

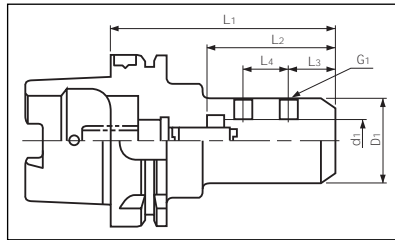
HSK TOOLING

HSK toolholders (hollow-shank short taper) provide the optimum tool performance with rigidity, accuracy and repeatability. **SOWA TOOL & MACHINE** offers **Form A** type of HSK holders. **Form A** can also be used in **Form C** holders. **Form A** toolholders are standard on most HSK machining centers and milling machines with automatic tool changers. **Form C** HSK holders are primarily used on transfer lines, specialty machines and modular tooling systems that have manual tool changers.

NOTE: Other forms and sizes are available, please contact your local distributor for pricing and deliveries

HSK Advantages:

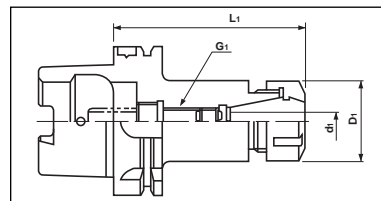
- High rigidity and torque transmission (almost double the rigidity of V-flange holders)
- Repeatability within 3µm
- Extreme concentricity enhances tool life performance
- Made to ISO 9002; DIN STD 69893
- Balanced to G1.5 or 15,000 rpm – Ideal for all high speed applications



ENDMILL HOLDERS

■ ENDMILL HOLDERS								
Specs. (in)	d ₁	D ₁	L ₁	L ₂	L ₃	L ₄	Code No.	Price \$
HSK50A								
EMH 0.375 x 3.5	0.375	1.375	3.15	1.57	-	0.78	341-005	256.40
EMH 0.500 x 3.54	0.500	1.65	3.54	1.92	-	0.88	341-010	256.40
EMH 0.625 x 3.54	0.625	1.89	3.54	2.04	-	0.94	341-015	256.40
EMH 0.750 x 3.93	0.750	2.05	3.93	2.12	-	0.98	341-020	263.42
HSK63A								
EMH 0.375 x 3.15	0.375	1.375	3.15	1.57	0.625	0.78	341-025	258.56
EMH 0.500 x 3.54	0.500	1.65	3.54	1.92	0.750	0.88	341-030	310.30
EMH 0.625 x 3.93	0.625	1.89	3.93	2.04	0.875	0.94	341-035	471.40
EMH 0.750 x 3.93	0.750	2.05	3.93	2.12	1.000	0.98	341-040	310.30
EMH 1.000 x 4.33	1.000	2.56	4.33	2.32	1.000	0.94	341-045	275.40
EMH 1.250 x 4.33	1.250	2.83	4.33	2.48	1.125	0.94	341-050	275.40
HSK100A								
EMH 0.500 x 3.93	0.500	1.65	3.93	1.92	0.750	0.88	341-055	607.30
EMH 0.625 x 3.93	0.625	1.89	3.93	2.04	0.875	0.94	341-060	607.30
EMH 0.750 x 4.33	0.750	2.05	4.33	2.12	1.000	0.98	341-065	636.10
EMH 1.000 x 4.72	1.000	2.56	4.72	2.32	1.000	0.94	341-070	548.00
EMH 1.250 x 4.72	1.250	2.83	4.72	2.48	1.125	0.94	341-075	590.20

HSK PRECISION ER COLLET CHUCKS

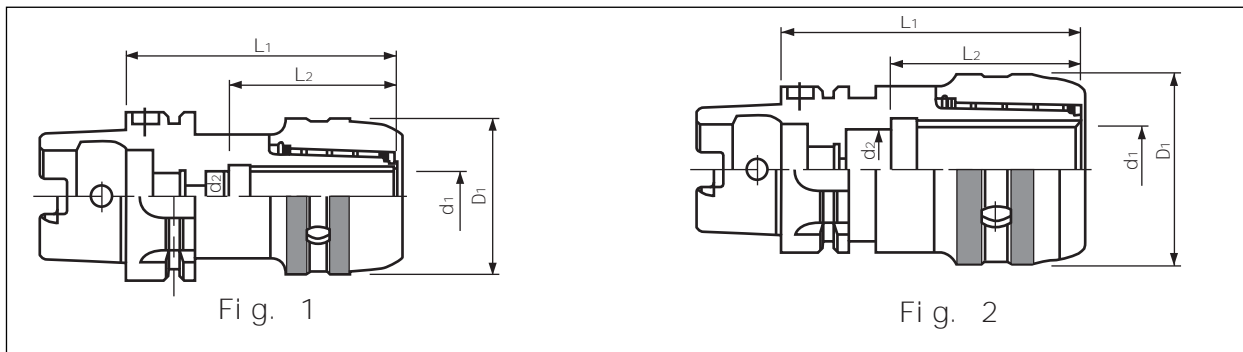


■ HSK PRECISION ER COLLET CHUCKS							
Specs. (in)	Range	D ₁	L ₁	Collet	Code No.	Price \$	
HSK50A							
ER11 - 3.15	0.5 - 7 (0.019 - 0.275)	1.10	3.15	ER-11	341-100	305.64	
ER20 - 3.54	1.0 - 13 (0.039 - 0.511)	1.33	3.54	ER-20	341-105	291.60	
ER25 - 3.93	1.0 - 16 (0.039 - 0.629)	1.65	3.93	ER-25	341-110	305.64	
HSK63A							
ER11 - 3.15	0.5 - 7 (0.019 - 0.275)	1.10	3.15	ER-11	341-115	323.14	
ER20 - 3.54	1.0 - 20 (0.039 - 0.511)	1.33	3.54	ER-20	341-120	316.23	
ER25 - 3.93	1.0 - 16 (0.039 - 0.629)	1.65	3.93	ER-25	341-125	379.60	
ER32 - 4.72	2.0 - 20 (0.78 - 0.787)	1.97	4.72	ER-32	341-130	379.60	
ER40 - 4.72	3.0 - 26 (0.118 - 1.023)	2.48	4.72	ER-40	341-135	396.30	
HSK100A							
ER11 - 3.54	0.5 - 7 (0.019 - 0.275)	1.10	3.54	ER-11	341-140	512.79	
ER20 - 3.93	1.0 - 20 (0.039 - 0.511)	1.33	3.93	ER-20	341-145	607.00	
ER25 - 3.93	1.0 - 16 (0.039 - 0.629)	1.65	3.93	ER-25	341-150	505.77	
ER32 - 4.72	2.0 - 20 (0.078 - 0.787)	1.97	4.72	ER-32	341-155	505.77	
ER40 - 4.72	3.0 - 26 (0.118 - 1.023)	2.48	4.72	ER-40	341-160	717.10	

HSK MILLING CHUCKS

HSK Milling Chucks provide the following benefits:

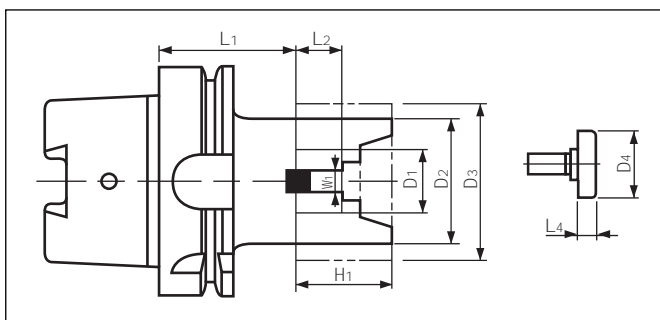
- High rigidity
- Improve and enhance tool life
- Eliminate vibration
- Compact design
- Ideal for heavy, high performance machining at High Speeds
- ISO 9000 Manufacturer



HSK MILLING CHUCKS

Type	Specs.	Fig.	d ₁	d ₂	D ₁	L ₁	L ₂	Code No.	Price \$
HSK50A - MC	3/4 - 3.93	1	3/4	.750	2.28	3.93	2.56	341-250	757.84
HSK63A - MC	3/4 - 4.13	1	3/4	.750	2.28	4.13	2.56	341-255	746.00
HSK63A - MC	1-1/4 - 5.12	2	1-1/4	1.00	2.875	5.12	2.95	341-260	815.40
HSK100A - MC	3/4 - 4.33	1	3/4	.750	2.28	4.33	2.56	341-265	969.30
HSK100A - MC	1-1/4 - 5.31	1	1-1/4	1.00	2.875	5.31	2.95	341-270	1,222.40

HSK SHELL END MILL ARBORS



HSK SHELL END MILL ARBORS

D ₁	L ₁	L ₂	D ₂	W ₁	Code No.	Price \$
HSK50A - SMA						
0.750	1.18	0.67	1.33	0.31	341-200	281.02
1	1.97	1.42	1.97	0.39	341-205	281.02
HSK63A - SMA						
1	2.36	1.42	1.97	0.39	341-210	379.60
1.250	2.36	1.49	2.36	0.39	341-215	555.20
1.500	2.36	1.49	3.15	0.47	341-220	722.90
HSK100A - SMA						
1	1.97	1.42	1.97	0.39	341-225	456.63
1.250	1.97	1.49	2.36	0.39	341-230	751.70
1.500	2.36	1.49	3.15	0.47	341-235	573.40
2.000	2.36	1.49	3.15	0.47	341-240	774.90