

Exchangeable head drill

**DRILLMEISTER**

Tungaloy Report No. 412S8-G

## New sleeve dedicated to Swiss type machines for easy setup with DrillMeister tools

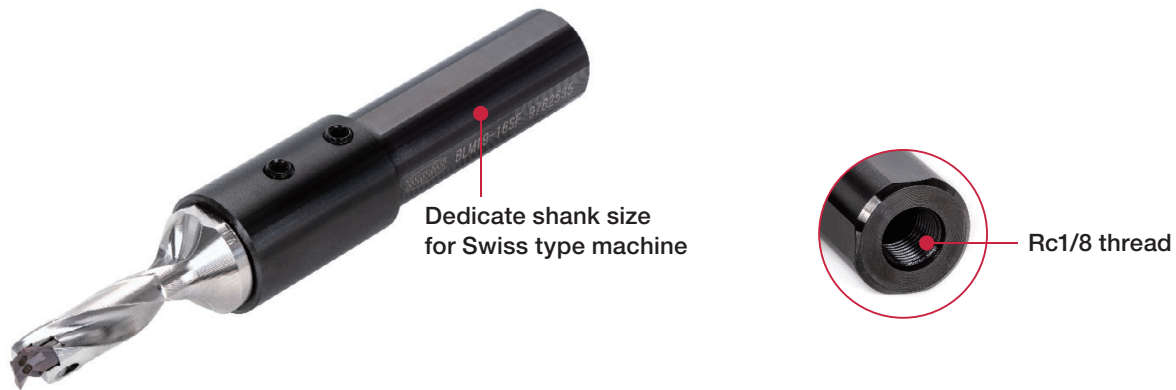




## New sleeve dedicated to Swiss type machines for easy setup with DrillMeister tools

### Dedicated design for Swiss type machines

- Allows standard TID-F bodies (flange type) to be used without additional machining
- Easy tool change in the machine with side lock system
- Tool can be replaced with minimal misalignment
- Internal lubrication enables high-efficiency machining



### Line up overview

Drill diameter (mm)	Drill body designation	Shank diameter of sleeve (mm)						
		ø16	ø19.05	ø20	ø22	ø25	ø25.4	ø32
ø6 - ø9.9	TID***F12...	○	○	○	○	○	○	○
ø10 - ø14.9	TID***F16...		○	○	○	○	○	○
ø15 - ø17.9	TID***F20...					○	○	○

### Designation system

**BLM** **254** - **16** **L** **F**

1 Shank diameter of sleeve (mm)	
254	ø25.4

2 Shank diameter of drill (mm)	
16	ø16

3 Length (mm)	
L	Long
S	Short

4 Shape of sleeve	
F	Flange
R	Round



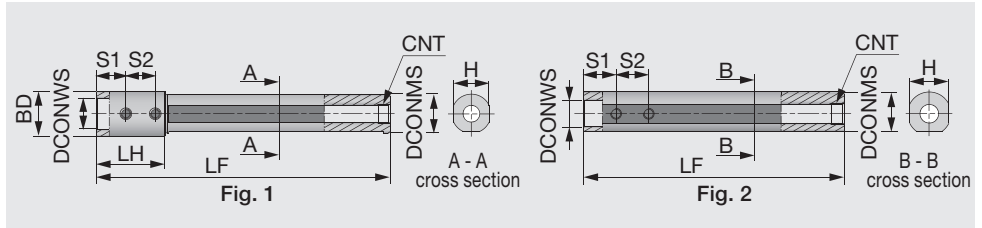
Flange



Round

## BLM

### Sleeve for exchangeable head drill



Designation	DCONMS	DCONWS	LF	LH	BD	H	S1	S2	CNT	Body	Fig.
BLM16-12LF	16	12	85	35	20	15.5	15	15	Rc1/8	TID***F12...	1
BLM19-12LF	19.05	12	140	35	23	18.5	15	15	Rc1/8	TID***F12...	1
BLM19-12SF	19.05	12	90	35	23	18.5	15	15	Rc1/8	TID***F12...	1
BLM19-16LF	19.05	16	140	35	23	18.5	15	15	Rc1/8	TID***F16...	1
BLM19-16SF	19.05	16	90	35	23	18.5	15	15	Rc1/8	TID***F16...	1
BLM20-12LR	20	12	120	-	-	19	15	15	Rc1/8	TID***F12...	2
BLM20-16LF	20	16	150	35	23	19	15	15	Rc1/8	TID***F16...	1
BLM22-12LR	22	12	120	-	-	21.5	15	15	Rc1/8	TID***F12...	2
BLM22-16LF	22	16	140	35	25	21.5	15	15	Rc1/8	TID***F16...	1
BLM25-12LR	25	12	115	-	-	24	15	15	Rc1/8	TID***F12...	2
BLM25-16LR	25	16	115	-	-	24	15	15	Rc1/8	TID***F16...	2
BLM25-20LF	25	20	150	35	28	24	15	15	Rc1/8	TID***F20...	1
BLM254-12LR	25.4	12	115	-	-	24.7	15	15	Rc1/8	TID***F12...	2
BLM254-12SR	25.4	12	75	-	-	24.7	15	15	Rc1/8	TID***F12...	2
BLM254-16LR	25.4	16	115	-	-	24.7	15	15	Rc1/8	TID***F16...	2
BLM254-16SR	25.4	16	75	-	-	24.7	15	15	Rc1/8	TID***F16...	2
BLM254-20LF	25.4	20	140	35	28	24.7	15	15	Rc1/8	TID***F20...	1
BLM32-12LR	32	12	120	-	-	31.5	15	15	Rc1/8	TID***F12...	2
BLM32-16LR	32	16	120	-	-	31.5	15	15	Rc1/8	TID***F16...	2
BLM32-20LR	32	20	120	-	-	31.5	15	15	Rc1/8	TID***F20...	2

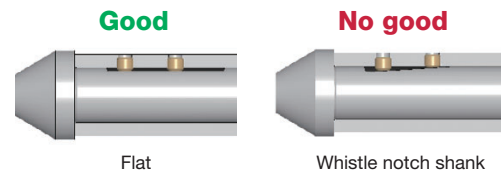
### SPARE PARTS



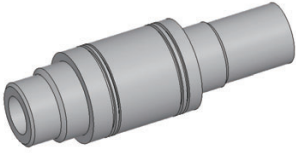

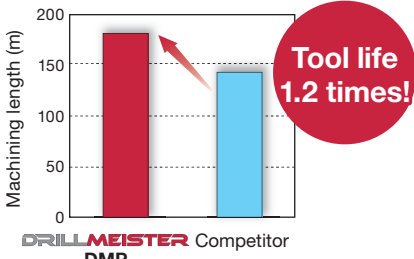
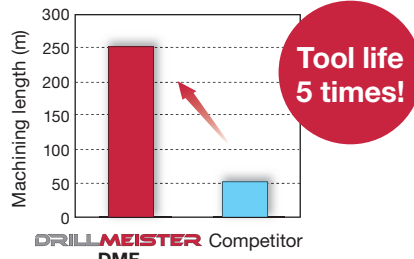
Designation	Clamping screw	Wrench
BLM16/19/20/22...	SR M5x4 FLAT	P-2.5
BLM25-12LR	SR M5x6 FLAT	P-2.5
BLM25-16LR, BLM25-20LF	SR M5x4 FLAT	P-2.5
BLM254-12LR, BLM254-12SR	SR M5x6 FLAT	P-2.5
BLM254-16LR, BLM254-16SR, BLM254-20LF	SR M5x4 FLAT	P-2.5
BLM32-12LR, BLM32-16LR	SR M5x6 FLAT	P-2.5
BLM32-20LR	SR M5x4 FLAT	P-2.5

### Note for sleeve usage

- Please refer to the separate Tungaloy report and product catalog for cutting conditions
- Please refrain from using whistle notch and weldon type shanks from the viewpoint of clamping stability



## PRACTICAL EXAMPLES

Workpiece type		Pump parts	Piston parts
Drill body		TID100F16-3	TID125F16-5
Head		DMP101	DMF126
Grade		AH725	AH9130
Workpiece material		SUS430 / X6Cr17	S10C / C10E / C10
		 <b>M</b>	 <b>P</b>
Cutting conditions	Cutting speed : $V_c$ (m/min)	79	50
	Feed : $f$ (mm/rev)	0.15	0.2
	Feed speed : $V_f$ (mm/min)	373	252.8
	Drill diameter: $DC$ (mm)	10.1	12.6
	Hole depth : $H$ (mm)	17.9	50
	Coolant	Wet (External coolant)	Wet (Internal coolant)
Machine		Swiss lathe	Swiss lathe
Results		 <p><b>DRILLMEISTER DMP</b> Competitor</p> <p>Tool life 1.2 times!</p> <p>Machining length improved by using a low cutting force of DMP head, achieving 20% longer tool life than existing products. In addition, tools can be exchanged inside the machine, leading to improved machine operating time.</p>	 <p><b>DRILLMEISTER DMF</b> Competitor</p> <p>Tool life 5 times!</p> <p>DMF drill head in AH9130 showed 5 times better tool life than existed solid flat drill. Tool changing became much easier and quicker since it was done in the machine. In addition, tool stock management is improved by eliminating re-grinding.</p>



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