

Water-Cooled MIG Barrels

Robotic Quick-Change Straight and Curved

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

WATER-COOLED ROBOTIC DOCKING SPOOL® COMPOSITE STRAIGHT AND CURVED MIG BARRELS

The versatile D/F quick change 500 amp Water-Cooled Robotic Docking Spool® Composite Barrel models can be used for a wide range of robotic applications. The composite modular design of the rugged, yet flexible, quick-disconnect model LRN (long reach 10-inch composite water-cooled nozzle) and the model N (short 5-inch composite water-cooled nozzle) torches allow the user to quickly change the gooseneck or cable assembly while maintaining tool center point, assuring accurate repeatability and continuous precision welding. These D/F robotic barrels have a compact, stainless steel, water-cooled nozzle designed specifically to withstand unusually large amounts of reflected heat build-up and prolonged duty cycles. Water circulates internally through the Docking Spool® to the nozzle, keeping the barrels running cooler, and thus the barrel and consumables last longer. Mounting is easy with the D/F Universal Robotic Mounting Arm (page 33). In the event that a component has to be adjusted or replaced, the Docking Spool® makes this torch entirely serviceable and easy to repair or replace in seconds.

The models NCM/LRN and NCM/N have a current capacity 400 amps in argon shielding. These accommodate slip-in current tips fastened by a collet action nut. The wire diameter range is .030" through 1/8" with hard/cored wire, and 3/64" through 3/32" with aluminum wire.

The barrel models HTM/LRN and HTM/N (threaded contact tip) have a current capacity range of up to 500 amperes. Rating will be contingent on the combination of current tip and shielding gas to be used. The model HTM employs threaded CuCrZr (copper chromium zirconium) current tips and has a wire diameter range of .035" through 1/8" with hard/cored wire, and 3/64" through 3/32" with aluminum wire.

MODEL EXPLANATION

NCM/N - Normal Duty, Collet Action (Slip-In Tip), Machine Barrel / Standard Length Nozzle NCM/LRN - Normal Duty, Collet Action (Slip-In Tip), Machine Barrel / Long Reach Nozzle HTM/N - Heavy Duty, Threaded Tip, Machine Barrel / Standard Length Nozzle HTM/LRN - Heavy Duty, Threaded Tip, Machine Barrel / Long Reach Nozzle NCC/N - Normal Duty, Collet Action (Slip-In Tip), Curved Barrel / Standard Length Nozzle NCC/LRN - Normal Duty, Collet Action (Slip-In Tip), Curved Barrel / Long Reach Nozzle HTC/N - Heavy Duty, Threaded Tip, Curved Barrel / Standard Length Nozzle HTC/LRN - Heavy Duty, Threaded Tip, Curved Barrel / Long Reach Nozzle

FEATURES

- Quick-Change Interchange Between Short, Long, Straight or Curved Goosenecks
- Fully Water-Cooled Internally Gas Cup Recessed in Water Cooling
- Up to 500 Amps Continuous Duty Cycle
- Adaptable to Any Wire Feeder or Power Source
- Withstands Preheat Upwards of 900 Degrees

ORDERING INFORMATION

	CODE NO.		
DESCRIPTION	Complete Assemblies	Complete Barrel Only	
NCM/N, HTM/N Straight 5"	40704	48240	
NCM/LRN, HTM/LRN Straight Long Reach	40786	48121	
NCC/N, HTC/N Curved 22° 5"	40775	48227	
NCC/LRN, HTC/LRN Curved 22° Long Reach	40785	48225	
NCC/LRN, HTC/LRN Curved 35° Long Reach	40712	48242	
NCC/LRN, HTC/LRN Curved 45° Long Reach	40788	48221	

For Complete Assemblies, Add Footage Digit to Code Number for Utility Length Required.

Example: Require 40785 with 4 Ft. Utilities - 40785-4





MODEL SPECIFICATIONS - CONTINUOUS DUTY CYCLE

	Model	Current Capacity	Length	Dia. of W/C Noz.	Weight	Cooling Required	Recommended Wire Dia. Range	Instruction Manual
	NCM/N, HTM/N	400/500 amp	8.375"	1.125"	3.6 lbs.	3 quarts/min	.030"-1/8" Hard/Cored, 3/64"-3/32" AL	536A
	NCM/LRN, HTM/LRN	400/500 amp	12.5"	1.125"	4.2 lbs.	3 quarts/min		536A
	NCC/N, HTC/N 22°	400/500 amp	8.375"	1.125"	3.6 lbs.	3 quarts/min		536
	NCC/HTC LRN 22°, 35°, 45°	400/500 amp	12.5"	1.125"	4.2 lbs.	3 quarts/min		536 (22°, 45°), 542-35 (35°)

