

Tooling Catalog

T-51\65 Series Lathes with T Style System



T51\65 Main Spindle Tooling Layout

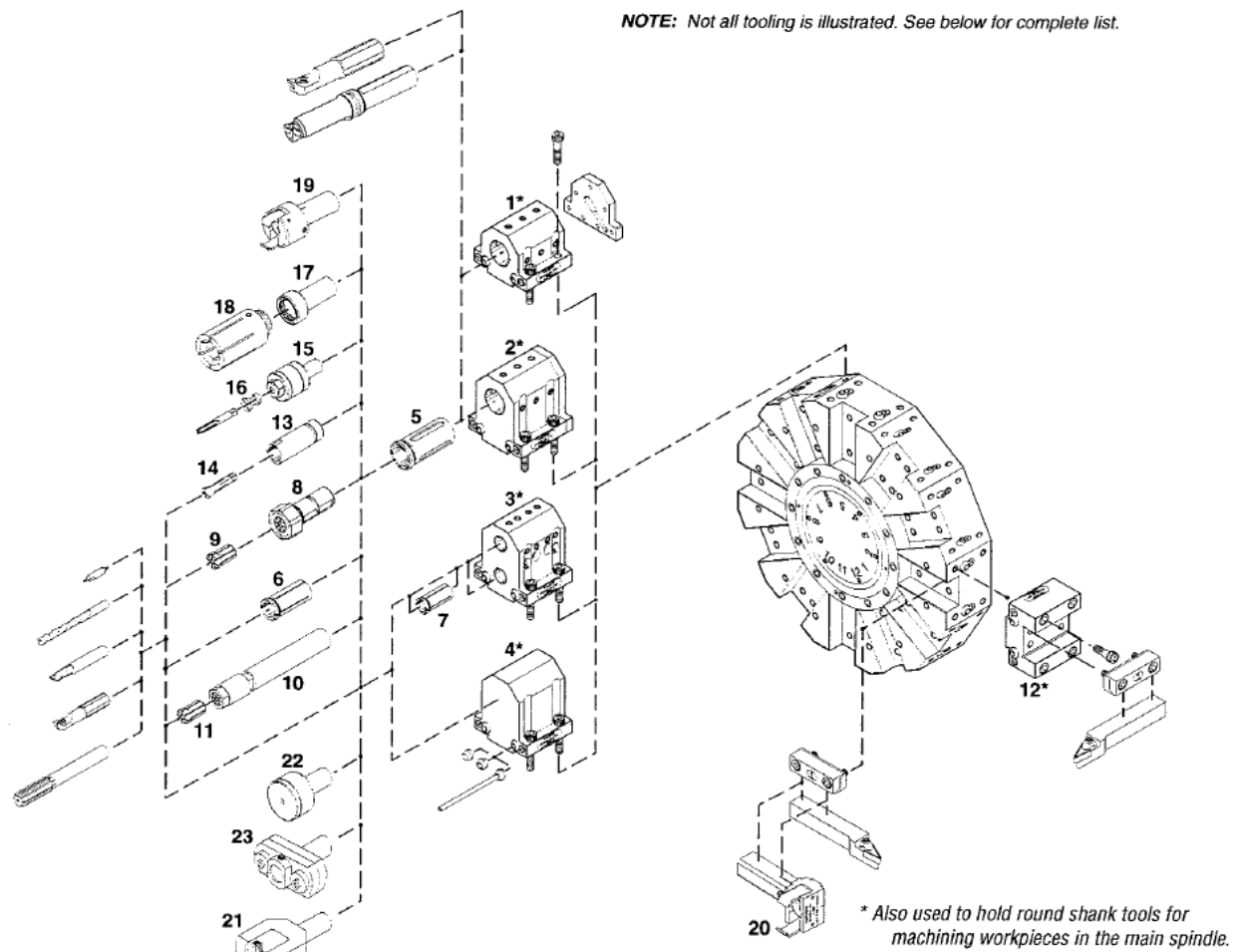


DIAGRAM KEY NUMBER	MASTER LISTING DESCRIPTION	MODEL NUMBER
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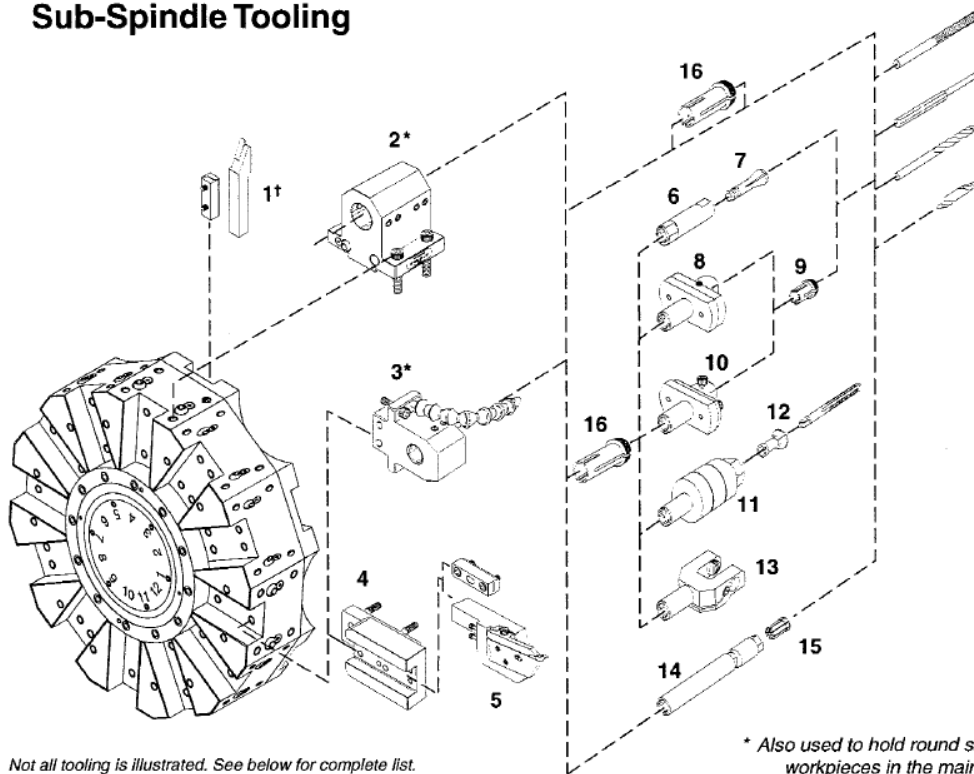
10- and 12-Station Turret Top Plate Tooling

1	Round Shank Tool Holder (1½" ID) Round Shank Tool Holder (40 mm ID)	CL-21 CL-20M
2	Round Shank Boring Tool Holder (1½" ID) Round Shank Boring Tool Holder (40 mm ID)	CL-30 CL-30M
3	Round Shank Double Tool Holder (1" ID) Round Shank Double Tool Holder (25 mm ID)	CL-34 CL-34M
4	Inch Blank Tool Holder (bore to size) Metric Blank Tool Holder (bore to size) Coolant Direction Balls and Tubes Round Shank Tool Setting Gauge (Main Spindle)	CL-PS CL-PM — —
5	Precision Solid HDC Bushings (1¼", 1½", 32mm or 40mm OD) Precision Solid HDZ Preset Bushings (1¼", 1½", 32mm or 40mm OD)	HDC-12/12M or 10/10M HDZ-12/12M or 10/10M
6	Precision Bushings (¾" OD)	HDB-8
7	Precision Bushings (1" OD)	HDB-6
8	Double-Angle Collet Holder, 180-Series (1¼" OD/32 mm OD) Double-Angle Collet Holder, 180-Series (1½" OD)	SG-180/180M SB-180

DIAGRAM KEY NUMBER	MASTER LISTING DESCRIPTION	MODEL NUMBER
9	180-Series Double-Angle Toolholder Collets	—
10	Double-Angle Collet Tool Holder (1/2", 5/8", 3/4", 1", and 1 1/4" OD)	DAH-
11	Double-Angle Collets, 100-, 200- and 300-Series	—
12	90° Square Shank Tool Holder (1")	CL-32
	90° Square Shank Tool Holder (25 mm)	CL-32M
13	1C Collet-Type Tool Holder (5/8" and 3/4" Shank)	T17
14	1C Collets	—
15	Collet-Type Releasing Tap Holder (5/8" and 3/4" Shank)	TT
16	"TT" Tap Collets	TT (Size)
17	Bar Stock Puller Adapter (1 1/8" Shank)	—
18	Interchangeable Bar Stock Pullers	—
19	Round Shank Bar Puller (1 1/4" OD)	F125
	Round Shank Bar Puller (30 mm OD)	FM30
20	Combination Round/Square Shank Bar Pullers	—
21	"Crush Type" Knurling Tool (5/8" and 3/4" Shank)	T8
22	Revolving Stock Stop (3/4" Shank)	T20
23	Floating Reamer Holder (5/8" and 3/4" Shank)	T19
—	#4 MT Live Center (Tailstock)	D-4a

T51\65 Sub Spindle Tooling Layout

Sub-Spindle Tooling



NOTE: Not all tooling is illustrated. See below for complete list.
A metric top plate is required for metric tools and tool holders.

* Also used to hold round shank tools for machining workpieces in the main spindle
† Used at even-numbered stations only

DIAGRAM KEY NUMBER	MASTER LISTING DESCRIPTION	MODEL NUMBER
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Sub-Spindle Turret Top Plate Tooling

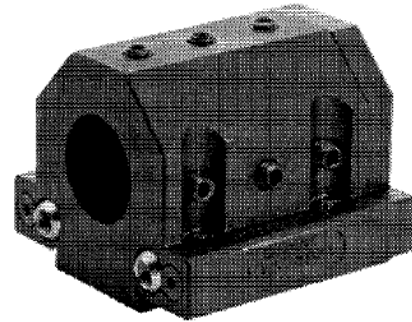
1	3/4" Square Shank Insert Cutting Tools	—
	3/4" Square Shank 35° and 55° Insert Profiling Tools	—
2	Double Round Shank Tool Holder (1" ID)	CL-46
	Double Round Shank Tool Holder (25 mm ID)	CL-47M
3	Round Shank Tool Holder (1" ID)	CL-38
	Round Shank Tool Holder (25 mm ID)	CL-39M
4	Tool Holder Extension (1")	CL-CE
	Tool Holder Extension (25 mm)	CL-CM
5	Cutoff Tool Separator	—
6	1C Collet-Type Tool Holder (3/4" Shank)	T-17
7	1C Collets	—
8	Floating Reamer Holder (3/4" Shank)	T-19
9	Precision Bushings (1/2" OD)	HDB-2
10	Adjustable Holder (3/4" Shank)	00D
11	Collet-Type Releasing Tap Holder (3/4" Shank)	TT
12	"TT" Tap Collets	TT (Size)
13	"Crush-Type" Knurling Tool	T-8
14	Double-Angle Collet Tool Holder, 100-Series (1" Shank)	DAH-135
15	Double-Angle Collets	—
	Round Shank Tool Setting Gauge (Sub-Spindle)	SG-4
16	Precision Bushings (1" OD)	HDB-8

Round Shank Tool Holder

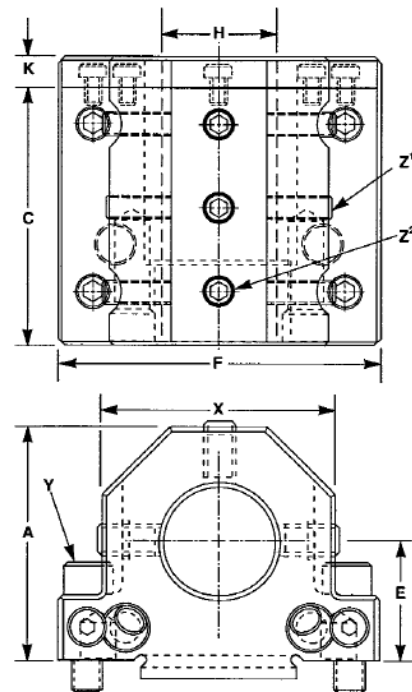
The round shank tool holder is used for operations such as center drilling, drilling, boring, tapping, reaming, or bar stock pulling. This tool holder is recommended when less clearance is needed for smaller stock sizes. It can also be used for machining operations at the sub-spindle.

The tool holder is available with bore sizes of $1\frac{1}{2}$ " and 40mm. For optimum rigidity, HDC-12 or HDZ-12 solid bushings are used in the CL-21 holder to grip round shank tools up to $1\frac{1}{4}$ " or #4MT tooling. The SG-180 Double-Angle Collet Tool Holder is also available to rigidly grip tools from $\frac{3}{16}$ " to $\frac{3}{4}$ " (3.5mm to 19.0mm) in diameter (see page 17). HDC-12M and HDZ-12M solid bushings are used in the CL-20M holder to grip round shank size tools up to 32mm or #3 and #4 MT tooling. See pages 14 & 15 for solid bushings.

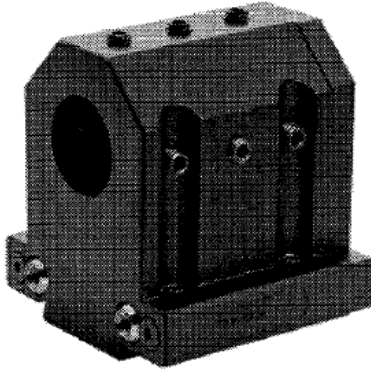
Two coolant balls in the holders direct coolant to the tool tip while machining on the main spindle. A $\frac{1}{8}$ -27 pipe plug, which is included, threads into the right coolant ball for through-the-tool coolant flow (a cover plate is included with each holder for through-the-tool coolant capabilities on the main spindle). To restrict coolant flow, a pipe plug is threaded into both coolant balls. Additional coolant direction balls and tubes are available (see page 16).



Model No.	Part Number	Dimensions							
			A	C	E	F	H	K	X
CL-21	CL-0011944-A	Inch	3.00	3.54	1.50	4.13	1.50	.472	3.00
		mm	76.20	90.00	38.10	104.90	38.10	12.00	76.20
CL-20M	CL-0011944-B	Inch	3.00	3.54	1.50	4.13	1.57	.472	3.00
		mm	76.20	90.00	38.10	104.90	40.00	12.00	76.20
		Z ¹	Z ²			Y			
		MS-0574018	MS-0574018			MS-0104021			



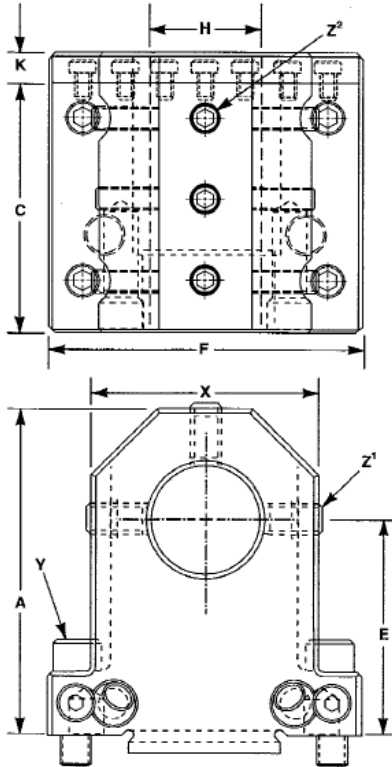
Round Shank Boring Tool Holder



The round shank boring tool holder is used for operations such as center drilling, drilling, tapping, reaming, boring, large hole boring, or bar stock pulling. This tool holder is recommended when maximum clearance is needed for larger stock sizes. It can also be used for machining operations on the sub-spindle.

The tool holder is available with bore sizes of 1½" and 40mm. For optimum rigidity, HDC-12 or HDZ-12 solid bushings are used in the CL-30 holder to grip round shank tools up to 1¼" or #4MT tooling. The SG-180 Double-Angle Collet Tool Holder is also available to rigidly grip tools from ⅜" to ¾" (3.5mm to 19.0mm) in diameter (see page 17). HDC-12M and HDZ 12M solid bushings are used in the CL-30M holder to grip round shank size tools up to 32mm or #3 and #4 MT tooling. See pages 14 & 15 for solid bushings.

Two coolant balls in the holder directs coolant to the tool tip while machining on the main spindle. A ⅜ - 27 pipe plug, which is included, threads into the right coolant ball for through-the-tool coolant flow (a cover plate is included with each holder for through-the-tool coolant capabilities on the main spindle). To restrict coolant flow, a pipe plug is threaded into both coolant balls. Additional coolant direction balls and tubes are available (see page 16).



Model No.	Part Number	Dimensions							
			A	C	E	F	H	K	X
CL-30	CL-0011944-E	Inch	4.31	3.54	2.81	4.13	1.50	.472	3.00
		mm	109.47	90.00	71.44	104.90	38.10	12.00	76.20
CL-30M	CL-0011944-F	Inch	4.31	3.54	2.81	4.13	1.57	.472	3.00
		mm	109.47	90.00	71.44	104.90	40.00	12.00	76.20
		Z¹	Z²			Y			
MS-0574018			MS-0574018			MS-0104021			

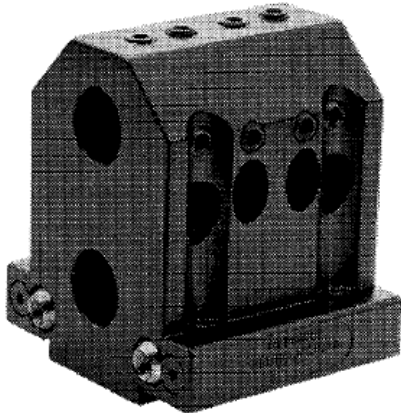
Round Shank Double Tool Holder

The round shank double tool holder is used for operations such as center drilling, drilling, tapping, reaming, boring, or bar stock pulling. This tool holder maximizes the number of ID tool stations available (limitation is part diameter). It can also be used for machining operations at the sub-spindle.

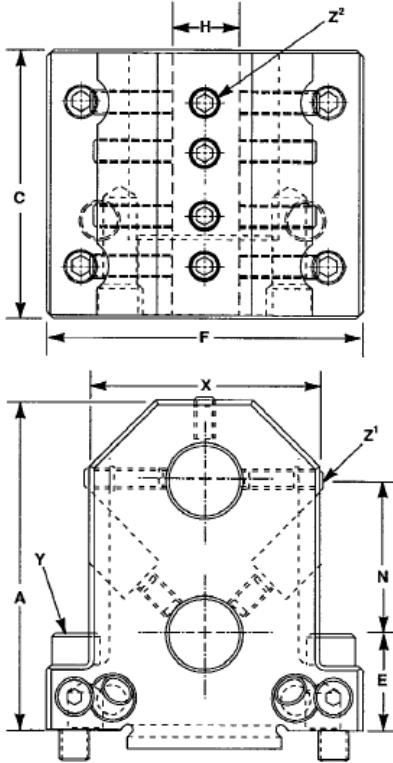
The tool holder is available with bore sizes of 1" and 25mm (note: the hole at dimension "E" cannot be used for "on center" work).

The DAH135 or 155-1 Double-Angle Collet Tool Holders shown on page 17 can be used in the CL-34 holder to grip tools ranging from 3/64" to 1/16". HDB-8 precision bushings can also be used for round shank tools ranging from 1/32" to 7/8" (1.0 to 20.0mm). See brochure 2351 for toolholder collets and precision bushings.

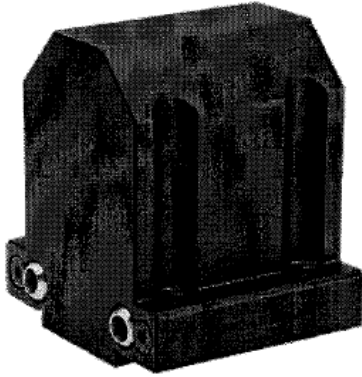
Two coolant balls in the holders direct coolant to the tool tip while machining on the main spindle. A 1/8" - 27 pipe plug, which is included, threads into the coolant ball to restrict coolant flow. Additional coolant direction balls and tubes are available (see page 16).



Model No.	Part Number	Dimensions							
		A	C	E	F	H	N	X	
CL-34	CL-0011944-G	Inch	4.310	3.543	1.064	4.130	1.000	2.187	3.000
		mm	109.47	90.00	27.01	104.90	25.40	55.55	76.20
CL-34M	CL-0011944-H	Inch	4.310	3.543	1.064	4.130	.9844	2.187	3.000
		mm	109.47	90.00	27.01	104.90	25.00	55.55	76.20
Z'		Z'			Y				
MS-0574018		MS-0574017			MS-0104021				



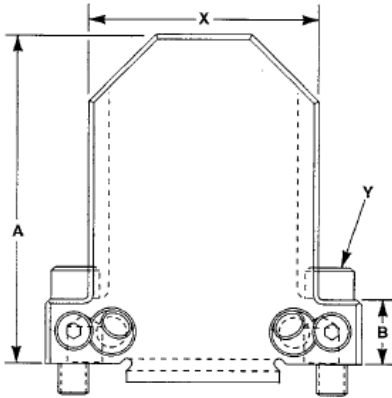
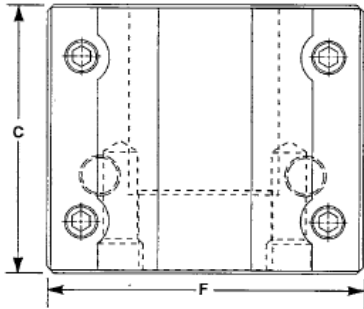
Blank Tool Holder



The blank tool holder is bored to size by the customer for operations such as center drilling, drilling, tapping, reaming, boring, or bar stock pulling. It can also be used on the sub-spindle.

Two coolant balls in the holders direct coolant to the tool tip while machining on the main spindle. A 1/8 - 27 pipe plug, which is included, threads into the coolant ball to restrict coolant flow. Additional coolant direction balls and tubes are available (see page 16).

Model No.	Part Number	Dimensions					
			A	B	C	F	X
CL-PS	CL-0011944-C	Inch	4.25	.840	3.54	4.13	3.00
		mm	107.95	21.34	90.00	104.90	76.20
CL-PM	CL-0011944-D	Inch	4.25	.840	3.54	4.13	3.00
		mm	107.95	21.34	90.00	104.90	76.20
			Y				
			MS-0104021				

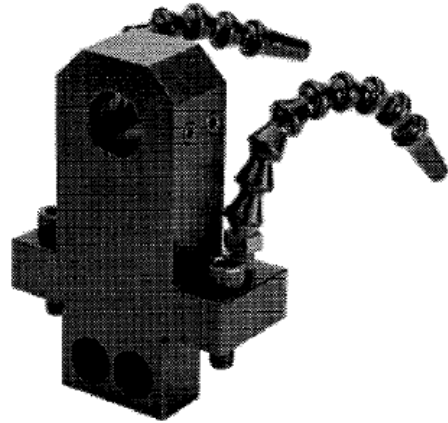


Round Shank Tool Holder

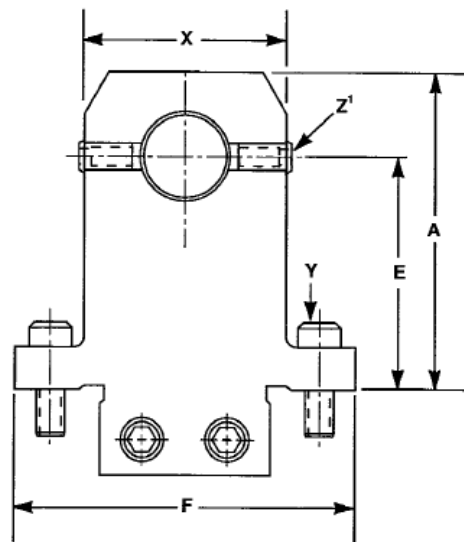
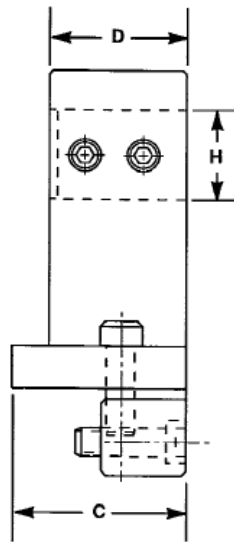
This round shank tool holder is used for machining operations on workpieces held in the main or sub-spindle, such as center drilling, drilling, tapping, reaming, boring and large hole boring.

The tool holder is available with bore sizes of 1" and 25mm. The DAH135-1 Double-Angle Collet Tool Holder shown on page 17 can be used in the CL-38 holder to grip tools ranging from $\frac{3}{64}$ " to $\frac{1}{16}$ ". HDB-8 precision bushings can also be used for round shank tools ranging from $\frac{1}{32}$ " to $\frac{7}{8}$ " (1.0 to 20.0mm). See brochure 2351 for toolholder collets and precision bushings.

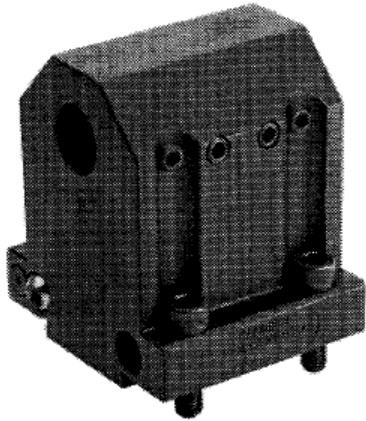
Two adjustable coolant nozzles direct coolant to the tool tip while machining. Two set screws are also included to restrict coolant flow. Additional coolant direction tubes are available (see page 16).



Model No.	Part Number	Dimensions								
			A	C	D	E	F	H	X	
CL-38	CL-0011944-17	Inch	4.31	1.82	1.37	3.25	4.13	1.00	2.25	
		mm	109.47	46.23	34.92	82.55	104.90	25.40	57.15	
CL-39M	CL-0011944-21	Inch	4.31	1.81	1.37	3.25	4.13	.984	2.25	
		mm	109.47	45.97	34.90	82.55	104.90	25.00	57.15	
		Y	Z'							
			MS-0104021			MS-0573817				



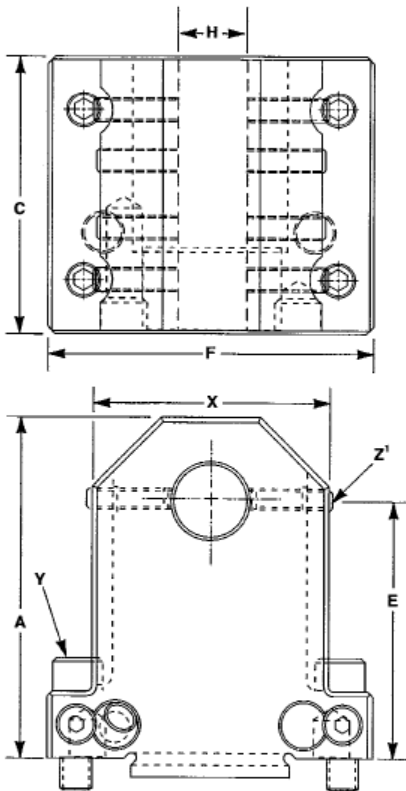
Double Round Shank Tool Holder



The double round shank tool holder holds two round shank tools from either end simultaneously for operations such as center drilling, drilling, tapping, reaming, boring and large hole boring on workpieces held in the Sub-Spindle or the main spindle.

The tool holder is available with bore sizes of 1" and 25mm. The DAH135-1 Double-Angle Collet Tool Holder shown on page 17 can be used in the CL-46 holder to grip tools ranging from $\frac{3}{8}$ " to $\frac{9}{16}$ ". HDB-8 precision bushings can also be used for round shank tools ranging from $\frac{1}{32}$ " to $\frac{1}{8}$ " (1.0 to 20.0mm). See brochure 2351 for toolholder collets and precision bushings.

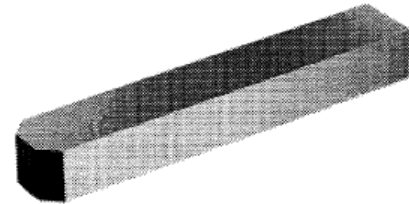
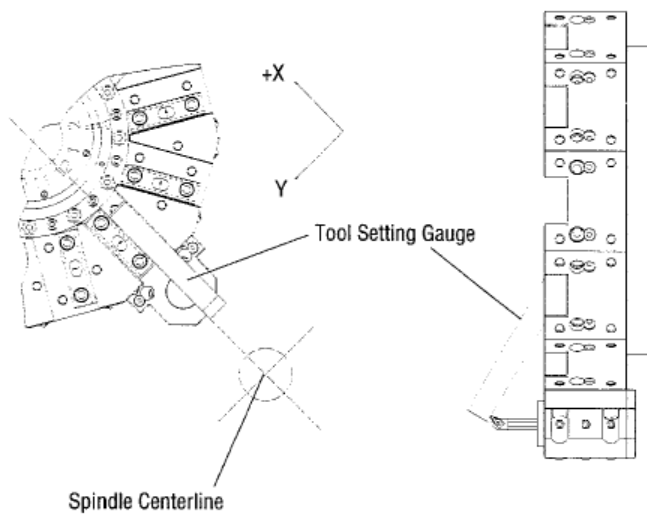
Two coolant balls in the holders, one on each end, direct coolant to the tool tip while machining. A $\frac{1}{8}$ -27 pipe plug, which is included, threads into the coolant ball to restrict coolant flow. Additional coolant direction balls and tubes are available (see page 16).



Model No.	Part Number	Dimensions						
			A	C	E	F	H	X
CL-46	CL-0011944-26	Inch	4.31	3.54	3.25	4.13	1.00	3.00
		mm	109.65	89.99	82.56	104.90	25.40	76.20
CL-47M	CL-0011944-27	Inch	4.31	3.54	3.25	4.13	.984	3.00
		mm	109.65	89.99	82.56	104.90	25.00	76.20
Y		Z'						
MS-0104021		MS-0574018						

Round Shank Tool Setting Gauge (Main Spindle)

This gauge is used to set round shank tooling on center with the main spindle centerline. One gauge is included with each QUEST® 51, 51SP, 65 and 65SP lathe with a T-style turret top plate.



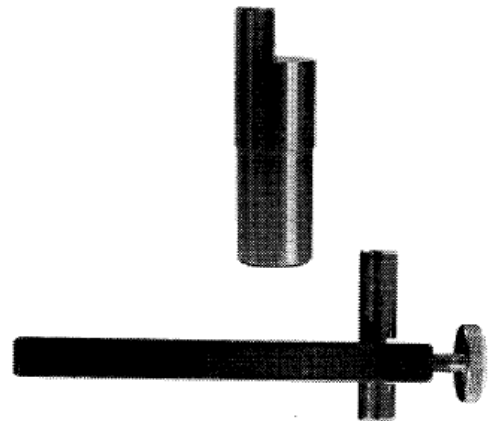
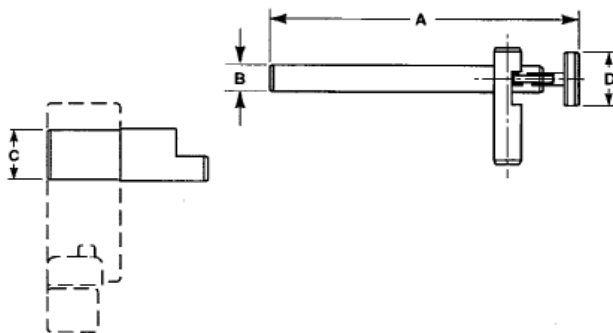
	Part Number
Inch	CL-0011890
MM	CL-0011890-M

Round Shank Tool Setting Gauge (Sub-Spindle)

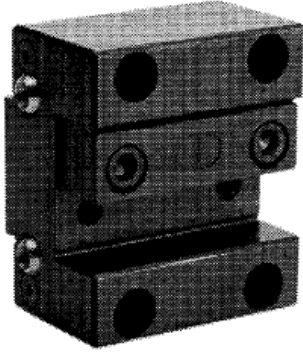
The SG-4 tool setting gauge is used to set round shank tooling on center with the centerline of the optional Sub-Spindle.

The gauge is used by mounting the round plug portion (lower illustration) into a CL-38 or CL-39M tool holder positioned on the turret. The centering portion (upper illustration) of the gauge can be positioned by the operator to match the tool's position and then locked into place with a thumb screw to center the tool.

Model No.	Part Number	Dimensions				
			A	B	C	D
SG-4	SG-0002321-04	Inch	5.06	.620	1.00	.750
		mm	128.57	15.75	25.40	19.05



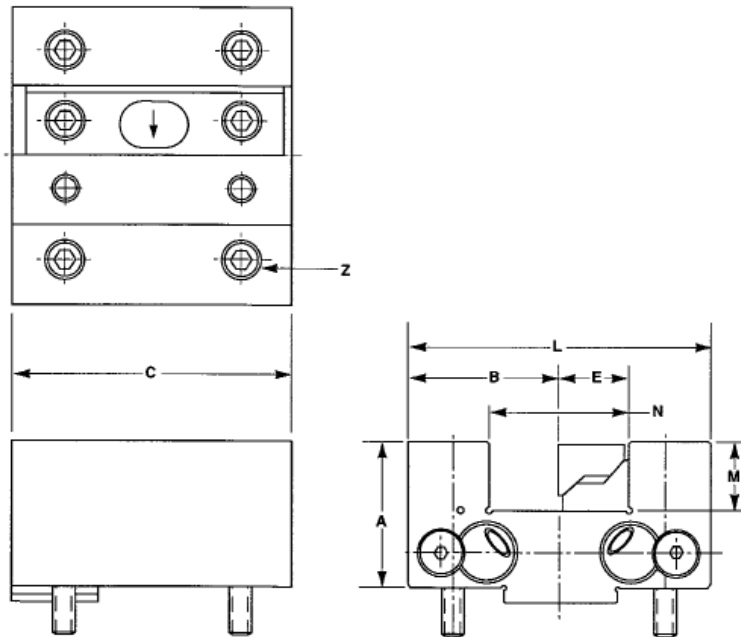
90° Square Shank Tool Holder



The 90° square shank tool holder is used to position a 1" or 25mm square shank tool perpendicular to the turret face for performing facing, rough and finish contouring, face grooving, and counterboring operations for workpieces on the main or sub-spindle.

A tool clamp is included with this tool holder to lock the square shank tool in position (the clamp part number is shown in parentheses below the tool part number). Two coolant balls in the holders direct coolant to the tool tip while machining. A 1/4"-27 pipe plug, which is included, threads into the coolant ball to restrict coolant flow. Additional coolant direction balls and tubes are available (see page 16).

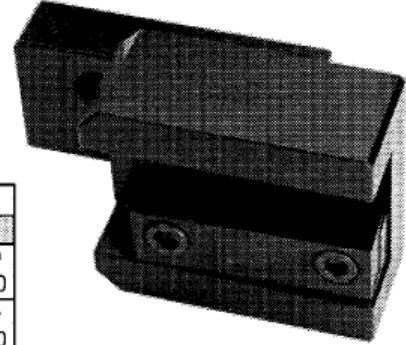
Model No.	Part Number	Dimensions							
			A	B	C	E	L	M	N
CL-32	CL-0011944-J	Inch	2.13	2.06	3.54	1.00	4.13	1.00	2.00
		mm	54.10	52.39	90.00	25.40	104.90	25.52	50.80
CL-32M	CL-0011944-K		A	B	C	E	L	M	N
		Inch	2.13	2.06	3.54	.984	4.13	.989	1.96
		mm	54.10	52.39	90.00	25.00	104.90	25.13	50.00
Z									
MS-0104023									



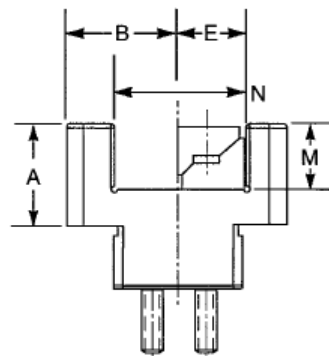
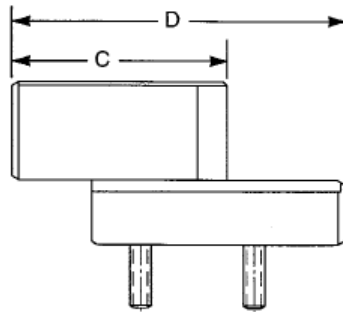
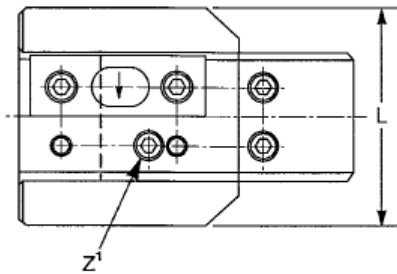
Square Shank Cut-Off Tool Holder (Sub-Spindle)

This tool holder mounts directly to the tool slot of the vertical turret. It holds a 1" or 25mm square shank cutoff tool for parting operations at the main spindle while transferring a part to the sub-spindle.

The holder comes with one tool clamp (clamp part number is shown in parentheses below tool part number).

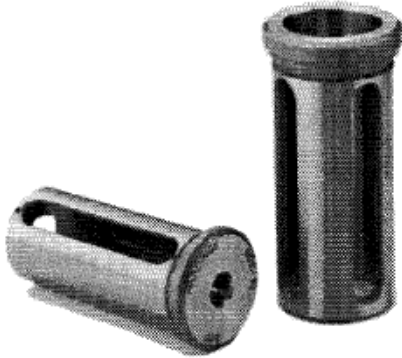


Model No.	Part Number	Dimensions								
			A	B	C	D	E	L	M	N
CL-CE	CL-0011150-CE (CL-0011944-TC)	Inch	1.75	1.75	4.50	5.81	1.00	3.49	1.00	2.00
		mm	44.45	44.45	114.30	147.65	25.40	88.65	25.40	50.80
CL-CM	CL-0011150-CM (CL-0011944-TC)	Inch	1.750	1.750	4.410	5.723	.984	3.49	1.00	1.96
		mm	44.45	44.45	112.01	145.36	25.00	88.65	25.40	50.00
Z'										
MS-0104020										



Precision Solid Bushings (HDC)

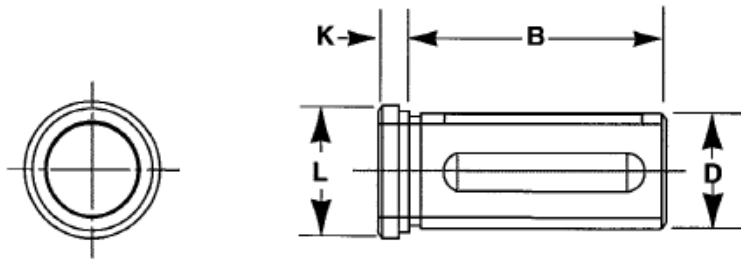
Hardinge round shank tool holders are specifically designed to use solid bushings for reduced tooling costs. Instead of buying several holders with different hole sizes, the desired tool holder and appropriate-size HDC solid bushing are used to adapt drills, reamers, boring bars, stock stops and other round shank tooling.



HDC bushings are manufactured to provide minimum wear with maximum resiliency. Bushings are hardened and precision ground inside and out so they won't scar, bind, or cause excessive tool holder ID wear. A larger shoulder is featured for easy installation and removal. Slots in the bushing body allow tool holder set screws to make direct contact with the tool for optimum tool rigidity.

Model No.	Part Number	OD	ID Sizes Available
HDC-12	1895-00-19-	1.50"	3/8", 1/2", 5/8", 3/4", 7/8", 1", 1 1/8" and 1 1/4"
HDC-12	9189-52-60-01652L	1.50"	#3 MT
HDC-12	1895-08-80-000004	1.50"	#4 MT
HDC-12M	1897-00-17-	40mm	10, 12, 16, 20, 25, 30 and 32mm
HDC-12M	1897-00-19-	40mm	1/2", 5/8", 3/4", 1", 1 1/8" and 1 1/4"
HDC-12M	1897-08-80-000002	40mm	#2 MT
HDC-12M	1897-08-80-000003	40mm	#3 MT
HDC-12M	1897-08-80-000004	40mm	#4 MT

Model No.	Part Number	OD	ID Sizes Available
HDC-10	1829-00-19-	1.25"	3/8", 1/2", 5/8", 3/4", 7/8", 1" and 1 1/8"
HDC-10	1829-08-80-000003	1.25"	#3 MT
HDC-10M	1831-00-17-	32mm	8, 10, 12, 16, 20 and 25mm
HDC-10M	1831-00-19-	32mm	3/8", 1/2", 5/8", 3/4", 7/8" and 1"
HDC-10M	1831-08-80-000002	32mm	#2 MT
HDC-10M	1831-08-80-000003	32mm	#3 MT



HDC-12 Dimensions				
	B	D	K	L
Inch	3.375	1.500	.375	1.750
mm	85.72	40.00	9.52	46.00

HDC-10 Dimensions				
	B	D	K	L
Inch	3.125	1.250	.250	1.500
mm	79.38	32.00	6.35	38.01

Precision Solid Preset Bushings (HDZ)

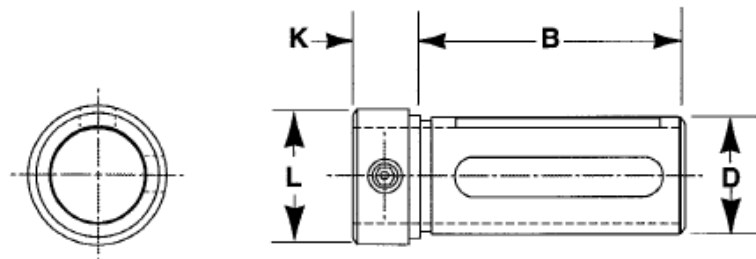
Hardinge HDZ bushings provide all the advantages of HDC bushings, plus the added benefit of precisely presetting the tool to a specific dimension. By placing the tool into the bushing, measuring it from the locating shoulder and locking it in place by tightening the set screws, tools may be set up prior to installation on the machine. This speeds up the setup process that normally is slowed by working in the confines of the machine and reduces down time.

HDZ bushings are specifically designed to use with Hardinge round shank tool holders. Instead of buying several holders with different hole sizes, the desired tool holder and appropriate-size solid bushing are used to adapt drills, reamers, boring bars, stock stops and other round shank tooling.

As with HDC bushings, HDZ bushings are manufactured to provide minimum wear with maximum resiliency. Bushings are hardened and precision ground inside and out so they won't scar, bind, or cause excessive tool holder ID wear. A large shoulder is featured for easy installation and removal. Slots in the bushing body allow tool holder set screws to make direct contact with the tool for optimum tool rigidity.



Model No.	Part Number	OD	ID Sizes Available
HDZ-12	2063-00-19-	1.50"	3/8", 1/2", 5/8", 3/4", 7/8", 1", and 1 1/4"
HDZ-12M	2065-00-17-	40mm	10, 12, 16, 20, 25, and 32mm
HDZ-10	2059-00-19-	1.25"	3/8", 1/2", 5/8", 3/4", 7/8" and 1"
HDZ-10M	2061-00-17-	32mm	10, 12, 16, 20 and 25mm



Dimensions HDZ-12				
	B	D	K	L
Inch	3.380	1.500	.680	1.750
mm	85.85	40.00	17.27	45.97

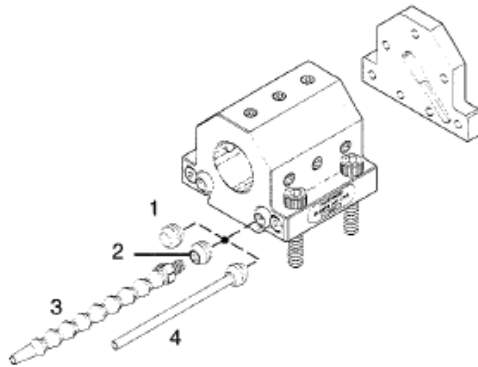
Dimensions HDZ-10				
	B	D	K	L
Inch	3.000	1.250	.560	1.500
mm	76.20	32.00	14.22	38.10

Coolant Direction Balls and Tubes

Coolant direction balls and pipe plugs to direct coolant flow are included with round shank tool holders. Coolant direction is adjusted by loosening the holder's flathead screw, rotating the ball, and tightening the screw. Additional coolant balls may be purchased.

For more accurate direction of coolant flow, a coolant ball with bendable copper tube or an adjustable coolant nozzle that threads into a coolant direction ball are available. The adjustable nozzle includes a connector and eight interlocking segments. The segments can be easily removed to suit machining requirements.

The rear cover plate illustrated is included with the round shank tool holders detailed on pages 5 & 6. The plate directs coolant through the center of the tool holder for through-the-tool coolant capabilities. The plate also acts as a solid stop for drills.



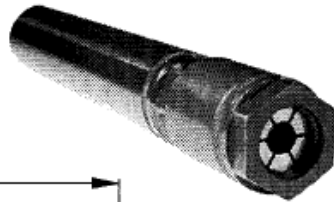
Item No.	Part Number	Description	Thru-Capacity
1	CS-0006058-03	Solid Coolant Ball	—
2 ^A	CSA-0006058-01	Coolant Direction Ball	.375" (9.5mm)
3	SG-0007011-01	Adjustable Coolant Nozzle	.250" (6.3mm)
4	CS-0009475-T1	Coolant Ball w/Copper Tube	.188" (4.8mm)

A - Threaded both ends.

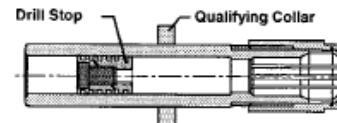
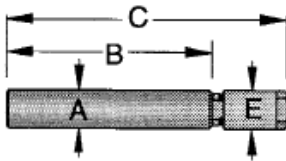
Double-Angle Collet Tool Holders

The Double-Angle (DA) Collet Extension Tool Holder mounts directly into a round shank tool holder. DAH model holders accept DA100, DA180, DA200 or DA300 collets. (See brochure #2351 for collets.)

Optional qualifying collars and chuck stops are available. The collars position and lock on the holder shank to qualify the tool's position in the DAH holder. Chuck stops are positioned inside the holder body to provide a qualified locating stop for tooling and help to prevent tool "push back".



Shown with optional collet.



Collet Style	Model Number	Part Number	Shank A	B	Length C	Cap E	Cap Part Number	Hex	Qualifying Collar Part Number	Drill Stop Part Number
DA300	DAH330	1925-00-00-000000	.500"	2.188"	3.50"	.560"	1933-00-00-000000	1/2"	1941-00-00-000000	1939-00-00-000000
DA300	DAH350	1927-00-00-000000	.500"	4.188"	5.50"	.560"	1933-00-00-000000	1/2"	1941-00-00-000000	1939-00-00-000000
DA300	—	7996-03-30-005000	.500"	5.500"	6.79"	.560"	7991-03-30-000001	1/2"	—	7990-03-30-000004
DA300	DAH335	1943-00-00-000000	.625"	2.188"	3.50"	.680"	1951-00-00-000000	5/8"	1957-00-00-000000	1939-00-00-000000
DA300	DAH355	1945-00-00-000000	.625"	4.188"	5.50"	.680"	1951-00-00-000000	5/8"	1957-00-00-000000	1939-00-00-000000
DA200	DAH255	1959-00-00-000000	.750"	1.875"	3.50"	.812"	1967-00-00-000000	11/16"	1975-00-00-000000	1973-00-00-000000
DA200	DAH235	1961-00-00-000000	.750"	3.875"	5.50"	.812"	1967-00-00-000000	11/16"	1975-00-00-000000	1973-00-00-000000
DA200	—	7996-03-20-007500	.750"	5.500"	7.23"	.860"	7991-03-20-000001	3/4"	—	7990-03-20-000004
DA100	DAH135	1977-00-00-000000	1.000"	1.875"	3.50"	1.062"	1985-00-00-000000	15/16"	1993-00-00-000000	1991-00-00-000000
DA100	DAH155	1979-00-00-000000	1.000"	3.875"	5.50"	1.062"	1985-00-00-000000	15/16"	1993-00-00-000000	1991-00-00-000000
DA100	—	7996-03-10-010000	1.000"	5.500"	7.47"	1.062"	7991-03-10-000001	31/32"	—	7990-03-10-000004
DA180	—	7996-03-18-012500	1.250"	5.500"	7.37"	1.440"	7991-03-18-000001	1 1/4"	—	7990-03-18-000004
SB- and SG-Style DA180 Tool Holders for CNC Lathes										
DA180	SG-180	SG 0000187	1.250"	2.500"	3.469"	1.747"	SG -0000187-02	1 1/4"	Not Required	SB -0000187-05 & 06
DA180	SG-180M	SG 0000187 M	32 mm	2.500"	3.469"	1.747"	SG -0000187-02	1 1/4"	Not Required	SB -0000187-05 & 06
DA180	SB-180	SBA0000187	1.125"	2.500"	3.560"	1.750"	SBA-0000187-02	Pin	Not Required	SB -0000187-05 & 06



Collet sold separately

