



# Water-Cooled TIG Barrels

Automatic & Robotic

D/F MACHINE SPECIALTIES  
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## WATER-COOLED AUTOMATIC TUBE MILL TIG BARREL

The TM500 TIG Top Load Machine Barrel is intended for semi-automatic or automatic machine applications of the tungsten inert arc process. The tungsten is loaded in the top of the barrel and is held with a tubular dual collet design providing clamping pressure at two points. This water-cooled TIG barrel has the unique feature of the nozzle assembly water passages being serially connected to the inner body water chamber by means of sliding removable connectors.

### MODEL EXPLANATION

TM500 - TIG, Machine Barrel, 500 Amp

### FEATURES

- Water-Cooled Inner Body & Nozzle
- 500 Amp Top Load
- Adaptable to Any Power Source
- Withstands Preheat & Extreme Conditions
- Dual Clamping Collet Provides Pressure at Two Points
- Tungsten Range .040"-5/32" (1mm-4mm)
- Gas Cup Range 1/4"-5/8" (#4-#10, 6.5mm-16mm)

### ORDERING INFORMATION - COMPLETE BARREL ONLY

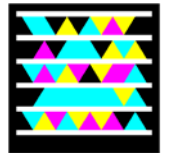
DESCRIPTION	CODE NO.
Model TM500 (Top Load Tungsten)	15499

### TUNGSTEN COLLETS - TM500 ONLY

CODE NO.	SIZE (in.)	SIZE (mm)
15871	.040"	1mm
15872	1/16"	1.2mm
15873	3/32"	2.4mm
15874	1/8"	3.2mm
15875	5/32"	4mm

### ORDERING INFORMATION - COMPLETE ASSEMBLIES

DESCRIPTION	CODE & MODEL NO. FOR AVAILABLE LENGTHS									
	TM502 2 Ft.	TM503 3 Ft.	TM504 4 Ft.	TM505 5 Ft.	TM506 6 Ft.	TM507 7 Ft.	TM508 8 Ft.	TM510 10 Ft.	TM512 12 Ft.	TM515 15 Ft.
Model TM500 (Top Load Tungsten)	15192	15193	15194	15195	15196	15197	15198	15199	15200	15201



## WATER-COOLED ROBOTIC BOTTOM LOAD TIG BARREL

The TM500-B TIG Bottom Load Machine Barrel incorporates the same design as previously described (TM500) but is a bottom load type barrel for robotic applications. Tungsten electrodes are fastened by a collet action nut. A unique feature of this water-cooled TIG barrel is that the nozzle assembly water chamber and inner body water chamber are serially connected to each other, thus completely eliminating the need for gaskets or o-rings in the water passage system. Maximum current rating with thoriated tungsten electrodes is 500 amperes DC straight polarity, and 300 amperes AC. High frequency may be superimposed over standard current on a continuous or intermittent basis. There are five (5) collets available for use with this machine barrel with sizes of .040", 1/16", 3/32", 1/8", and 5/32". The singular collet design provides clamping pressure when the collet is securely fastened on the tungsten.

### MODEL EXPLANATION

TM500-B - TIG, Machine Barrel, 500 Amp - Bottom Load

### FEATURES

- Water-Cooled Inner Body & Nozzle
- 500 Amp Bottom Load
- Tungsten Range .040"-5/32" (1mm-4mm)
- Gas Cup Range 1/4"-5/8" (#4-#10, 6.5mm-16mm)
- Withstands Preheat & Extreme Conditions

### TUNGSTEN COLLETS - TM500-B ONLY

CODE NO.	SIZE (in.)	SIZE (mm)
19272	.040"	1mm
19273	1/16"	1.2mm
19274	3/32"	2.4mm
19275	1/8"	3.2mm
18158	5/32"	4mm

### ORDERING INFORMATION (Complete Assemblies)

DESCRIPTION	CODE & MODEL NO. FOR AVAILABLE LENGTHS									
	TM502-B 2 FT.	TM503-B 3 FT.	TM504-B 4 FT.	TM505-B 5 FT.	TM506-B 6 FT.	TM508-B 8 FT.	TM5010-B 10 FT.	TM5012-B 12 FT.	TM5015-B 15 FT.	
Model TM500-B (Bottom Load Tungsten)	15237	15238	15239	15240	15241	15242	15243	15244	15245	

### MODEL SPECIFICATIONS - CONTINUOUS DUTY CYCLE

Model	Current Capacity	Length	Diameter of Body	Weight (approx.)	Cooling Required	Recommended Tungsten Electrode Range	Instruction Manual
TM500	500 amp cont. duty	12.500"	1.625"	2.5 lbs.	5 pints/min	.040" - 5/32"	64TM
TM500-B	500 amp cont. duty	10.250"	1.625"	2.5 lbs	5 pints/min	.040" - 5/32"	66TMB



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