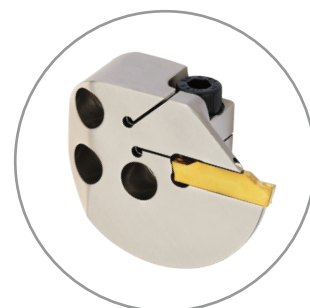
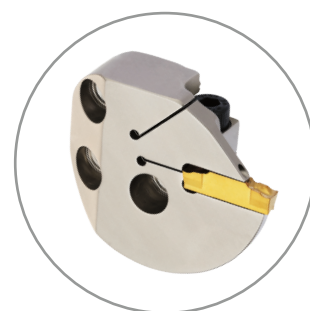


TMODULAR

NEW TMODULAR HEADS FOR IMPROVED INTERNAL GROOVING OF DEEP HOLES

- ▶ Internal grooving heads range: 2-6 mm
- ▶ Grooving heads for **TClamp^{Ultra+}** inserts
- ▶ Fitting to **TAbsorber** shanks and head changeable **CAdapters**
 - ▶ Pinpointed coolant supply to the insert's cutting edge
 - ▶ Improved tool life and chip removal
 - ▶ Good surface roughness



PRODUCT OVERVIEW

TModular series expanded with TModular heads for internal grooving of deep holes.

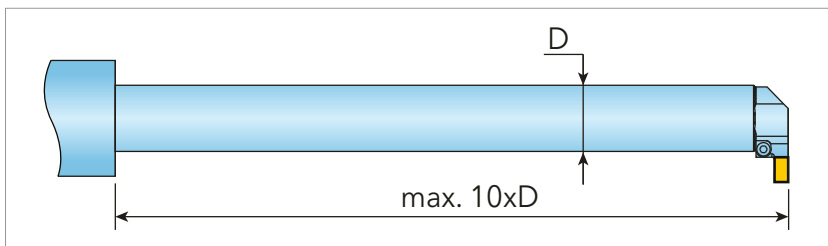
The new grooving heads, using **TClamp^{Ultra+}** inserts, range between 2-6 mm and are mountable to the existing **TAbsorber** shanks as well as head changeable **TModular CAdapter (Capto)**.

Although internal grooving negatively impacts surface finish due to the vibrations caused by long overhangs, using the new **TAbsorber** grooving products results in good surface roughness, even in deep internal grooving of 5xD or higher, and offers improved tool life and excellent machining performance.

TECHNICAL FEATURES & ADVANTAGES

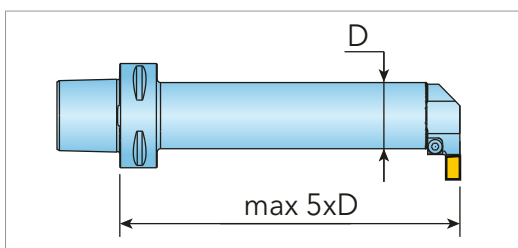
- **TClamp^{Ultra+}** inserts' internal grooving heads range: 2-6 mm
- Mountable to the current line **TAbsorber** shanks and head changeable **TModular CAdapters (Capto)**

– **TAbsorber** shank



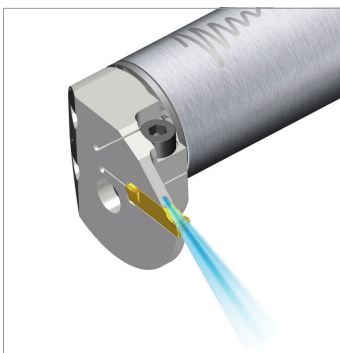
TAbsorber

– Head changeable **TModular CAdapter (Capto)**



CAdapter
TModular

- Pinpointed coolant supply to the insert's cutting edge for improved tool life and chip control



CoolBurst

HEAD DESIGNATION SYSTEM

DTC - D32 - TTIR - 4T12 -

1
2
3
4
5

- 1** – TModular head
- 2** – Shank connection sizes (dw) Ø25, 32, 40 mm
- 3** – Head type (same as standard boring bars)
- 4** – Insert seat size 2, 3, ..., 6 and maximum cutting depth (Tmax)
- 5** – Option code (**TB: CoolBurst**)

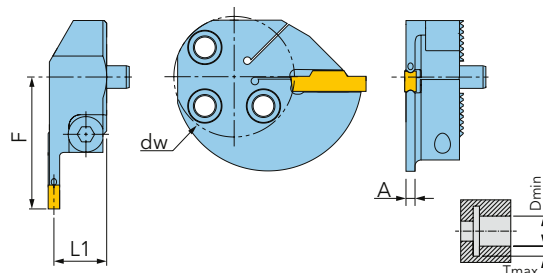
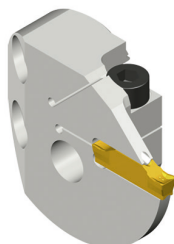
RECOMMENDED CUTTING DATA

Carbon steel: S45C

TAbsorber shank	Cutting conditions	TModular head				
		DTC-D25 TTIR-2T12-TB	DTC-D25 TTIR-3T12-TB	DTC-D32 TTIR-4T12-TB	DTC-D32 TTIR-5T12-TB	DTC-D40 TTIR-6T12-TB
DTA...-7D	V (m/min)	80-100	60-80	60-80	40-50	40-50
	f (mm/U)	0,10-0,12	0,10-0,12	0,08-0,10	0,08-0,10	0,08-0,10
DTA...-10D	V (m/min)	40-50	40-50	40-50	40-50	25-30
	f (mm/U)	0,08-0,10	0,08-0,10	0,08-0,10	0,08-0,10	0,08-0,10

Alloy steel: SCM440

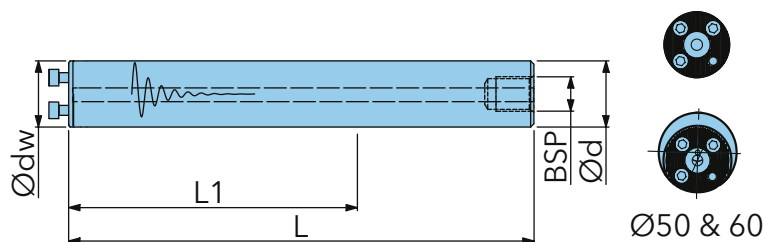
TAbsorber shank	Cutting conditions	TModular head				
		DTC-D25 TTIR-2T12-TB	DTC-D25 TTIR-3T12-TB	DTC-D32 TTIR-4T12-TB	DTC-D32 TTIR-5T12-TB	DTC-D40 TTIR-6T12-TB
DTA...-7D	V (m/min)	80-100	60-80	60-80	40-50	30-40
	f (mm/U)	0,10-0,12	0,10-0,12	0,08-0,10	0,08-0,10	0,08-0,10
DTA...-10D	V (m/min)	40-50	40-50	30-40	30-40	25-30
	f (mm/U)	0,08-0,10	0,08-0,10	0,08-0,10	0,08-0,10	0,08-0,10

MODULAR HEAD FOR INTERNAL GROOVING AND PARTING


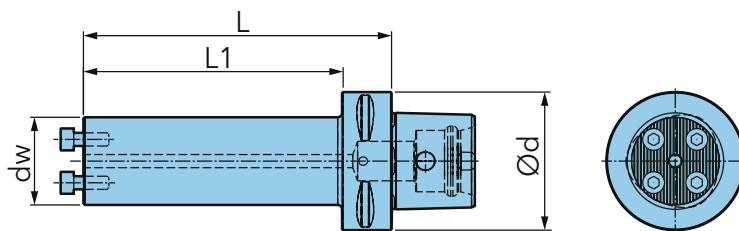
Designation	D min.	dw	L1	A	F	Tmax	insert-S	kg	IK	①	②
DTC-D25-TTIL-2T12-TB	58	25	14,3	1,8	32	12	2	0,16	✓	SH M5X0.8X16	LW 4
DTC-D25-TTIL-3T12-TB	58	25	14,0	2,4	32	12	3	0,16	✓	SH M5X0.8X16	LW 4
DTC-D32-TTIL-2T12-TB	58	32	14,3	1,8	35	12	2	0,16	✓	SH M5X0.8X16	LW 4
DTC-D32-TTIL-3T12-TB	58	32	14,0	2,4	35	12	3	0,16	✓	SH M5X0.8X16	LW 4
DTC-D32-TTIL-4T12-TB	58	32	13,7	3,0	35	12	4	0,16	✓	SH M5X0.8X16	LW 4
DTC-D32-TTIL-5T17-TB	58	32	15,1	3,9	40	17	5	0,30	✓	SH M5X0.8X16	LW 4
DTC-D40-TTIL-3T12-TB ¹⁾	60	40	14,0	2,4	38,5	12	3	0,16	✓	SH M5X0.8X16	LW 4
DTC-D40-TTIL-4T12-TB ¹⁾	60	40	13,7	3,0	38,5	12	4	0,19	✓	SH M5X0.8X16	LW 4
DTC-D40-TTIL-5T17-TB ¹⁾	64	40	15,1	3,9	43	17	5	0,23	✓	SH M5X0.8X16	LW 4
DTC-D40-TTIL-6T17-TB ¹⁾	64	40	14,6	4,9	43	17	6	0,30	✓	SH M5X0.8X16	LW 4
DTC-D25-TTIR-2T12-TB	58	25	14,3	1,8	32	12	2	0,13	✓	SH M5X0.8X16	LW 4
DTC-D25-TTIR-3T12-TB	58	25	14,0	2,4	32	12	3	0,13	✓	SH M5X0.8X16	LW 4
DTC-D32-TTIR-2T12-TB	58	32	14,3	1,8	35	12	2	0,16	✓	SH M5X0.8X16	LW 4
DTC-D32-TTIR-3T12-TB	58	32	14,0	2,4	35	12	3	0,16	✓	SH M5X0.8X16	LW 4
DTC-D32-TTIR-4T12-TB	58	32	13,7	3,0	35	12	4	0,16	✓	SH M5X0.8X16	LW 4
DTC-D32-TTIR-5T17-TB	58	32	15,1	3,9	40	17	5	0,30	✓	SH M5X0.8X16	LW 4
DTC-D40-TTIR-3T12-TB ¹⁾	60	40	14,0	2,4	38,5	12	3	0,19	✓	SH M5X0.8X16	LW 4
DTC-D40-TTIR-4T12-TB ¹⁾	60	40	13,7	3,0	38,5	12	4	0,19	✓	SH M5X0.8X16	LW 4
DTC-D40-TTIR-5T17-TB ¹⁾	64	40	15,1	3,9	43	17	5	0,23	✓	SH M5X0.8X16	LW 4
DTC-D40-TTIR-6T17-TB ¹⁾	64	40	14,6	4,9	43	17	6	0,30	✓	SH M5X0.8X16	LW 4

¹⁾When using Ø50 mm shafts, add +10 mm to Dmin. If using 60mm diameter shafts, add +20mm to the Dmin..

① = clamp screw ② = wrench

ANTI-VIBRATION BORING BAR WITH INTERNAL COOLANT FOR MODULAR HEADS


Designation	d	dw	L	L1	BSP	IK
DTA-D16-7D-C	16	16	156	92	-	✓
DTA-D16-10D-E	16	16	204	140	G1/8	✓
DTA-D20-7D-C	20	20	200	120	-	✓
DTA-D20-10D-E	20	20	260	180	G1/4	✓
DTA-D25-7D-C	25	25	255	155	G1/4	✓
DTA-D25-10D-C	25	25	330	230	G1/4	✓
DTA-D32-7D-C	32	32	320	192	G3/8	✓
DTA-D32-10D-C	32	32	416	288	G3/8	✓
DTA-D40-7D-C	40	40	408	248	G1/2	✓
DTA-D40-10D-C	40	40	528	368	G1/2	✓
DTA-D50-7D-C	50	40	518	318	G1/2	✓
DTA-D50-10D-C	50	40	668	468	G1/2	✓
DTA-D60-7D-C	60	40	628	388	G3/4	✓
DTA-D60-10D-C	60	40	808	568	G3/4	✓

CAPTO ADAPTION FOR MODULAR HEADS


Designation	d	dw	L	L1	kg	IK	①	②
C4-DTA-16A-2.5D	40	16	40	20	0,310	✓	SH M3X0.5X10	L-W 2.5
C4-DTA-20A-2.5D	40	20	50	30	0,345	✓	SH M3.5X0.6X10	L-W 2.5
C4-DTA-25A-2.5D	40	25	55	35	0,405	✓	SH M3.5X0.6X10	WS-0060
C4-DTA-32A-2.5D	40	32	75	55	0,615	✓	SH M5x0.8x12	L-W 4
C4-DTA-40A-3D	40	40	80	80	0,845	✓	SH M6x1x16	L-W 5
C5-DTA-16A-2.5D	50	16	40	20	0,510	✓	SH M3X0.5X10	L-W 2.5
C5-DTA-20A-2.5D	50	20	50	30	0,580	✓	SH M3.5X0.6X10	L-W 2.5
C5-DTA-25A-2.5D	50	25	55	35	0,645	✓	SH M3.5X0.6X10	WS-0060
C5-DTA-32A-2.5D	50	32	75	55	0,825	✓	SH M5x0.8x12	L-W 4
C5-DTA-40A-3D	50	40	100	80	1,265	✓	SH M6x1x16	L-W 5
C6-DTA-16A-2.5D	63	16	40	18	0,865	✓	SH M3X0.5X10	L-W 2.5
C6-DTA-20A-2.5D	63	20	50	28	0,900	✓	SH M3.5X0.6X10	L-W 2.5
C6-DTA-25A-2.5D	63	25	65	43	0,980	✓	SH M3.5X0.6X10	WS-0060
C6-DTA-32A-3D	63	32	90	68	1,235	✓	SH M5x0.8x12	L-W 4
C6-DTA-32A-4D	63	32	125	103	1,445	✓	SH M5x0.8x12	L-W 4
C6-DTA-40A-3D	63	40	100	78	1,580	✓	SH M6x1x16	L-W 5
C6-DTA-40A-4D	63	40	140	118	1,965	✓	SH M6x1x16	L-W 5
C6-DTA-16E-5D	63	16	80	58	0,945	✓	SH M3X0.5X10	L-W 2.5
C6-DTA-20E-5D	63	20	100	78	1,065	✓	SH M3.5X0.6X10	L-W 2.5
C6-DTA-25E-5D	63	25	115	93	1,265	✓	SH M3.5X0.6X10	WS-0060
C6-DTA-32E-5D	63	32	150	128	1,750	✓	SH M5x0.8x12	L-W 4
C6-DTA-40E-5D	63	40	185	163	2,635	✓	SH M6x1x16	L-W 5

① = clamp screw ② = wrench

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