ACCULOCK™ R

MIG (GMAW) WELDING CONSUMABLES



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APPLICATIONS	Automotive General Manufacturing & Fabrication
SYSTEM COMPONENTS	Nozzles
COMPATIBLE WITH	TOUGH GUN® Robotic Air-Cooled Guns Tregaskiss® Robotic Water-Cooled Guns Tregaskiss® Fixed Automatic Guns
WIRE SIZES	• 0.030" to 3/32" (0.8 to 2.4 mm)

IT ALL COMES TOGETHER WITH ACCULOCK™ (๑)

In robotic MIG welding applications, MIG gun consumables require frequent replacement, contributing to both planned and unplanned downtime. If you need to increase throughput and efficiency with minimal risk and effort, IT'S TIME TO TAKE A FRESH LOOK AT YOUR MIG GUN CONSUMABLES.

- 60% of the contact tip is buried within the diffuser for less exposure to the heat of the weld for longer tip life and reduced replacement frequency.
- Upgrading from a copper tip to ACCULOCK™ HDP CONTACT TIPS can increase life up to 10x, depending on the application.
- Mating tapers on both tip-to-diffuser and diffuser-to-neck connection provide good electrical conductivity.
- In most cases, your current tip and diffuser can be replaced with no impact to TCP, making this upgrade LOW EFFORT, LOW RISK AND HIGH PAYOFE
- AccuLock[™] contact tips concentrically align with the diffuser to eliminate cross-threading and unplanned downtime.
- Innovative QUICK LOAD® liners install from the front of the MIG gun in less than half the time required to install conventional liners.







LONGER TIP LIFE

VIRTUALLY ELIMINATES CONTACT TIP CROSS-THREADING EASE OF MAINTENANCE



LONGER TIP LIFE

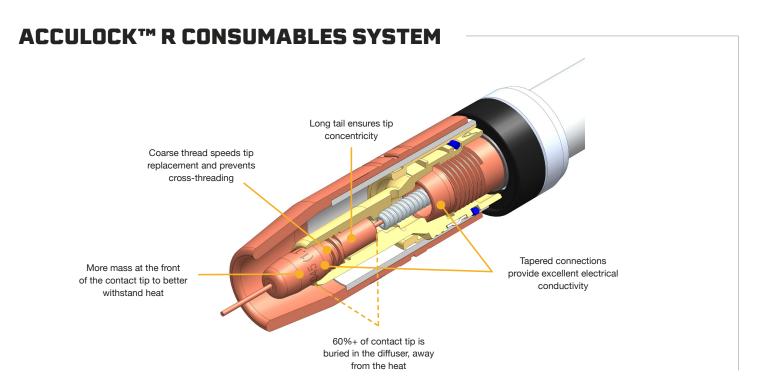
Coarse thread and long tail on contact tip ensures concentricity and prevents cross-threading

RELOAD UP TO 50% FASTER

Reload liners from the front in less than half the time

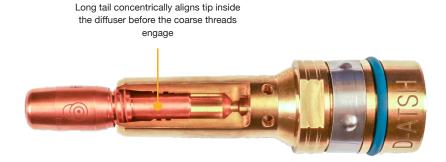
INCREASE UPTIME & THROUGHPUT

AccuLock[™] contact tips last longer and are quicker and easier to install



VIRTUALLY ELIMINATE CROSS THREADING

AccuLock[™] contact tips have a long tail that concentrically aligns with the diffuser before the coarse threads engage. Together, this design makes AccuLock[™] contact tips virtually impossible to cross thread, preventing downtime to troubleshoot weld problems and replace cross-threaded consumables.



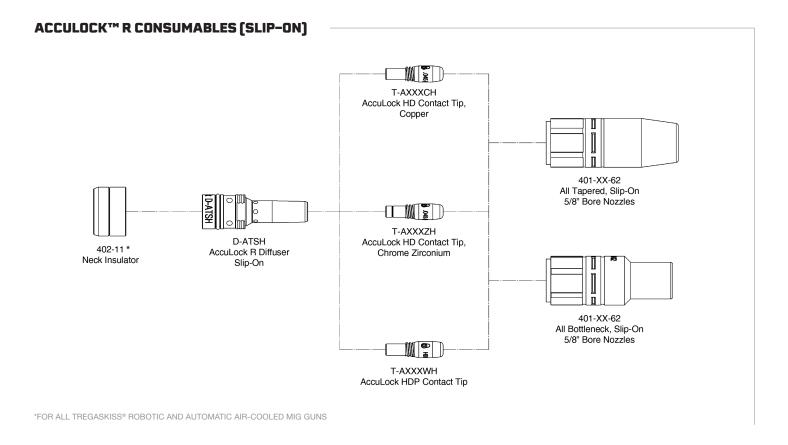
THE ACCULOCK™ R CONSUMABLE SYSTEM IS COMPRISED OF THE FOLLOWING COMPONENTS:

- AccuLock[™] contact tips and tip tool (see page 4)
- AccuLock™ R gas diffusers (see page 5)
- AccuLock[™] nozzles only 5/8" bore nozzles are currently available (see page 5)
- Optional Accessories AccuLock™ R teach pointers (see page 5)
- QUICK LOAD® liners and retainers (see page 6)

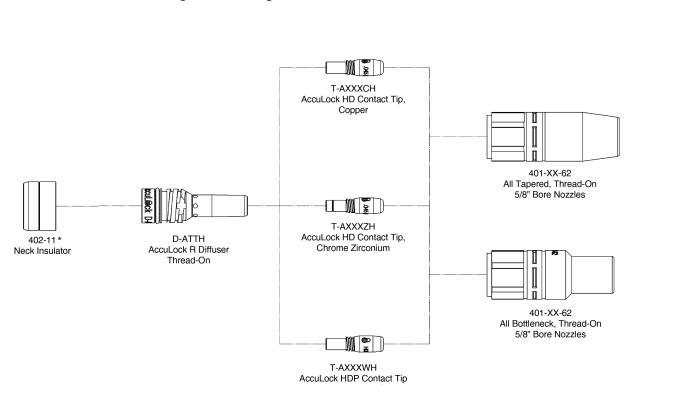
COMMON CONTACT TIP

Tregaskiss® AccuLock™ R consumables and Bernard® AccuLock™ S consumables share a common contact tip. If you have a combination of robotic, fixed automatic and semi-automatic guns in your facility, you'll benefit from the reduced costs and simplified inventory.

ACCULOCK™ R CONSUMABLE SYSTEM



ACCULOCK™ R CONSUMABLES (THREAD-ON)



*FOR ALL TREGASKISS® ROBOTIC AND AUTOMATIC AIR-COOLED MIG GUNS

ACCULOCK™ CONTACT TIPS

HEAVY DUTY [HD] COPPER CONTACT TIPS (Torque all AccuLock™ contact tips to 30 in.-lbs. (3.5Nm)

T-A030CH*^	for 0.030" (0.8 mm); qty. 10	T-A062CH^	for 1/16" (1.6 mm); qty. 10
T-A035CH*^	for 0.035" (0.9 mm); qty. 10	T-A072CH^	for 0.070" (1.8 mm); qty. 10
T-A039CH*^	for 0.039" (1.0 mm); qty. 10	T-A078CH^	for 5/64" (2.0 mm); qty. 10
T-A045CH*^	for 0.045" (1.2 mm); qty. 10	T-A094CH^	for 3/32" (2.4 mm); qty. 10
T-A052CH*^	for 0.052" (1.3 mm); qty. 10		

[^] ADD "-100" TO THE END OF THE ABOVE PART NUMBERS FOR QUANTITIES OF 100.

HEAVY DUTY (HD) CHROME ZIRCONIUM CONTACT TIPS (Torque all AccuLock™ contact tips to 30 in.-lbs. (3.5Nm)

T-A030ZH	for 0.030" (0.8 mm); qty. 10	T-A045ZH	for 0.045" (1.2 mm); qty. 10
T-A035ZH	for 0.035" (0.9 mm); qty. 10	T-A052ZH	for 0.052" (1.3 mm); qty. 10
T-A039ZH	for 0.039" (1.0 mm); qty. 10	T-A062ZH	for 1/16" (1.6 mm); qty. 10

NOTE: ADD "-100" TO THE END OF ANY OF THE ABOVE HD CHROME ZIRCONIUM CONTACT TIP PART NUMBERS LISTED FOR QUANITIES OF 100.

ACCULOCK™ TIP TOOL

T-ALTOOL Tip tool, AccuLock™; qty. 1

HDP CONTACT TIPS

Engineered with a special alloy that has superior resistance to arc erosion and wear, HDP tips can increase life up to 10x longer than copper and chrome zirconium tips, depending on the application. You can enjoy all the benefits of pulse welding plus dramatically extended contact tip life for increased production throughput. Additional benefits include increased arc stability for improved weld quality and reduced spatter.

T-A035WH for 0.035" (0.9 mm); qty. 10 T-A045WH for 0.045" (1.2 mm); qty. 10
T-A039WH for 0.039" (1.0 mm); qty. 10 T-A052WH for 0.052" (1.3 mm); qty. 10

NOTE: ADD "-100" TO THE END OF THE ABOVE HDP CONTACT TIP PART NUMBERS FOR QUANITIES OF 100.

C122 COPPER TIP





0 minutes 120 minutes arc on time arc on time

CHROME ZIRCONIUM TIP





0 minutes 120 minutes arc on time arc on time

HDP TIP





0 minutes arc on time

120 minutes arc on time

TEST PARAMETERS: 120 MINUTES ARC ON TIME (20 MIN X 6 CYCLES), HIGH SPEED PULSE WAVEFORM, ER70S3 .045" CU COATED SOLID WIRE FROM BULK PACKAGE (ER480S3 IN CANADA), 450 IPM WIRE FEED SPEED, 40-45 IPM TRAVEL SPEED, 90/10 MIXED GAS, 240-260 AVERAGE AMPS, TREGASKISS® TOUGH GUN® CA3 GUN WITH 22 DEGREE NECK

^{*} ADD "-1000" TO THE END OF THE ABOVE HD COPPER CONTACT TIP PART NUMBERS FOR QUANTITIES OF 1000.

ACCULOCK™ R GAS DIFFUSERS

HEAVY DUTY (HD) DIFFUSERS

D-ATTH*THREAD-ON; for TOUGH GUN® TA3 and CA3 robotic, MA1 automatic air-cooled, 500 amp MW1 automatic qty.10

water- cooled, Auto Head fixed automatic air-cooled, and 400 amp T-Gun™ (compact series handle) and 450

amp T-Gun semi-automatic water-cooled guns

D-ATSH* SLIP-ON; for TOUGH GUN® TA3 and CA3 robotic, MA1 automatic air-cooled, 500 amp MW1 automatic water-

cooled, Auto Head fixed automatic air-cooled, and 400 amp T-Gun™ (compact series handle) semi-automatic

qty. 10

qty. 25

water-cooled guns

D-ATTH-RW1 THREAD-ON; for 600 amp robotic water-cooled guns

D-ATTH-MW1 THREAD-ON; for 600 amp MW1 fixed automatic water-cooled and 600 amp T-Gun semi-automatic water-cooled guns qty. 25

D-ATSH-AW2 SLIP-ON; for AW2 fixed automatic water-cooled guns and 600 amp W-Gun™ semi-automatic water-cooled guns qty. 25

*ADD "-100" TO THE END OF THE ABOVE GAS DIFFUSERS PART NUMBERS FOR QUANTITIES OF 100.

TREGASKISS® NOZZLES

AIR-COOLED NOZZLES (THREAD-ON)

Part Number	Bore	Tip Position	Туре	Material	O.D.	Qty	Reamer Cutter Blade
401-14-62	5/8"	1/8" recess	Tapered	Copper	1.062"	10	RCT-01
401-43-62	5/8"	1/8" recess	Tapered	Copper	0.938"	10	RCT-01
401-18-62	5/8"	1/8" stick out	Tapered	Copper	0.938"	10	RCT-01
401-20-62	5/8"	1/8" stick out	Tapered	Copper	1.062"	10	RCT-01
401-30-62T	5/8"	1/8" stick out	Bottleneck	Brass	0.938"	10	RCT-01

AIR-COOLED NOZZLES (SLIP-ON)

Part Number	Bore	Tip Position	Туре	Material	O.D.	Qty	Reamer Cutter Blade	
401-6-62	5/8"	1/8" recess	Tapered	Copper	1.062"	10	RCT-01	
401-8-62	5/8"	1/8" stick out	Tapered	Copper	0.938"	10	RCT-01	
401-4-62	5/8"	1/8" recess	Tapered	Copper	0.938"	10	RCT-01	
401-5-62	5/8"	1/4" recess	1/4" recess	Tapered	Copper	1.062"	10	RCT-01
401-48-62	5/8"	Flush	Bottleneck	Copper	1.062"	10	RCT-01	
401-81-62	5/8"	1/8" stick out	Tapered	Copper	1.062"	10	RCT-01	
401-7-62	5/8"	1/4" recess	Tapered	Brass	1.106"	10	RCT-01	
401-71-62	5/8"	1/8" recess	Tapered	Brass	1.106"	10	RCT-01	
401-87-62	5/8"	1/8" stick out	Tapered	Brass	1.062"	10	RCT-01	
401-30-62	5/8"	1/8" stick out	Bottleneck	Brass	0.938"	10	RCT-01	

ACCULOCK™ R TEACH POINTERS

T-A050TP	Teach pointer, 1/2"; qty. 1	T-A10MTP	Teach pointer, 10 mm; qty. 1
T-A062TP	Teach pointer, 5/8"; qty. 1	T-A15MTP	Teach pointer, 15 mm; qty. 1
T-A075TP	Teach pointer, 3/4"; qty. 1	T-A001TP	Teach pointer, adjustable; qty. 1

QUICK LOAD® LINERS & RETAINERS

Select your wire size and gun length in the table below to find which QUICK LOAD® Liner part number is needed for your application.

QUICK LOAD® LINERS

Wire Size	6 ft Length	10 ft Length	15 ft Length	25 ft Length	Description
0.023"	_	_	415-23-15Q	_	High Carbon Steel - Round Wound
0.030"	415-30-6Q	_	415-30-15Q	_	High Carbon Steel - Round Wound
0.035" - 0.045"	415-35-6Q	415-35-10Q	415-35-15Q	415-35-25Q	High Carbon Steel - Round Wound
0.045" - 1/16"	415-116-6Q	415-116-10Q	415-116-15Q	415-116-25Q	High Carbon Steel - Round Wound
1/16" – 5/64"	415-564-6Q	_	415-564-15Q	415-564-25Q	High Carbon Steel - Round Wound
0.078" - 3/32"	415-332-6Q	_	415-332-15Q	415-332-25Q	High Carbon Steel - Flat Wound

QUICK LOAD® E-Z FEED™ LINERS

Wire Size	6 ft Length	10 ft Length	15 ft Length	25 ft Length	Description
0.035" - 0.045"	415-35-062Q	_	_	_	Galvanized - D Wound (requires 415-26 retainer)
0.045" - 1/16"	415-116-062Q	_	_	_	Galvanized - D Wound (includes 415-31 retainer)

QUICK LOAD® LINER RETAINERS Required for initial installation (sold separately)

Wire Size	Part Number	Description
0.030" - 5/64"	415-26	QUICK LOAD® Liner Retainer*
0.030" - 5/64"	415-37	QUICK LOAD® Liner Retainer**
0.045" - 1/16"	415-31	QUICK LOAD® Liner Retainer (required for 415-116-062Q)
0.078" - 3/32"	415-24	QUICK LOAD® Liner Retainer*

COMPATIBLE WITH TREGASKISS TOUGH GUN* ROBOTIC AND AUTOMATIC MIG GUNS AND BERNARD BTB, TGX AND CLEAN AIR SEMI-AUTOMATIC MIG GUNS

**COMPATIBLE WITH MOST TWECO® MIG GUNS

ACCULOCK® R CONVERSION SERIES

Add our AccuLock® R Consumables to your Fronius® style MIG gun. See the chart below for parts needed to upgrade.

Gun Manufacturer	Gun Model	Gun Neck	AccuLock™ Conversion Diffuser	Neck Insulator	Adaptor
Fronius [®]	TPSi	Compatible with M12x1.0 thread	D-ATTH-F4C	Not applicable	Not applicable

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