

SPHOORTI

Precision Assured



TOOL DISCS & TOOL HOLDERS

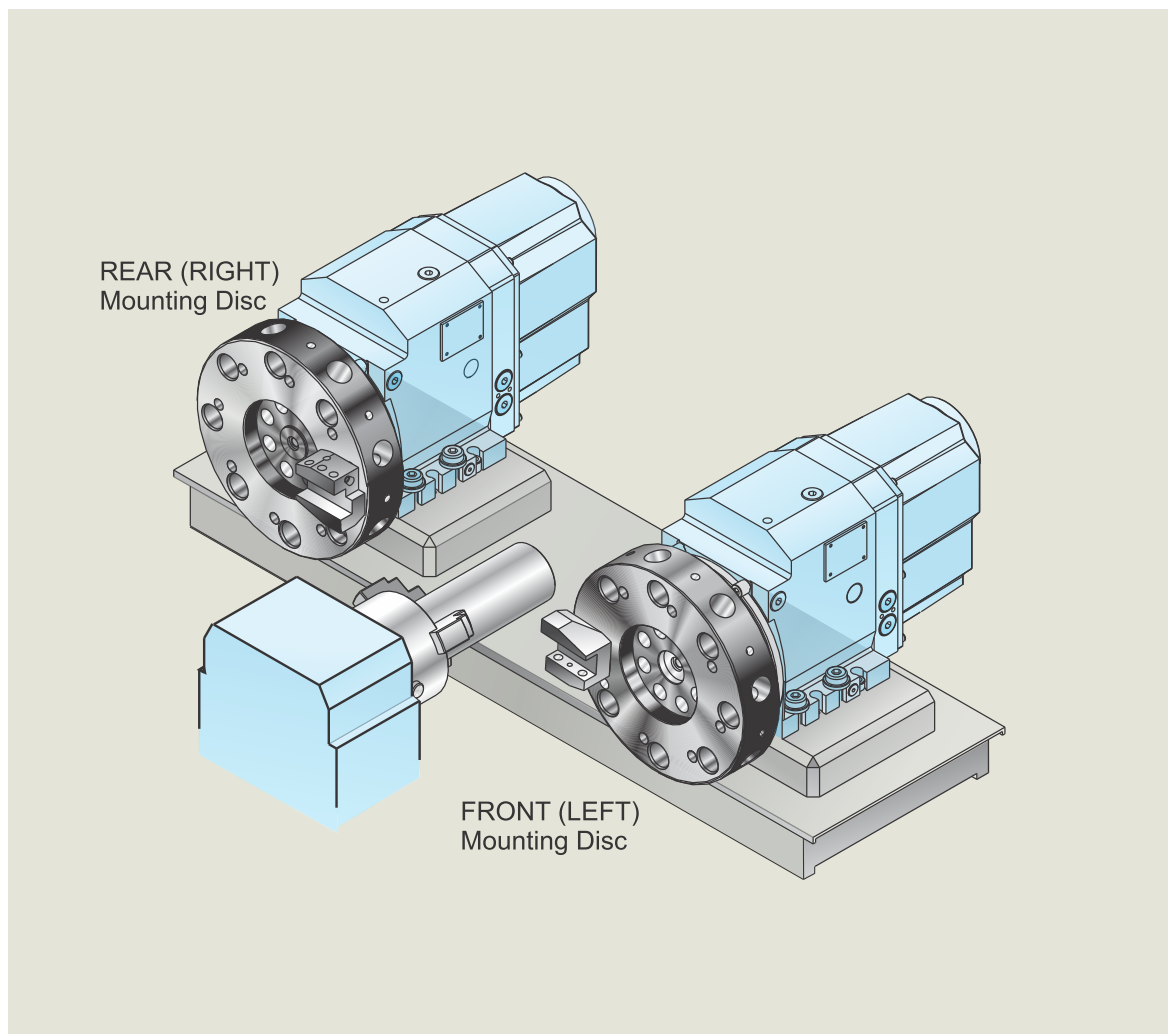
FOR CNC TURNING CENTERS & TURN MILL CENTERS



FEATURES

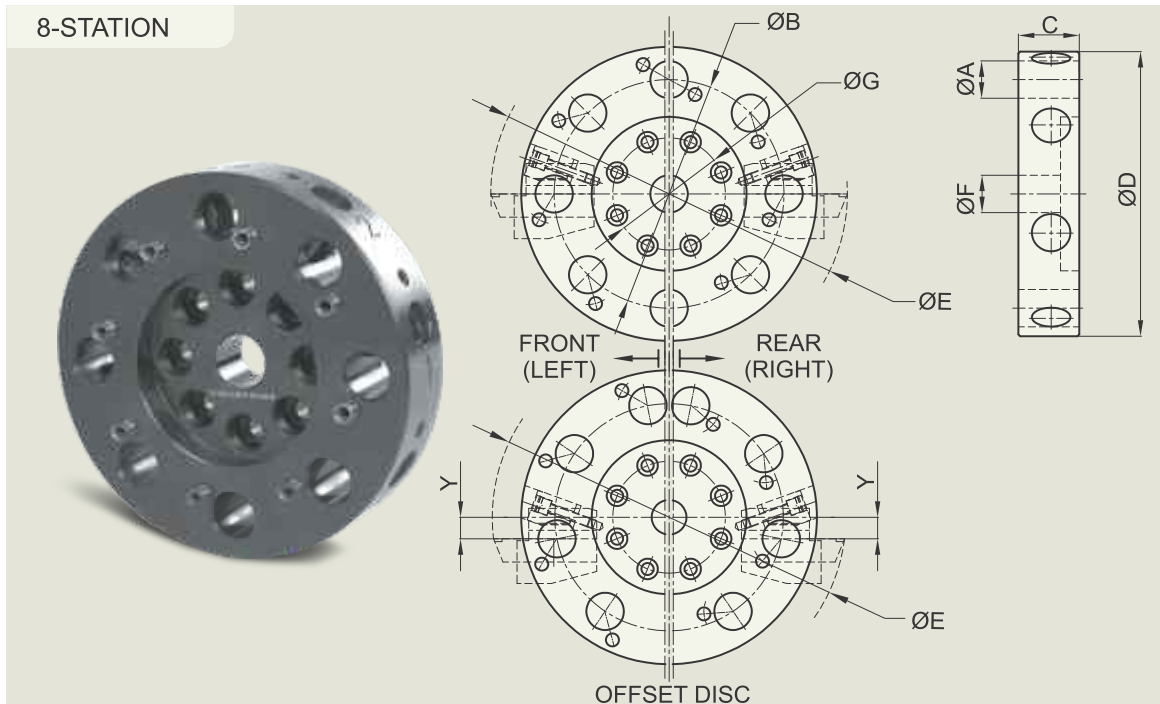
- Available in VDI type & Slotted type models.
- Available in 8 & 12 Station as our standard.
- Made out of Forged, Medium Carbon Steel & Toughened to 20 ± 2 HRC.
- Finish machining on precision machining centers to ensure accuracies.
- Suitable for fitment on both flat and slant bed CNC lathes.
- Available in Right version (Rear Mounting) & Left version (Front Mounting).
- Suitable for fitment on Pragati, Diplomatic, Sauter & Baruffaldi turrets.
- Customised design can be supplied upon request.
- Inch series disc in slotted models are available upon request.

TOOL DISC MOUNTING POSITION



VDI TOOL DISCS - STATIC TOOLS

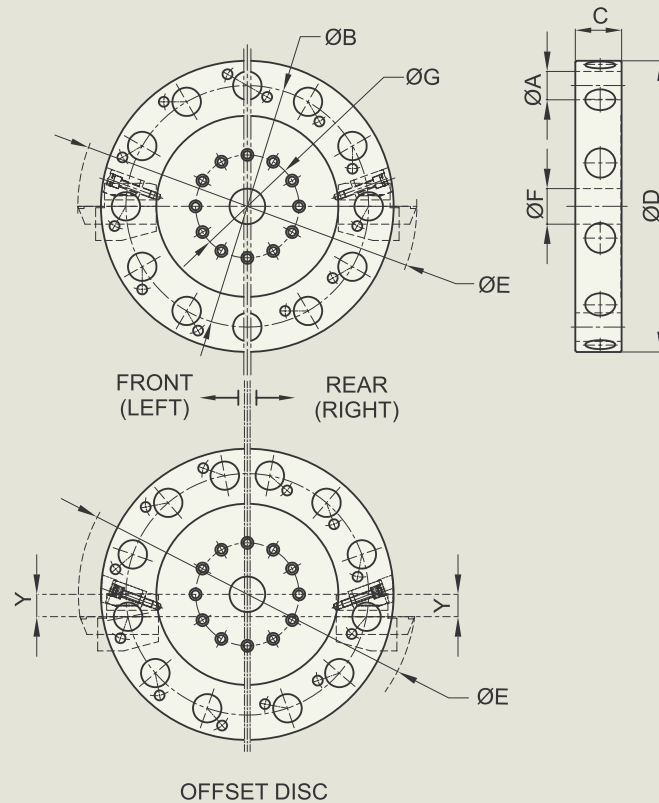
8-STATION



CODE	ØA	ØB	C	ØD	~ØE	ØF	ØG	Y	TURRET TYPE
TD-VDI-S-50-8-16-160	16	160	34	205	230	25	70	-	PRAGATI BTP-50, Diplomatic-BSV-N-100 Baruffaldi - TOE-100, Sauter 05-480-510
TD-VDI-S-50-8-20-140	20	140	42	185	235	25	70	-	
TD-VDI-S-63-8-20-200	20	200	42	245	294	30	90	-	
TD-VDI-S-63-8-20-200-17	20	200	42	245	292	30	90	17	PRAGATI BTP-63 Diplomatic-BSV-N-120 Baruffaldi - TOE-120 Sauter 05-480-512
TD-VDI-S-63-8-20-209-12	20	209	42	264	303	30	90	12	
TD-VDI-S-63-8-20-240	20	240	42	295	332	30	90	-	
TD-VDI-S-63-8-20-240-17	20	240	42	295	331	30	90	17	
TD-VDI-S-63-8-30-190	30	190	57	250	300	30	90	-	
TD-VDI-S-63-8-30-200	30	200	57	260	310	30	90	-	
TD-VDI-S-63-8-30-200-15	30	200	57	260	308	30	90	15	
TD-VDI-S-63-8-30-220	30	220	57	280	330	30	90	-	PRAGATI BTP-80 Diplomatic-BSV-N-160 Baruffaldi - TOE-160 Sauter 05-480-516
TD-VDI-S-80-8-30-210	30	210	57	280	310	40	120	-	
TD-VDI-S-80-8-30-210-25	30	210	57	280	308	40	120	25	
TD-VDI-S-80-8-30-240	30	240	57	310	350	40	120	-	
TD-VDI-S-80-8-30-240-25	30	240	57	310	348	40	120	25	
TD-VDI-S-80-8-30-270	30	270	57	340	380	40	120	-	
TD-VDI-S-80-8-30-270-25	30	270	57	340	378	40	120	25	
TD-VDI-S-80-8-40-245	40	245	65	310	380	40	120	-	PRAGATI BTP-100 Diplomatic-BSV-N-200 Baruffaldi - TOE-200 Sauter 05-480-520
TD-VDI-S-80-8-40-245-25	40	245	65	315	378	40	120	25	
TD-VDI-S-100-8-40-272	40	272	65	340	407	50	145	-	
TD-VDI-S-100-8-40-272-32	40	272	65	340	405	50	145	32	
TD-VDI-S-100-8-40-275-25	40	275	65	345	408	50	145	25	
TD-VDI-S-100-8-40-290	40	290	65	370	425	50	145	-	
TD-VDI-S-100-8-40-290-32	40	290	65	370	422	50	145	32	
TD-VDI-S-100-8-40-340	40	340	65	410	475	50	145	-	PRAGATI BTP-125 Diplomatic-BSV-N-250 Baruffaldi - TOE-250 Sauter 05-480-525
TD-VDI-S-100-8-40-340-32	40	340	65	410	473	50	145	32	
TD-VDI-S-125-8-50-340	50	340	80	420	495	63	182	-	
TD-VDI-S-125-8-50-340-35	50	340	80	420	492	63	182	35	
TD-VDI-S-125-8-50-400	50	400	80	480	564	63	182	-	PRAGATI BTP-160, Diplomatic-BSV-N-320 Baruffaldi - TOE-320, Sauter 05-480-532
TD-VDI-S-125-8-50-400-35	50	400	80	480	561	63	182	35	
TD-VDI-S-160-8-60-460	60	460	96	560	649	80	220	-	
TD-VDI-S-160-8-60-460-40	60	460	96	560	645	80	220	40	

VDI TOOL DISCS - STATIC TOOLS

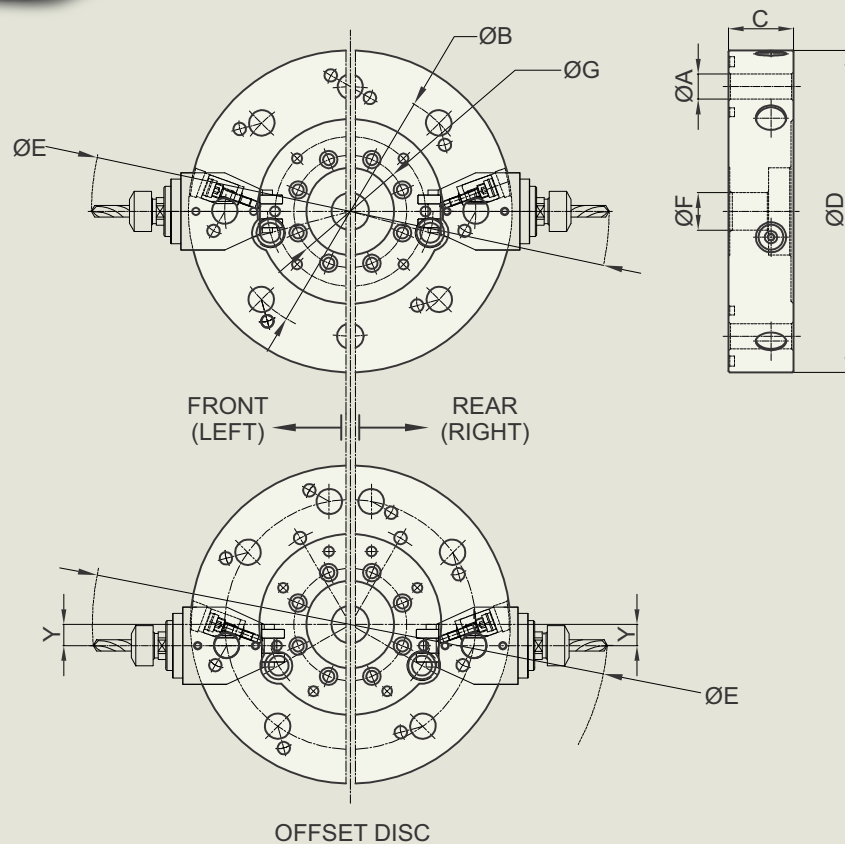
12-STATION



CODE	ØA	ØB	C	ØD	~ØE	ØF	ØG	Y	TURRET TYPE
TD-VDI-S-50-12-16-160	16	160	34	205	230	25	70	-	PRAGATI BTP-50 Diplomatic-BSV-N-100 Baruffaldi - TOE-100 Sauter 05-480-510
TD-VDI-S-63-12-20-200	20	200	42	250	292	30	90	-	PRAGATI BTP-63 Diplomatic-BSV-N-120 Baruffaldi - TOE-120 Sauter 05-480-512
TD-VDI-S-63-12-20-200-17	20	200	42	250	290	30	90	17	
TD-VDI-S-63-12-20-209-12	20	209	42	264	301	30	90	12	
TD-VDI-S-63-12-20-240	20	240	42	295	332	30	90	-	
TD-VDI-S-63-12-20-240-17	20	240	42	295	330	30	90	17	
TD-VDI-S-80-12-20-290	20	290	45	345	382	40	120	-	PRAGATI BTP-80 Diplomatic-BSV-N-160 Baruffaldi - TOE-160 Sauter 05-480-516
TD-VDI-S-80-12-30-270	30	270	57	340	380	40	120	-	
TD-VDI-S-80-12-30-270-25	30	270	57	340	378	40	120	25	
TD-VDI-S-80-12-30-315	30	315	57	380	425	40	120	-	
TD-VDI-S-100-12-30-340	30	340	57	400	450	50	145	-	PRAGATI BTP-100 Diplomatic-BSV-N-200 Baruffaldi - TOE-200 Sauter 05-480-520
TD-VDI-S-100-12-30-370	30	370	57	430	480	50	145	-	
TD-VDI-S-100-12-40-340	40	340	65	410	475	50	145	-	
TD-VDI-S-100-12-40-340-32	40	340	65	410	472	50	145	32	
TD-VDI-S-100-12-40-340-55	40	340	65	410	471	50	145	55	
TD-VDI-S-100-12-40-370	40	370	65	440	505	50	145	-	
TD-VDI-S-125-12-50-400	50	400	80	480	564	63	182	-	PRAGATI BTP-125 Diplomatic-BSV-N-250 Baruffaldi - TOE-250 Sauter 05-480-525
TD-VDI-S-125-12-50-400-35	50	400	80	480	561	63	182	35	
TD-VDI-S-160-12-60-460	60	460	96	560	649	80	220	-	PRAGATI BTP-160 Diplomatic-BSV-N-320 Baruffaldi - TOE-320 Sauter 05-480-532
TD-VDI-S-160-12-60-460-40	60	460	96	560	645	80	220	40	

VDI TOOL DISCS - DRIVEN TOOLS

8-STATION

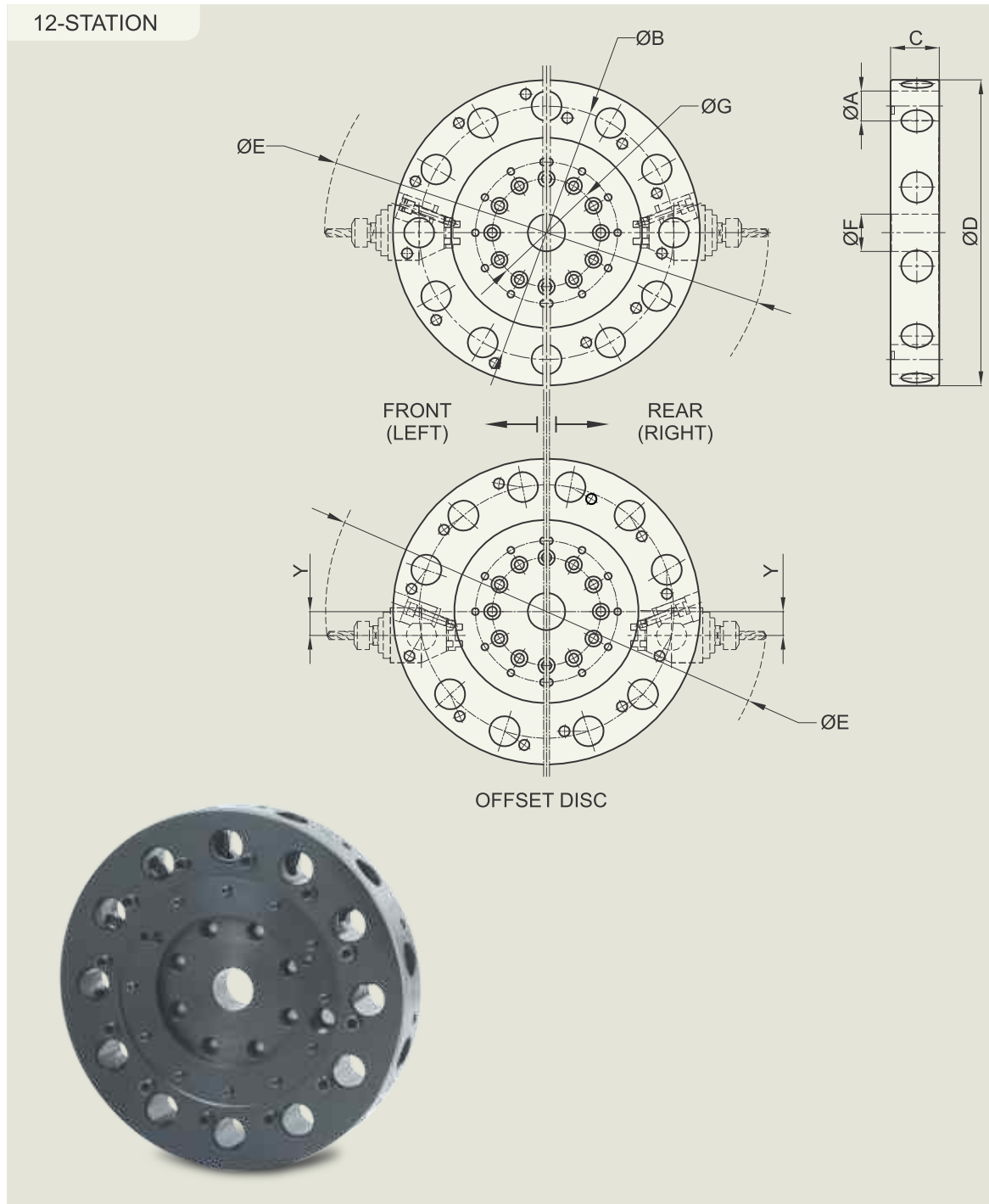


CODE	ØA	ØB	C	ØD	~ØE	ØF	ØG	Y	TURRET TYPE
TD-VDI-R-63-8-20-200	20	200	52	255	390	30	90	-	PRAGATI DTT 63-8-200-0
TD-VDI-R-63-8-20-240	20	240	52	298	430	30	90	-	PRAGATI DTT 63-8-240-0
TD-VDI-R-80-8-30-240	30	240	56	310	484	40	120	-	PRAGATI DTT 80-8-240-0
TD-VDI-R-80-8-30-240-25	30	240	56	310	481	40	120	25	PRAGATI DTT 80-8-240-25
TD-VDI-R-80-8-30-270	30	270	56	340	516	40	120	-	PRAGATI DTT 80-8-270-0
TD-VDI-R-80-8-30-270-25	30	270	56	340	513	40	120	25	PRAGATI DTT 80-8-270-25
TD-VDI-R-100-8-40-340	40	340	64	410	638	50	145	-	PRAGATI DTT 100-8-340-0
TD-VDI-R-100-8-40-340-32	40	340	64	410	635	50	145	32	PRAGATI DTT 100-8-340-32

*Driven Tool Discs can be supplied as per customers drawings

VDI TOOL DISCS - DRIVEN TOOLS

12-STATION

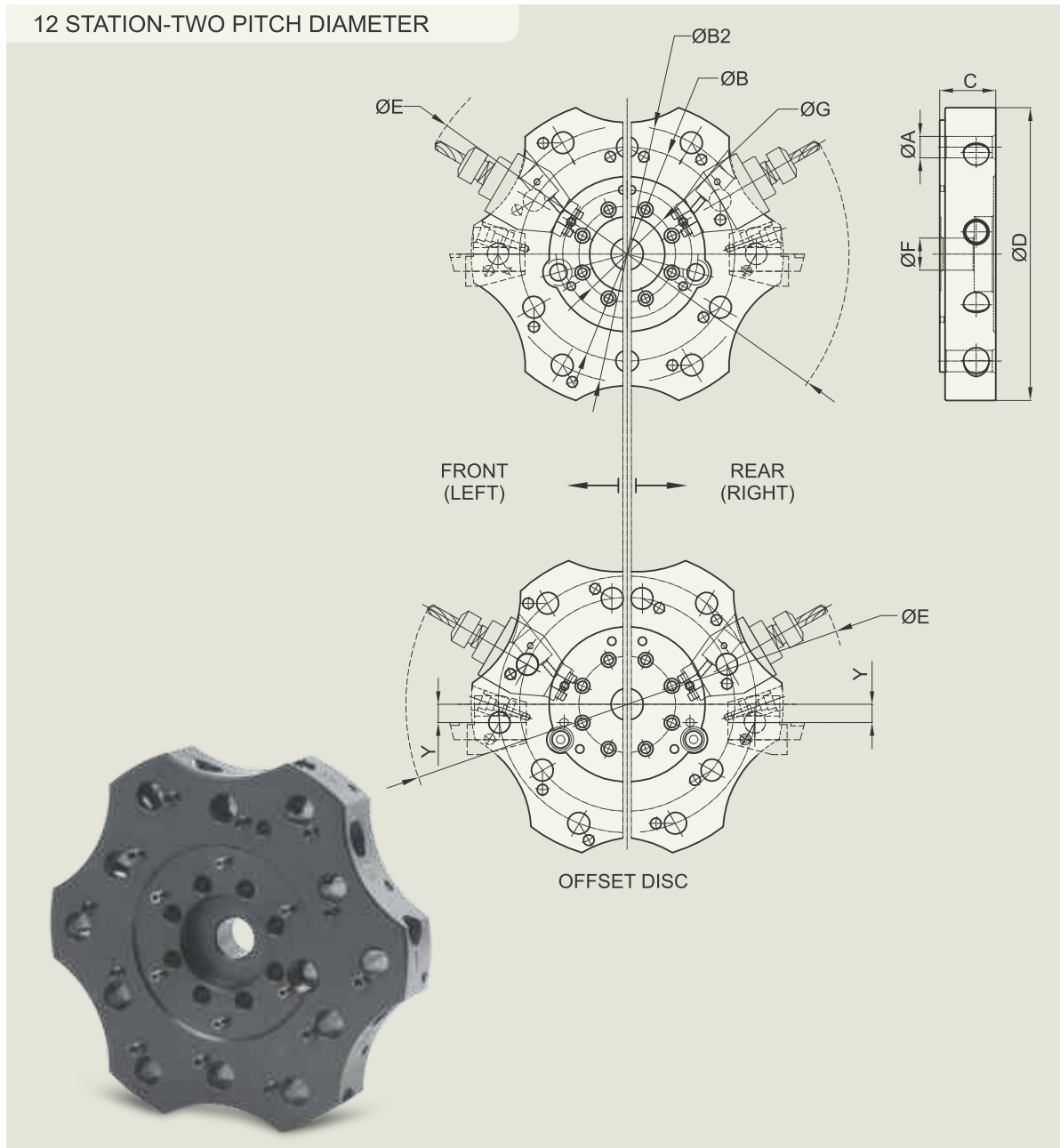


CODE	$\varnothing A$	$\varnothing B$	C	$\varnothing D$	$\sim \varnothing E$	$\varnothing F$	$\varnothing G$	Y	TURRET TYPE
TD-VDI-R-63-12-20-240	20	240	52	295	430	30	90	-	PRAGATI DTT 63-12-240-0
TD-VDI-R-80-12-30-270	30	270	56	340	516	40	120	-	PRAGATI DTT 80-12-270-0
TD-VDI-R-80-12-30-270-25	30	270	56	340	513	40	120	25	PRAGATI DTT 80-12-270-25
TD-VDI-R-100-12-40-340	40	340	64	410	638	50	145	-	PRAGATI DTT 100-12-340-0
TD-VDI-R-100-12-40-340-32	40	340	64	410	635	50	145	32	PRAGATI DTT 100-12-340-32
TD-VDI-R-100-12-40-370	40	370	64	440	668	50	145	-	PRAGATI DTT 100-12-370-0

*Driven Tool Discs can be supplied as per customers drawings

VDI TOOL DISCS - DRIVEN TOOLS

12 STATION-TWO PITCH DIAMETER



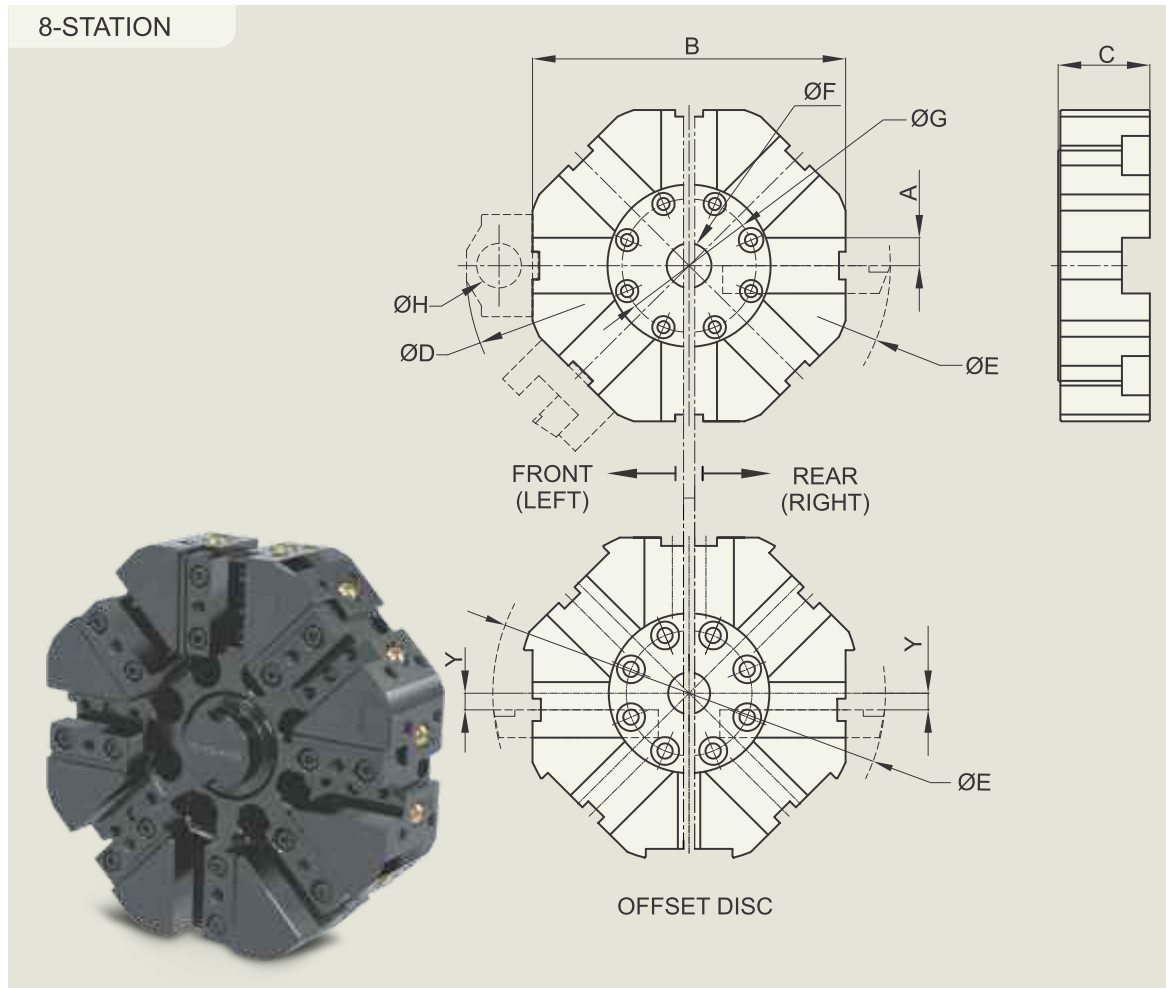
CODE	ØA	ØB	ØB2	C	ØD	~ØE	ØF	ØG	Y	TURRET TYPE
TD-VDI-R-63-12-20-200-240-2	20	200	240	52	295	390	30	90	-	PRAGATI DTT 63-12-200-240-0
TD-VDI-R-63-12-20-200-240-17-2	20	200	240	52	295	388	30	90	17	PRAGATI DTT 63-12-200-240-17
TD-VDI-R-80-12-30-240-308-2	30	240	308	56	370	484	40	120	-	PRAGATI DTT 80-12-240-308-0
TD-VDI-R-80-12-30-240-308-25-2	30	240	308	56	370	482	40	120	25	PRAGATI DTT 80-12-240-308-25
TD-VDI-R-80-12-30-270-310-2	30	270	310	59	366	516	40	120	-	PRAGATI DTT 80-12-270-310-0
TD-VDI-R-100-12-30-310-370-2	30	310	370	59	430	554	50	145	-	PRAGATI DTT 100-12-310-370-0
TD-VDI-R-100-12-40-370-400-2	40	370	400	67	470	668	50	145	-	PRAGATI DTT 100-12-370-400-0
TD-VDI-R-100-12-40-370-400-32-2	40	370	400	67	470	666	50	145	32	PRAGATI DTT 100-12-370-400-32
TD-VDI-R-100-12-40-340-400-2	40	340	400	67	470	638	50	145	-	PRAGATI DTT 100-12-40-340-400-0

*Inner Pitch Circle Diameter ØB for Driven Tools and Outer Pitch Circle Diameter ØB2 for Static Tools

*Driven Tool Discs can be supplied as per customers drawings

SLOTTED TOOL DISCS

8-STATION



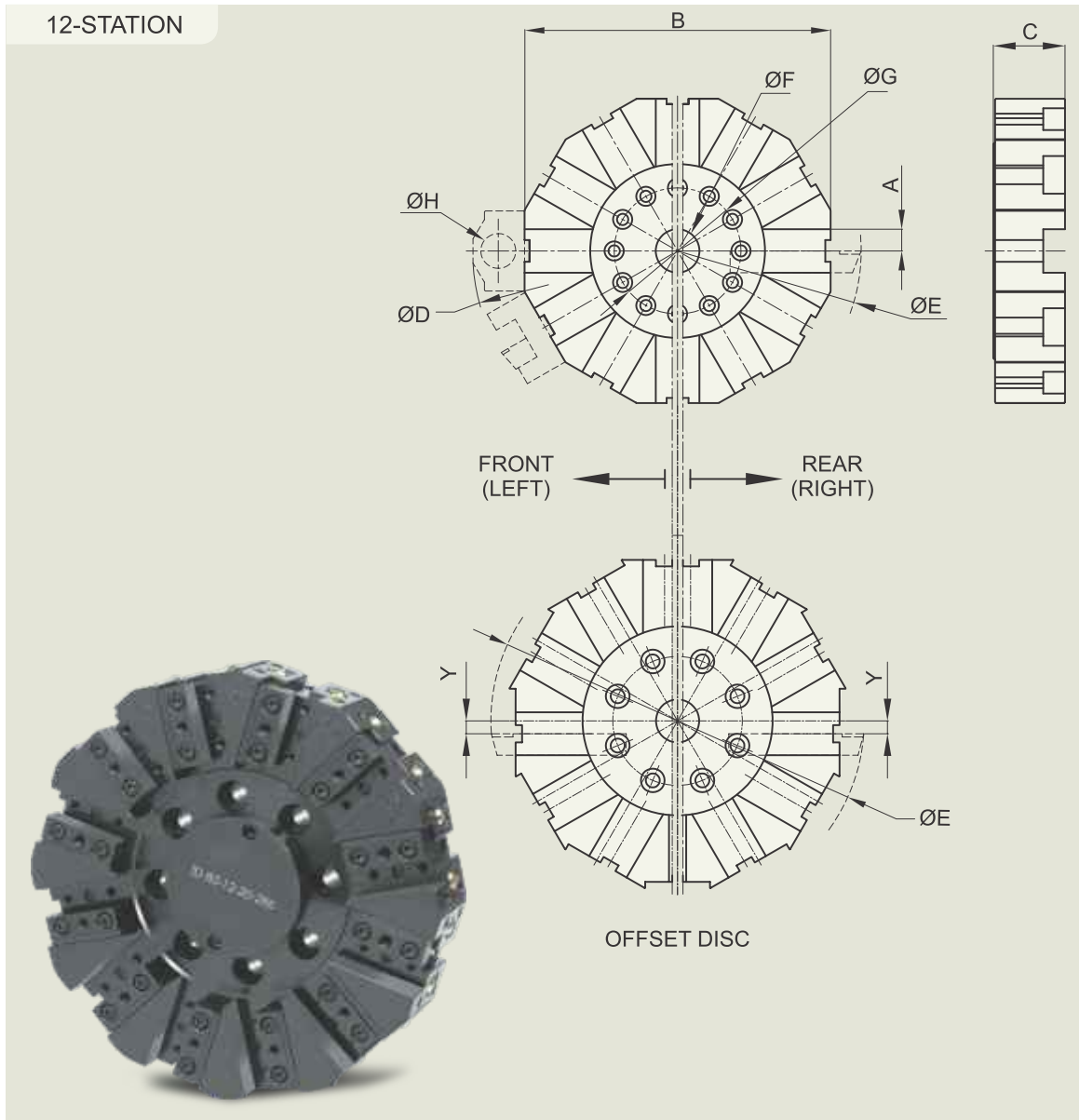
CODE	A	B	C	ØD	~ØE	ØF	ØG	ØH Max	Y	TURRET TYPE
TD-50-8-16-180	16	180	51	252	238	25	70	25	-	PRAGATI BTP-50 Duplomatic-BSV-N-100
TD-50-8-20-200	20	200	54	305	280	25	70	32	-	Baruffaldi - TOE-100 Sauter 05-480-510
TD-63-8-16-200	16	200	51	272	256	30	90	25	-	PRAGATI BTP-63 Duplomatic-BSV-N-120
TD-63-8-20-220	20	220	61	325	294	30	90	32	-	Baruffaldi - TOE-120
TD-63-8-20-224-12	20	224	61	332	281	30	90	32	12	Sauter 05-480-512
TD-80-8-20-250	20	250	61	355	324	40	120	32	-	PRAGATI BTP-80 Duplomatic-BSV-N-160
TD-80-8-25-280	25	280	81	399	366	40	120	40	-	Baruffaldi - TOE-160 Sauter 05-480-516
TD-100-8-25-304	25	304	81	423	384	50	145	40	-	PRAGATI BTP-100 Duplomatic-BSV-N-200
TD-100-8-25-350	25	350	81	489	420	50	145	40	-	Baruffaldi - TOE-200
TD-100-8-32-350	32	350	96	503	440	50	145	50	-	Sauter 05-480-520
TD-125-8-32-350	32	350	96	503	430	63	182	50	-	PRAGATI BTP-125 Duplomatic-BSV-N-250
TD-125-8-32-380	32	380	96	532	470	63	182	50	-	Baruffaldi - TOE-250
TD-125-8-32-436	32	436	96	588	525	63	182	50	-	Sauter 05-480-525
TD-125-8-40-400	40	400	96	541	500	63	182	50	-	PRAGATI BTP-160 Duplomatic-BSV-N-320
TD-160-8-32-480	32	480	126	632	560	80	220	50	-	Baruffaldi - TOE-320
TD-160-8-40-480	40	480	126	643	616	80	220	60	-	Sauter 05-480-532

* Customised design can be supplied upon request

* Inch series tool discs are available upon request

SLOTTED TOOL DISCS

12-STATION



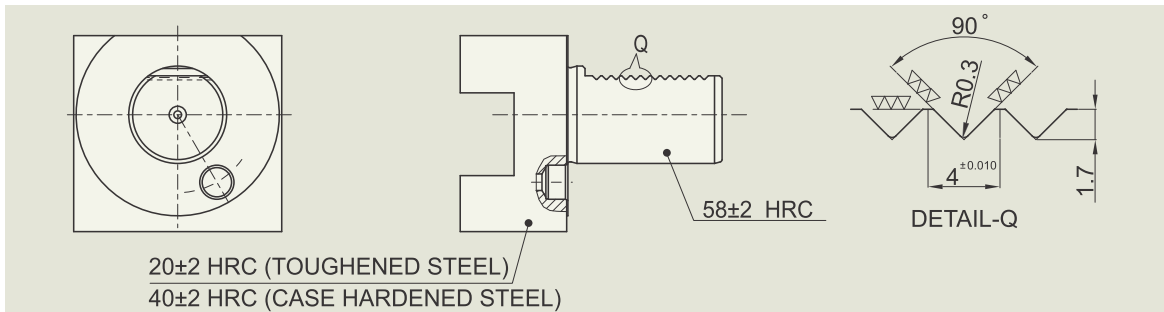
CODE	A	B	C	ØD	~ØE	ØF	ØG	ØH Max	Y	TURRET TYPE
TD-63-12-16-236	16	236	51	307	270	30	90	25	-	PRAGATI BTP-63 Diplomatic-BSV-N-120 Baruffaldi - TOE-120 Sauter 05-480-512
TD-80-12-20-286	20	286	61	391	348	40	120	32	-	PRAGATI BTP-80 Diplomatic-BSV-N-160 Baruffaldi - TOE-160 Sauter 05-480-516
TD-80-12-20-295-12	20	295	61	402	346	40	120	32	12	
TD-80-12-20-320	20	320	61	425	382	40	120	32	-	
TD-100-12-25-350	25	350	81	469	420	50	145	40	-	PRAGATI BTP-100 Diplomatic-BSV-N-200 Baruffaldi - TOE-200 Sauter 05-480-520
TD-100-12-25-350-20	25	350	81	473	421	50	145	40	20	
TD-125-12-25-380	25	380	81	499	460	63	182	40	-	PRAGATI BTP-125 Diplomatic-BSV-N-250 Baruffaldi - TOE-250 Sauter 05-480-525
TD-125-12-32-436	32	436	96	588	525	63	182	50	-	
TD-160-12-32-565	32	565	126	717	645	80	220	50	-	PRAGATI BTP-160 Diplomatic-BSV-N-320 Baruffaldi - TOE-320 Sauter 05-480-532
TD-160-12-40-565	40	565	126	727	645	80	220	60	-	

* Customised design can be supplied upon request

* Inch series tool discs are available upon request

VDI TECHNOLOGY

The VDI system is a quick change clamping systems for each tool holder within the tool disc. Tool changes can therefore be performed within seconds, rather than minutes as with the traditional block system.

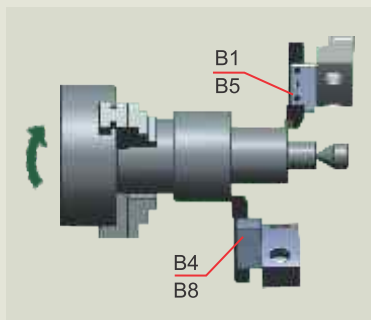


FEATURES

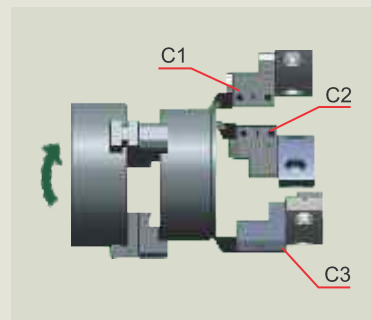
- VDI tool holders are made as per DIN 69880.
- Tool holders are made by toughened steel C-45 as well as case hardened steel 20MnCr5.
- Our standard supply will be in toughened steel C-45 for form A, B, C, D, E1, E2 & Z varieties.
- Case hardened steel 20MnCr5 for form E4 & F varieties.
- Our standard tool holders are fully blackened.
- Shank white, teeth white, tool holder seating surface white will be given on request.
- The tool holder shank portion are heat treated to 58±2 HRC, and the teeth are ground.

SELECTION OF VDI TOOL HOLDERS

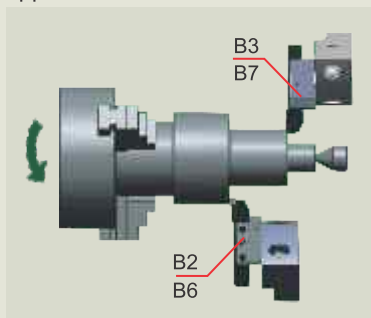
Spindle Rotation clockwise
application of OD Turn and Face



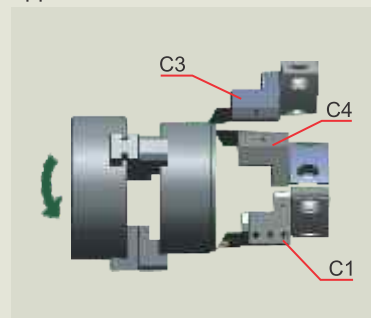
Spindle Rotation clockwise
application of Face and ID Bore



Spindle Rotation Anticlockwise
application of OD Turn and Face

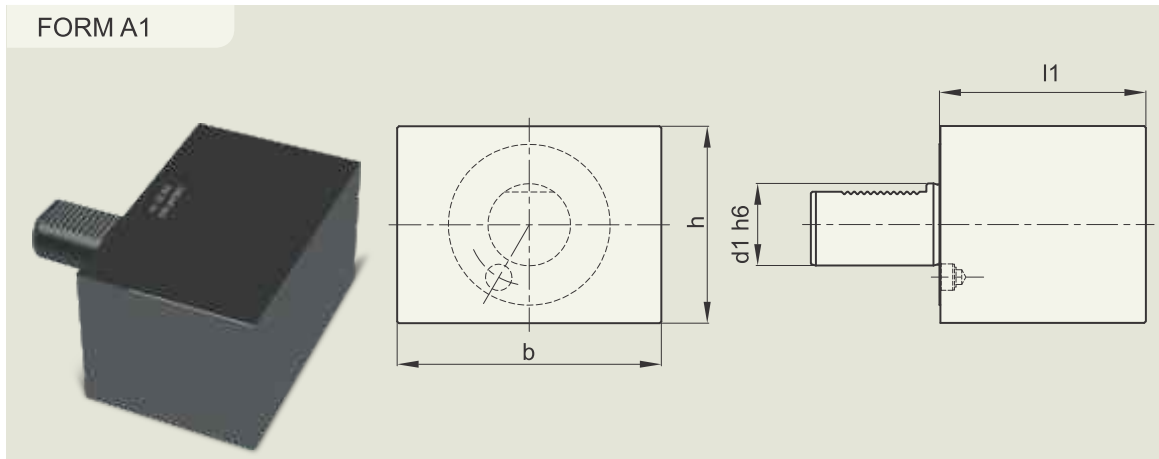


Spindle Rotation Anticlockwise
application of Face and ID Bore



PRE MACHINED BLANKS

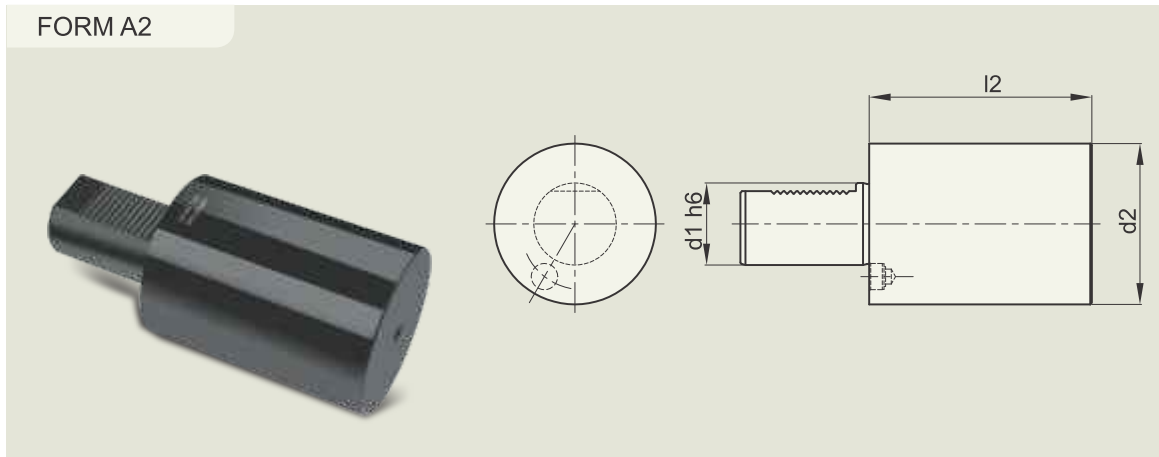
FORM A1



CODE	d1	l1	b	h
A1 16x44	16	44	78	44
A1 20x65	20	65	100	60
A1 25x75	25	75	100	60
A1 30x85	30	85	130	76
A1 40x100	40	100	151	96
A1 50x125	50	125	160	120
A1 60x160	60	160	165	125

PRE MACHINED BLANKS

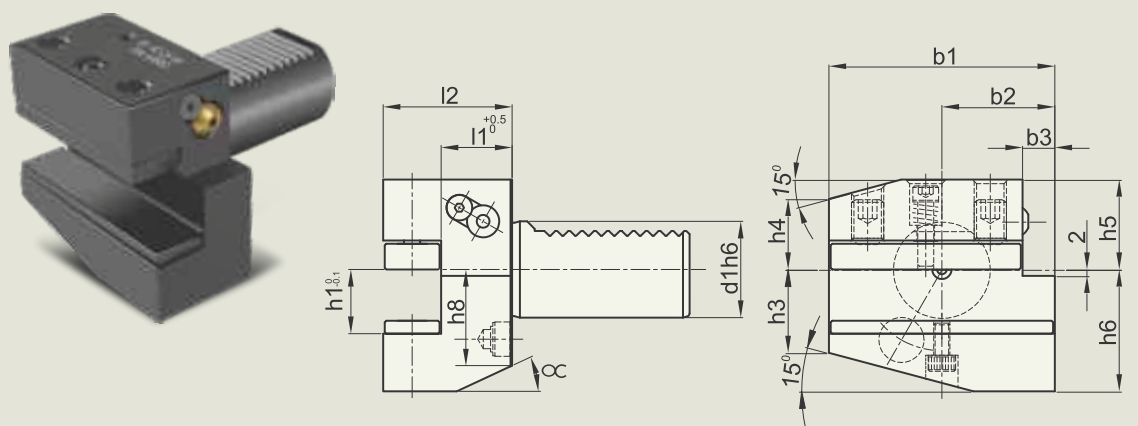
FORM A2



CODE	d1	d2	l2
A2 16x60	16	40	60
A2 20x70	20	50	70
A2 25x80	25	58	80
A2 30x100	30	68	100
A2 40x120	40	83	120
A2 50x135	50	98	135
A2 60x150	60	123	150

RIGHT HAND SHORT-RADIAL

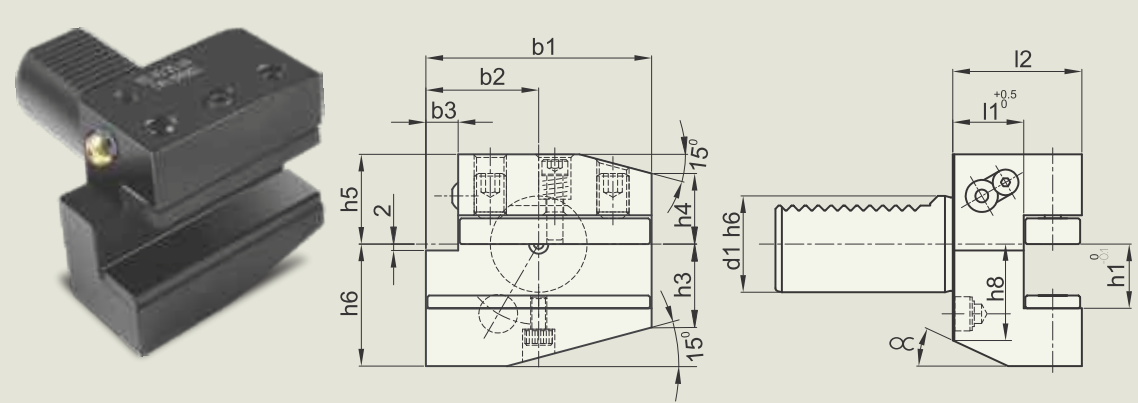
FORM B1



CODE	d1	b1	b2	b3	h1	h3	h4	h5	h6	h8	l1	l2	α
B1 16 12 24	16	42	23	5	12	15	15	20	22	19	13	24	30°
B1 20 16 30	20	55	30	7	16/12	19	19	25	30	23	16	30	30°
B1 25 16 30	25	55	30	7	16/12	22.5	22.5	25	30	25	16	30	30°
B1 30 20 40	30	70	35	10	20/16	26	22	28	38	30	22	40	25°
B1 40 25 44	40	85	42.5	12.5	25/20	35	30	32.5	48	-	22	44	-
B1 50 32 55	50	100	50	16	32/25	42	35	35	60	-	30	55	-
B1 60 32 60	60	125	62.5	16	32/25	46	42.5	42.5	62.5	-	30	60	-

LEFT HAND SHORT-RADIAL

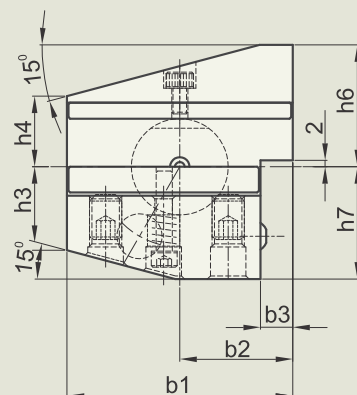
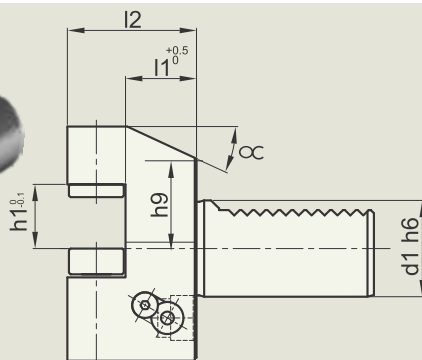
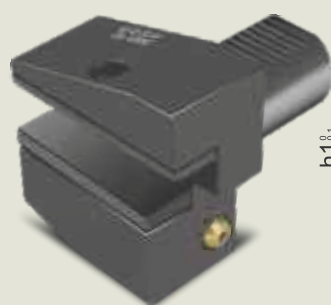
FORM B2



CODE	d1	b1	b2	b3	h1	h3	h4	h5	h6	h8	l1	l2	α
B2 16 12 24	16	42	23	5	12	15	15	20	22	19	13	24	30°
B2 20 16 30	20	55	30	7	16/12	19	19	25	30	23	16	30	30°
B2 25 16 30	25	55	30	7	16/12	22.5	22.5	25	30	25	16	30	30°
B2 30 20 40	30	70	35	10	20/16	26	22	28	38	30	22	40	25°
B2 40 25 44	40	85	42.5	12.5	25/20	35	30	32.5	48	-	22	44	-
B2 50 32 55	50	100	50	16	32/25	42	35	35	60	-	30	55	-
B2 60 32 60	60	125	62.5	16	32/25	46	42.5	42.5	62.5	-	30	60	-

RIGHT HAND SHORT OVER HEAD-RADIAL

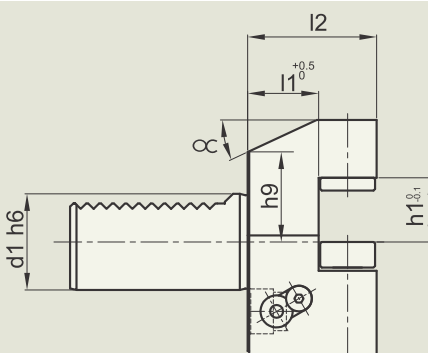
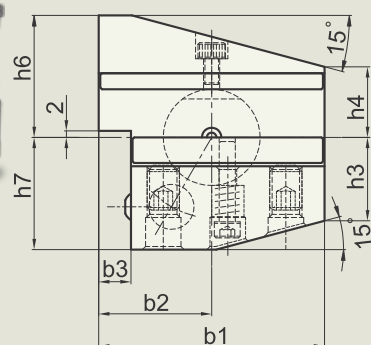
FORM B3



CODE	d1	b1	b2	b3	h1	h3	h4	h6	h7	h9	l1	l2	α
B3 16 12 24	16	42	23	5	12	15	15	22	20	19	13	24	30°
B3 20 16 30	20	55	30	7	16/12	19	19	30	25	23	26	30	30°
B3 25 16 30	25	55	30	7	16/12	22.5	22.5	30	25	25	16	30	30°
B3 30 20 40	30	70	35	10	20/16	26	22	38	35	28	22	40	25°
B3 40 25 44	40	85	42.5	12.5	25/20	35	30	48	42.5	-	22	44	-
B3 50 32 55	50	100	50	16	32/25	42	35	60	50	-	30	55	-
B3 60 32 60	60	125	62.5	16	32/25	46	42.5	62.5	62.5	-	30	60	-

LEFT HAND SHORT OVER HEAD-RADIAL

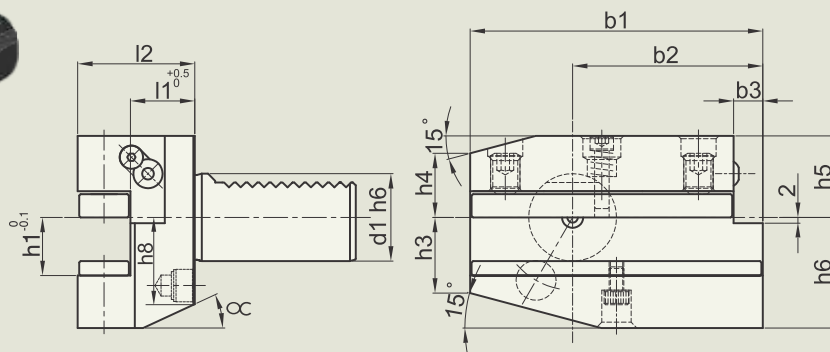
FORM B4



CODE	d1	b1	b2	b3	h1	h3	h4	h6	h7	h9	l1	l2	α
B4 16 12 24	16	42	23	5	12	15	15	22	20	19	13	24	30°
B4 20 16 30	20	55	30	7	16/12	19	19	30	25	23	26	30	30°
B4 25 16 30	25	55	30	7	16/12	22.5	22.5	30	25	25	16	30	30°
B4 30 20 40	30	70	35	10	20/16	26	22	38	35	28	22	40	25°
B4 40 25 44	40	85	42.5	12.5	25/20	35	30	48	42.5	-	22	44	-
B4 50 32 55	50	100	50	16	32/25	42	35	60	50	-	30	55	-
B4 60 32 60	60	125	62.5	16	32/25	46	62.5	62.5	62.5	-	30	60	-

RIGHT HAND LONG-RADIAL

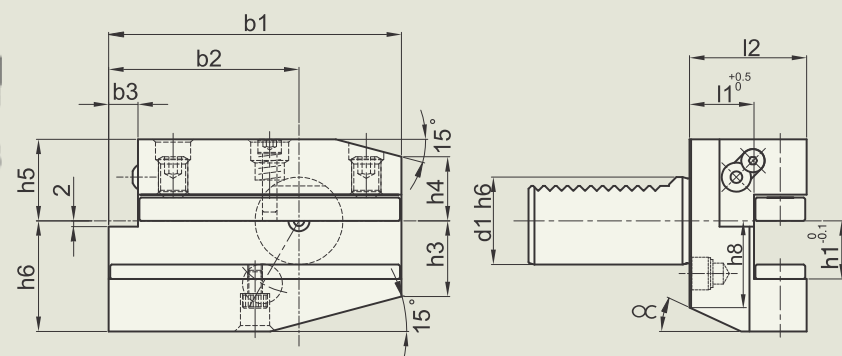
FORM B5



CODE	d1	b1	b2	b3	h1	h3	h4	h5	h6	h8	l1	l2	α
B5 16 12 24	16	58	39	5	12	15	15	20	22	19	13	24	30°
B5 20 16 30	20	75	50	7	16/12	19	19	25	30	23	16	30	30°
B5 25 16 30	25	75	50	7	16/12	22.5	22.5	25	30	25	16	30	30°
B5 30 20 40	30	100	65	10	20/16	26	22	28	38	30	22	40	25°
B5 40 25 44	40	118	75.5	12.5	25/20	35	30	32.5	48	-	22	44	-
B5 50 32 55	50	130	80	16	32/25	42	35	35	60	-	30	55	-
B5 60 32 60	60	145	82.5	16	32/25	46	42.5	42.5	62.5	-	30	60	-

LEFT HAND LONG-RADIAL

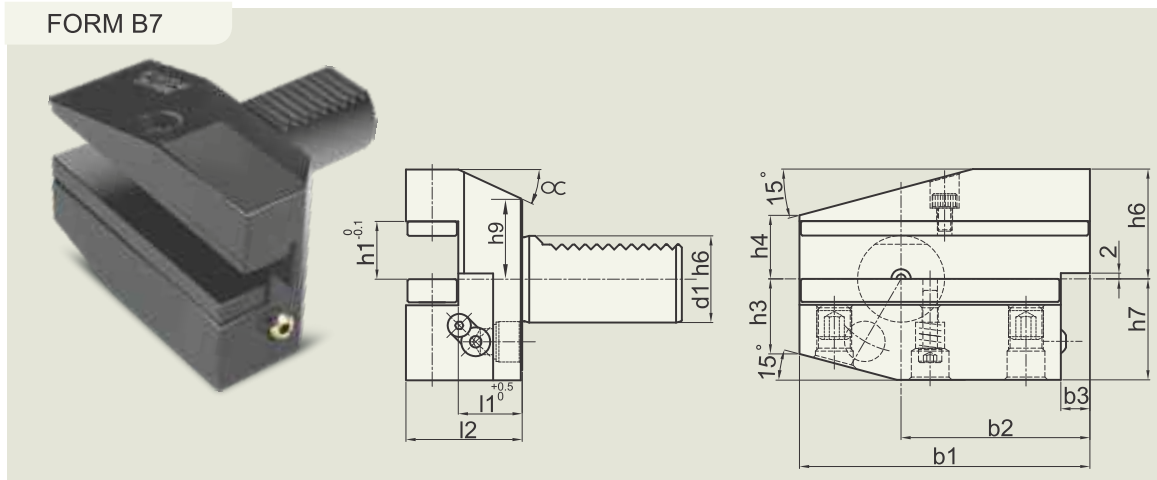
FORM B6



CODE	d1	b1	b2	b3	h1	h3	h4	h5	h6	h8	l1	l2	α
B6 16 12 24	16	58	39	5	12	15	15	20	22	19	13	24	30°
B6 20 16 30	20	75	50	7	16/12	19	19	25	30	23	16	30	30°
B6 25 16 30	25	75	50	7	16/12	22.5	22.5	25	30	25	16	30	30°
B6 30 20 40	30	100	65	10	20/16	26	22	28	38	30	22	40	25°
B6 40 25 44	40	118	75.5	12.5	25/20	35	30	32.5	48	-	22	44	-
B6 50 32 55	50	130	80	16	32/25	42	35	35	60	-	30	55	-
B6 60 32 60	60	145	82.5	16	32/25	46	42.5	42.5	62.5	-	30	60	-

RIGHT HAND LONG OVER HEAD-RADIAL

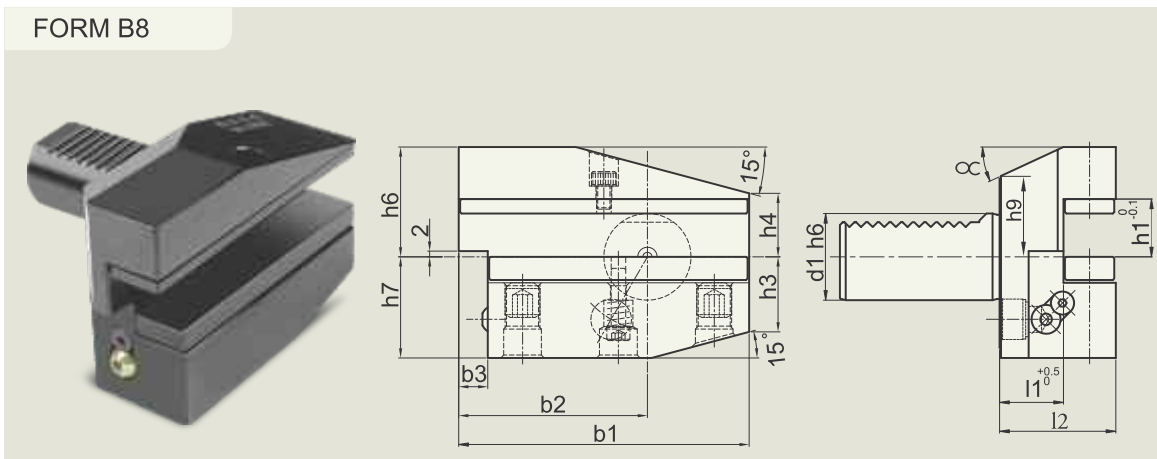
FORM B7



CODE	d1	b1	b2	b3	h1	h3	h4	h6	h7	h9	l1	l2	α
B7 16 12 24	16	58	39	5	12	15	15	22	20	19	13	24	30°
B7 20 16 30	20	75	50	7	16/12	19	19	30	25	23	16	30	30°
B7 25 16 30	25	75	50	7	16/12	22.5	22.5	30	25	25	16	30	30°
B7 30 20 40	30	100	65	10	20/16	26	22	38	35	28	22	40	25°
B7 40 25 44	40	118	75.5	12.5	25/20	35	30	48	42.5	-	22	44	-
B7 50 32 55	50	130	80	16	32/25	42	35	60	50	-	30	55	-
B7 60 32 60	60	145	82.5	16	32/25	46	42.5	62.5	62.5	-	30	60	-

LEFT HAND LONG OVER HEAD-RADIAL

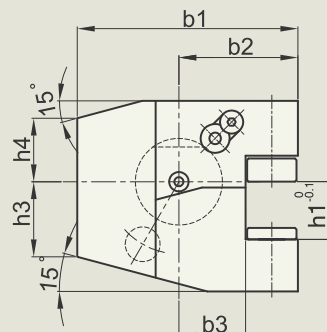
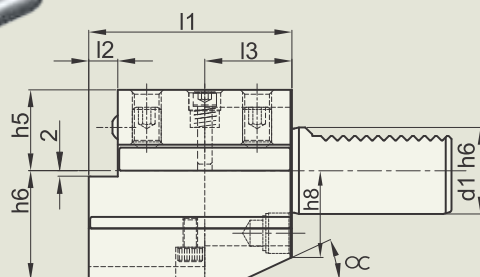
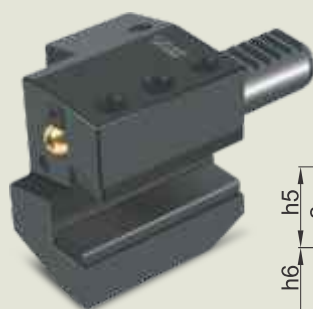
FORM B8



CODE	d1	b1	b2	b3	h1	h3	h4	h6	h7	h9	l1	l2	α
B8 16 12 24	16	58	39	5	12	15	15	22	20	19	13	24	30°
B8 20 16 30	20	75	50	7	16/12	19	19	30	25	23	16	30	30°
B8 25 16 30	25	75	50	7	16/12	22.5	22.5	30	25	25	16	30	30°
B8 30 20 40	30	100	65	10	20/16	26	22	38	35	28	22	40	25°
B8 40 25 44	40	118	75.5	12.5	25/20	35	30	48	42.5	-	22	44	-
B8 50 32 55	50	130	80	16	32/25	42	35	60	50	-	30	55	-
B8 60 32 60	60	145	82.5	16	32/25	46	42.5	62.5	62.5	-	30	60	-

RIGHT HAND -AXIAL

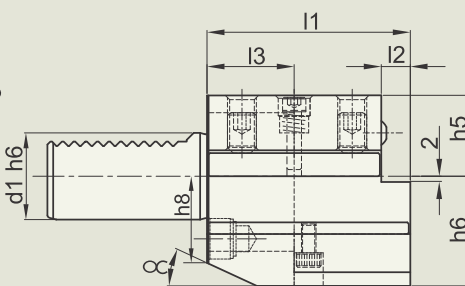
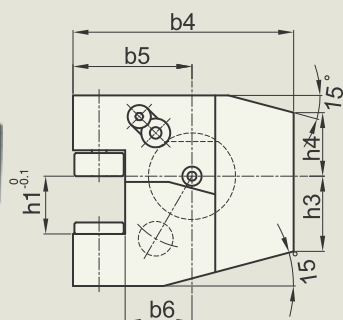
FORM C1



CODE	d1	b1	b2	b3	h1	h3	h4	h5	h6	h8	l1	l2	l3	α
C1 16 12 44	16	43	24	13	12	15	15	20	22	19	44	5	20	30°
C1 20 16 55	20	52	27	13	16/12	19	19	25	30	23	55	7	30	30°
C1 25 16 55	25	58	33	19	16/12	22.5	22.5	25	30	25	55	7	20	30°
C1 30 20 70	30	70	35	17	20/16	26	22	28	38	30	70	10	30	25°
C1 40 25 85	40	85	42.5	21	25/20	35	30	32.5	48	-	85	12.5	30	-
C1 50 32 100	50	100	50	26	32/25	42	35	35	60	-	100	16	40	-
C1 60 32 125	60	125	62.5	33	32/25	46	42.5	42.5	62.5	-	125	16	40	-

LEFT HAND -AXIAL

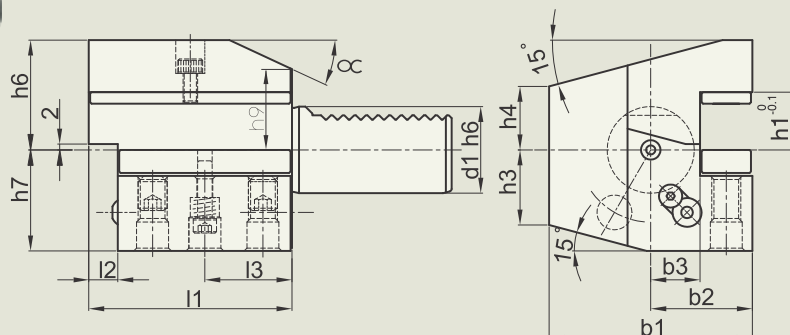
FORM C2



CODE	d1	b4	b5	b6	h1	h3	h4	h5	h6	h8	l1	l2	l3	α
C2 16 12 44	16	43	24	13	12	15	15	20	22	19	44	5	20	30°
C2 20 16 55	20	65	40	26	16/12	19	19	25	30	23	50	7	30	30°
C2 25 16 55	25	58	33	19	16/12	22.5	22.5	25	30	25	55	7	20	30°
C2 30 20 70	30	76	41	23	20/16	26	22	28	38	30	70	10	30	25°
C2 40 25 85	40	90	47.5	25.5	25/20	35	30	32.5	48	-	85	12.5	30	-
C2 50 32 100	50	105	55	30.5	32/25	42	35	35	60	-	100	16	40	-
C2 60 32 125	50	125	62.5	33	32/25	46	42.5	42.5	62.5	-	125	16	40	-

RIGHT HAND OVER HEAD-AXIAL

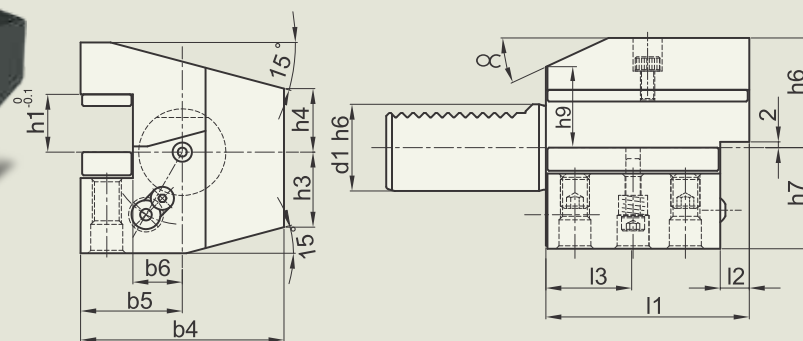
FORM C3



CODE	d_1	b_1	b_2	b_3	h_1	h_3	h_4	h_6	h_7	h_9	l_1	l_2	l_3	α
C3 16 12 44	16	43	24	13	12	15	15	22	20	19	44	5	20	30°
C3 20 16 55	20	52	27	13	16/12	19	19	30	25	23	55	7	30	30°
C3 25 16 55	25	58	33	19	16/12	22.5	22.5	30	25	25	55	7	20	30°
C3 30 20 70	30	70	35	17	20/16	26	22	38	35	28	70	10	30	25°
C3 40 25 85	40	85	42.5	21	25/20	35	30	48	42.5	-	85	12.5	30	-
C3 50 32 100	50	100	50	26	32/25	42	35	60	50	-	100	16	40	-
C3 60 32 125	60	125	62.5	33	32/25	46	42.5	62.5	62.5	-	125	16	40	-

LEFT HAND OVER HEAD -AXIAL

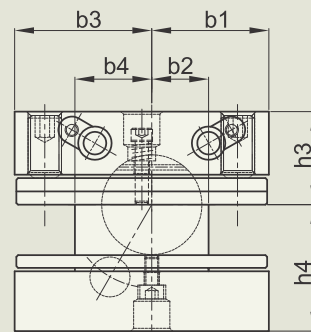
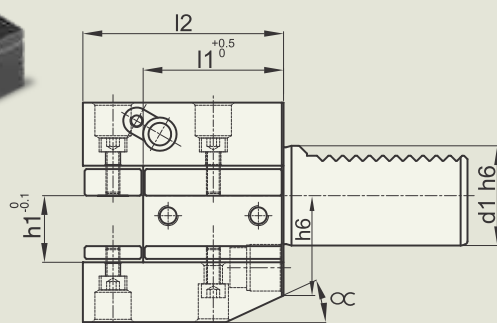
FORM C4



CODE	d_1	b_4	b_5	b_6	h_1	h_3	h_4	h_6	h_7	h_9	l_1	l_2	l_3	α
C4 16 12 44	16	43	24	13	12	15	15	22	20	19	44	5	20	30°
C4 20 16 55	20	65	40	26	16/12	19	19	30	25	23	55	7	30	30°
C4 25 16 55	25	58	33	19	16/12	22.5	22.5	30	25	25	55	7	20	30°
C4 30 20 70	30	76	41	23	20/16	26	22	38	35	28	70	10	30	25°
C4 40 25 85	40	90	47.5	25.5	25/20	35	30	48	42.5	-	85	12.5	30	-
C4 50 32 100	50	105	55	30.5	32/25	42	35	60	50	-	100	16	40	-
C4 60 32 125	60	125	62.5	33	32/25	46	42.5	62.5	62.5	-	125	16	40	-

MULTIPLE SQUARE SEATS HOLDER

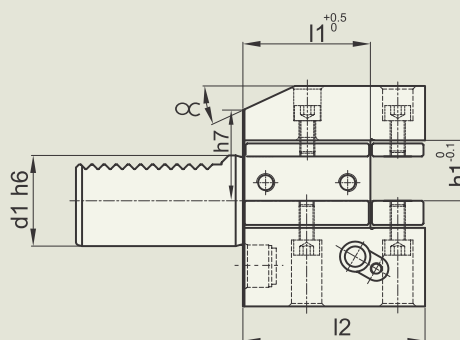
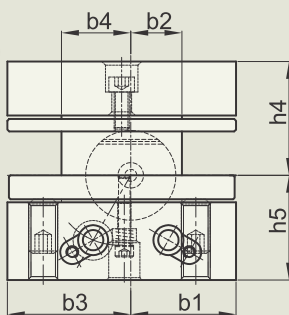
FORM D1



CODE	d1	b1	b2	b3	b4	h1	h3	h4	h6	l1	l2	α
D1 25 16 48	25	33	19	33	19	16/12	25	30	25	34	48	30°
D1 30 20 60	30	35	17	41	23	20/16	28	38	30	42	60	25°
D1 40 25 72	40	42.5	21	47.5	25.5	25/20	32.5	48	-	50	72	-
D1 50 32 85	50	50	26	55	30.5	32/25	35	60	-	60	85	-
D1 60 32 110	60	57.5	33	57.5	33	32/25	42.5	62.5	-	85	110	-

MULTIPLE SQUARE SEATS OVERHEAD

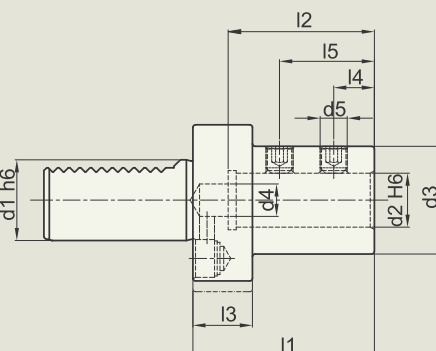
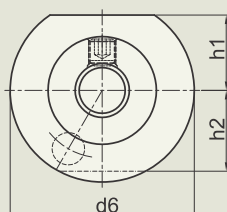
FORM D2



CODE	d1	b1	b2	b3	b4	h1	h4	h5	h7	l1	l2	α
D2 25 16 48	25	33	19	33	19	16/12	30	25	25	34	48	30°
D2 30 20 60	30	35	17	41	23	20/16	38	35	28	42	60	25°
D2 40 25 72	40	42.5	21	47.5	25.5	25/20	48	42.5	-	50	72	-
D2 50 32 85	50	50	26	55	30.5	32/25	60	50	-	60	85	-
D2 60 32 110	60	57.5	33	57.5	33	32/25	62.5	62.5	-	85	110	-

THROUGH COOLANT BORING BAR HOLDERS

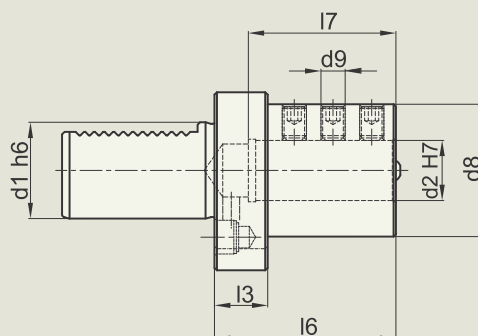
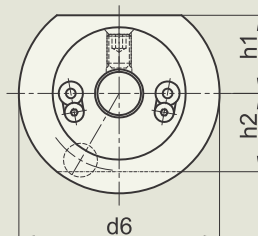
FORM E1



CODE	d1	d2	d3	d4	d5	d6	h1	h2	l1	l2	l3	l4	l5
E1 20x16	20	16	36	12	M10x1	50	-	23	64	51	18	15	35
E1 20x20	20	20	40	12	M10x1	50	-	23	67	54	18	15	35
E1 20x25	20	25	45	17	M12x1	50	-	23	71	59	18	17	40
E1 25x16	25	16	40	12	M10x1	58	25	25	67	54	18	15	35
E1 25x20	25	20	40	12	M10x1	58	25	25	67	54	18	15	35
E1 25x25	25	25	45	17	M12x1	58	25	25	71	59	18	17	40
E1 30x16	30	16	36	12	M10x1	68	28	30	64	51	22	15	35
E1 30x20	30	20	40	12	M10x1	68	28	30	67	54	22	15	35
E1 30x25	30	25	45	17	M12x1	68	28	30	71	59	22	17	40
E1 30x32	30	32	52	24	M12x1	68	28	30	75	63	22	17	44
E1 30x40	30	40	65	32	M16x1	68	28	30	90	73	22	22	50
E1 40x16	40	16	36	12	M10x1	83	32.5	-	64	51	22	15	35
E1 40x20	40	20	40	12	M10x1	83	32.5	-	67	54	22	15	35
E1 40x25	40	25	45	17	M12x1	83	32.5	-	75	59	22	17	40
E1 40x32	40	32	52	24	M12x1	83	32.5	-	75	63	22	17	44
E1 40x40	40	40	65	32	M16x1	83	32.5	-	90	73	22	22	50
E1 50x20	50	20	40	12	M10x1	98	35	-	67	54	30	15	35
E1 50x25	50	25	45	17	M12x1	98	35	-	80	59	30	17	40
E1 50x32	50	32	52	24	M12x1	98	35	-	80	63	30	17	44
E1 50x40	50	40	65	32	M16x1	98	35	-	90	73	30	22	50
E1 50x50	50	50	75	42	M16x1	98	35	-	100	83	30	24	60
E1 60x20	60	20	40	12	M10x1	123	42.5	-	80	54	30	15	35
E1 60x25	60	25	45	17	M12x1	123	42.5	-	80	59	30	17	40
E1 60x32	60	32	52	24	M12x1	123	42.5	-	80	63	30	17	44
E1 60x40	60	40	65	32	M16x1	123	42.5	-	90	73	30	22	50
E1 60x50	60	50	75	42	M16x1	123	42.5	-	100	83	30	24	60

BORING BAR HOLDERS

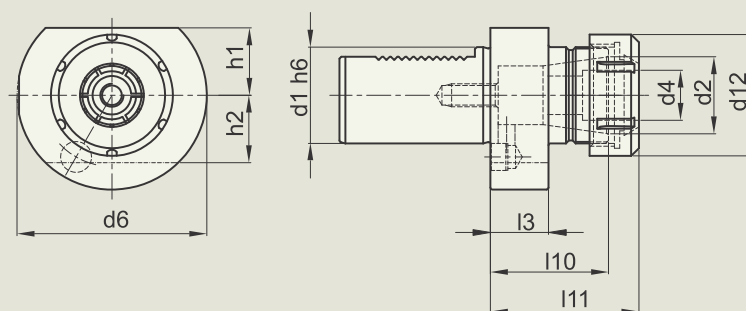
FORM E2



CODE	d1	d2	d6	d8	d9	h1	h2	l3	l6	l7
E2 16x6	16	6	40	32	M6	18	18	13	44	34
E2 16x8	16	8	40	32	M6	18	18	13	44	34
E2 16x10	16	10	40	32	M6	18	18	13	44	34
E2 16x12	16	12	40	40	M8	18	18	-	44	34
E2 16x16	16	16	40	40	M8	18	18	-	44	34
E2 20x8	20	8	50	40	M6	-	23	18	50	41
E2 20x10	20	10	50	40	M6	-	23	18	50	41
E2 20x12	20	12	50	40	M8	-	23	18	50	41
E2 20x16	20	16	50	40	M8	-	23	18	50	41
E2 20x20	20	20	50	50	M8	-	23	-	50	41
E2 20x25	20	25	50	50	M8	-	23	-	60	51
E2 25x8	25	8	58	40	M6	25	25	18	50	41
E2 25x10	25	10	58	40	M6	25	25	18	50	41
E2 25x12	25	12	58	40	M8	25	25	18	50	41
E2 25x16	25	16	58	40	M8	25	25	18	50	41
E2 25x20	25	20	58	58	M8	25	25	18	50	41
E2 25x25	25	25	58	58	M8	25	25	18	60	51
E2 30x8	30	8	68	55	M6	28	30	22	60	51
E2 30x10	30	10	68	55	M6	28	30	22	60	51
E2 30x12	30	12	68	55	M8	28	30	22	60	51
E2 30x16	30	16	68	55	M8	28	30	22	60	51
E2 30x20	30	20	68	55	M8	28	30	22	60	51
E2 30x25	30	25	68	55	M8	28	30	22	60	51
E2 30x32	30	32	68	68	M8	28	30	-	75	61
E2 40x8	40	8	83	55	M6	32.5	-	22	75	61
E2 40x10	40	10	83	55	M8	32.5	-	22	75	61
E2 40x12	40	12	83	55	M8	32.5	-	22	75	61
E2 40x16	40	16	83	55	M10	32.5	-	22	75	61
E2 40x20	40	20	83	55	M10	32.5	-	22	75	61
E2 40x25	40	25	83	55	M10	32.5	-	22	75	61
E2 40x32	40	32	83	83	M10	32.5	-	-	75	61
E2 40x40	40	40	83	83	M10	32.5	-	-	90	76
E2 50x16	50	16	98	68	M10	35	-	30	90	76
E2 50x20	50	20	98	68	M12	35	-	30	90	76
E2 50x25	50	25	98	68	M12	35	-	30	90	76
E2 50x32	50	32	98	68	M12	35	-	30	90	76
E2 50x40	50	40	98	98	M12	35	-	-	90	76
E2 50x50	50	50	98	98	M12	35	-	-	100	86
E2 60x16	60	16	123	68	M10	42.5	-	30	90	76
E2 60x20	60	20	123	68	M12	42.5	-	30	90	76
E2 60x25	60	25	123	68	M12	42.5	-	30	90	76
E2 60x32	60	32	123	68	M12	42.5	-	30	90	76
E2 60x40	60	40	123	98	M12	42.5	-	30	90	76
E2 60x50	60	50	123	98	M12	42.5	-	30	100	86

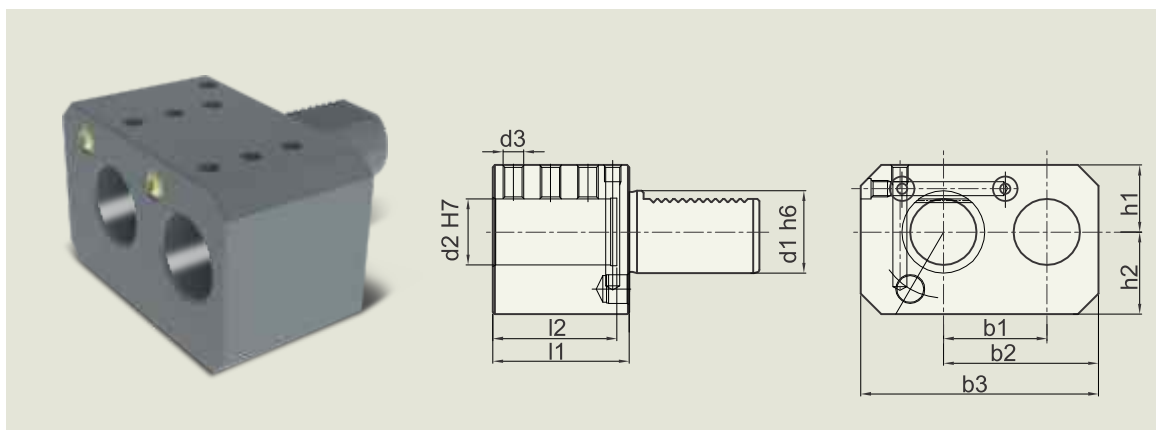
COLLET CHUCKS AS PER DIN 6499

FORM E4



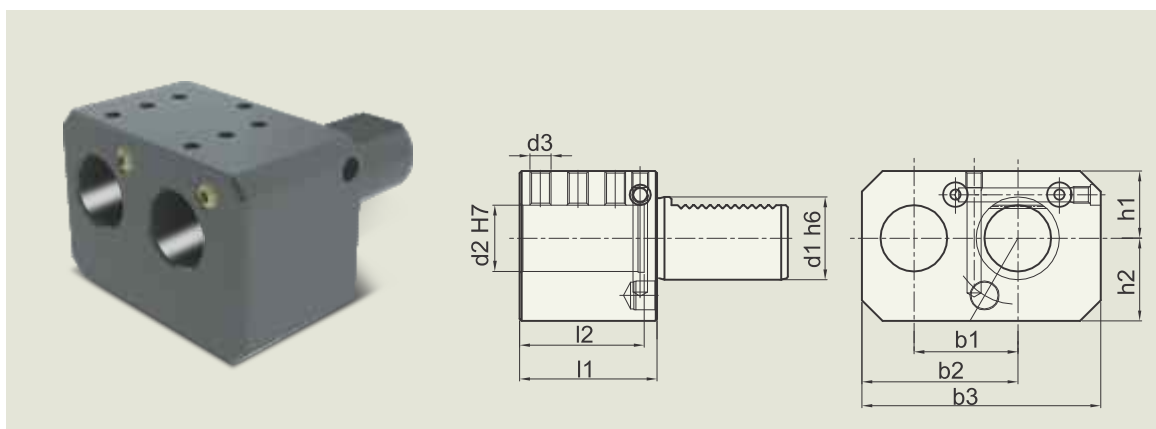
CODE	d1	d2	d4	d6	d12	h1	h2	l3	l10	l11
E4 16x16	16	16	0.5-10	40	32	18	-	13	27.5	38
E4 16x20	16	20	1-13	40	35	18	18	13	32.5	44
E4 20x16	20	16	0.5-10	50	32	-	23	18	32.5	44
E4 20x20	20	20	1-13	50	35	-	23	18	32.5	44
E4 20x25	20	25	1-16	50	42	-	23	18	38	50
E4 25x20	25	20	1-13	58	35	25	25	18	32.5	44
E4 25x25	25	25	1-16	58	42	25	25	18	45	57
E4 25x32	25	32	2-20	58	50	25	25	18	49.5	62
E4 30x25	30	25	1-16	68	42	28	30	22	45	57
E4 30x32	30	32	2-20	68	50	28	30	22	49.5	62
E4 30x40	30	40	3-26	68	63	28	30	22	56	70
E4 40x25	40	25	1-16	83	42	32.5	-	22	49.5	62
E4 40x32	40	32	2-20	83	50	32.5	-	22	49.5	62
E4 40x40	40	40	3-26	83	63	32.5	-	22	61	75
E4 50x32	50	32	2-20	98	50	35	-	30	57.5	75
E4 50x40	50	40	3-26	98	63	35	-	30	61	75
E4 60x40	60	40	3-26	123	63	42.5	-	30	61	75

FORM E7 (DOUBLE BORING BAR HOLDER - RIGHT)



CODE	d1	d2	h1	h2	l1	l2	b1	b2	b3	d3
E7 20 16	20	16	25	25	45	42	32	51	76	M8
E7 20 20	20	20	25	25	45	42	32	51	76	M8
E7 30 25	30	25	28	32	56	52	45	65	95	M8
E7 30 32	30	32	28	32	66	60	50	75	110	M8
E7 40 32	40	32	32.5	40	66	60	50	75	115	M10
E7 40 40	40	40	32.5	40	90	80	50	75	115	M10
E7 50 32	50	32	32.5	47.5	66	60	50	75	115	M12
E7 50 40	50	40	32.5	47.5	90	80	50	75	115	M12
E7 50 50	50	50	35	49	115	100	68	103	152	M12

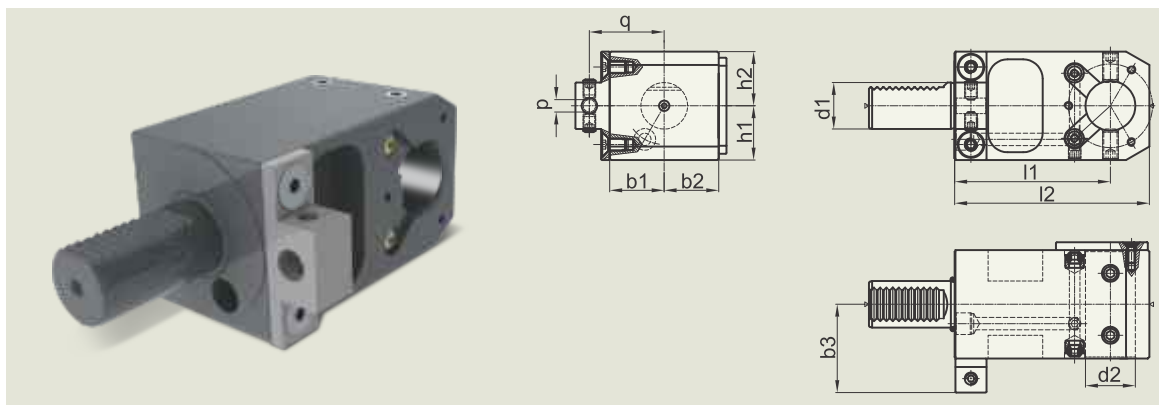
FORM E8 (DOUBLE BORING BAR HOLDER - LEFT)



CODE	d1	d2	h1	h2	l1	l2	b1	b2	b3	d3
E8 20 16	20	16	25	25	45	42	32	51	76	M8
E8 20 20	20	20	25	25	45	42	32	51	76	M8
E8 30 25	30	25	28	32	56	52	50	65	95	M8
E8 30 32	30	32	28	32	66	60	50	75	110	M8
E8 40 32	40	32	32.5	40	66	60	50	75	115	M10
E8 40 40	40	40	32.5	40	90	80	50	75	115	M10
E8 50 32	50	32	32.5	47.5	66	60	50	75	115	M12
E8 50 40	50	40	32.5	47.5	90	80	50	75	115	M12
E8 50 50	50	50	35	49	115	100	68	103	152	M12

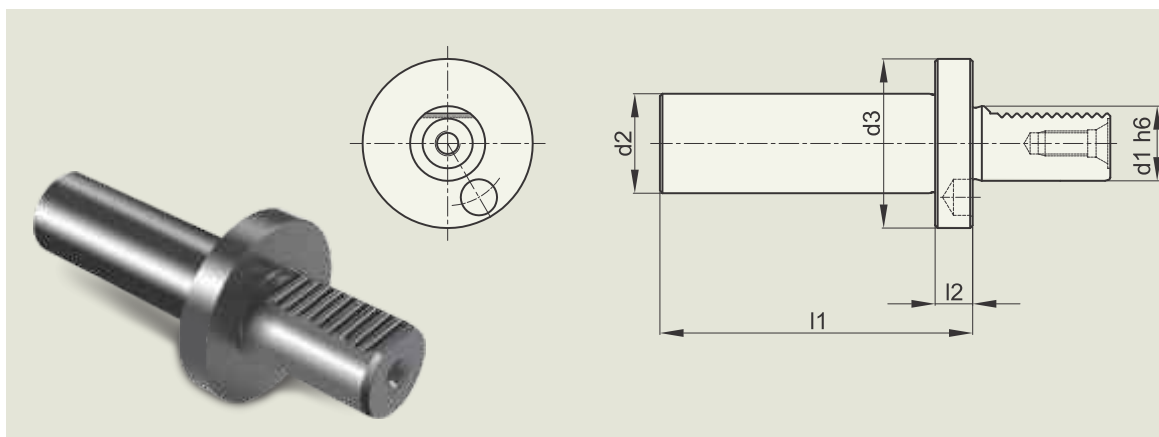
* Customised design can be supplied upon request

RBTH (RADIAL BORING TOOL HOLDER FOR RADIAL TOOL DISC)



CODE	d1	d2	h1	h2	b1	b2	b3	l1	l2	p	q
RBTH 25 25 CH-75	25	25	32	32	35	35	57	75	100	8	40
RBTH 25 32 CH-75	25	32	32	32	35	35	57	75	100	8	40
RBTH 30 25 CH-85	30	25	35	35	35	35	57	85	110	8	48
RBTH 30 32 CH-85	30	32	35	35	35	35	57	85	110	8	48
RBTH 30 40 CH-85	30	40	35	35	35	35	57	85	110	8	48
RBTH 30 25 CH-100	30	25	35	35	35	35	57	100	125	8	48
RBTH 30 32 CH-100	30	32	35	35	35	35	57	100	125	8	48
RBTH 30 40 CH-100	30	40	35	35	35	35	57	100	125	8	48
RBTH 40 25 CH-100	40	25	43	43	45	45	65	100	130	10	56
RBTH 40 32 CH-100	40	32	43	43	45	45	65	100	130	10	56
RBTH 40 40 CH-100	40	40	43	43	45	45	65	100	130	10	56

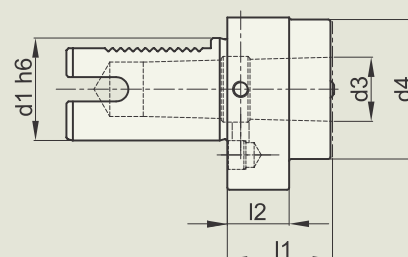
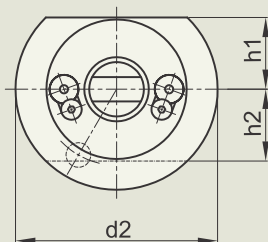
TEST MANDREL



CODE	d1	d2	d3	l1	l2
Y 16	16	30	40	125	15
Y 20	20	40	50	125	15
Y 25	25	40	58	125	15
Y 30	30	40	68	125	15
Y 40	40	40	83	125	15
Y 50	50	40	98	125	15
Y 60	60	40	125	125	15

MORSE TAPER HOLDERS

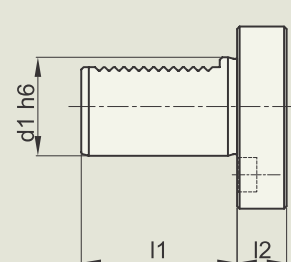
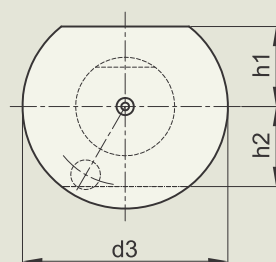
FORM F



CODE	d1	d2	MT	d3	d4	h1	h2	l1	l2
F 20 MT 1	20	50	1	12.065	-	-	23	23	-
F 25 MT 1	25	58	1	12.065	-	25	25	23	-
F 25 MT 2	25	58	2	17.780	-	25	25	27	-
F 30 MT 1	30	68	1	12.065	-	28	30	27	-
F 30 MT 2	30	68	2	17.780	-	28	30	27	-
F 30 MT 3	30	68	3	23.825	-	28	30	73	-
F 40 MT 1	40	83	1	12.065	55	32.5	-	36	22
F 40 MT 2	40	83	2	17.780	55	32.5	-	36	22
F 40 MT 3	40	83	3	23.825	58	32.5	-	36	22
F 40 MT 4	40	83	4	31.267	68	32.5	-	80	22
F 50 MT 2	50	98	2	17.780	55	35	-	36	30
F 50 MT 3	50	98	3	23.825	58	35	-	36	30
F 50 MT 4	50	98	4	31.267	68	35	-	50	30
F 60 MT 3	60	123	3	23.825	58	42.5	-	36	30
F 60 MT 4	60	123	4	31.267	68	42.5	-	50	30
F 60 MT 5	60	123	5	44.399	98	42.5	-	63	30

PLUG

FORM Z2

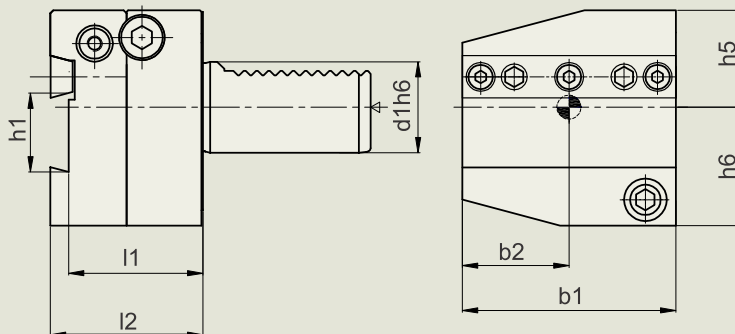


CODE		d1	d3	h1	h2	l1	l2
Z2 16S	-	16	40	18	18	32	13
Z2 20S	-	20	50	23	23	40	16
Z2 25S	Z2 25P	25	58	25	25	48	16
Z2 30S	Z2 30P	30	68	28	30	55	16
Z2 40S	Z2 40P	40	83	32.5	-	63	20
Z2 50S	Z2 50P	50	98	35	-	78	20
Z2 60S	-	60	123	42.5	-	94	20

* 'S' Stands for Steel Plug
'P' Stands for Plastic Plug

CUTOFF TOOL HOLDER

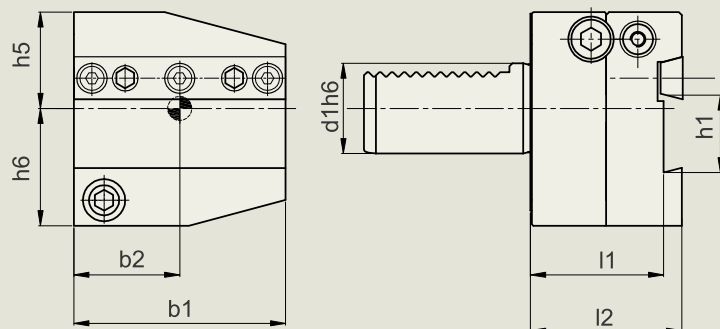
AR



CODE	d1	b1	b2	h1	h5	h6	l1	l2
AR20 26	20	60	30	26	28	36	44	50
AR25 26	25	60	30	26	28	36	44	50
AR30 26	30	70	35	26	32	39	44	50
AR30 32	30	70	35	32	32	39	44	50
AR40 26	40	85	42.5	26	43	41.5	44	50
AR40 32	40	85	42.5	32	43	41.5	44	50
AR50 26	50	100	50	26	43	45	44	50
AR50 32	50	100	50	32	43	45	44	50
AR60 26	60	125	62.5	26	48	55	44	50
AR60 32	60	125	62.5	32	48	55	44	50

CUTOFF TOOL HOLDER

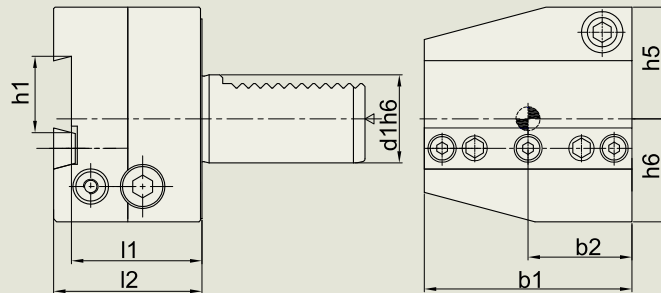
AL



CODE	d1	b1	b2	h1	h5	h6	l1	l2
AL20 26	20	60	30	26	28	36	44	50
AL25 26	25	60	30	26	28	36	44	50
AL30 26	30	70	35	26	32	39	44	50
AL30 32	30	70	35	32	32	39	44	50
AL40 26	40	85	42.5	26	43	41.5	44	50
AL40 32	40	85	42.5	32	43	41.5	44	50
AL50 26	50	100	50	26	43	45	44	50
AL50 32	50	100	50	32	43	45	44	50
AL60 26	60	125	62.5	26	48	55	44	50
AL60 32	60	125	62.5	32	48	55	44	50

CUTOFF TOOL HOLDER

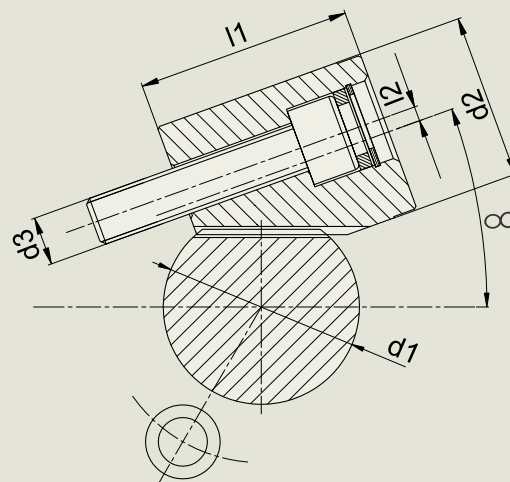
ARU



CODE	d1	b1	b2	h1	h5	h6	l1	l2
ARU25 26	25	60	30	26	36	28	44	50
ARU30 26	30	70	35	26	38	35	44	50
ARU30 32	30	70	35	32	38	35	44	50
ARU40 26	40	85	42.5	26	43	41.5	44	50
ARU40 32	40	85	42.5	32	43	41.5	44	50
ARU50 26	50	100	50	26	43	45	44	50
ARU50 32	50	100	50	32	43	45	44	50
ARU60 26	60	125	62.5	26	48	55	44	50
ARU60 32	60	125	62.5	32	48	55	44	50

LOCKING CLAMPS

VDI CLAMP

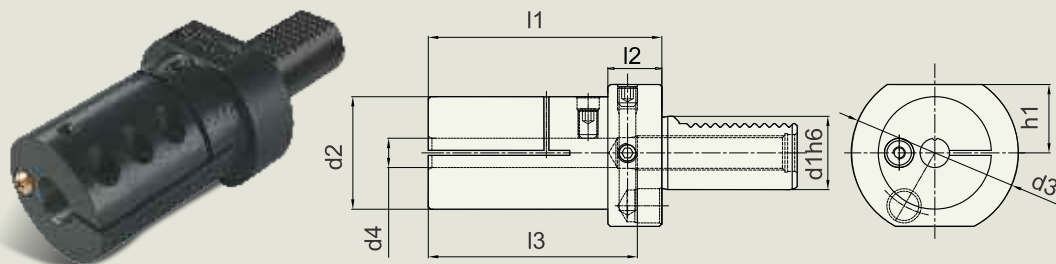


CODE	d1	d2	l1	l2	d3	α
VEC 20	16/20/25	20	25	2	M6	20°
VEC 22	30	22	34	2	M8	20°
VEC 26	30	26	32	3	M8	20°
VEC 34	40	34	44	3	M10	20°
VEC 44	50/60	44	50	3	M12	25°

* Locking clamps can be supply as per customers drawing.

DAMPENED TOOL HOLDER

E2-S



CODE	d1	d2	d3	d4	h1	l1	l2	l3
E2-S-30x10	30	46	68	10	28	88	22	65
E2-S-30x12	30	46	68	12	28	88	22	70
E2-S-30x16	30	50	68	16	28	88	22	70
E2-S-30x20	30	54	68	20	28	96	22	80
E2-S-30x25	30	58	68	25	28	112	22	100
E2-S-30x32	30	63	68	32	28	142	22	128
E2-S-30x40	30	73	68	40	28	174	22	150
E2-S-40x10	40	46	83	10	32.5	88	22	65
E2-S-40x12	40	46	83	12	32.5	95	22	85
E2-S-40x16	40	50	83	16	32.5	88	22	70
E2-S-40x20	40	54	83	20	32.5	96	22	80
E2-S-40x25	40	58	83	25	32.5	112	22	100
E2-S-40x32	40	63	83	32	32.5	142	22	128
E2-S-40x40	40	73	83	40	32.5	174	22	150
E2-S-50x16	50	50	98	16	35	103	30	85
E2-S-50x20	50	54	98	20	35	103	30	89
E2-S-50x25	50	59	98	25	35	120	30	106
E2-S-50x32	50	65	98	32	35	150	30	128
E2-S-50x40	50	73	98	40	35	182	30	160
E2-S-50x50	50	83	98	50	35	182	30	160
E2-S-60x25	60	59	123	25	42.5	120	30	106
E2-S-60x32	60	65	123	32	42.5	150	30	128
E2-S-60x40	60	73	123	40	42.5	182	30	160
E2-S-60x50	60	83	123	50	42.5	202	30	180

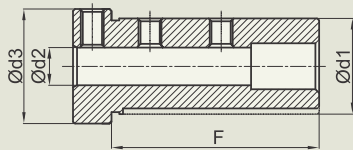
REDUCTION SLEEVES

FOR VDI TOOL HOLDER E1 & E2
BORING BAR HOLDER ONLY

SPHOORTI

TYPE - A

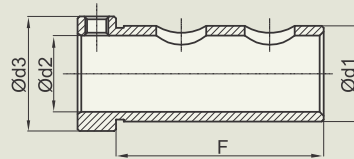
(E1 & E2 VARIETIES FOR SMALLER TOOLS)



CODE	Ød1	Ød2	F	SUITS FOR
SM E 20 08	20	08	39	E1 20x20
SM E 20 10		10		E1 30x20
				E1 40x20
				E1 50x20
				E2 20x20
				E2 30x20
				E2 40x20
				E2 50x20
SM E 25 08	25	08	50	E2 20x25
SM E 25 10		10		E2 30x25
				E2 40x25
				E2 50x25
SM E 25 12		12		E1 20x25
				E1 30x25
				E1 40x25
				E1 50x25
SM E 32 08	32	08	59	E2 30x32
SM E 32 10		10		E2 40x32
SM E 32 12		12		E2 50x32
SM E 32 16		16		E1 30x32
				E1 40x32
				E1 50x32
SM E 40 08	40	08	69	E2 40x40
SM E 40 10		10		E2 50x40
SM E 40 12		12		E1 30x40
SM E 40 16		16		E1 40x40
SM E 40 20		20		E1 50x40
SM E 50 08	50	08	80	E2 40x50
SM E 50 10		10		E2 50x50
SM E 50 12		12		E2 60x50
SM E 50 16		16		E1 40x50
				E1 50x50
				E1 60x50
SM E 50 20		20		

TYPE - B

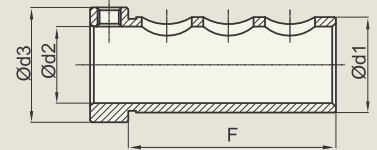
(E1 VARIETIES FOR BIGGER TOOLS)



CODE	Ød1	Ød2	F	SUITS FOR
SM E1 20 12	20	12	52	E1 20x20
				E1 30x20
				E1 40x20
SM E1 20 16		16		E1 50x20
SM E1 25 16	25	16	50	E1 20x25
				E1 30x25
SM E1 25 20		20		E1 40x25
				E1 50x25
SM E1 32 20	32	20	59	E1 30x32
				E1 40x32
SM E1 32 25		25		E1 50x32
SM E1 40 25	40	25	69	E1 30x40
				E1 40x40
SM E1 40 32		32		E1 50x40
SM E1 50 25	50	25	80	E1 40x50
SM E1 50 32		32		E1 50x50
SM E1 50 40		40		E1 60x50

TYPE - C

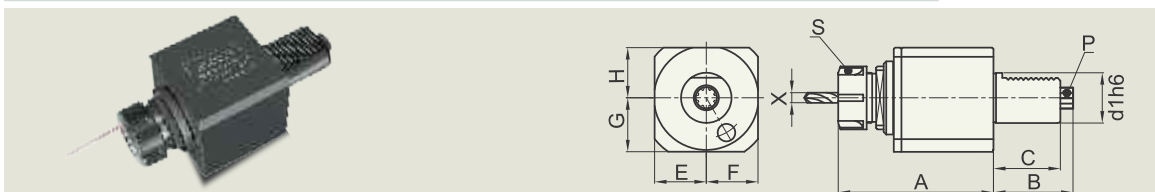
(E2 VARIETIES FOR BIGGER TOOLS)



CODE	Ød1	Ød2	F	SUITS FOR
SM E2 20 12 L39	20	12	39	E2 20x20
				E2 30x20
SM E2 20 12 L52			52	E2 40x20
				E2 50x20
SM E2 20 16 L39	20	16	39	E2 20x20
				E2 30x20
SM E2 20 16 L52			52	E2 40x20
				E2 50x20
SM E2 25 16	25	16	50	E2 20x25
				E2 30x25
SM E2 25 20		20		E2 40x25
				E2 50x25
SM E2 32 20	32	20	59	E2 30x32
				E2 40x32
SM E2 32 25		25		E2 50x32
SM E2 40 25	40	25	69	E2 40x40
				E2 50x40
SM E2 40 32		32		
SM E2 50 25	50	25	80	E2 40x50
SM E2 50 32		32		E2 50x50
SM E2 50 40		40		E2 60x50

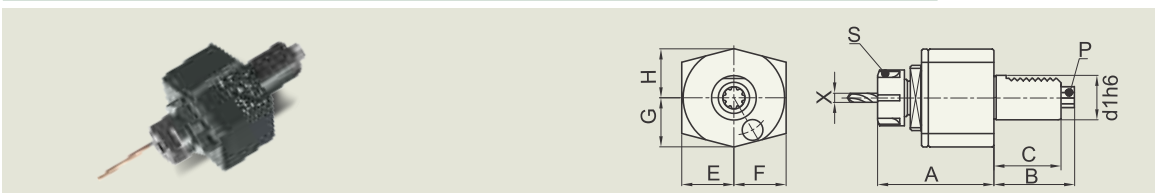
* Made out of medium carbon steel and toughened to 20± 2 HRC.

AXIAL TOOL HEAD



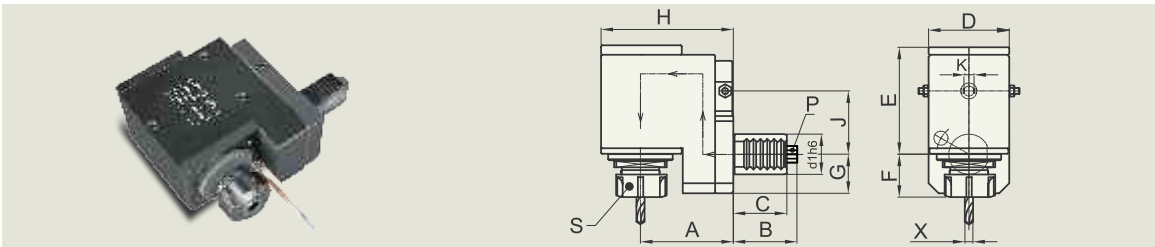
CODE	d1	A	B	C	E	F	G	H	X	(DIN 6499) S	P	TOOL DISC TYPE
ATH 30-ER20-82	30	94	55	45	30	30	30	28	2-13	ER20	B15x12x8	DRIVEN TOOL DISC VDI Ø30 BORE
ATH 30-ER25-82	30	99	55	45	30	30	30	28	2-16	ER25	B15x12x8	DRIVEN TOOL DISC VDI Ø30 BORE
ATH 40-ER32-82	40	123	63	53	41	41	43	40	3-20	ER32	B17x14x9	DRIVEN TOOL DISC VDI Ø40 BORE

AXIAL TOOL HEAD SHORT



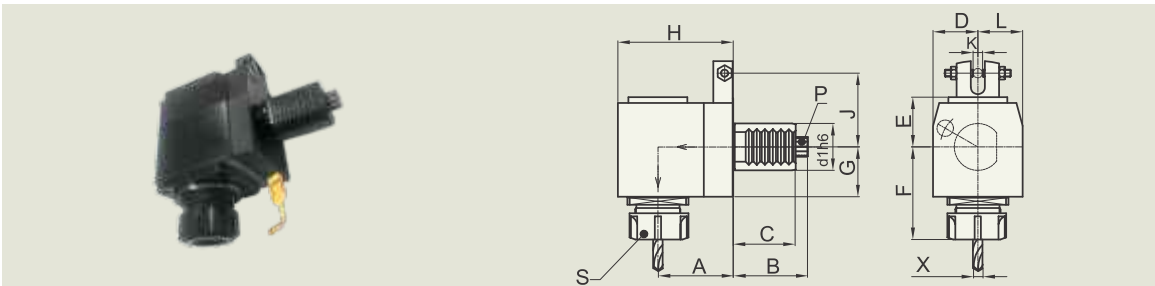
CODE	d1	A	B	C	E	F	G	H	X	(DIN 6499) S	P	TOOL DISC TYPE
ATHS 30-ER20-82	30	78	55	45	35	35	33	33	2-13	ER20	B15X12X8	DRIVEN TOOL DISC VDI Ø30 BORE
ATHS 40-ER25-82	40	85	63	53	42.5	42.5	38	38	2-16	ER25	B17X14X9	DRIVEN TOOL DISC VDI Ø40 BORE

RADIAL TOOL HEAD



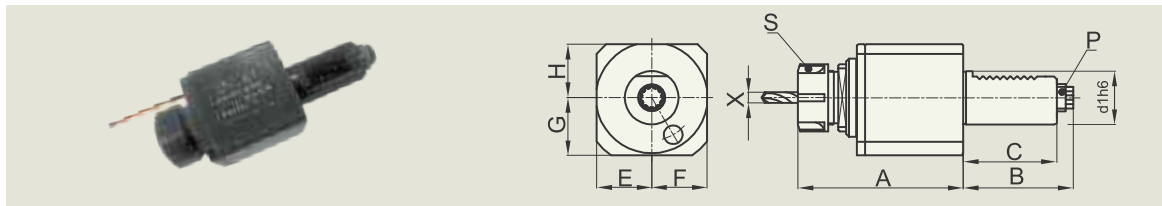
CODE	d1	A	B	C	D	E	F	G	H	J	K	X	(DIN 6499) S	P	TOOL DISC TYPE
RTH 30-ER25-82	30	84	55	45	63	97	49	33	119	40	8	2-16	ER25	B15X12X8	DRIVEN TOOL DISC VDI Ø30 BORE
RTH 40-ER32-82	40	91	63	53	80	109	43	43	131	63	10	3-20	ER32	B17X14X9	DRIVEN TOOL DISC VDI Ø40 BORE

RADIAL TOOL HEAD - DIRECT DRIVE



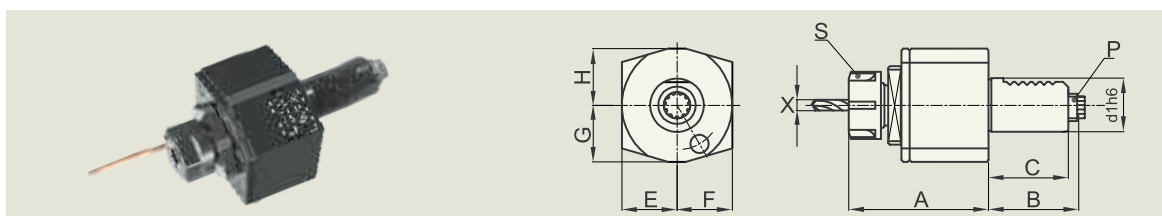
CODE	d1	A	B	C	D	E	F	G	H	J	K	L	X	(DIN 6499) S	P	TOOL DISC TYPE
RTHD 30-ER25-82	30	55	55	45	33	38	75	41.5	85	40	8	33	2-16	ER25	B15X12X8	DRIVEN TOOL DISC VDI Ø30 BORE
RTHD 40-ER32-82	40	64	63	53	38	42.5	89	45	98	63	10	38	3-20	ER32	B17X14X9	DRIVEN TOOL DISC VDI Ø40 BORE

AXIAL TOOL HEAD



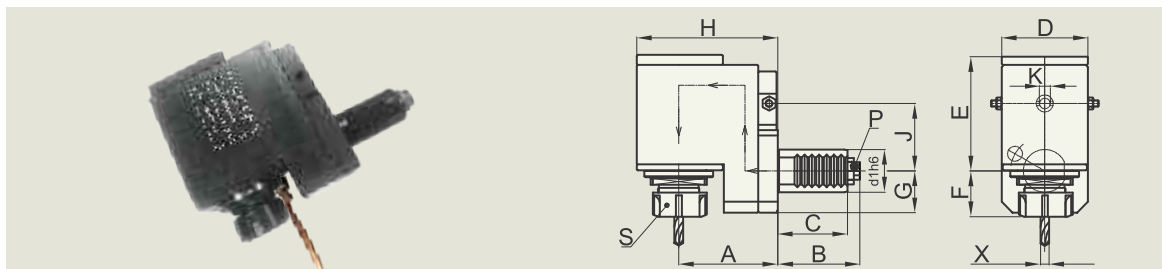
CODE	d1	A	B	C	E	F	G	H	X	S (DIN 6499)	P	TOOL DISC TYPE
ATH 20-ER20-80	20	94	51	40	30	30	27	26	2-13	ER20	W11X0.8X30°X12	DRIVEN TOOL DISC VDI Ø20 BORE
ATH 30-ER20-80	30	94	67	55	30	30	30	28	2-13	ER20	W16X0.8X30°X18	DRIVEN TOOL DISC VDI Ø30 BORE
ATH 30-ER25-80	30	98.5	67	55	30	30	30	28	2-16	ER25	W16X0.8X30°X18	DRIVEN TOOL DISC VDI Ø30 BORE
ATH 40-ER32-80	40	123	75	63	41	41	43	40	3-20	ER32	W20X0.8X30°X24	DRIVEN TOOL DISC VDI Ø40 BORE

AXIAL TOOL HEAD SHORT



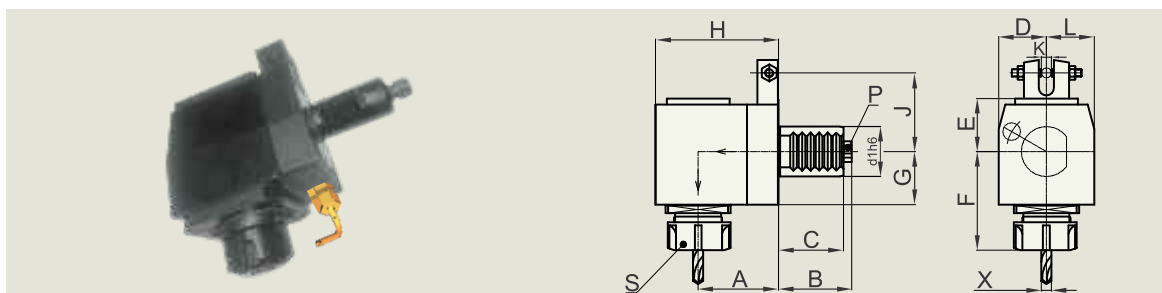
CODE	d1	A	B	C	E	F	G	H	X	S (DIN 6499)	P	TOOL DISC TYPE
ATHS 20-ER20-80	20	76	51	40	31	31	35	28	2-10	ER16	W11X0.8X30°X12	DRIVEN TOOL DISC VDI Ø20 BORE

RADIAL TOOL HEAD



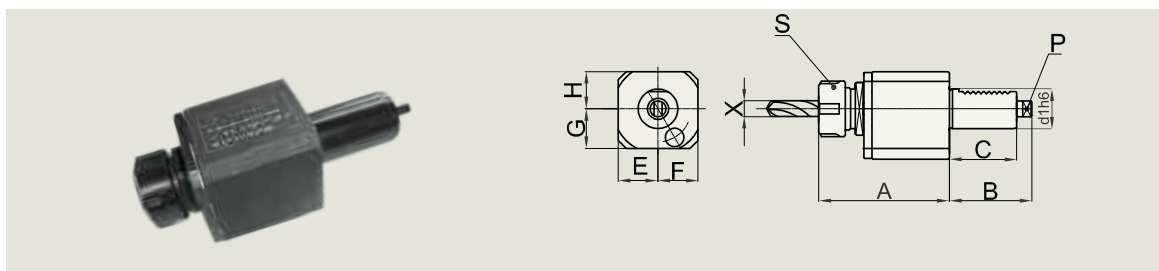
CODE	d1	A	B	C	D	E	F	G	H	J	K	X	S (DIN 6499)	P	TOOL DISC TYPE
RTH 30-ER25-80	30	84	67	55	63	97	49	33	119	48	8	2-16	ER25	W16X0.8X30°X18	DRIVEN TOOL DISC VDI Ø30 BORE
RTH 40-ER32-80	40	91	75	63	80	109	43	43	131	56	10	3-20	ER32	W20X0.8X30°X24	DRIVEN TOOL DISC VDI Ø40 BORE

RADIAL TOOL HEAD - DIRECT DRIVE



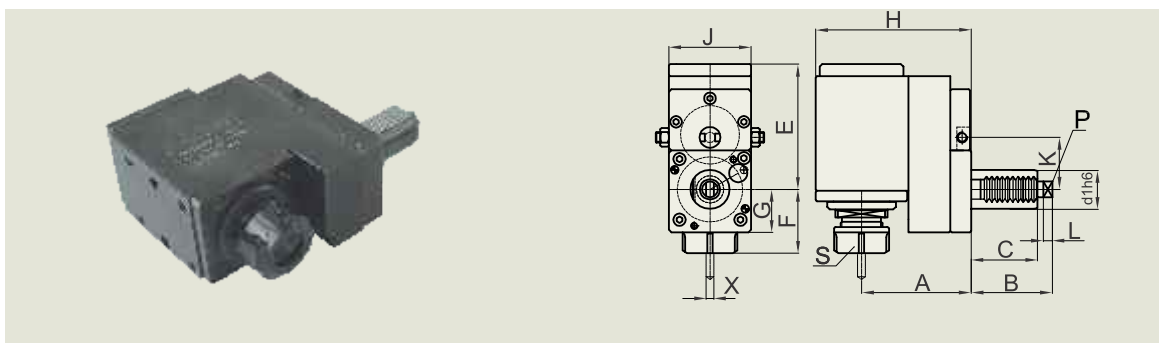
CODE	d1	A	B	C	D	E	F	G	H	J	K	L	X	S (DIN 6499)	P	TOOL DISC TYPE
RTHD 20-ER16-80	20	45	51	40	29	35.5	65.5	32.5	71	40	8	29	2-10	ER16	W10X0.8X30°X11	DRIVEN TOOL DISC VDI Ø20 BORE

AXIAL TOOL HEAD - DIN 1809



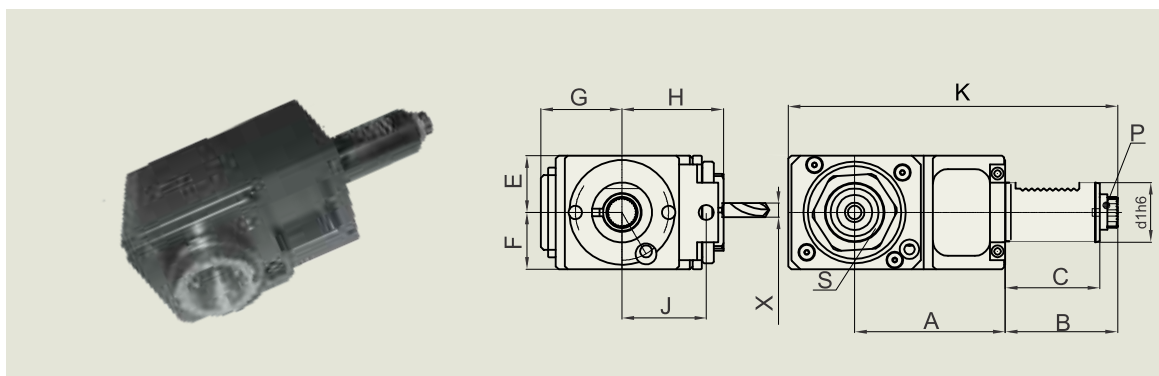
CODE	d1	A	B	C	E	F	G	H	X	S (DIN 6499)	P	TOOL DISC TYPE
ATH 30-ER20-09	30	94	62	50.5	30	30	30	28	2-13	ER20	6x12	DRIVEN TOOL DISC VDI Ø30 BORE
ATH 30-ER25-09	30	99	62	50.5	30	30	30	28	2-16	ER25	6x12	DRIVEN TOOL DISC VDI Ø30 BORE
ATH 40-ER32-09	40	123	72	56	41	41	43	40	3-20	ER32	8x14	DRIVEN TOOL DISC VDI Ø40 BORE

RADIAL TOOL HEAD - DIN 1809



CODE	d1	A	B	C	E	F	G	H	J	K	L	X	S (DIN 6499)	P	TOOL DISC TYPE
RTH 30-ER25-09	30	84	62	50.5	96.5	49	33	119	63	40	7	2-16	ER25	6x12	DRIVEN TOOL DISC VDI Ø30 BORE
RTH 40-ER32-09	40	91	72	56	106.5	43	43	131	80	63	7	3-20	ER32	8x14	DRIVEN TOOL DISC VDI Ø40 BORE

RADIAL TOOL HEAD AS PER DIN 5480 INT NUT

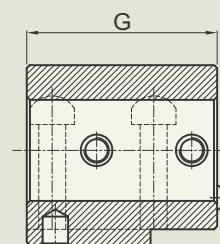
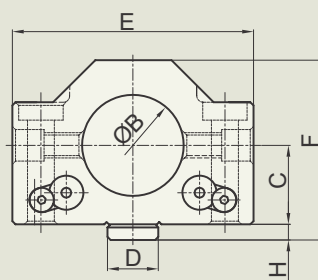


CODE	d1	A	B	C	E	F	G	H	J	K	X	S (DIN 6499)	P	TOOL DISC TYPE
RTH 30-ER25-80 IN	30	85	67	55	35	35	49.5	62	53.5	120	2-16	ER25-INT	W16X0.8X30° X18	DRIVEN TOOL DISC VDI Ø30 BORE
RTH 40-ER32-80 IN	40	100	75	63	38	38	54	67.5	56	144	3-20	ER32-INT	W20X0.8X30° X24	DRIVEN TOOL DISC VDI Ø40 BORE

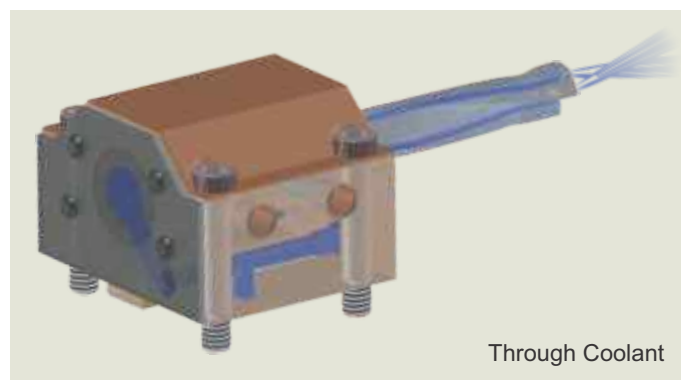
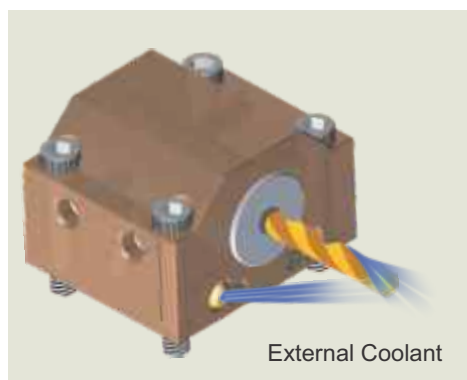
TOOL HOLDERS FOR SLOTTED TOOL DISCS

BTH (BORING TOOL HOLDER)

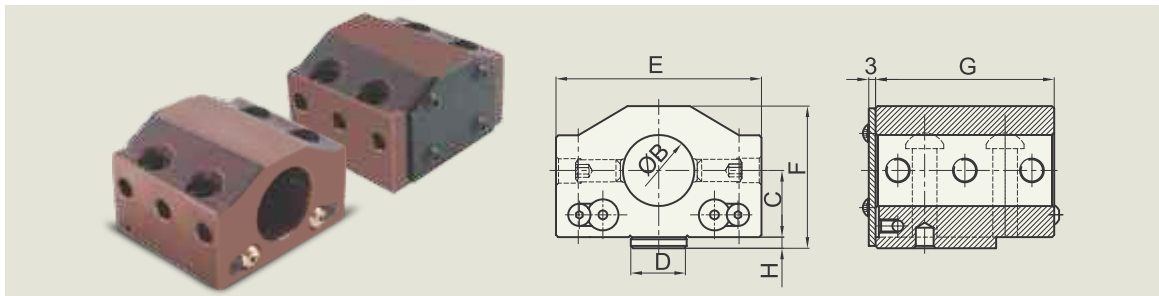
- Highest Tensile Strength of 40kgf/mm² and better impact properties.
- Finish machined on Hi-Precision machining centers.
- Interchangeable tool holders. No need for in-line boring on machine.
- Through Coolant Boring Tool Holders also available.
- Suitable sleeves can be used in BTH for different tool sizes.
- Inch series Boring Tool Holders are also available upon request.



CODE	A	ØB	C	D	E	F	G	H	TOOL DISC TYPE
BTH 16-20 CH 18	16	20	18	16	66	40	51	5	TD 50-8-16-180 TD 63-12-16-236
BTH 16-25 CH 18	16	25	18	16	66	40	51	5	TD 50-8-20-200 TD 63-8-20-220 TD 80-12-20-286
BTH 20-20 CH 18	20	20	18	16	76	42.5	60	5	
BTH 20-25 CH 18	20	25	18	16	76	42.5	60	5	
BTH 20-32 CH 18	20	32	18	16	76	42.5	60	5	
BTH 20-25 CH 25	20	25	25	16	76	57	60	5	
BTH 20-32 CH 25	20	32	25	16	76	57	60	5	
BTH 25-32 CH 30	25	32	30	25	92	60	80	5	TD 80-8-25-280 TD 100-8-25-304 TD 100-12-25-350 TD 125-12-25-380
BTH 25-40 CH 30	25	40	30	25	92	64	80	5	TD 100-8-32-350 TD 125-8-32-380 TD 125-12-32-436
BTH 25-40 CH 40	25	40	40	25	92	74	80	5	
BTH 32-40 CH 40	32	40	40	25	114	80	95	5	
BTH 32-50 CH 40	32	50	40	25	114	80	95	5	TD 125-8-40-400
BTH 40-40 CH 35	40	40	35	25	142	75	95	5	
BTH 40-50 CH 35	40	50	35	25	142	75	95	5	TD 160-8-40-480
BTH 160-60 CH 40	40	60	40	40	142	85	124	5	

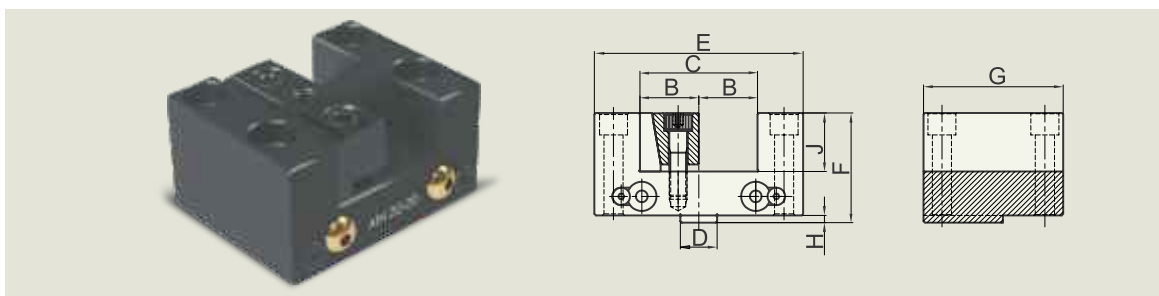


BTH - THROUGH COOLANT



CODE	A	ØB	C	D	E	F	G	H	TOOL DISC TYPE
BTH 16-20 CH 18-TC	16	20	18	16	66	40	51	5	TD 50-8-16-180
BTH 16-25 CH 18-TC	16	25	18	16	66	40	51	5	TD 63-12-16-236
BTH 20-20 CH 18-TC	20	20	18	16	76	42.5	60	5	TD 50-8-20-200 TD 63-8-20-220 TD 80-12-20-286
BTH 20-25 CH 18-TC	20	25	18	16	76	42.5	60	5	
BTH 20-32 CH 18-TC	20	32	18	16	76	42.5	60	5	
BTH 20-25 CH 25-TC	20	25	25	16	76	57	60	5	
BTH 20-32 CH 25-TC	20	32	25	16	76	57	60	5	TD 80-8-25-280 TD 100-8-25-304 TD 100-12-25-350 TD 125-12-25-380
BTH 25-32 CH 30-TC	25	32	30	25	92	64	80	5	
BTH 25-40 CH 30-TC	25	40	30	25	92	64	80	5	
BTH 25-40 CH 40-TC	25	40	40	25	92	74	80	5	
BTH 32-40 CH 40-TC	32	40	40	25	114	80	95	5	TD 100-8-32-350
BTH 32-50 CH 40-TC	32	50	40	25	114	80	95	5	TD 125-8-32-380
BTH 40-40 CH 35-TC	40	40	35	25	142	75	95	5	TD 125-12-32-436
BTH 40-50 CH 35-TC	40	50	35	25	142	75	95	5	TD 125-8-40-400
BTH 160-60 CH 40-TC	40	60	40	40	142	85	124	5	

ATH (AXIAL TOOL HOLDER)



CODE	A	B	C	D	E	F	G	H	J	TOOL DISC TYPE
ATH 16-16	16	16	32	16	66	37	51	5	16	TD 50-8-16-180 TD 63-12-16-236
ATH 20-20	20	20	40	16	76	45	60	5	20	TD 50-8-20-200 TD 63-8-20-220 TD 80-12-20-286
ATH 25-25	25	25	50	25	92	55	80	5	25	TD 80-8-25-280 TD 100-8-25-304 TD 100-12-25-350 TD 125-12-25-380
ATH 32-32	32	32	64	25	114	65	95	5	32	TD 100-8-32-350 TD 125-8-32-380 TD 125-12-32-436
ATH 40-40	40	40	80	25	142	75	95	5	40	TD 125-8-40-400
ATH 160-40	40	40	80	40	142	74	124	5	40	TD 160-8-40-480

* Made out of Medium Carbon Steel, Forged & Toughened to 20±2 HRC

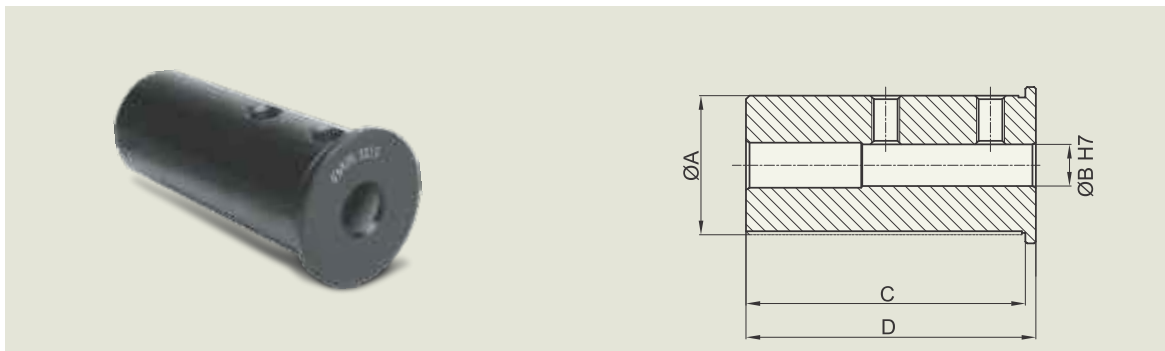
* Customised design can be given upon request

* Inch series Axial Tool Holders are also available upon request

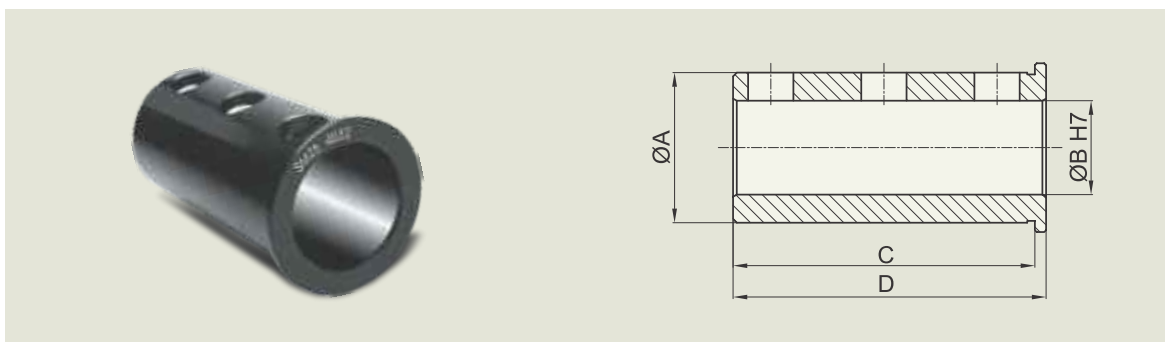
FEATURES

- Reduction sleeves are available to mount different sizes of tool shanks in BTH (Boring Tool Holders).
- Available in Type 1, 2 & 3 as our standards.
- Type 1 to clamp the tools within sleeves for smaller tool shanks.
- Type 2 to clamp the tools from BTH itself for smaller boring bars, U-drills & etc.,
- Type 3 to hold Morse Taper tool shanks.
- Type 1 & 2 made out of medium carbon steel and toughened to 20 ± 2 HRC.
- Type 3 made out of medium carbon steel and toughened to 40 ± 2 HRC.
- Customised design can be supplied upon request.

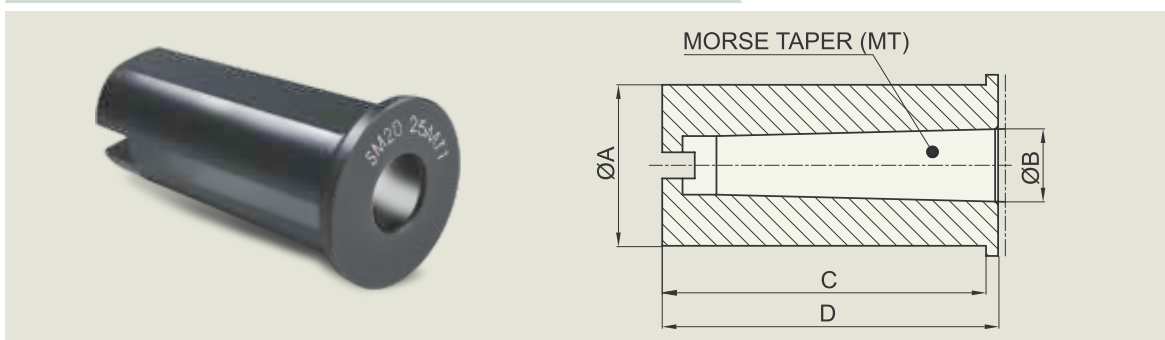
TYPE-1



TYPE-2



TYPE-3



REDUCTION SLEEVES

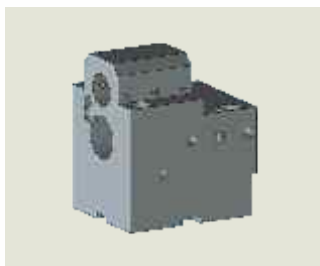
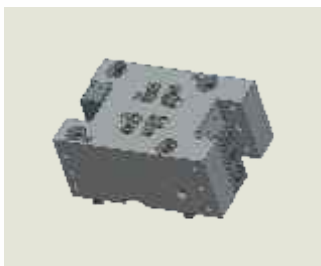
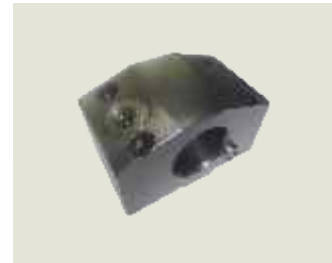
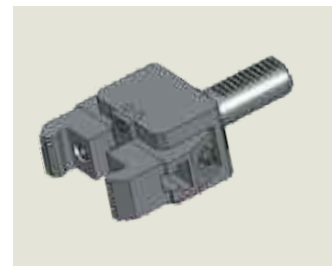
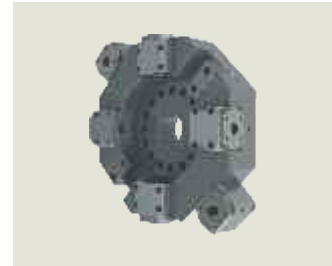
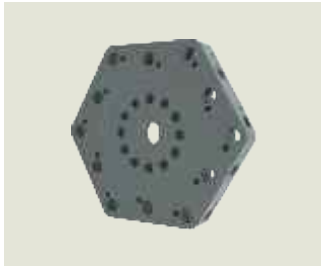
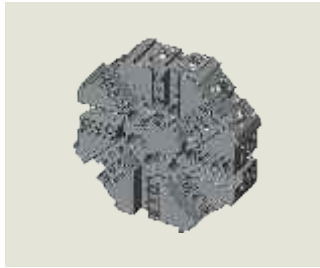
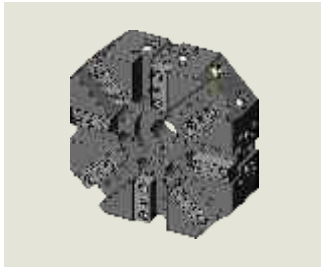
FOR BORING TOOL HOLDER (BTH)
OF SLOTTED TOOL DISC ONLY

SPHOORTI

CODE	A	B	C	D	TYPE	SUITS FOR TOOL HOLDER	SUITS FOR TOOL DISC
SM16 2508	25	8	48	51	1	BTH 16-25	TD 50-8-16 TD 63-8-16 TD 63-12-16
SM16 2510	25	10	48	51	1		
SM16 2512	25	12	48	51	2		
SM16 2516	25	16	48	51	2		
SM16 2520	25	20	48	51	2		
SM20 2508	25	8	58	61	1	BTH 20-25	TD 50-8-20 TD 63-8-20 TD 80-12-20
SM20 2510	25	10	58	61	1		
SM20 2512	25	12	58	61	2		
SM20 2516	25	16	58	61	2		
SM20 2520	25	20	58	61	2		
SM20 25MT1	25	MT1	58	61	3	BTH 20-32	
SM20 3208	32	8	58	61	1		
SM20 3210	32	10	58	61	1		
SM20 3212	32	12	58	61	1		
SM20 3216	32	16	58	61	2		
SM20 3220	32	20	58	61	2		
SM20 3225	32	25	58	61	2		
SM20 32MT1	32	MT1	57	60	3		
SM20 32MT2	32	MT2	70	73	3		BTH 25-32
SM25 3208	32	8	78	81	1		
SM25 3210	32	10	78	81	1		
SM25 3212	32	12	78	81	1		
SM25 3216	32	16	78	81	2		
SM25 3220	32	20	78	81	2		
SM25 3225	32	25	78	81	2		
SM25 32MT1	32	MT1	77	80	3		
SM25 32MT2	32	MT2	78	81	3	BTH 25-40	
SM25 4008	40	8	78	81	1		
SM25 4010	40	10	78	81	1		
SM25 4012	40	12	78	81	1		
SM25 4016	40	16	78	81	1		
SM25 4020	40	20	78	81	2		
SM25 4025	40	25	78	81	2		
SM25 4032	40	32	78	81	2		
SM25 40MT1	40	MT1	78	81	3		
SM25 40MT2	40	MT2	78	81	3	BTH 32-40 BTH 40-40	
SM25 40MT3	40	MT3	79	92	3		
SM32 4008	40	8	93	96	1		
SM32/40 4010	40	10	93	96	1		
SM32/40 4012	40	12	93	96	1		
SM32/40 4016	40	16	93	96	1		
SM32/40 4020	40	20	93	96	1		
SM32/40 4025	40	25	93	96	2		
SM32/40 4032	40	32	93	96	2		
SM32/40 40MT1	40	MT1	80	83	3	BTH 32-50 BTH 40-50	
SM32/40 40MT2	40	MT2	80	83	3		
SM32/40 40MT3	40	MT3	79	92	3		
SM32/40 5016	50	16	93	96	1		
SM32/40 5020	50	20	93	96	1		
SM32/40 5025	50	25	93	96	2		
SM32/40 5032	50	32	93	96	2		
SM32/40 5040	50	40	93	96	2		
SM32/40 50MT2	50	MT2	89	92	3		
SM32/40 50MT3	50	MT3	89	92	3		
SM32/40 50MT4	50	MT4	92	115	3		TD 100-8-32 TD 125-8-32 TD 125-12-32 TD 125-8-40

* Inch series sleeves are available upon request.

CUSTOM DESIGNED TOOL DISCS & TOOL HOLDERS



SPHOORTI

Precision Assured

Sphoorti Machine Tools Pvt. Ltd.
18, Plot No. 467 - 469, 12th Cross, IV Phase
Peenya Industrial Area, Bangalore - 560 058. INDIA.
Ph. : +91 80 4127 2768, Fax : +91 80 4117 1589
E-mail : info@sphoorti.com
URL : <http://www.sphoorti.com>