



# Water-Cooled MIG Barrels

Automatic Water-Cooled-to-the-Tip®

**D/F MACHINE SPECIALTIES**  
 1750 Howard Drive  
 North Mankato, MN 56003  
 Phone: (507) 625-6200  
 Fax: (507) 625-6203

## WATER-COOLED-TO-THE-TIP® AUTOMATIC DOCKING SPOOL® MACHINE BARRELS

The 650 amp Direct Mount Docking Spool®/Water-Cooled-to-the-Tip® Barrels accommodate two (2) different sizes and two (2) different lengths of water-cooled nozzle assemblies. Whether you are running steel, metal cored, or aluminum wire, the correct torch can be chosen for a neat and clean installation. The Water-Cooled-to-the-Tip Barrels are an ideal choice for hardbanding applications. These barrels are fully water cooled internally and externally. The internal body of the barrel is water cooled, thus putting the water cooling on the tip. This has increased tip life up to 14 times longer. Also, because the water cooling is on the tip, this enables customers to use our less expensive 122 slip-in copper tips for many high-current, single-arc welding applications. These barrels are available in 5-inch and 8-inch lengths. Each length is available with our standard size nozzles (1.125"). The wire diameter range is .030" through 5/32" with hard/cored wire, and 3/64" through 1/8" with aluminum wire.

The models NCM-W/C-T-A and HTM-W/C-T-A are similar to the models above but differ in gas flow capacity. These models feature our high capacity (Series A) nozzles (1.445") that provide more gas coverage for larger diameter wire. You can switch between the standard nozzles and high capacity nozzles if you have the correct inner parts for each. The W/C-Tip Barrels can run the complete line of D/F C122 DHP contact tips and the complete line of D/F CuCrZr (copper chromium zirconium) contact tips, as well as any custom tip configuration you may need.

The D/F Water-Cooled-to-the-Tip Barrels are standard equipped with a single Water Out & Power Cable, rated at 650 amps (continuous duty cycle). However, these ratings dictated by the contact tip. The NCM (slip-in) series of contact tips is rated up to 450 amps (continuous duty cycle). If your welding application requires amperages above 450, you must change to the heavy duty threaded CuCrZr series of contact tips rated up to 650 amps (continuous duty cycle).

In some instances C122 DHP is adequate, but for stainless steel and stiff, high column strength or abrasive wire such as flux cored and metal cored, CuCrZr is the correct choice. D/F Machine Specialties can increase several key characteristics creating a higher-quality consumable with increased conductivity, higher softening temperature and improved hardness. This means a reduction in arc start failures, increased tip life, and an increase in productivity.

These Water-Cooled-to-the-Tip Barrels can also be retrofit to have two Water Out & Power Cables, increasing the continuous duty cycle rating to 850 amps. These amperages require the use of the threaded CuCrZr current tips.

### MODEL EXPLANATION

- NCM-W/C-T** - Normal Duty, Collet Action (Slip-In Tip), Machine Barrel, Water-Cooled to the Tip
- HTM-W/C-T** - Heavy Duty, Threaded Tip, Machine Barrel, Water-Cooled to the Tip
- NCM-W/C-T-A** - Normal Duty, Collet Action (Slip-In Tip), Machine Barrel, Water-Cooled to the Tip, Series A High Capacity
- HTM-W/C-T-A** - Heavy Duty, Threaded Tip, Machine Barrel, Water-Cooled to the Tip, Series A High Capacity

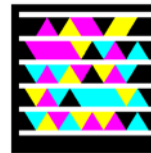
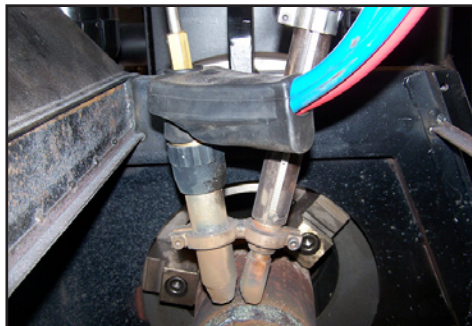
### FEATURES

- Water-Cooled Internally - Tip Recessed in Water Cooling
- Water-Cooled Externally - Gas Cup Recessed in Water Cooling
- 650 Amps Continuous Duty Cycle
- Up to 850 Amps Continuous with Dual Power Cables
- Adaptable to Any Wire Feeder or Power Source
- Withstands Preheat Upwards of 900 Degrees

### ORDERING INFORMATION (Complete Assemblies)

DESCRIPTION	CODE NO.	
	NCM-W/C-T	HTM-W/C-T
5" Long Nozzle	40134	40246
8" Long Nozzle	40135	40247
Series-A 5" Nozzle	40136	40248
Series-A 8" Nozzle	40137	40249

Add Footage Digit to Code Number for Utility Length Required.  
 Example: Require 40136 with 4 Ft. Utilities - 40136-4



### MODEL SPECIFICATIONS - CONTINUOUS DUTY CYCLE

Model	Current Capacity	Length w/ 5" Nozzle	Length w/ 8" Nozzle	Weight w/ 5" Nozzle	Weight w/ 8" Nozzle	Cooling Required	Diameter of W/C Nozzle	Recommended Wire Diameter Range	Instruction Manual
NCM-W/C-T	450 amps	9.25"	12.25"	2.8 lbs.	3.5 lbs.	3 quarts/min	1.125"	.030"-5/32" Hard/Cored, 3/64"-1/8" AL	599WC
NCM-W/C-T-A	450 amps	9.25"	12.25"	3 lbs.	3.8 lbs.	3 quarts/min	1.445"		599WC
HTM-W/C-T	850 amps	9.25"	12.25"	2.8 lbs.	3.5 lbs.	3 quarts/min	1.125"		599WC
HTM-W/C-T-A	850 amps	9.25"	12.25"	3 lbs.	3.8 lbs.	3 quarts/min	1.445"		599WC