

High Pressure Coolant Tool







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Taegutec is pleased to introduce, T-BURST, a new tool holder system for turning application that is capable of delivering high pressure coolant directly to the cutting edge.

The T-BURST tool holder incorporates dual coolant holes and an adjustable nozzle making it possible for high pressure coolant to be streamed exactly in the cutting zone between metal chip and the insert's rake face. This accurate and effective coolant jet produced by the T-BURST system facilitates optimum chip control, short chip formation, extended tool life as well as increased productivity through higher cutting speeds and feed rates.

The T-BURST system is capable of handling coolant pressure upto 300 bars maximum. Moreover, a retractable nozzle design makes it possible to change or index cutting insert on the machines without having to detach the nozzle housing.

The T-BURST tool holder is ideally suited for machining difficult-to-cut materials such as titanium, inconel and other heat resistant alloys.



- Up to 300 bar pressure
 - -Excellent chip control
 - -Effective cooling of the insert's cutting edge due to dual through hole coolant design
- Under same conditions: over 50% tool life increase
 - -Increased tool life on difficult-to-cut materials like titanium and other heat resistant alloys, stainless and alloy steel due to accurate coolant flow to the inserts' cutting edge
- Over 20% cutting speed increase is possible on difficult-to-cut materials
 - -Reduced machining time due to higher productivity in high speed, high feed machining conditions on difficult-to-cut materials such as titanium and heat resistant super alloys

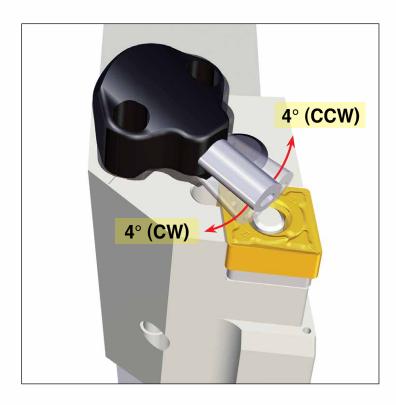




T-BURST advantage

The T-BURST is designed with a unique high pressure coolant pump system designed with a static housing and nozzle tube to direct the coolant to the insert's cutting edge. The nozzle tube located in the housing can be swiveled both right and left (4°) depending on need.

Another advantage is it eliminates the need to detach the tool's housing from the body when indexing inserts thereby reducing set-up time.

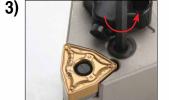


Indexing an insert:

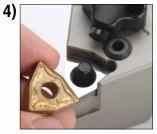




1) & 2) Push the nozzle tube backward



3) Using the screwdriver, turn counter clockwise to loosen the lever screw



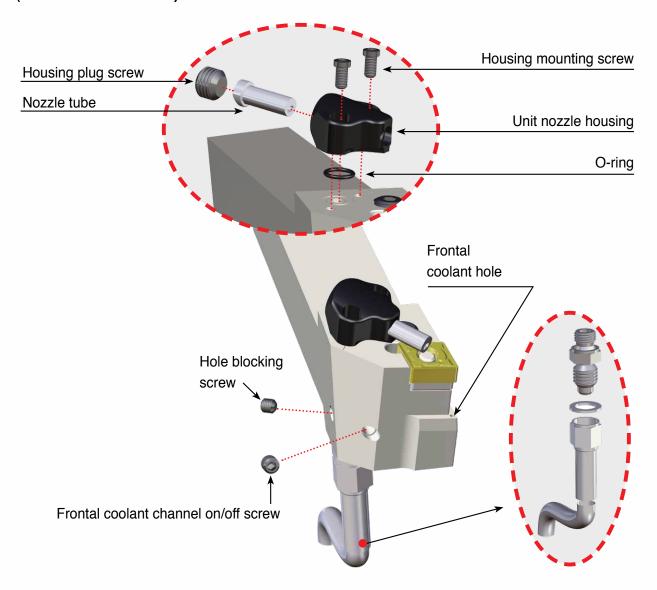
4) Take out the insert





High pressure holder component designation

(PCLNR 2525 M12-TB)



Effective cooling of both the insert's rake and clearance faces is made possible by the dual through hole design; a nozzle located behind the rake face and frontal coolant holes under the insert's seat for coolant flow to both the rake angle and clearance faces for proper cooling of the insert's heat zone.

Additionally, the coolant's flow rate is controlled by an on /off screw.

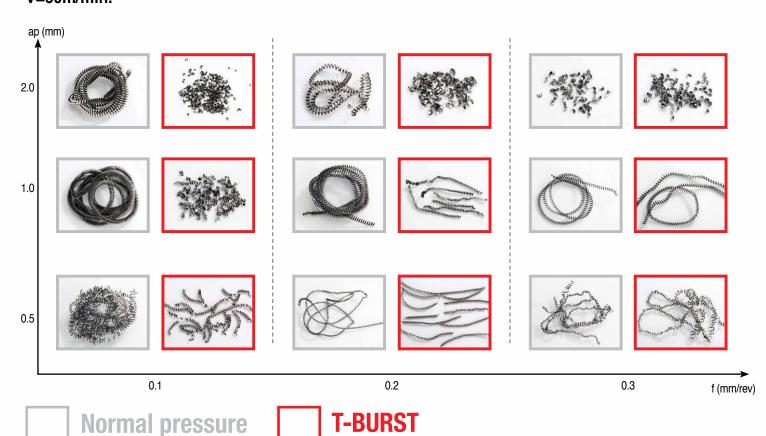




Tool life test between Normal pressure & T-BURST

Workpiece material	Inconel 718	Tool life(min.)				Normal
Feed rate(f)	0.2 mm/rev	- 40				T-BURST
Depth of cut(ap)	2.0 mm	30				
Operation	Ext, Wet	20				
TaeguTec	CNMG 120408 MP TT5080	10				
Test coolant pressure	69 bar					
		_ 0	60	40	V(m/min.)	

Chip breaking test between Normal pressure & T-BURST V=60m/min.





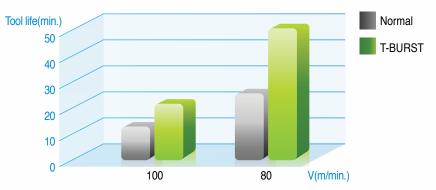
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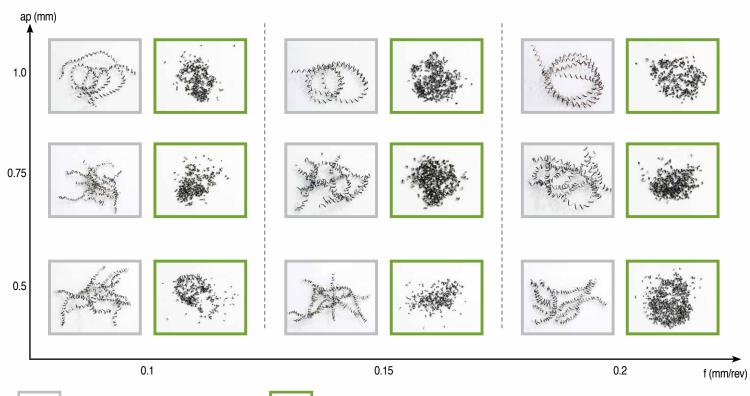


Tool life test between Normal pressure & T-BURST

Workpiece material	Ti-6Al-4V
Feed rate(f)	0.15 mm/rev
Depth of cut(ap)	1.0 mm
Operation	Ext, Wet
TaeguTec	CNMG 120408 MP K10
Test coolant pressure	69 bar



Chip breaking test between Normal pressure & T-BURST V=100m/min.





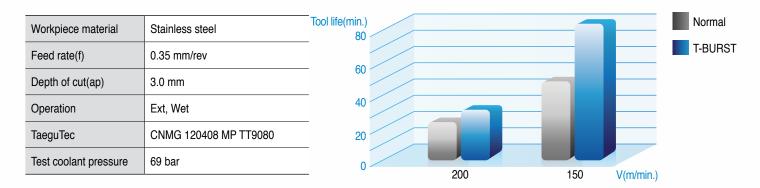


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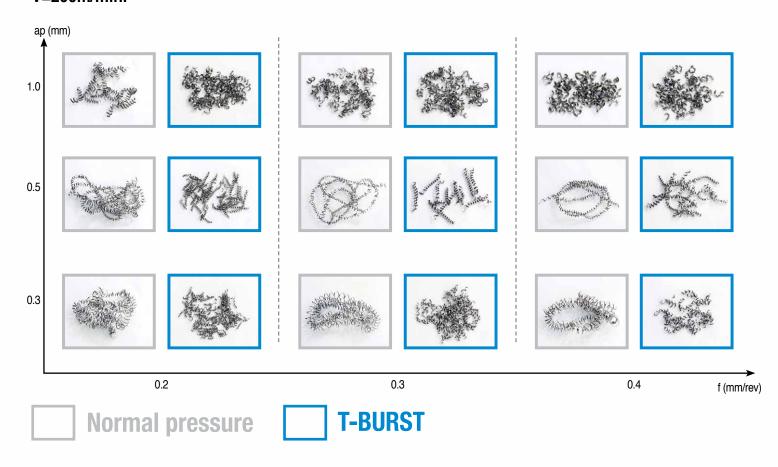




Tool life test between Normal pressure & T-BURST

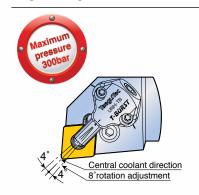


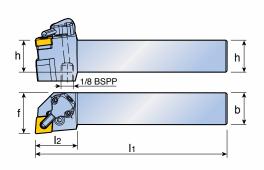
Chip breaking test between Normal pressure & T-BURST V=200m/min.

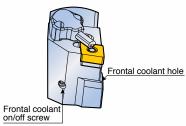




PCLNR/L-TB







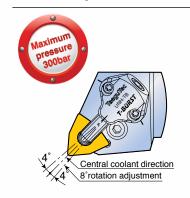
PCLNR/L-TB

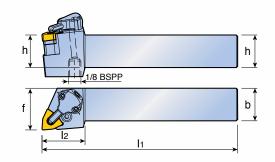
	Doc	signation			Dim	nension (mm)		Insert
	Des	signation	h	b	l1	l 2	f		insert
	PCLNR/L	2525 M12-TB	25	25	150	33	32		CNM 1204
		3232 P12-TB	32	32	170	33	40		
 *									

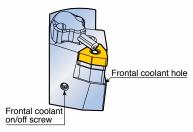
	Lever	Screw	Shim	Shim pin	Oil-supply unit	O-ring	Plug	Wrench1	Wrench2	Wrench3
Designation				T						
PCLNR/LTB	LCL 4	LCS 4	LSC 42	LSP 4	CU-CW-TB	ID 6.4x0.9	SS M4x0.7x4-NL	L-W 2	L-W 3	T 8 (T-8/5)



PWLNR/L-TB







PWLNR/L-TB

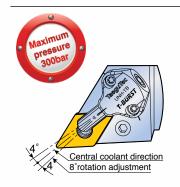
	Do	Designation			Dim	nension (mm)		Insert
	De	signation	h	b	l1	l 2	f		insert
	PWLNR/L	2525 M08-TB	25	25	150	33	32	\ \	VNM 0804
		3232 P08-TB	32	32	170	33	40		
 \									

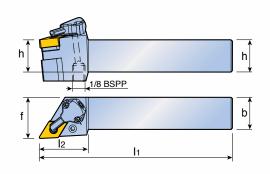
	Lever	Screw	Shim	Shim pin	Oil-supply unit	O-ring	Plug	Wrench1	Wrench2	Wrench3
Designation				T						
PWLNR/LTB	LCL 4	LCS 4	TWN 423(T)	LSP 4	CU-CW-TB	ID 6.4x0.9	SS M4x0.7x4-NL	L-W 2	L-W 3	T 8 (T-8/5)

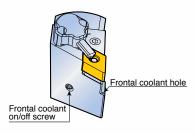




PDJNR/L-TB







PDJNR/L-TB

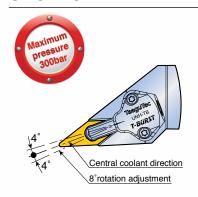
		esignation			Din	nension (r	nm)	Insert
	D	esignation	h	b	l1	l 2	f	Illseit
	PDJNR/L	2525 M1504-TB	25	25	150	37	32	DNM 1504
		2525 M1506-TB	25	25	150	37	32	DNM 1506
27° mấx.								
•								

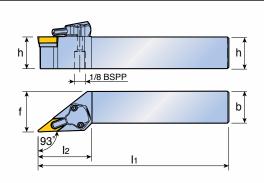
	Lever	Screw	Shim	Shim pin	Oil-supply unit	O-ring	Plug	Wrench1	Wrench2	Wrench3
Designation				T						
M1504	LCL 4A	LCS 4	LSD 42	LSP 4	CU-D-TB	ID 6.4x0.9	SS M4x0.7x4-NL	L-W 2	L-W 3	T 8 (T-8/5)
M1506	LCL 4A	LCS 4	LSD 43	LSP 4	CU-D-TB	ID 6.4x0.9	SS M4x0.7x4-NL	L-W 2	L-W 3	T 8 (T-8/5)

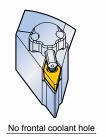




SVJBR/L-TB







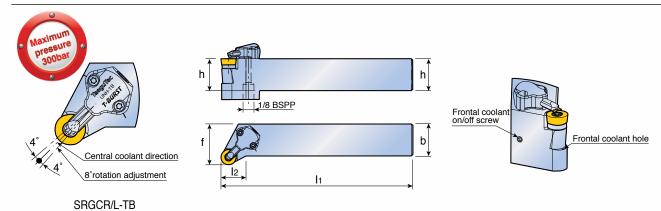
SVJBR/L-TB

		esignation			Dim	nension (r	mm)	Insert
			h	b	l1	l2	f	lliseit
	SVJBR/L	2525 M16-TB	25	25	150	37	32	VBT 1604
44° max.								
\								
		-						
		-						

	Screw	Shim	Shim screw	Oil-supply unit	O-ring	Wrench1	Wrench2	Wrench3
Designation								
SVJBR/LTB	SO 35124I	SSV 32	TS 5035062S	CU-V-TB	ID 6.4x0.9	L-W 3.5	T 8 (T-8/5)	T 15



SRGCR/L-TB



	Do	oignotion			Din	nension (r	nm)		lnoort
	De	signation	h	b	l1	l2	f		Insert
	SRGCR/L	2525 M12-TB	25	25	150	19.6	32		RCT 1204
27° max.									
A									
									_

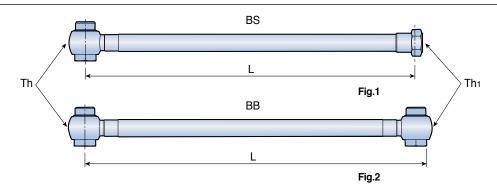
	Screw	Shim	Shim screw	Oil-supply unit	O-ring	Plug	Wrench1	Wrench2	Wrench3	Wrench4
Designation										
SRGCR/LTB	TS 35110I	SSR 32	TS 5035062S	CU-R-TB	ID 6.4x0.9	SS M4x0.7x4-NL	L-W 2	L-W 3.5	T 8 (T-8/5)	T 15





Accessories

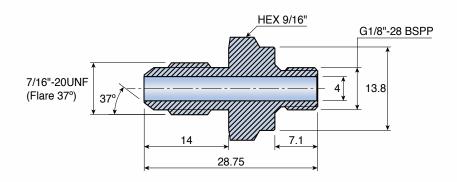
Hose



Designation		Dimension (mm)					
		L(mm)	Th	Th ₁	Max. pressure(Bar)	Fig.	
TB HOSE	G1/8-7-16-200BS	200	G1/8"-28 BSPP	7/16"-20 UNF (Flare 37°)	260	1	
	G1/8-7/16-250BS	250	G1/8"-28 BSPP	7/16"-20 UNF (Flare 37°)	260	1	
	G1/8-G1/8-200BB	200	G1/8"-28 BSPP	G1/8"-28 BSPP	260	2	
	G1/8-G1/8-250BB	250	G1/8"-28 BSPP	G1/8"-28 BSPP	260	2	
	5/16-7/16-200BS	200	5/16"-24 UNF	7/16"-20 UNF (Flare 37°)	200	1	
	5/16-G1/8-200BS	200	5/16"-24 UNF	G1/8"-28 BSPP	200	1	

[•] Hose is ordered separately

Adapter



Designation

TB NIPPLE G1/8-7/16 UNF

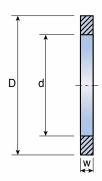
•Adapter is ordered separately





Accessories

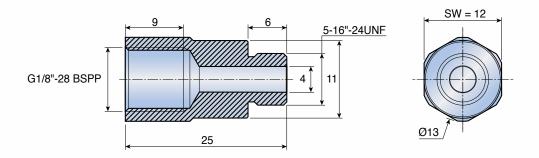
Seal washer



	Designation		Dimension (mm)							
Designation		D	d	W						
TB COPPER	SEAL 1/8"	15	10	1						
	SEAL 5/16"	12	8	1						

[•] Seal washer is ordered separately

Connector



Designation

TB CONECTOR 5/16"-G1/8"

• Connector is ordered separately



