.150.01	85.150.01	85.150.01	85.150.02	85.810.18
18	长/long	85.150.04	85.150.04	85.150.04	85.150.04	85.810.46.2
18	ZG 130	85.150.05	85.150.05	-	-	-
18	超长/oversize	85.150.07	85.150.06	85.150.06	85.150.06	85.810.18
20	短/short	85.150.01	85.150.01	85.150.01	85.150.02	85.810.27
20	长/long	85.150.04	85.150.04	85.150.04	85.150.04	85.810.38.2
20	ZG 130	85.150.05	85.150.05	-	-	-
20	超长/oversize	85.150.07	85.150.06	85.150.06	85.150.06	85.810.27
25	短/short	85.150.03	85.150.02	85.150.03	85.150.03	85.810.27
25	长/long	-	-	-	-	85.810.38.2
25	ZG 130	85.150.08	85.150.08	-	-	-
25	超长/oversize	85.150.06	85.150.06	85.150.06	85.150.06	85.810.27
32	短/short	-	85.150.03	85.150.03	85.150.03	85.810.27
32	长/long	-	-	-	-	85.810.38.2
32	ZG 130	-	85.150.08	-	-	-
32	超长/oversize	-	85.150.06	85.150.06	85.150.06	85.810.27
40	短/short	-	85.150.02	-	85.150.03	-
40	长/long	-	-	-	-	-
40	ZG 130	-	85.150.08	-	-	-
40	超长/oversize	-	85.150.05	-	85.150.05	-

FH型快换插件 QUICK CHANGE INSERTS TYPE FH

HAIMER.



类型/Type					FH 01		FH 02	
Ø D1 [mm]					32		42	
Ø D2 [mm]					20		28	
L1 [mm]					28		35	
L2 [mm]					5,5		5,5	
切削范围/Cutting range					M3–M14		M4,5–M24	
柄部/Shank Ø D3	缝宽 Square K	DIN 371	DIN 374/376 ISO	柄部规格 Shank size	L3	订货号 Order No.	L3	订货号 Order No.
2,5	2,1	M1–M1,8	M3,5	–	11,5	80.501.02.5	–	
2,8	2,1	M2–M2,5	M4	–	12	80.501.02.8	–	
3,15	2,5	M3	M4,5–M5	M4–M3	13	80.501.03.1	–	
3,5	2,7	M3	M4,5–M5	–	14,5	80.501.03.5	–	
3,55	2,8	M3	M4,5–M5	M4,5–M3,5	14	80.501.03.6	–	
4	3	M3,5	–	–	16	80.501.04.0	–	
4	3,15	M3,5	–	M4–M5	16	80.501.04.3	–	
4,5	3,4	M4	M6	–	17	80.501.04.5	–	
5	4	M4	M6	M5	17	80.501.05.0	–	
6	4,9	M4,5–M6	M8	–	17	80.501.06.0	17	80.503.06.0
6,3	5	M4,5–M6	M8	M6–M8	17	80.501.06.3	17	80.503.06.3
7	5,55	M7	M10	–	17	80.501.07.0	17	80.503.07.0
8	6,3	M8	–	–	17	80.501.08.0	20	80.503.08.0
9	7,1	–	M12	–	17	80.501.09.0	21	80.503.09.0
10	8	M10	–	–	17	80.501.10.0	21	80.503.10.0
11	9	–	M14	–	17	80.501.11.0	21	80.503.11.0
11,2	9	–	–	–	–		21	80.503.11.2
12	9	–	M16	–	–		21	80.503.12.0
12,5	10	–	M16	M16	–		21	80.503.12.5
14	11	–	M18	–	–		22	80.503.14.0
14	11,2	–	M18	M18–M20	–		22	80.503.14.2
16	12	–	M20	–	–		22	80.503.16.0
16	12,5	–	M20	M22	–		22	80.503.16.5
18	14,5	–	M22–M24	–	–		22	80.503.18.0

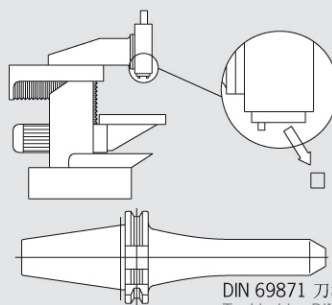
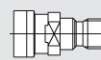
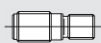
转换包 DIN 2080-DIN 69871/CONVERSION KIT DIN 2080-DIN 69871

用于DIN 2080主轴转接DIN 69871刀柄
For conversion of spindles DIN 2080 for tool holders DIN 69871

2 个带紧固螺钉的传动键
2 drive keys with clamping screws
SK 40: 订货号/Order No. 85.500.40
SK 50: 订货号/Order No. 85.500.50

带有锯齿螺纹的拉钉
Pullstud with saw thread

带有Ott-groove的拉钉
Pullstud with Ott-groove



单键替换
Replace only 1 drive key

DIN 69871 刀柄
Tool holder DIN 69871