

Tregaskiss® 600 amp Robotic Water-Cooled MIG Gun

Issued April 2024 • Index No. RWC/2.0

MIG (GMAW)
Robotic Welding 

Quick Specs

Duty Cycle Rating

60%: 600 amp with Mixed Gases

Ratings are based on tests that comply with IEC 60974-7 standards

Processes

MIG (GMAW) Welding

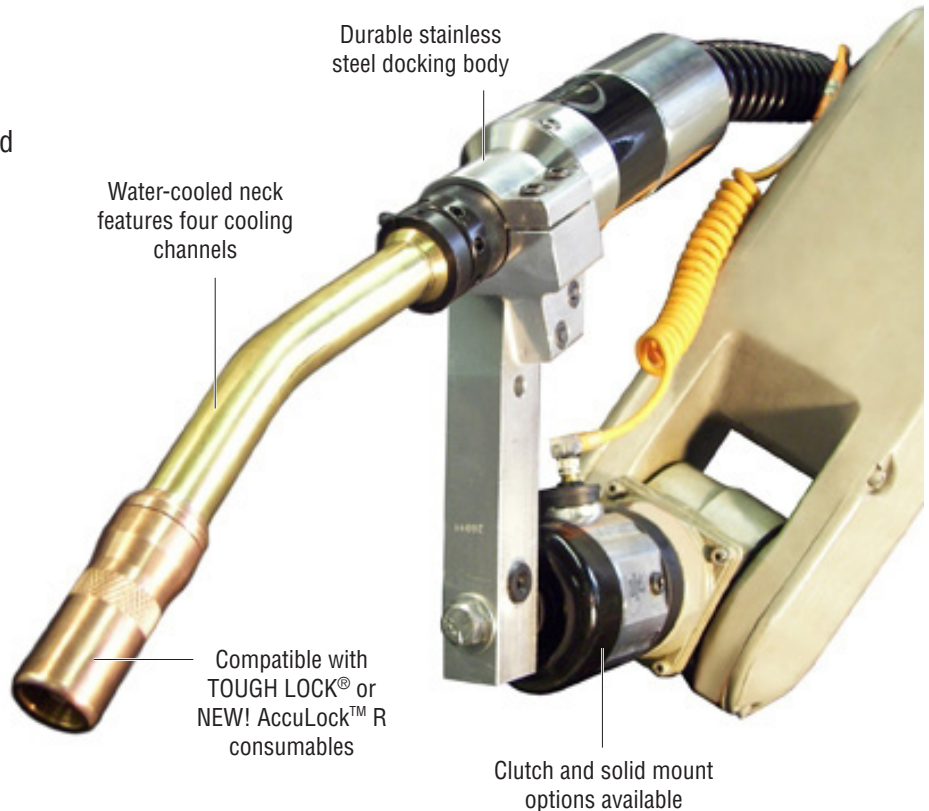
Robots

ABB®, Yaskawa® Motoman®, FANUC®,
Miller®, OTC Daihen®, Kawasaki®

Serviceable and easy to repair, the Tregaskiss® 600 amp robotic water-cooled MIG gun is ready to take on your most demanding welding applications. Its rugged design is tough and dependable enough to maximize productivity when welding thick plate or running excessive duty cycles and long beads.

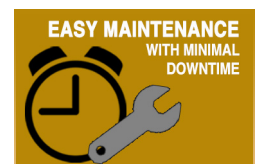
In addition to having a water-cooled power cable, the neck features four cooling channels that provide significant water-cooling capacity to the front-end components, keeping them cool and extending their usable life.

The stainless steel docking body is built to last and will not deteriorate during the serviceable life of the MIG gun. Plus, the heavy duty monocoil cable provides a rigid support for the liner, resulting in smooth and consistent wire feeding.



- Durable stainless steel docking body will not deteriorate during the serviceable life of the MIG gun
- Withstands heat from welding thick plate, long beads or excessive duty cycles
- Water-cooled neck and power cable keep front-end consumables cool
- Neck features four cooling channels

- Durable conduit swivels independently and provides rigid support for the liner, resulting in smooth and consistent wire feeding
- Maintenance-friendly features include accessible front housing, quick-change fittings and replaceable components



Tregaskiss

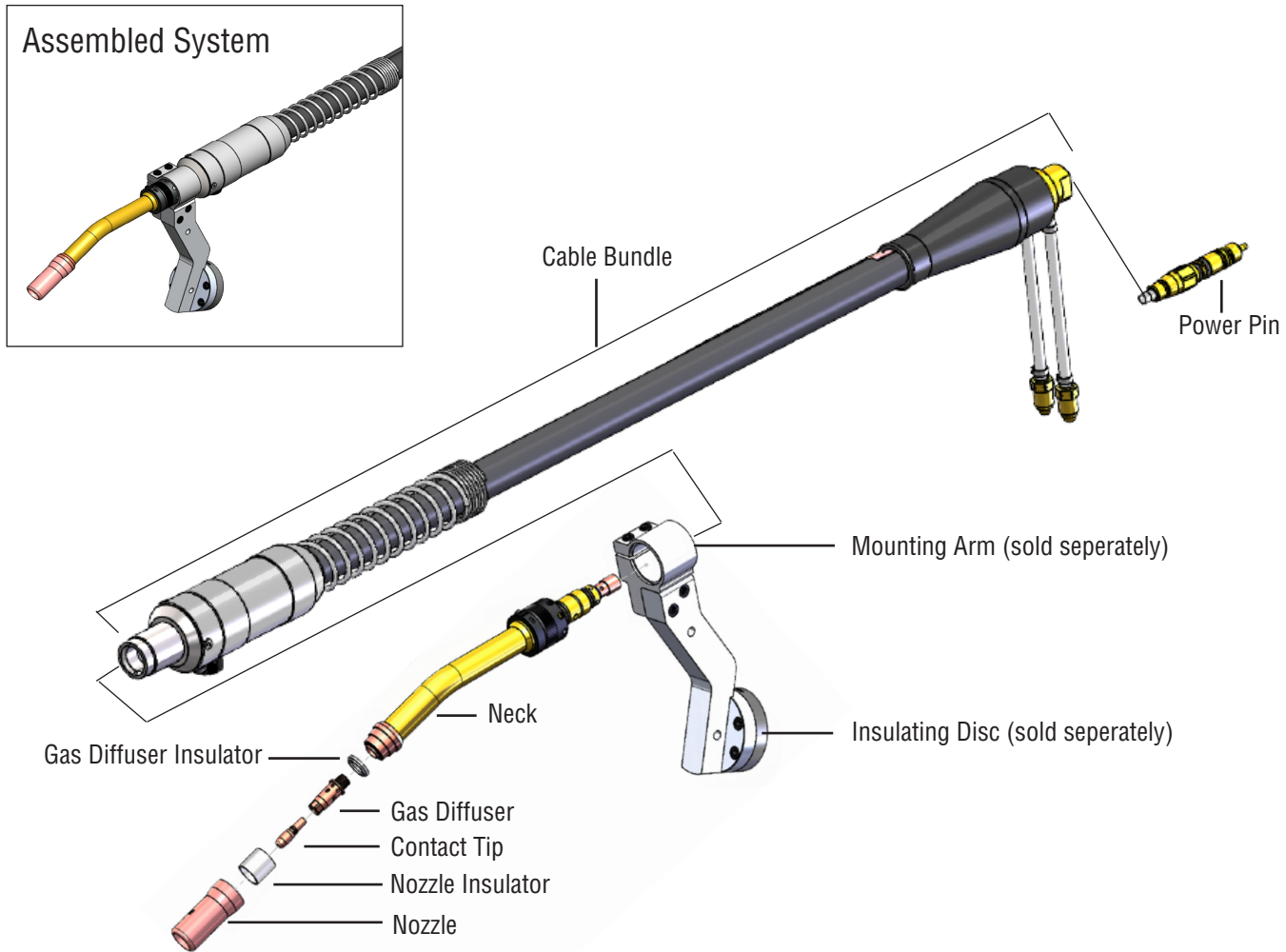
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For more information, visit us at Tregaskiss.com

System Components



*Other mounting options available

Know Your Options

What's the difference between clutch and solid mount?

A clutch mount is designed to trigger an emergency stop in the event of a robotic collision, whereas a solid mount is not equipped with this functionality. Although many of today's robots are equipped with independent collision detection software and may not require this functionality in a robotic MIG gun, the clutch option is sometimes selected during gun configuration as an additional safeguard.

Wire Brake

Wire brake holds wire to a consistent stick out to allow a repeatable tool center point (TCP) for touch sensing / seam tracking while the torch articulates. Selecting the wire brake option when configuring a gun will not impact TCP. 40-60 psi maximum air supply is required for proper operation. Wire brake is available for wire sizes between 0.030" and 1/16", and requires the use of a jump liner (for use with conventional liners). This option is not compatible with QUICK LOAD® Liners or the QUICK LOAD Liner AutoLength™ System.

AccuLock™ R Consumables

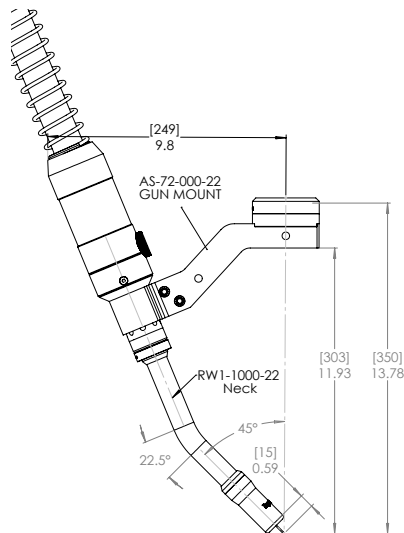
Eliminate contact tip cross-threading issues with new AccuLock R Consumables. These new consumables are designed for increased tip life, which can reduce replacement frequency and related downtime. AccuLock HDP Contact Tips can increase life by an additional 10x or more in pulse welding applications. And in most cases, your current tip and diffuser can be replaced with no impact to Tool Center Point (TCP), making this upgrade low effort, low risk, and high payoff.



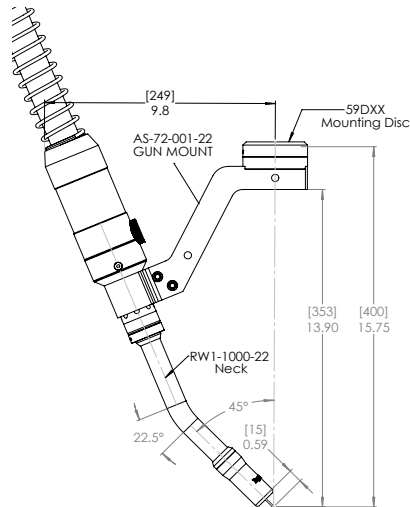
Gun Configurations

NOTE: For Center Of Mass information, please visit Tregaskiss.com/RWC

Standard Configurations (Solid Mount) – 22 Degree Necks

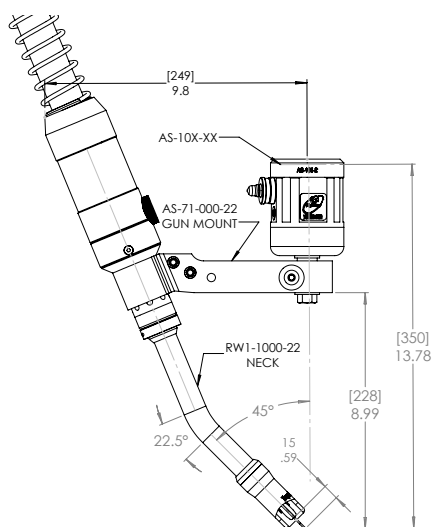


350 mm (13.78") TCP,
Neck RW1-1000-22

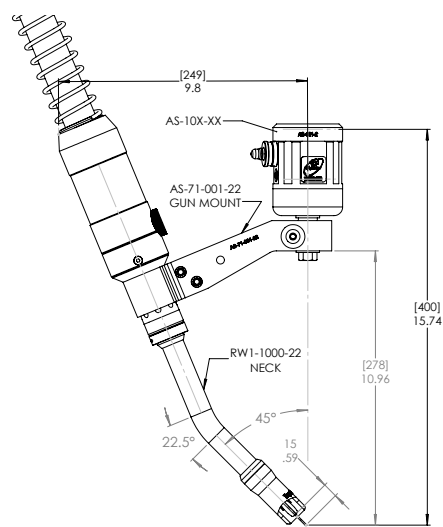


400 mm (15.75") TCP,
Neck RW1-1000-22

Standard Configurations (Clutch) – 22 Degree Necks



350 mm (13.78") TCP,
Neck RW1-1000-22

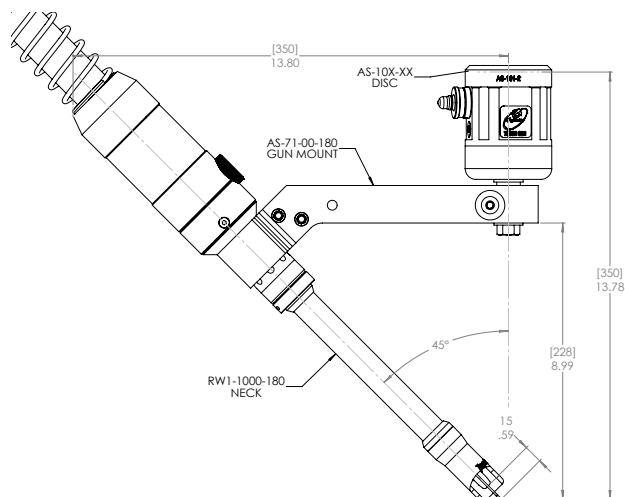


400 mm (15.75") TCP,
Neck RW1-1000-22

Gun Configurations (Continued)

NOTE: For Center Of Mass information, please visit Tregaskiss.com/RWC

Standard Configurations (Clutch) – 180 Degree Necks



350 mm (13.78") TCP,
Neck RW1-1000-180

Consumable Options

AccuLock™ Heavy Duty (HD) Copper Contact Tips

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

NOTE: add "-100" to the end of the above HD copper contact tip part numbers for quantities of 100.

**add "-1000" to the end of the above part numbers for quantities of 1000.*

AccuLock Heavy Duty (HD) Chrome Zirconium Contact Tips

T-A030ZH	for 0.030" (0.8 mm) wire; qty. 10	T-A039ZH	for 0.039" (1.0 mm) wire; qty. 10
T-A035ZH	for 0.035" (0.9 mm) wire; qty. 10	T-A045ZH	for 0.045" (1.2 mm) wire; qty. 10

NOTE: add "-100" to the end of the above HD chrome zirconium contact tip part numbers for quantities of 100.

AccuLock R Gas Diffusers

D-ATTH-RW1	Gas diffuser, thread-on, AccuLock R
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TOUGH LOCK® Heavy Duty (HD) Contact Tips

403-20-30	for 0.030" (0.8 mm) wire	403-20-1.4	for 0.055" (1.4 mm) wire
403-20-35	for 0.035" (0.9 mm) wire	403-20-116	for 1/16" (1.6 mm) wire
403-20-1.0	for 0.040" (1.0 mm) wire	403-20-1.8	for 0.070" (1.8 mm) wire
403-20-45	for 0.045" (1.2 mm) wire	403-20-78	for 0.078" (2.0 mm) wire
403-20-364	for 3/64" (1.2 mm) wire	403-20-564	for 5/64" (2.0 mm) wire
403-20-52	for 0.052" (1.3 mm) wire	403-20-332	for 3/32" (2.4 mm) wire

TOUGH LOCK Extended Life Heavy Duty (EHD) Contact Tips

403-27-30	for 0.030" (0.8 mm) wire	403-27-45	for 0.045" (1.2 mm) wire
403-27-35	for 0.035" (0.9 mm) wire	403-27-364	for 3/64" (1.2 mm) wire
403-27-1.0	for 0.040" (1.0 mm) wire		

Consumable Options (Continued)

TOUGH LOCK Water-Cooled Gas Diffusers

404-71 Gas diffuser, thread-on, water-cooled

Tregaskiss® Nozzles

671-6-75 3/4" bore, 1/8" recess, water-cooled; 1" O.D.

671-8-75 3/4" bore, 1/8" stick-out, water-cooled; 1" O.D.

Conventional Liners

415-35-6 for 0.035" (0.9 mm) - 0.045" (1.2 mm) wire; 6' (1.8 m)
415-35-10 for 0.035" (0.9 mm) - 0.045" (1.2 mm) wire; 10' (3.05 m)
415-35-15 for 0.035" (0.9 mm) - 0.045" (1.2 mm) wire; 15' (5.0 m)
415-116-6W for 0.045" (1.2 mm) - 1/16" (1.6 mm) wire; 6' (1.8 m)
415-116-10W for 0.045" (1.2 mm) - 1/16" (1.6 mm) wire; 10' (3.05 m)
415-116-15W for 0.045" (1.2 mm) - 1/16" (1.6 mm) wire; 15' (5.0 m)
415-564-6W for 1/16" (1.6 mm) - 5/64" (2.0 mm) wire; 6' (1.8 m)
415-564-10W for 1/16" (1.6 mm) - 5/64" (2.0 mm) wire; 10' (3.05 m)
415-564-15W for 1/16" (1.6 mm) - 5/64" (2.0 mm) wire; 15' (5.0 m)

Jump Liners (required for MIG guns equipped with wire brake only)

495-19-35 for 0.035" (0.9 mm) - 0.045" (1.2 mm) wire; 26"
495-19-116 for 0.045" (1.2 mm) - 1/16" (1.6 mm) wire; 26"

Components

Water-Cooled Necks

RW1-1000-22 22 degree neck

RW1-1000-180 180 degree neck

Cable Bundles

RW1-2000-B Cable bundle, 3.5 ft
RW1-2000-C Cable bundle, 4.0 ft
RW1-2000-D Cable bundle, 4.5 ft
RW1-2000-E Cable bundle, 5.0 ft
RW1-2000-F Cable bundle, 5.5 ft
RW1-2000-G Cable bundle, 6.0 ft
RW1-2000-H Cable bundle, 6.5 ft
RW1-2000-J Cable bundle, 7.0 ft
RW1-2000-K Cable bundle, 7.5 ft
RW1-2000-M Cable bundle, 8.0 ft
RW1-2000-N Cable bundle, 8.5 ft
RW1-2000-P Cable bundle, 9.0 ft
RW1-2000-Q Cable bundle, 9.5 ft
RW1-2000-R Cable bundle, 10.0 ft
RW1-2000-S Cable bundle, 10.5 ft
RW1-2000-T Cable bundle, 11.0 ft
RW1-2000-U Cable bundle, 12.0 ft
RW1-2000-V Cable bundle, 13.0 ft
RW1-2000-W Cable bundle, 14.0 ft
RW1-2000-Y Cable bundle, 15.0 ft

RW1-2000WB-B Cable bundle, wire brake, 3.5 ft
RW1-2000WB-C Cable bundle, wire brake, 4.0 ft
RW1-2000WB-D Cable bundle, wire brake, 4.5 ft
RW1-2000WB-E Cable bundle, wire brake, 5.0 ft
RW1-2000WB-F Cable bundle, wire brake, 5.5 ft
RW1-2000WB-G Cable bundle, wire brake, 6.0 ft
RW1-2000WB-H Cable bundle, wire brake, 6.5 ft
RW1-2000WB-J Cable bundle, wire brake, 7.0 ft
RW1-2000WB-K Cable bundle, wire brake, 7.5 ft
RW1-2000WB-M Cable bundle, wire brake, 8.0 ft
RW1-2000WB-N Cable bundle, wire brake, 8.5 ft
RW1-2000WB-P Cable bundle, wire brake, 9.0 ft
RW1-2000WB-Q Cable bundle, wire brake, 9.5 ft
RW1-2000WB-R Cable bundle, wire brake, 10.0 ft
RW1-2000WB-S Cable bundle, wire brake, 10.5 ft
RW1-2000WB-T Cable bundle, wire brake, 11.0 ft
RW1-2000WB-U Cable bundle, wire brake, 12.0 ft
RW1-2000WB-V Cable bundle, wire brake, 13.0 ft
RW1-2000WB-W Cable bundle, wire brake, 14.0 ft
RW1-2000WB-Y Cable bundle, wire brake, 15.0 ft

Components (Continued)

Liner Conduits

RW1-2600-B	Conduit, 3.5 ft	RW1-2600-N	Conduit, 8.5 ft
RW1-2600-C	Conduit, 4.0 ft	RW1-2600-P	Conduit, 9.0 ft
RW1-2600-D	Conduit, 4.5 ft	RW1-2600-Q	Conduit, 9.5 ft
RW1-2600-E	Conduit, 5.0 ft	RW1-2600-R	Conduit, 10.0 ft
RW1-2600-F	Conduit, 5.5 ft	RW1-2600-S	Conduit, 10.5 ft
RW1-2600-G	Conduit, 6.0 ft	RW1-2600-T	Conduit, 11.0 ft
RW1-2600-H	Conduit, 6.5 ft	RW1-2600-U	Conduit, 12.0 ft
RW1-2600-J	Conduit, 7.0 ft	RW1-2600-V	Conduit, 13.0 ft
RW1-2600-K	Conduit, 7.5 ft	RW1-2600-W	Conduit, 14.0 ft
RW1-2600-M	Conduit, 8.0 ft	RW1-2600-Y	Conduit, 15.0 ft

Power Cables

RW1-2500-B	Power cable, 3.5 ft	RW1-2500-N	Power cable, 8.5 ft
RW1-2500-C	Power cable, 4.0 ft	RW1-2500-P	Power cable, 9.0 ft
RW1-2500-D	Power cable, 4.5 ft	RW1-2500-Q	Power cable, 9.5 ft
RW1-2500-E	Power cable, 5.0 ft	RW1-2500-R	Power cable, 10.0 ft
RW1-2500-F	Power cable, 5.5 ft	RW1-2500-S	Power cable, 10.5 ft
RW1-2500-G	Power cable, 6.0 ft	RW1-2500-T	Power cable, 11.0 ft
RW1-2500-H	Power cable, 6.5 ft	RW1-2500-U	Power cable, 12.0 ft
RW1-2500-J	Power cable, 7.0 ft	RW1-2500-V	Power cable, 13.0 ft
RW1-2500-K	Power cable, 7.5 ft	RW1-2500-W	Power cable, 14.0 ft
RW1-2500-M	Power cable, 8.0 ft	RW1-2500-Y	Power cable, 15.0 ft

Leather Jackets

RW1-2400-G	Leather jacket, 6.0 ft
RW1-2400-R	Leather jacket, 10.0 ft
RW1-2400-Y	Leather jacket, 15.0 ft

Wire Brake

450-17	Wire brake installation tool	598	Wire brake wire guide; 0.035" (0.9 mm) - 0.045" (1.2 mm)
RW1-599	Wire brake, water-cooled	598-116	Wire brake wire guide; 0.045" (1.2 mm) - 1/16" (1.6 mm)
499-9-15	Wire brake hose; 15 ft		

Mounting Options

Clutch

AS-708 Safety clutch

Mounting Arms - Clutch

AS-71-000-22	Mounting arm; 22 degree, 350 mm TCP	AS-71-001-22	Mounting arm; 22 degree, 400 mm TCP
AS-71-00-180	Mounting arm; 180 degree, 350 mm TCP		

Mounting Arms - Solid Mount

AS-72-000-22	Mounting arm; 22 degree, 350 mm TCP
AS-72-001-22	Mounting arm; 22 degree, 400 mm TCP

Insulating / Transition Discs — Clutch

For ABB® Robots

AS-101-2	IRB6, 140, 1400, 1500, 1600, M97A, 2000, IRB2400L, 4000
AS-101-4	IRB2400-10, IRB2400-16, IRB2600, IRB4600-20/2.5, IRB440L
AS-107-13	IRB6600, IRB6650

For COMAU® Robots

AS-102-10	SmartSix 6-14
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For KUKA® Robots

AS-101-2	KR5 arc, KR6, KR6-2, KR6 arc, KR6 KS, KR16 L6, KR16 L6 arc, KR16 L6 KS
AS-106-8	KR5 R1400, KR6 R700 sixx, KR6 R900 sixx, KR10 R900 sixx, KR10 R1100 sixx
AS-107-12	KR-125, KR-150/2

For Miller® Robots

AS-101-2	MRV-2
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For OTC Daihen® Robots

AS-101-2	MRV-6, EX-V6, EX-V6L, EX-V16, DR-2000, DR-4000, DR-4200L, DR-440
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For FANUC® Robots

AS-101-2	100, 100i, 120iB, S-6, M710-20L
AS-106-8	ArcMate 50iB, 50iC
AS-102-17	100iC, 120iC, M710iC-12L (includes AS-102-10 insulating disc)

For Kawasaki® Robots

AS-106-14	RA10L, RS10L, RS20N
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For Reis® Robots

AS-106-14	RV16, RV16L, RVL16, RH16, RL16 A4, RL26 A4, RV20-16
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For Yaskawa® Motoman® Robots

AS-101-2	HP6, HP50-20, K6A, K10S, MH50-20, MH6, SK6, SK16, SK16X, SSF2000, UP6, UP20
AS-106-7	K35, HP3, HP3C, HP3JC, MH5, MH5L, SV3
AS-106-13	MH5S, MH5LS
AS-102-20	MA1440, MA2010, MA3210 (includes AS-102-10 insulating disc)

For Panasonic® Robots

AS-106-4	VR-008A, VR-006A, VR-005C, VR-005LII, AW-010A, AW-8010, AW-005A, AW-005C, AW-005CL, AS-006A, VR-006AL, TA-1400, TA-1800, TL-1800, TL-2000
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Mounting Options (Continued)

Insulating / Transition Discs - Solid Mount

For ABB® Robots

59D02	IRB6, 140, 1400, 1500, 1600, M97A, 2000, IRB2400L, 4000
59D04	IRB2400-10, IRB2400-16, IRB2600, IRB4600-20/2.5, IRB440L

For COMAU® Robots

59D01	SmartSix 6-14
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For KUKA® Robots

59D02	KR5 arc, KR6, KR6-2, KR6 arc, KR6 KS, KR16 L6, KR16 L6 arc, KR16 L6 KS
59D05	KR5 R1400, KR6 R700 sixx, KR6 R900 sixx, KR10 R900 sixx, KR10 R1100 sixx
59D06	KR16, KR16-2, KR16 S, KR16 KS, KR30 L16-2
59DT-006	KR30, KR60, KR60 L45, KR60 L30 (includes 59D02 insulating disc)

For OTC Daihen® Robots

59D02	MRV-6, EX-V6, EX-V6L, EX-V16, DR-2000, DR-4000, DR-4200L, DR-4400
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For Reis® Robots

59D06	RV4, RV6, RV6L, RV20-6
59D06	insulating disc

For FANUC® Robots

59D02	100, 100i, 120iB, S-6, M710-20L
59D05	ArcMate 50iB, 50iC
59DT-003	100iC, 120iC, M710iC-12L (includes 59D01 insulating disc)

For Yaskawa® Motoman® Robots

59D02	HP6, HP50-20, K6A, K10S, MH50-20, MH6, SK6, SK16, SK16X, SSF2000, UP6, UP20
59D07	K35, HP3, HP3C, HP3JC, MH5, MH5L, SV3
59DT-001	MH50 (includes 59D02 insulating disc)
59D08	MH5S, MH5LS
59DT-008	MA1440, MA2010, MA3210 (includes 59D01 insulating disc)
59DT-002	EA Series (includes 59D03 insulating disc)

For Panasonic® Robots

59D03	VR-008A, VR-006A, VR-005C, VR-005LII, AW-010A, AW-8010, AW-005A, AW-005C, AW-005CL, AS-006A, VR-006AL, TA-1400, TA-1800, TL-1800, TL-2000
59DT-005	TM-1100, TM-1400, TM-1600, TM-1800 (includes 59D02 insulating disc)

For Miller® Robots

59D02	MRV-2
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Power Pins

Power Pins

214-1W	Miller®	214-7W	Lincoln®	214W	Tweco® #4
214-12W	Tweco #5	214-17W	Fronius®	214-30W	Panasonic®
214-40W	Lincoln (modified)				

Peripherals & Accessories



TOUGH GUN® TT4 Reamer *Power Through Weld Spatter for Increased Uptime and Weld Quality*

Automating spatter removal helps to extend the life of your robotic MIG guns and consumables, benefiting your bottom line, production uptime and throughput. Operates reliably in the harshest welding environments.

Visit Tregaskiss.com/robotic-nozzle-cleaning-stations for ordering information.

TOUGH GARD Anti-Spatter Liquid



This ready-to-use water-soluble, non-toxic product creates a sacrificial surface that reduces spatter adhesion. This prolongs the life of your consumables and minimizes downtime due to nozzle cleaning which can help reduce your operating and maintenance costs.

TOUGH GARD Anti-Spatter Liquid

TG-101-05	5.28 U.S. Gallon / 20 L
TG-101-55	55 U.S. Gallon / 208 L
TG-101-01	1 U.S. Gallon / 3.78 L
TG-101-32SP	32 fl. oz. / 946 mL (spray bottle)
TG-101-14S	16.9 fl. oz. / 500 mL

TOUGH GARD® Multi-Feed System



Eliminate the need to frequently refill sprayer reservoirs with the TOUGH GARD Multi-Feed System from Tregaskiss. Feed up to 10 TOUGH GUN Reamer units from a single 5-gallon or 55-gallon drum of TOUGH GARD Anti-Spatter Liquid.

TOUGH GARD Multi-Feed System

TG-103-05-2	for 5-Gallon pail (up to 2 nozzle cleaning stations)
TG-103-05-10	for 5-Gallon pail (up to 10 nozzle cleaning stations)
TG-103-55-10	for 55-Gallon drum (up to 10 nozzle cleaning stations)

TOUGH GARD Multi-Feed System Hose (sold separately)

TG-103-100	100' Multi-Feed Hose
TG-103-200	200' Multi-Feed Hose

Notes

Ordering Information

Step #1 - Tregaskiss 600 amp Robotic Water-Cooled MIG Guns

Gun Series	Neck	Option 1	Option 2	Cable Length	Nozzle	Contact Tip	Wire Size	Power Pin
R W 1 6	A	Z	0	B	A	1	B	M
	A 22 degree C 180 degree	Z No options available	0 No options 1 Wire brake	B 3.5 ft C 4.0 ft D 4.5 ft E 5.0 ft F 5.5 ft G 6.0 ft H 6.5 ft J 7.0 ft L 8.0 ft R 10.0 ft U 12.0 ft	0 No consumables A 671-6-75 B 671-8-75	0 No consumables* 5 T-A0XXCH**	0 N/A* E 0.045" G 0.052" J 1/16"	L Lincoln® M Miller® P Panasonic® T Tweco® #4

* Must be selected if "No consumables" is selected in Nozzle option
 ** XX = wire size

Step #2 - Insulating/Transition Disc

Select your insulating disc from page 7 and enter it here:

Step #3 - Mounting Arm

Select your insulating disc from page 7 and enter it here:

Step #4 - Clutch

NOTE: Omit this step for solid mount setups.

Select your safety clutch from page 7 and enter it here:

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