



MIG Welding Guns, Consumables and Robotic Peripherals



AccuLock™
CONSUMABLES

WHY TREGASKISS AND BERNARD?

The Tregaskiss® and Bernard® brands are backed by a shared team that is focused on helping you achieve success in your MIG welding operations.

YOU ASK. WE LISTEN.

Your needs and challenges are something we listen closely to as we improve existing products and launch innovative yet practical new products. Recent examples include our new AccuLock™ S and AccuLock R consumables (see pages 4-10 for more information).

YOU NEED RELIABILITY. WE UNDERSTAND.

You need reliable MIG guns, consumables and welding products that are readily available and offer consistent performance. Simplicity, ease of maintenance and durability are always part of our design specifications.

YOU WANT QUALITY. WE DELIVER.

You prefer to use best-in-class welding products and components in your welding applications. Our premium quality welding consumables are precision-engineered for superior performance and longer life. To further support you, our MIG guns are designed to be universally compatible with most brands of welding machines and robots on the market.

YOUR NEEDS ARE UNIQUE. WE CONFIGURE.

You understand the efficiency benefits of using best-fit products that optimize your welding applications. Our configured MIG product solutions help you achieve your goals.

YOU EXPECT ONGOING SUPPORT. WE VALUE OUR PARTNERSHIP.

You need supplier partners who stand firmly behind their products. We support you long after the sale by offering you competitive warranties as well as technical support via phone and email, 24/7 online resources, and an extensive authorized partner network (see page 44 for more information).

INDUSTRIES



AUTOMOTIVE



COMMERCIAL



***COMMERCIAL TRUCK
AND TRAILER***



***GENERAL
MANUFACTURING***



HEAVY EQUIPMENT



OIL & GAS



SHIP

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MIG GUN CONSUMABLES OVERVIEW

Genuine Bernard® and Tregaskiss® consumables enhance the performance of your MIG welding gun. They are manufactured to the same durable, high-performance standards as every MIG welding product we build, and they deliver the improved performance you've come to know and expect from us.

CONSUMABLES COMPARISON CHART

Features	AccuLock™ S	AccuLock R	Centerfire™	TOUGH LOCK®
Copper contact tips	✓	✓	✓	✓
Chrome zirconium contact tip	✓	✓	—	✓
HDP contact tips	—	✓	—	—
Drop-in contact tip (no threads)	—	—	✓	—
Coarse threaded contact tip prevents cross-threading	✓	✓	—	—
Cooling tail on contact tip	✓	✓	—	—
Threaded nozzles	✓	✓	✓	✓
Slip-on nozzles	✓	✓	—	✓
Taper lock (tip to diffuser/head)	✓	✓	✓	✓
Taper lock (diffuser/head to neck)	✓	✓	—	✓

Looking for a consumable series that is compatible with your existing Bernard semi-automatic or Tregaskiss robotic or fixed automatic MIG welding gun? Consult the reference chart below:

CONSUMABLES AND MIG GUN SERIES COMPATIBILITY CHART

Features	AccuLock™ S*	AccuLock R^	Centerfire™	TOUGH LOCK®
Bernard BTB Semi-Automatic Air-Cooled MIG Guns (page 14)	✓	✓	✓	✓
Bernard W-Gun™ Semi-Automatic Water-Cooled MIG Guns (page 26)	—	✓	✓	—
Bernard T-Gun™ Semi-Automatic Water-Cooled MIG Guns (page 26)	—	✓	—	SP
Bernard Clean Air™ Fume Extraction MIG Guns (page 22)	Coming Soon	—	✓	SP
Tregaskiss TOUGH GUN® TA3 Robotic Air-Cooled MIG Guns (page 28)	—	✓	—	✓
Tregaskiss TOUGH GUN CA3 Robotic Air-Cooled MIG Guns (page 32)	—	✓	—	✓
Tregaskiss 600 amp TOUGH GUN Robotic Water-Cooled MIG Guns (page 40)	—	✓	—	✓
Tregaskiss BA1 Cobot Air-Cooled MIG Guns (page 36)	—	✓	—	—
Tregaskiss MA1 Fixed Automatic Air-Cooled MIG Guns (page 38)	—	✓	—	✓
Tregaskiss MW1 Fixed Automatic Water-Cooled MIG Guns (page 39)	—	✓	—	✓
Tregaskiss AW2 Fixed Automatic MIG Guns (page 39)	—	✓	✓	—

*For use with AccuLock S Liners

^For use with QUICK LOAD® Liners

GUIDE: ✓ Compatible
 SP Compatible but may require special parts (check spec sheet for details)

AccuLock™ S CONSUMABLES

LESS TROUBLESHOOTING. LESS TIP CHANGES. MORE PRODUCTS OUT THE DOOR.

Maximize productivity — reduce issues that lead to costly rework and downtime and increase the life of your consumables

Reduce Errors

Error-proof liner trimming every time — no measuring required! Color match power pin cap washer to liner shrink tube to ensure compatibility.

Increase Productivity

Eliminate welding liner misalignment and gaps from your troubleshooting list. Front-loading AccuLock S liners are locked and concentrically aligned to both the contact tip and the power pin to ensure optimized wire feeding.

Longer Contact Tip Life

Get more products out the door when you have fewer interruptions in your welding operation. 60% of the contact tip is buried within the diffuser away from the heat of the weld which contributes to 2-3x longer tip life.

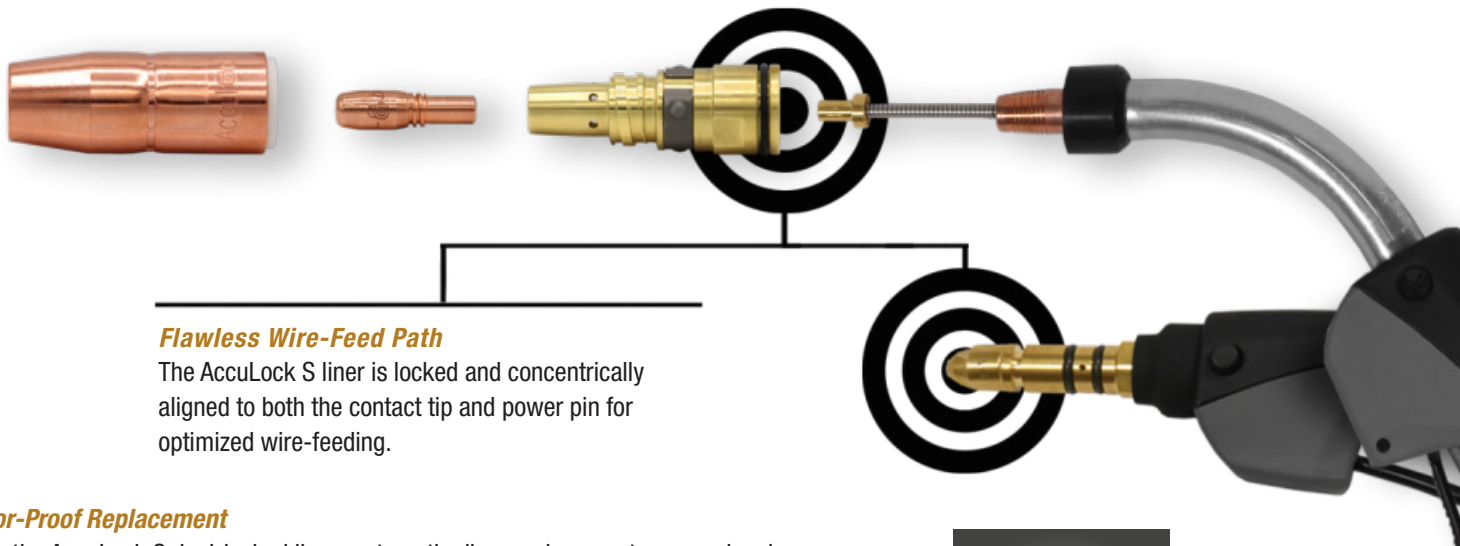
The AccuLock S Consumable system with dual-locked liner requires the use of all the following MIG welding consumables and components:

- AccuLock contact tips
- AccuLock S nozzles
- AccuLock S neck insulators
- AccuLock S gas diffusers
- AccuLock S liners
- AccuLock S power pins and caps

For details on the AccuLock S consumable system provided with your Miller equipment package, see page 6.



LOAD AND LOCK LINERS ACCURATELY AND EASILY



Flawless Wire-Feed Path

The AccuLock S liner is locked and concentrically aligned to both the contact tip and power pin for optimized wire-feeding.

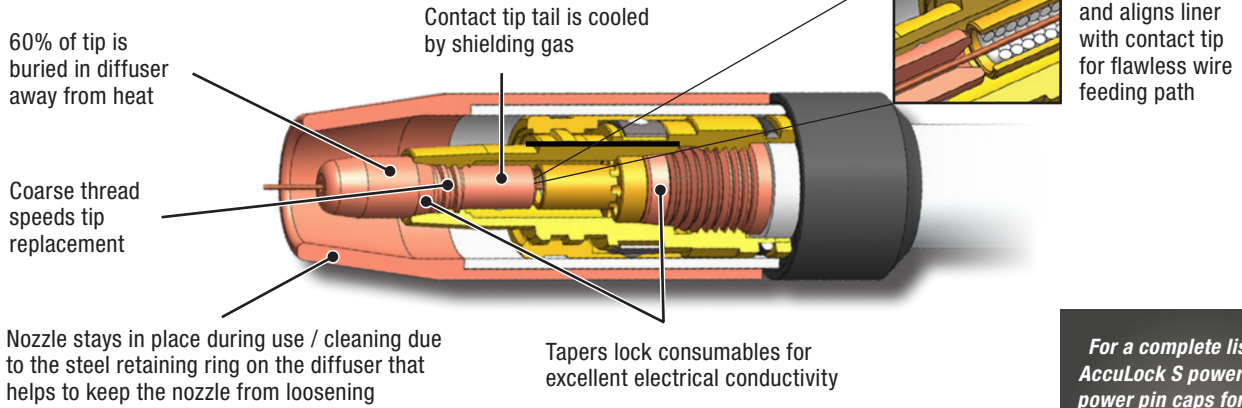
Error-Proof Replacement

With the AccuLock S dual-locked liner system, the liner replacement process has been error-proofed. No more measuring means no more liners trimmed incorrectly!

Scan here for
installation
instructions



KEY FEATURES



COMMON CONTACT TIP

Bernard® AccuLock S and Tregaskiss® AccuLock R 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 of using a consumable system with a common contact tip.



For a complete listing of AccuLock S power pin and power pin caps for Miller®, Lincoln®, Tweco® 4, Tweco 5, Euro and OXO™ scan for AccuLock S consumables spec sheet.



PART NUMBERS

SMALL NOZZLES		LARGE NOZZLES		'T' CONTACT TIPS		'TT' CONTACT TIPS	
NS-A5800C	5/8" Bore, Flush, Copper	N-A3400C	3/4" Bore, Flush, Copper	T-A023CH	0.023" (0.6 mm)	TT-A023CH	0.023" (0.6 mm)
NS-A5818C	5/8" Bore, 1/8" Recess, Copper	N-A3418C	3/4" Bore, 1/8" Recess, Copper	T-A030CH	0.030" (0.8 mm)	TT-A030CH	0.030" (0.8 mm)
NS-A5800B	5/8" Bore, Flush, Brass	N-A3414C	3/4" Bore, 1/4" Recess, Copper	T-A035CH	0.035" (0.9 mm)	TT-A035CH	0.035" (0.9 mm)
NS-A5818B	5/8" Bore, 1/8" Recess, Brass	N-A3418B	3/4" Bore, 1/8" Recess, Brass	T-A039CH	0.039" (1.0 mm)	TT-A039CH	0.039" (1.0 mm)
NS-A1218C	1/2" Bore, 1/8" Recess, Copper	N-A3414B	3/4" Bore, 1/4" Recess, Brass	T-A045CH	0.045" (1.2 mm)	TT-A045CH	0.045" (1.2 mm)
NS-A1200B	1/2" Bore, Flush, Brass	N-A5800C	5/8" Bore, Flush, Copper	T-A052CH	0.052" (1.4 mm)	TT-A052CH	0.052" (1.4 mm)
NS-A1218B	1/2" Bore, 1/8" Recess, Brass	N-A5818C	5/8" Bore, 1/8" Recess, Copper	T-A062CH	1/16" (1.6 mm)	TT-A062CH	1/16" (1.6 mm)
NST-A3800B	3/8" Bore, Flush, Brass	N-A5814C	5/8" Bore, 1/4" Recess, Copper	T-A072CH	0.072" (1.8 mm)		
NST-A3818B	3/8" Bore, 1/8" Recess, Brass	N-A5818B	5/8" Bore, 1/8" Recess, Brass	T-A078CH	5/64" (2.0 mm)		
NST-A38XTB	3/8" Bore, 1/8" Extension, Brass	N-A5814B	5/8" Bore, 1/4" Recess, Brass	T-A094CH	3/32" (2.4 mm)		
NST-A1218B	1/2" Bore, 1/8" Recess, Brass	N-A1218C	1/2" Bore, 1/8" Recess, Copper	T-A109CH	7/64" (2.8 mm)		
		NT-A3800C	3/8" Bore, Flush, Copper	T-A125CH	1/8" (3.2 mm)		

DIFFUSERS FOR USE WITH ACCULOCK S LINERS					
Small	DS-A1	Thread-On	Large	D-A1	Thread-On
Small	DS-A2	Slip-On	Large	D-A2	Slip-On

DIFFUSERS FOR USE WITH BERNARD CONVENTIONAL LINERS FOUND IN MILLER PACKAGES					
Small	DS-A1-C	Thread-On	Large	D-A1-C	Thread-On
Small	DS-A2-C	Slip-On	Large	D-A2-C	Slip-On

LINERS						MILLER POWER PINS & POWER PIN CAPS	
Wire Size	Liner Color	Cable Length				Power Pin	Power Pin Cap*
		10' (3.05 m)	15' (4.57 m)	20' (6.10 m)	25' (7.62 m)		
0.023" - 0.030"	Yellow	LA1A-10	LA1A-15	LA1A-20	LA1A-25	2200206	2200351
0.030" - 0.035"	Green	LA2A-10	LA2A-15	LA2A-20	LA2A-25	2200206	2200352
0.035" - 0.045"	White	LAD3A-10	LAD3A-15	LAD3A-20	LAD3A-25	2200206	2200353
0.045" - 1/16"	Red	LAD4A-10	LAD4A-15	LAD4A-20	LAD4A-25	2200206	2200354
5/64"	Blue	LA6A-10	LA6A-15	LA6A-20	LA6A-25	2200206	2200355
3/32"	Grey	LA7A-10	LA7A-15	LA7A-20	LA7A-25	2200207	2200356
7/64" - 1/8"	Black	LA8A-10	LA8A-15	LA8A-20	LA8A-25	2200207	2200357

*Denotes internal color of the cap's o-ring

ACCULOCK S CONSUMABLES IN MILLER® PACKAGES

AccuLock S consumables are now available on the Bernard® MIG gun inside of the following Miller packages:

- Suitcase® 12RC
- ArcReach® SuitCase® 8 and 12 (on Bernard® BTB MIG guns only)
- Deltaweld® Systems
- XMT® 350 FieldPro™ Systems
- XMT® 450 Systems
- Continuum™ Systems
- 20 Series
- S-74 MPa Feeders
- Intellix® Wire Feeders
- Intellix® SwingArc®



Deltaweld® 500 with Intellix™ Elite Feeder shown

AccuLock S consumables supplied with Miller packages require the use of all the following MIG welding consumables and components:

- AccuLock contact tips
- AccuLock S diffusers for conventional liners
- AccuLock S nozzles
- Bernard conventional liners

To upgrade the gun that came with your Miller package to the full AccuLock S dual-locked liner system it's as easy as changing your diffuser, liner and power pin cap. Scan the QR code at right to learn more.

Scan here to view AccuLock consumables video



For more information refer to the full line Miller catalog specific to your Miller package

WHICH BERNARD SEMI-AUTOMATIC CONSUMABLES ARE RIGHT FOR YOUR WELDING OPERATION?



Features	AccuLock S Consumables Dual-Locked Liner (See page 4)	AccuLock S Consumables Conventional Liner — (Miller Packages)	Centerfire™ Consumables (See page 11)	TOUGH LOCK® Consumables (See page 11)
No liner measuring required during replacement	Added benefit of full system	—	—	—
Liner locked and concentrically aligned to both the contact tip and power pin to ensure optimized wire feeding	Added benefit of full system	—	—	—
Percentage of contact tip buried within diffuser away from the heat of the weld	60%	60%	25%	40%
Mating tapers on both tip-to-diffuser and diffuser-to-neck connection for good electrical conductivity			YES	YES
Shielding gas cools contact tip tail			—	—
Contact tip with coarse thread and long tail to prevent cross-threading			No thread, no tail	No tail
Nozzle can be used as either thread-on or slip-on			—	—
Diffuser snap ring to prevent loosening of nozzle			—	—

Less tip
changes

Less
troubleshooting

More beads
worth
bragging
about

Transform your business with

AccuLock™ CONSUMABLES

Enjoy more efficiency, less downtime and better weld quality in all of your semi-automatic and robotic welding operations with AccuLock™ S and AccuLock™ R Consumables.

AccuLock™ S consumables work to maximize productivity by reducing issues that lead to costly rework and downtime and increasing life.



AccuLock™ R consumables help ensure that your equipment continues to operate at its highest efficiency by reducing both planned and unplanned downtime in your operations.



[Tregaskiss.com/AccuLock](https://www.tregaskiss.com/AccuLock)

| 1-855-MIGWELD (644-9353)

AccuLock™ R CONSUMABLES



AccuLock R consumables for robotic MIG guns help ensure that your equipment continues to operate at its highest efficiency by reducing both planned and unplanned downtime in your operations. If you are looking for new ways to increase throughput with minimal risk and effort, it's time to take a fresh look at your MIG gun consumables.

The AccuLock R consumables system requires the use of all of the following MIG welding consumables and components:

- AccuLock contact tips
- AccuLock R gas diffusers
- Tregaskiss® nozzles
- QUICK LOAD® liners

LESS DOWNTIME. LESS TROUBLESHOOTING. MORE TIP LIFE.

Longer Life — Weld for longer between changeouts with contact tips that are designed to last — even when welding with aggressive pulse waveforms.

Decreased Downtime — Get more products out the door when you have fewer interruptions in your welding operation.

Ease of Use — The advanced AccuLock system approach has virtually "fool-proofed" the consumable changeout process, reducing the likelihood for human error.

MAXIMIZE PERFORMANCE

- AccuLock contact tips last longer due to increased mass and 60% of the contact tip buried within the diffuser, away from the heat of the weld
- AccuLock HDP contact tips last 6-10x longer in pulse welding applications
- Mating tapers on both tip-to-diffuser and diffuser-to-neck connections provide good electrical conductivity
- For use with front-loading QUICK LOAD liners

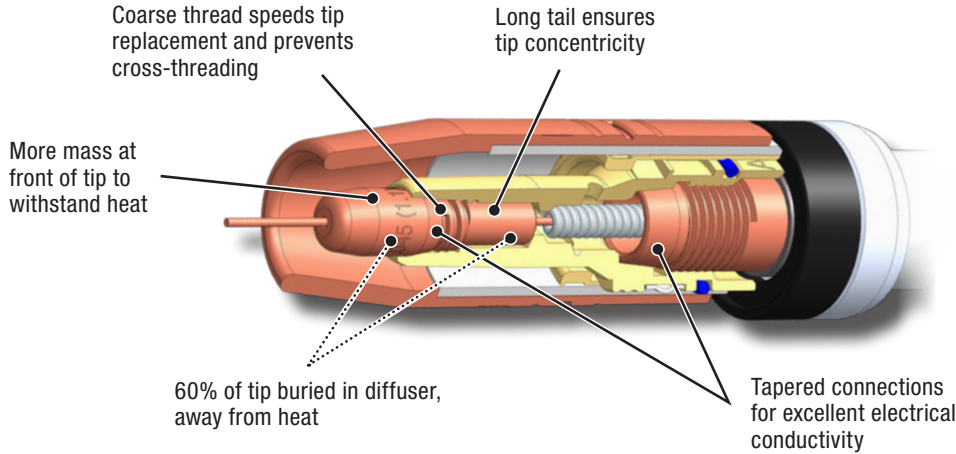
MINIMIZE ERRORS

- Coarse thread on tip virtually eliminates risk of cross-threading during replacement
- Long contact tip tail concentrically aligns the tip within the diffuser prior to thread engagement, ensuring quick, accurate replacement without cross-threading

SIMPLIFY MAINTENANCE

- QUICK LOAD® liners install from the front of the MIG gun 50% faster than rear-loading liners
- No need to remove the gun from the feeder — operators can change liners from a safe zone in the robotic cell
- Direct replacement for TOUGH LOCK® contact tips and retaining heads with no impact on TCP

KEY FEATURES



Scan here to view
the AccuLock R
consumables spec
sheet



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 of using a consumable system with a common contact tip.



PART NUMBERS

NOZZLES	
401-6-62	5/8" Bore, 1/8" Recess, Copper, Slip On, Tapered, 1.062", HD
401-5-62	5/8" Bore, 1/4" Recess, Copper, Slip On, Tapered, 1.062", HD
401-7-62	5/8" Bore, 1/4" Recess, Brass, Slip On, Tapered, 1.106", HD
401-8-62	5/8" Bore, 1/8" Stick-Out, Copper, Slip On, Tapered, 0.938", SD
401-4-62	5/8" Bore, 1/8" Recess, Copper, Slip On, Tapered, 0.938", SD
401-48-62	5/8" Bore, Flush, Copper, Slip On, Bottleneck, 1.062", HD
401-81-62	5/8" Bore, 1/8" Stick-Out, Copper, Slip On, Tapered, 1.062", HD
401-71-62	5/8" Bore, 1/8" Recess, Brass, Slip On, Tapered, 1.106", HD
401-87-62	5/8" Bore, 1/8" Stick-Out, Brass, Slip On, Tapered, 1.062", HD
401-14-62	5/8" Bore, 1/8" Recess, Copper, Thread On, Tapered, 1.062", HD
401-18-62	5/8" Bore, 1/8" Stick-Out, Copper, Thread On, Tapered, 0.938", SD
401-20-62	5/8" Bore, 1/8" Stick-Out, Copper, Thread On, Tapered, 1.062", HD
401-43-62	5/8" Bore, 1/8" Recess, Copper, Thread On, Tapered, 0.938", SD
401-30-62	5/8" Bore, 1/8" Stick-Out, Brass, Slip On, Bottleneck, 0.938", SD
401-30-62T	5/8" Bore, 1/8" Stick-Out, Brass, Thread On, Bottleneck, 0.938", SD

DIFFUSERS	
D-ATSH	Slip-On
D-ATTH	Thread-On

QUICK LOAD® LINERS & RETAINERS	
FOR STEEL WIRE	
415-30-6Q	0.030", High Carbon Steel, Round Wound, 6'
415-30-15Q	0.030", High Carbon Steel, Round Wound, 15'
415-35-6Q	0.035"-0.045", High Carbon Steel, Round Wound, 6'
415-35-10Q	0.035"-0.045", High Carbon Steel, Round Wound, 10'
415-35-15Q	0.035"-0.045", High Carbon Steel, Round Wound, 15'
415-35-25Q	0.035"-0.045", High Carbon Steel, Round Wound, 25'
415-116-6Q	0.045"-1/16", High Carbon Steel, Round Wound, 6'
415-116-10Q	0.045"-1/16", High Carbon Steel, Round Wound, 10'
415-116-15Q	0.045"-1/16", High Carbon Steel, Round Wound, 15'
415-116-25Q	0.045"-1/16", High Carbon Steel, Round Wound, 25'
415-564-6Q	1/16"-5/64", High Carbon Steel, Round Wound, 6'
415-564-15Q	1/16"-5/64", High Carbon Steel, Round Wound, 15'
415-564-25Q	1/16"-5/64", High Carbon Steel, Round Wound, 25'
415-332-6Q	0.078"-3/32", High Carbon Steel, Round Wound, 6'
415-332-15Q	0.078"-3/32", High Carbon Steel, Round Wound, 15'
415-332-25Q	0.078"-3/32", High Carbon Steel, Round Wound, 25'

CONTACT TIPS					
COPPER		CHROME ZIRCONIUM		HDP	
T-A030CH	0.030" (0.8 mm)	T-A030ZH	0.030" (0.8 mm)	T-A035WH	0.035" (0.9 mm)
T-A035CH	0.035" (0.9 mm)	T-A035ZH	0.035" (0.9 mm)	T-A039WH	0.039" (1.0 mm)
T-A039CH	0.039" (1.0 mm)	T-A039ZH	0.039" (1.0 mm)	T-A045WH	0.045" (1.2 mm)
T-A045CH	0.045" (1.2 mm)	T-A045ZH	0.045" (1.2 mm)	T-A052WH	0.052" (1.3 mm)
T-A052CH	0.052" (1.3 mm)				
T-A062CH	1/16" (1.6 mm)				
T-A072CH	0.072" (1.8 mm)				
T-A078CH	5/64" (2.0 mm)				
T-A094CH	3/32" (2.4 mm)				

QUICK LOAD® PRO LINERS	
415-35-062Q	0.035"-0.045", Galvanized, D Wound, 6' (requires 415-26)
415-116-062Q	0.045"-1/16", Galvanized, D Wound, 6' (includes 415-31)

QUICK LOAD LINER RETAINERS (SOLD SEPARATELY)	
415-26	0.030"-5/64", compatible with Tregaskiss and Bernard MIG guns
415-37	0.030"-5/64", compatible with most Tweco® MIG Guns
415-31	0.045"-1/16", required for 415-116-062Q and 415-116-152Q
415-24	0.078"-3/32", compatible with Tregaskiss and Bernard MIG guns

AccuLock™ HDP CONTACT TIPS

WEBSITE QUICKLINK:
Tregaskiss.com/HDP



REGAIN AS MUCH AS 95% OF LOST PRODUCTIVITY FOR CONTACT TIP CHANGES

With the AccuLock™ HDP contact tip, you can enjoy all the benefits of pulse welding plus dramatically extend contact tip life for increased production throughput.

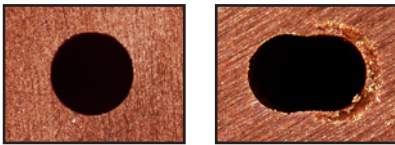
Last 6-10x Longer — Engineered with a special alloy that has superior resistance to arc erosion and wear over copper and chrome zirconium tips.

Increased Arc Stability — Improves weld quality and reduces spatter



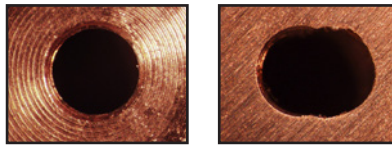
RESISTANCE TO WEAR

COPPER TIP



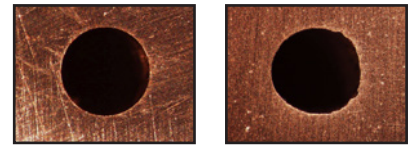
0 minutes arc on time 120 minutes arc on time

CHROME ZIRCONIUM TIP



0 minutes arc on time 120 minutes arc on time

HDP TIP



0 minutes arc on time 120 minutes arc on time

Test parameters: 120 minutes arc on time (20min 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 amperage amps, Tregaskiss® TOUGH GUN® CA3 gun with 22 degree neck

PROBLEM



Adoption of pulse welding waveforms can **DOUBLE** contact tip replacement frequency and related downtime when using copper or chrome zirconium contact tips.

A single contact tip change can create **10-15 minutes** of downtime on average (based on user feedback).

SOLUTION



AccuLock HDP contact tips **last 6-10x longer** than copper and chrome zirconium tips. Users have gone from changing contact tips 2-4x *each shift* to 1x after 3 *shifts or longer*. Plus, HDP contact tips are compatible with AccuLock R diffusers and Tregaskiss® nozzles with no change to TCP!

Welding Application Compatibility

1. Are you running high frequency pulse welding?
2. Do you have solid copper-coated wires?
3. Is your wire size 0.035", 0.039", 0.045" or 0.052"?

If you answered YES to all three questions, then your system is compatible!

Scan here
to view HDP
contact tips in
the AccuLock R
consumables
spec sheet



TOUGH LOCK CONSUMABLES

WEBSITE QUICKLINK:
Tregaskiss.com/TOUGHLOCK

www://



This system features our well-known TOUGH LOCK® contact tips and retaining heads. TOUGH LOCK contact tips are precision-machined using a process that tightly controls tip tolerances. TOUGH LOCK retaining heads are manufactured with a tapered design at both ends that keep the consumables locked from tip to neck for improved weld consistency and to maximize heat dissipation.

TOUGH LOCK consumables with dual taper technology keep consumables running cooler for longer tip life and improved performance.

AccuLock R consumables are the next evolution of TOUGH LOCK consumables and offer additional benefits (see page 8 for more information).

Scan here
to view the
TOUGH LOCK
consumables
spec sheet



CENTERFIRE CONSUMABLES

WEBSITE QUICKLINK:
Tregaskiss.com/Centerfire

www://



Centerfire™ consumables are easy to use and provide better arc starts, less spatter and more consistent welds. Centerfire consumables are ideal for heavy-duty and light commercial applications.

CENTERFIRE HD CONSUMABLES

Looking for consumables for heavy-duty applications such as shipbuilding, fabrication and other heavy equipment manufacturing operations? Consider Bernard Centerfire HD series consumables. Centerfire HD nozzles feature a removable nozzle cone, thicker wall and a high-temperature insulator. The removable nozzle cone **lowers downtime and consumables costs** by allowing operators to replace only the cone (the most frequently damaged part of the nozzle) without removing and replacing the entire nozzle body for spatter removal.

AccuLock S consumables are the next evolution of Centerfire consumables and offer additional benefits (see page 4 for more information).

Scan here
to view the
Centerfire
consumables
spec sheet



QUICK LOAD LINERS

WEBSITE QUICKLINKS:
Tregaskiss.com/QUICKLOAD

www://

QUICK LOAD® liners load from the front of the MIG gun and require **less than half the time and effort to replace** when compared with conventional liners.

A QUICK LOAD liner retainer must be purchased separately and installed inside the power pin on the first use of a QUICK LOAD liner. All future QUICK LOAD liner replacements will be done from the front of the MIG gun.

QUICK INSTALLATION

- Remove front-end consumables and slide liner over the wire, using it as a guide
- Ease of installation simplifies routine maintenance
- No need to cut and waste wire!

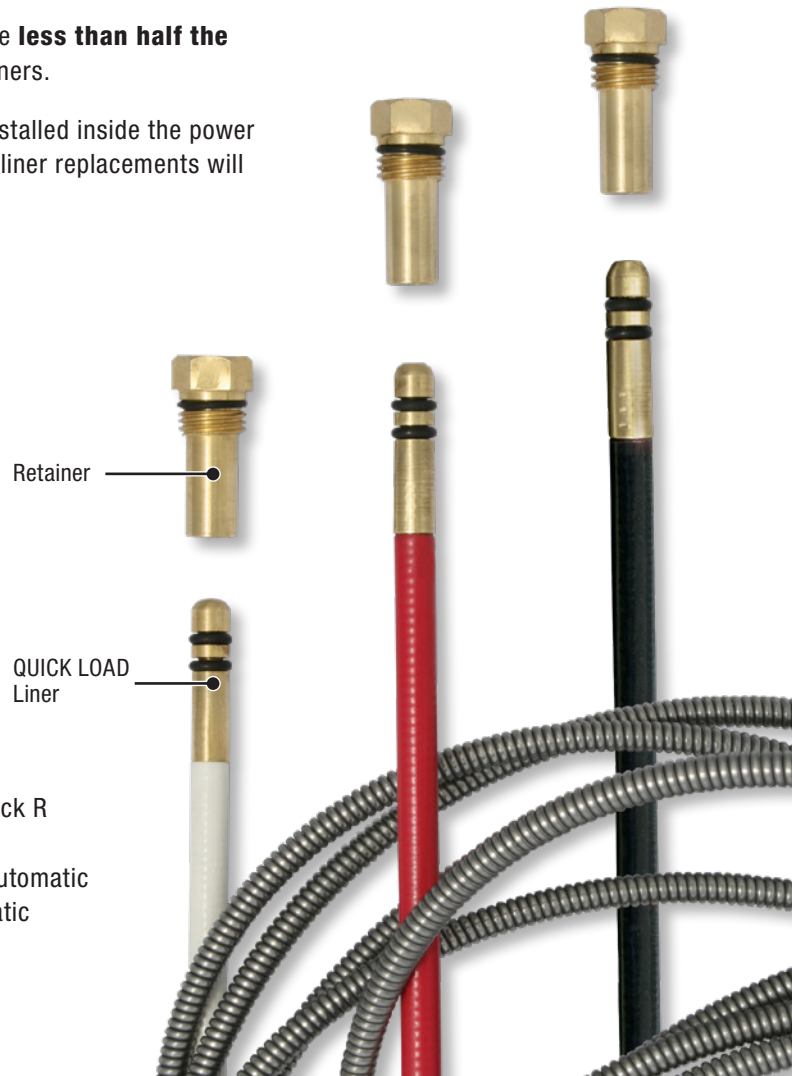
MAINTENANCE MADE EASY

- Avoid having to remove MIG gun from wire feeder
- Change liner from a safe zone within the robotic work cell during routine pauses in production
- No need to climb up to change liners in semi-automatic MIG guns connected to boom mounted feeders

COMPATIBILITY

- Available for semi-automatic and automation applications
- The QUICK LOAD liner is an important component of the AccuLock R consumables system
- Available for Tregaskiss® TOUGH GUN® robotic air-cooled and automatic air-and water-cooled MIG guns, and Bernard® BTB semi-automatic air-cooled and Clean Air™ fume extraction MIG guns

**Not recommended for guns equipped with wire brake; Not compatible with robotic water-cooled or AW2 fixed automatic water-cooled MIG guns*



PRO LINERS

Part of the front-loading QUICK LOAD liner family, the QUICK LOAD pro liner features a special profile and a galvanized coating that improves wire feedability and protects the integrity of the wire material in humid or damp welding environments.

- Ideal for solid and cored wire
- Larger coil profile strengthens the rigidity of the liner which improves wire support
- Fewer touch points during wire passage improves wire-feeding and minimizes gun chatter
- Available for 0.035"-1/16" wire sizes in lengths up to 6 feet



Scan here to
view the
QUICK LOAD
liner spec sheet



BERNARD CONVENTIONAL LINERS

BERNARD CONVENTIONAL LINERS

Bernard conventional liners are compatible with all legacy Q-Gun™, S-Gun™ and T-Gun™ semi-automatic air-cooled MIG guns and all BTB semi-automatic MIG guns, which allows you to **simplify and reduce your inventory**. Color-coded by wire size for ease of identification, these liners are made of high carbon music wire for smooth wire feeding and long life and are available in lengths up to 25' (7.6 m) for various wire sizes.

Scan here
to view the
Bernard
conventional
liners spec
sheet



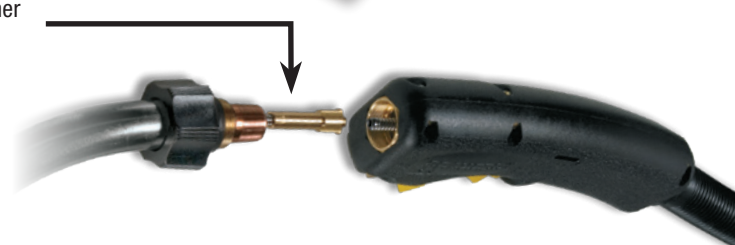
BERNARD JUMP LINER

VERY COST-EFFECTIVE AND GETS YOU BACK ON THE JOB WITHIN MINUTES!

Bernard jump liners replace only the most commonly worn and clogged liner area to **reduce the amount of time a gun is offline** and to **minimize inventory**. These jump liners enable quick and easy neck change-out so guns can be easily adapted to fit multiple applications. The Bernard jump liners connect with conventional liners at the base of the neck and run through the most commonly worn area up to the contact tip. For use with Bernard conventional liners and rotatable neck options, jump liners are available in sizes to fit 0.023" to 1/16" wire.



Trim damaged liner where it enters neck, slip jump liner over existing liner and tighten neck into place



Scan here
to view the
Bernard
jump liner
spec sheet



BERNARD BTB AIR-COOLED MIG GUNS

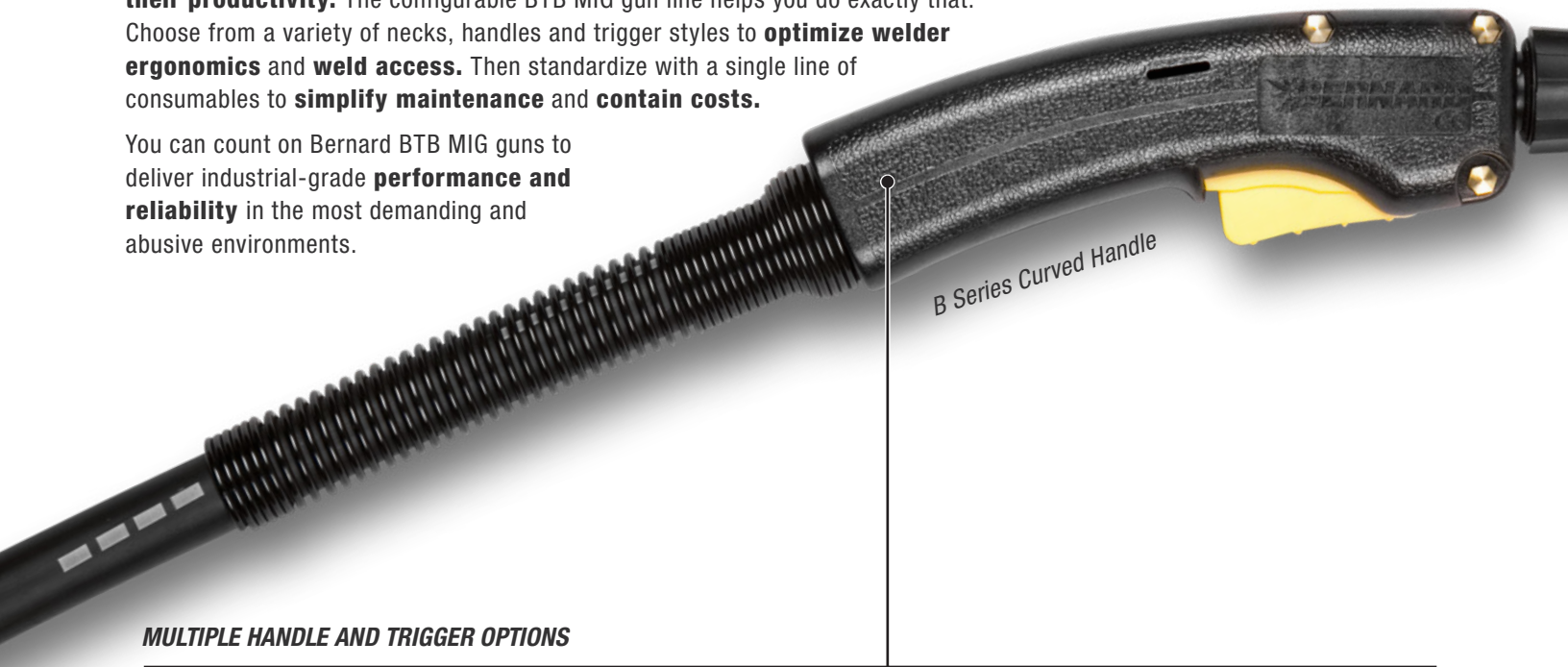
OPTIMIZE FOR PRODUCTIVITY. STANDARDIZE FOR SIMPLICITY.

According to the American Welding Society (AWS) the demand for welding professionals is projected to be 336,000 by 2026.

In the face of this challenge, it's critical to **keep your skilled welders healthy while also increasing their productivity.** The configurable BTB MIG gun line helps you do exactly that.

Choose from a variety of necks, handles and trigger styles to **optimize welder ergonomics** and **weld access.** Then standardize with a single line of consumables to **simplify maintenance** and **contain costs.**

You can count on Bernard BTB MIG guns to deliver industrial-grade **performance and reliability** in the most demanding and abusive environments.



MULTIPLE HANDLE AND TRIGGER OPTIONS

- Choose between **seven different curved and straight handle styles**
- C Series Straight Handle features comfortable overmolding and ergonomic rear swivel at no extra cost!
- Wide selection of handles and easy-to-change trigger options allow guns to be matched to user preference and welding application
- Triggers are designed and built to last more than one million cycles

See page 18 for more information



LINER OPTIONS

- AccuLock™ S liners are locked and concentrically aligned to both the contact tip and the power pin

See page 5 for more information

- Compatible with all BTB and Clean Air™ fume extraction MIG guns, Bernard conventional liners allow you to simplify and reduce inventory

See page 13 for more information

- Save time by loading your liner from the front of your gun with the innovative QUICK LOAD® liner

See page 12 for more information



FIXED OR ROTATABLE NECKS

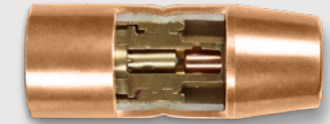
- Wide variety of angle and length options
- Aluminum armored necks withstand abuse and offer outstanding heat dissipation
- No tools required to adjust rotatable necks

See page 19 for more information

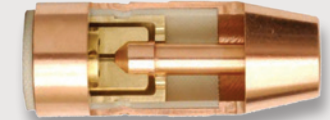
HIGH PERFORMANCE CONSUMABLES

- Available with AccuLock™ S, Centerfire™ or TOUGH LOCK® consumables

See pages 4-11 for more information



AccuLock S Consumables Cutaway



Centerfire Consumables Cutaway



TOUGH LOCK Consumables Cutaway

CONFIGURE ONLINE AT

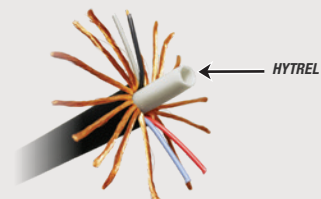
Tregaskiss.com/
ConfigureMyGun

or see page 16 for our
hard copy configurator

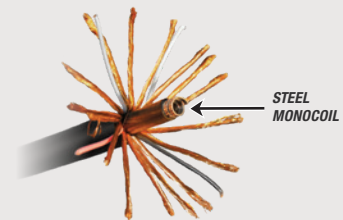


UNICABLE DESIGN

- Cone and cone nut threaded cable connections for optimal electrical conductivity
- Internal gas hose resists kinking for consistent gas flow
- Choose Industrial Grade or Steel Monocoil cable (upgrade for extra pinch/kink resistance)



HYTREL® POLYMER CABLE
(INDUSTRIAL GRADE)



STEEL MONOCOIL CABLE

C Series Straight Handle

ACCESSORIES

- Neck coupler
- Neck guard and grip
- Heat shield
- Gun hanger
- Flex necks

WARRANTY

- One year manufacturer's warranty
- Lifetime warranty on rear straight strain relief and on all T Series and C Series Straight Handles and trigger switches

BERNARD BTB AIR-COOLED MIG GUNS

CHOOSE YOUR WEAPON – BTB MIG GUN CONFIGURATOR

Welders and welding applications differ — a MIG gun optimized for weld access and ergonomics can help increase productivity. This chart shows the many options available to help you optimize your MIG gun:

1 CABLE TYPE AND AMPERAGE

HYTREL® POLYMER CABLE	
Q20	200 amp max. wire size 1/16" (1.6 mm)
Q30	300 amp max. wire size 5/64" (2.0 mm)
Q40	400 amp max. wire size 5/64" (2.0 mm)
Q50	500 amp max. wire size 3/32" (2.4 mm)
Q60	600 amp max. wire size 1/8" (3.2 mm)
STEEL MONOCOIL CABLE	
S30	300 amp max. wire size 5/64" (2.0 mm)
S40	400 amp max. wire size 5/64" (2.0 mm)
S50	500 amp max. wire size 3/32" (2.4 mm)
S60	600 amp max. wire size 1/8" (3.2 mm)

2 CABLE LENGTH

10	10 ft (3.05 m)
15	15 ft (4.57 m)
20	20 ft (6.16 m)
25	25 ft (7.62 m)

4 NECK

B	Rotatable, Short†	45°	O	Fixed, Short†	45°
C	Rotatable, Short†	60°	P	Fixed, Short†	60°
E	Rotatable, Medium†	45°	R	Fixed, Medium†	45°
F	Rotatable, Medium†	60°	S	Fixed, Medium†	60°
H	Rotatable, Long†	45°	U	Fixed, Long†	45°
I	Rotatable, Long†	60°	V	Fixed, Long†	60°

See page 19 for part numbering and compatibility.



3 HANDLE AND TRIGGER

B Series Small Curved Handle	Q20, Q30	A Standard Trigger B Locking Trigger C Dual Pull Trigger	T Series Small Straight Handle	Q20, Q30	S Standard Trigger	C Series Straight Handle	Q20, Q30, Q40 Q50, S30, S40	V Standard Trigger X Dual Pull Trigger Y Dual Schedule Switch J Insight™ Limited (Available only with Miller® power pin)
B Series Curved Handle	Q40	A Standard Trigger B Locking Trigger C Dual Pull Trigger D Dual Schedule Switch	T Series Straight Handle	Q30, Q40, Q50, Q60, S30, S40	M Standard Trigger N Locking Trigger P Dual Pull Trigger Q Dual Schedule Switch			
O Series Curved Handle	Q40, Q50, Q60 S40, S50, S60	G Standard Trigger H Locking Trigger I Dual Pull Trigger K Dual Schedule Switch	O Series Small Curved Handle	Q20, Q30, Q40, S30, S40	T Standard Trigger U Locking Trigger			

See page 18 for more information.



5 CONTACT TIP

4	AccuLock™ S ^{††}	(For use with AccuLock S Dual Locked Liner)
		0.350" O.D. (8.89 mm)
9	AccuLock S	(For use with Bernard® Conventional Liner)
		0.350" O.D. (8.89 mm)
8	Centerfire™ ^{^^}	
		5/16" O.D. (7.94 mm)
3	TOUGH LOCK® HD ^{^^}	
		5/16" O.D. (7.94 mm)

6 WIRE SIZE

B	0.030" (0.8 mm)
C	0.035" (0.9 mm)
D	0.039" (1.0 mm)
E	0.045" (1.2 mm)
H	0.052" (1.4 mm)
I	1/16" (1.6 mm)
K	5/64" (2.0 mm)
L	3/32" (2.4 mm)
M	7/64" (2.8 mm)

ALUMINUM WIRE

Q	0.035" (0.9 mm)
R	3/64" (1.2 mm)
S	1/16" (1.6 mm)

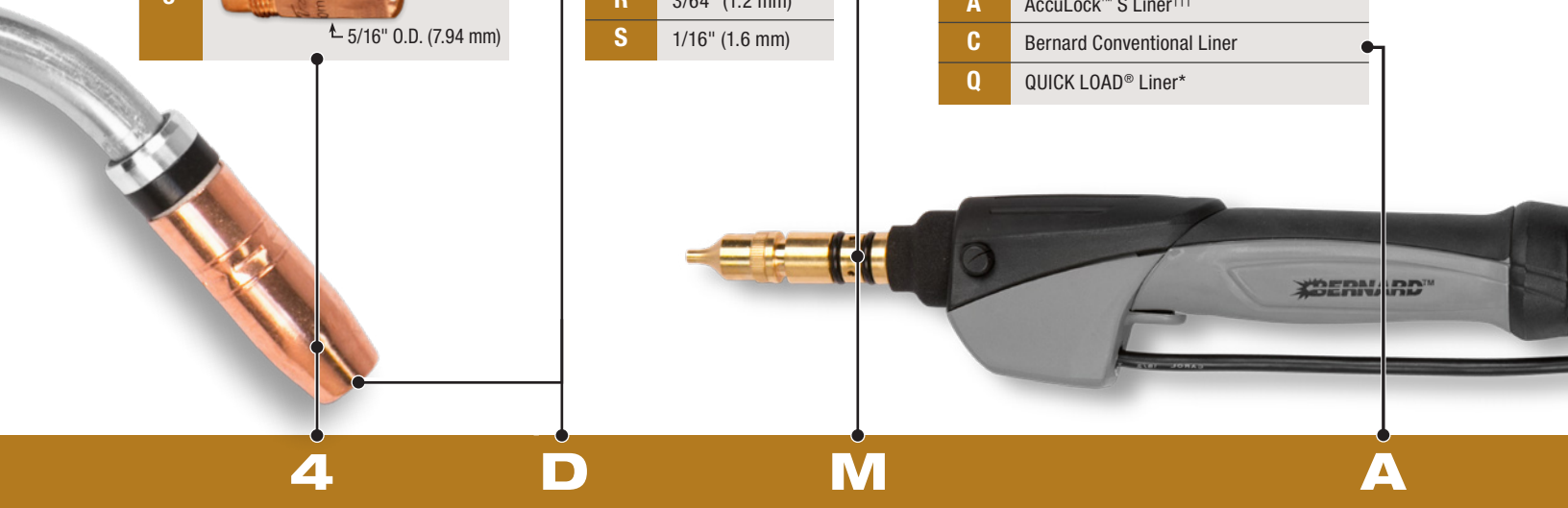
7 POWER PIN

E	Euro
L	Lincoln®
M	Miller®
S	Tweco® #4 (Lincoln Lead)
R	Tweco #4 (Miller Lead)
T	Tweco #4 (Standard Lead)
U	Tweco #4 (NAS Plug)
W	Tweco #5 (Standard Lead)
X	Tweco #5 (Miller Lead)

8 LINER

A	AccuLock™ S Liner ^{†††}
C	Bernard Conventional Liner
Q	QUICK LOAD® Liner*

CONFIGURE ONLINE AT
Tregaskiss.com/ConfigureMyGun



The diffusers and nozzles in the chart below come factory installed based on gun amperage:

AMP	ACCULOCK S		CENTERFIRE		TOUGH LOCK	
	Diffuser	Nozzle	Diffuser	Nozzle	Diffuser (HD)	Nozzle
200	DS-A1	NS-A1218B	DS-1	NS-1218B	N/A	N/A
300	DS-A1	NS-A5818C	DS-1	NS-5818C	404-26	401-6-62
300 <i>(T Series Small Straight Handle Only)</i>	DS-A1	NS-A5818C	DS-1	NS-5818C	404-26	401-4-62
400	D-A1	N-A5818C	D-1	N-5818C	404-26	401-6-62
500	D-A1	N-A5814C	D-1	N-5814C	404-26	401-5-62
600	D-A1	N-A3414C	D-1	N-3414C	404-26	401-5-75

[†]Not compatible with T Series Small Straight Handle styles.

^{††}Only available with Miller® power pin; Must be used with AccuLock S liner.

^{†††}Compatible only with AccuLock contact tip option.

[^]Available for wire sizes up to 1/16" for 200 amp guns; Available for wire sizes up to 5/64" for 300 and 400 amp guns; Available for wire sizes up to 7/64" for 500 amp guns; Available for wire sizes up to 1/8" for 600 amp guns.

^{^^}Available for wire sizes up to 5/64" for 300 and 400 amp guns; Available for wire sizes up to 3/32" for 500 and 600 amp guns; Not available for 200 amp guns.

^{*}Available for wire sizes between 0.023" and 3/32"; Available for cable lengths up to 15 ft (4.57 m); Not compatible with aluminum wire.

^{**}Available for wire sizes between 0.030" and 3/32"; Not compatible with aluminum wire; Not compatible with Bernard power pin or OXO power pin option.

BERNARD BTB MIG GUNS

GUN AMPERAGE RATINGS*

GUN MODEL	60% DUTY CYCLE — MIXED GASES OR 100% DUTY CYCLE — CO ₂
Q20	200 amp
Q30, S30	300 amp
Q40, S40	400 amp
Q50, S50	500 amp
Q60, S60	600 amp








NOTE: Q indicates Hytre[®] Polymer Cable; S indicates Steel Monocoil Cable

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

BTB MIG GUN HANDLE AND TRIGGER OPTIONS

Handle shape and size as well as trigger style can have a significant impact on welder ergonomics and overall comfort. Choose from one of the following seven handles and their respective trigger options:



HANDLE OPTIONS							
FEATURES	B SERIES SMALL CURVED HANDLE	B SERIES CURVED HANDLE	O SERIES SMALL CURVED HANDLE	O SERIES CURVED HANDLE	T SERIES SMALL STRAIGHT HANDLE	T SERIES STRAIGHT HANDLE	C SERIES STRAIGHT HANDLE
							
Amperage	200, 300	400	200, 300, 400	400, 500, 600	200, 300	300, 400, 500, 600	200, 300, 400, 500
Style	Curved	Curved	Curved	Curved	Straight	Straight	Straight
Neck	Fixed or Rotatable	Fixed or Rotatable	Fixed or Rotatable	Fixed or Rotatable	Fixed	Fixed or Rotatable	Fixed or Rotatable
Trigger	Standard, Locking, Dual Pull	Standard, Locking, Dual Pull, Dual Schedule Switch, Locking Dual Schedule Switch	Standard, Locking	Standard, Locking, Dual Pull, Dual Schedule Switch	Standard	Standard, Locking, Dual Pull, Dual Schedule Switch	Standard, Locking, Dual Pull, Dual Schedule Switch, Insight Ltd.
Cable	Hytre [®] Polymer (Industrial Grade)	Hytre Polymer (Industrial Grade)	Hytre Polymer (Industrial Grade) or Steel Monocoil for 300, 400 amp only	Hytre Polymer (Industrial Grade) or Steel Monocoil	Hytre Polymer (Industrial Grade)	Hytre Polymer (Industrial Grade) or Steel Monocoil for 300, 400 amp only	Hytre Polymer (Industrial Grade) or Steel Monocoil for 300, 400 amp only

BTB MIG GUN NECK OPTIONS

Optimize weld access by choosing your neck style, angle and length:



T Series Small Straight Handle

Neck Type		Angle/Length	Part Number
Fixed	O	45, Short	205-45
	P	60, Short	205-60
	R	45, Medium	315-45
	S	60, Medium	315-60
	U	45, Long	405-45NB
	V	60, Long	405-60NB



T Series Straight Handle



C Series Straight Handle

Neck Type		Angle/Length	Part Number (T Series Handle Type)	Part Number (C Series Handle Type)
Fixed	O	45, Short	305-45	305-45CT
	P	60, Short	305-60	305-60CT
	R	45, Medium	405-45	405-45CT
	S	60, Medium	405-60	405-60CT
	U	45, Long	505-45	505-45CT
	V	60, Long	505-60	505-60CT



B Series Small Curved Handle



B Series Curved Handle

Neck Type		Angle/Length	Part Number
Rotatable	B	45, Short	QT2-45
	C	60, Short	QT2-60
	E	45, Medium	QT3-45
	F	60, Medium	QT3-60
	H	45, Long	QT5-45
	I	60, Long	QT5-60



O Series Small Curved Handle

Neck Type		Angle/Length	Part Number
Fixed	O	45, Short	QT2-45
	P	60, Short	QT2-60
	R	45, Medium	QT3-45
	S	60, Medium	QT3-60
	U	45, Long	QT5-45
	V	60, Long	QT5-60



O Series Curved Handle

Didn't find the neck you need? See page 27 for additional specialty neck options.

BERNARD DURA-FLUX SERIES

A FLUX-CORED GUN BUILT FOR THE WAY YOU WELD

Self-shielded flux-cored welding can be rough on both you and your welding equipment. That's why Bernard designed the Dura-Flux™ self-shielded FCAW gun to be **extremely durable, yet comfortable to hold and use.**

Dura-Flux guns meet the demanding needs and harsh environments of construction, shipbuilding, heavy manufacturing and rental applications. Triggers are non-metallic to absorb less heat. The triggers are also made with a sealed micro switch that helps keep out dust and dirt to provide a long-lasting work life.

Bernard offers two lines of Dura-Flux series self-shielded flux cored FCAW guns. One gun features a replaceable power cable liner, while the other one features a fixed liner.

Can't decide which gun line best suits your needs? See the comparison chart below:



Features	Dura-Flux Gun with Replaceable Power Cable Liner	Dura-Flux Gun with Fixed Power Cable Liner
350 amp	✓	✓
Internal Trigger Leads	✓	—
Replaceable Liner	✓	—
Fixed Liner	—	✓
Optional Dual Schedule Switch	✓	—
Hi-Viz™ Neck	✓	—
Wire Size 0.045" - 5/64"	✓	—
Wire Size 1/16" - 3/32"	—	✓

DURA-FLUX™ SELF-SHIELDED FLUX-CORED GUNS WITH REPLACEABLE POWER CABLE LINER

- Internal trigger leads, which means no trigger cord to get caught on surrounding objects
- Replaceable power cable liner that allows quick and easy power cable maintenance
- Optional dual schedule switch allows wire speed adjustment while welding and is integrated into the handle to keep it protected from weld spatter

CONSUMABLES

Can be easily installed or changed with a simple twist after a burnback, see Dura-Flux spec sheet for complete list of consumable options

NECK

Lightweight, rotatable Hi-Viz neck reduces user fatigue and improves weld visibility

HANDLE

Advanced molded handle design that helps reduce downtime associated with user fatigue

OPTIONAL DUAL SCHEDULE SWITCH

Allows for easy wire feed speed adjustment while welding

INTERNAL TRIGGER LEADS

Prevent the trigger cord from becoming tangled on surrounding equipment

DURA-FLUX SELF-SHIELDED FLUX-CORED GUNS WITH FIXED POWER CABLE LINER

- Ultra heavy-duty steel monocoil power cables that are highly resistant to kinking for exceptional wire-feeding in abusive environments
- Centerfire™ contact tips are easy to use, high performing and provide better arc starts, less spatter and more consistent welds — and last up to three times longer than most competitive brands
- Sleeved and aluminum-armored necks are available in multiple lengths for optimal accessibility and improved operator comfort
- Trigger is sealed from outside contaminants, is simple to replace and absorbs less heat than a metal trigger for long life, greater arc-on time and lower heat output

CONSUMABLES

Provide better arc starts, less spatter, more consistent welds and no tools are required for tip change.

For a complete list of part numbers, scan here to view the Dura-Flux spec sheet



BERNARD FUME EXTRACTION MIG GUNS

BERNARD CLEAN AIR™ FUME EXTRACTION MIG GUNS

HELPS REMOVE FUMES RIGHT AT THE SOURCE!

For a cleaner, more compliant work environment, get right to the source and extract fumes at the weld with the fume extraction MIG gun. Closely matching the weight, handle size, durability and industrial-grade performance of Bernard BTB semi-automatic air-cooled MIG guns, Clean Air fume extraction guns are fully configurable with your choice of curved handle (formerly Bernard FILTAIR™ fume extraction series) or straight handle.

- Ideal for large weldment and confined space welding applications
- For use with most solid and flux-cored wires
- Compatible with weld fume exhaust systems and welding machines from most major manufacturers
- Available with Bernard conventional liners or front-loading QUICK LOAD® liners



Features	Clean Air Curved Handle Series	Clean Air Straight Handle Series
Amperage	300, 400	300, 400, 500, 600
Neck Angle	30°, 45°, 60°	45°, 60°
Trigger	Standard	Standard
Adjustable Vacuum Chamber	✓	✓
Centerfire™ Contact Tips	✓	✓
TOUGH LOCK® Contact Tips	✓	✓
Bernard Conventional Liners	✓	✓
QUICK LOAD® Liners	✓	✓
Handle Overmolding	—	✓
360 Degree Hose Swivel	—	✓



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Tregaskiss.com/ConfigureMyGun
 or see page 24 for our hard copy configurator



LIGHTWEIGHT HOSE COVER

- Protects the hose from damage that can be incurred in hot workspaces, extends the life of the MIG gun hose and protects against spatter and workspace snags.

IS WELD JOINT VISIBILITY AND ACCESS AN ISSUE?

Consider the **short nozzle shroud** for use on your Clean Air fume extraction MIG gun.

This optional smaller vacuum chamber **offers improved visibility and better access** when working in confined spaces, and is compatible with TOUGH LOCK Heavy Duty (HD) consumables and large Centerfire consumables.



Short Nozzle Shroud
1.43" tall



Standard Nozzle Shroud
3.5" tall



NOTE: The short nozzle shroud is not a configurable option, and must be purchased separately.

BERNARD FUME EXTRACTION MIG GUNS

CLEAN AIR™ FUME EXTRACTION MIG GUN CONFIGURATOR

For a cleaner, more compliant work environment, get right to the source and extract fumes at the weld with the fully configurable Clean Air fume extraction MIG gun.

1 AMPERAGE

CL30	300 amp
CL40	400 amp
CL50	500 amp
CL60	600 amp

2 CABLE LENGTH

08	8 ft (2.44 m)
10	10 ft (3.05 m)
12	12 ft (3.66 m)
15	15 ft (4.57 m)
20	20 ft (6.16 m)
25	25 ft (7.63 m)

CL50

15

N

K

3 HANDLE AND TRIGGER

N	Straight Handle, Standard Trigger
T	Curved Handle, Standard Trigger

4 NECK

J	Medium, 45 degree, 2" radius
K	Medium, 60 degree, 2" radius

*Available for 300 and 400 amp model only.

**Available for Curved Handle model only.

^Compatible with Centerfire series only.

^^Compatible with wire sizes between 0.023" and 3/32" and cable lengths up to 15' (4.57 m); Not compatible with wire size options for aluminum.

^^^Compatible with wire sizes between 0.030" and 3/32" and cable lengths up to 15' (4.57 m); Not compatible with wire size options for aluminum or Bernard power pin option.

Some limitations exist. Please consult our online configurator or your Customer Service Representative to ensure that the part number configured using these pages is accurate prior to placing an order.



6 WIRE SIZE

A	0.023" (0.6 mm)
B	0.030" (0.8 mm)
C	0.035" (0.9 mm)
D	0.039" (1.0 mm)
E	0.045" (1.2 mm)
H	0.052" (1.4 mm)
I	1/16" (1.6 mm)
K	5/64" (2.0 mm)
L	3/32" (2.4 mm)
M	7/64" (2.8 mm)
N	1/8" (3.2 mm)

ALUMINUM WIRE

Q	0.035" (0.9 mm)
R	3/64" (1.2 mm)
S	1/16" (1.6 mm)

7 POWER PIN

B	Bernard®
E	Euro
L	Lincoln®
M	Miller®
S	Tweco® #4 (Lincoln Lead)
T	Tweco #4 (Standard Lead)
U	Tweco #4 (Two-Prong Twist Lead)
W	Tweco #5 (Standard Lead)

CONFIGURE ONLINE AT
Tregaskiss.com/ConfigureMyGun





8 LINER STYLE

8 LINER STYLE

C	Bernard Conventional Liner
Q	QUICK LOAD® Liner^^

5 CONTACT TIP

8	Centerfire™^^  ↕ 5/16" O.D. (7.94 mm)
3	TOUGH LOCK® HD^^  ↕ 5/16" O.D. (7.94 mm)

The diffusers and nozzles in the chart below come factory installed based on gun amperage:

AMP	CENTERFIRE		TOUGH LOCK	
	Diffuser	Nozzle	Diffuser (HD)	Nozzle
300	DS-1	NS-5818C	404-44	401-6-62
400	D-1	N-5818C	404-44	401-6-62
500	D-1	N-5814C	404-44	401-5-62
600	D-1	N-3414C	404-44	401-5-75

BERNARD WATER-COOLED MIG GUNS

WEBSITE QUICKLINK:
Tregaskiss.com/WaterCooled



BERNARD W-GUN™ SEMI-AUTOMATIC WATER-COOLED MIG GUNS

Bernard W-Gun water-cooled MIG guns contain a flexible cable assembly with reinforced synthetic rubber hoses to prevent water leakage, provide increased water flow and reduce gas leakage. Heavy-duty necks are available in multiple lengths and bend configurations to allow for optimal weld accessibility and improved operator comfort. Multiple handle and trigger options are available as well to increase operator comfort.

- Water block with interchangeable direct plugs and trigger leads
- Durable and easily replaced power pin housing with a coolant hose strain relief
- Coolant channel keeps consumables temperatures low under high-amperage, high-heat applications
- Compatible with AccuLock™ R or Centerfire™ consumables
- Available in 600 amp models

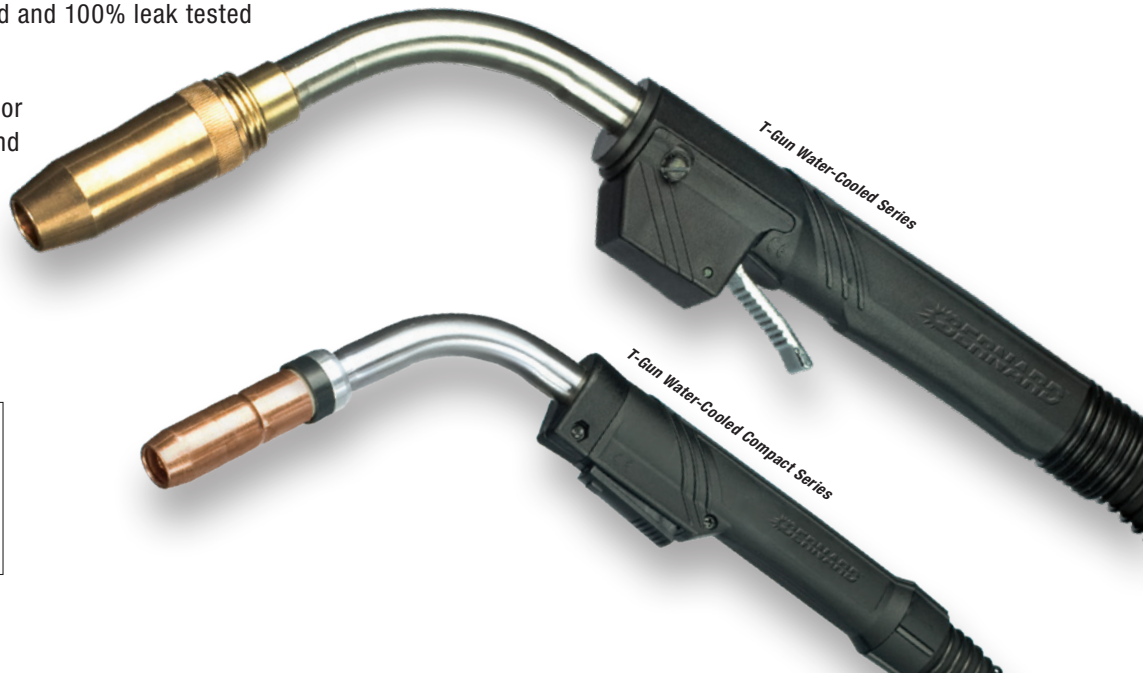
Scan here to view the W-Gun MIG gun spec sheet



BERNARD T-GUN™ SEMI-AUTOMATIC WATER-COOLED MIG GUNS

The Bernard T-Gun water-cooled MIG guns are engineered for superior performance in production environments requiring extremely high-heat applications. All guns are built to order.

- Neck is insulated and armored with stainless steel to withstand abuse
- All neck joints are silver brazed and 100% leak tested
- Custom gun length options
- Compatible with AccuLock™ R or TOUGH LOCK® consumables and QUIK LOAD™ liners
- Available in 400 amp (compact series handle), 450 and 600 amp models



Scan here to view the T-Gun MIG gun spec sheet








SPECIALTY NECKS

WEBSITE QUICKLINK:
Tregaskiss.com/SpecialtyNecks



If you are unable to reach your weld joints comfortably using one of our wide selection of standard necks, consider adding one of the following specialty necks or neck accessories to your Bernard semi-automatic MIG gun:

FLEX NECKS (BTB MIG GUNS)	Q-NECK COUPLER
 <ul style="list-style-type: none">• Change, rotate or bend neck to desired angle without tools• Connection improves conductivity for better weld quality• Available in 6" and 8" lengths	 <ul style="list-style-type: none">• Designed to connect any two Q-Necks• Provides flexibility and cost savings while minimizing the need for special-order necks• Compatible with any rotatable neck
NECK GRIP FOR CURVED HANDLE MIG GUNS	NECK GRIP FOR STRAIGHT HANDLE MIG GUNS WITH FIXED NECKS
 <ul style="list-style-type: none">• High-temperature rubber sleeve• Designed to reduce heat exposure and help operator hold neck in a steady position• Improves overall weld quality and reduces operator fatigue	 <ul style="list-style-type: none">• Heavy-duty metal spring reduces heat exposure and helps operator hold neck in a steady position• Improves overall weld quality and reduces operator fatigue
HANG UP HOOK FOR MIG GUNS	
 <ul style="list-style-type: none">• Conveniently hangs MIG gun while not in use• Attaches to neck of air-cooled semi-automatic BTB MIG guns	

BERNARD SHORTSTUB STICK ELECTRODE HOLDER

WEBSITE QUICKLINK:
Tregaskiss.com/shortstub



One of the first products Bernard ever introduced was the Shortstub™ stick electrode holder and it's still satisfying customers today.

- Electrode can be used within one inch of the high heat, high impact head, compared to the standard three inches of electrode leftover with typical tong-style holders
- Designed to greatly improve productivity with quick and easy electrode installation and replaceable head
- Over 2,000 lbs of gripping pressure allows the electrode to be bent to a desired shape for access to difficult welds

TOUGH GUN TA3 ROBOTIC AIR-COOLED MIG GUNS

MAXIMIZE THROUGHPUT. MINIMIZE COST.

Designed with our unique and durable low-stress robotic (LSR+) uncable, fully configurable TOUGH GUN® TA3 robotic air-cooled MIG guns feed through the robot arm and provide outstanding precision and reliability.

These high-performance MIG welding guns are available as a complete package – from the power pin to the contact tip – for clutch and solid mount systems, including Yaskawa® Motoman®, FANUC®, ABB®, KUKA®, OTC Daihen®, COMAU®, Panasonic® and Kawasaki®.

FEATURES & BENEFITS

- Durable neck clamp provides consistent clamping force for repeatability and TCP accuracy
- Choose between a variety of standard necks for expanded tool center point options and variety of working envelopes
- Features a precision-engineered keyway system for accurate alignment and quick replacement
- NEW! LSR+ (Low-Stress Robotic) uncable with SmoothTurn™ technology maximizes production uptime. (See page 29 for more details).

THE CONSUMABLE ADVANTAGE

- AccuLock™ R consumables offer an enhanced contact tip-to-diffuser design which increases tip life, plus the coarse thread on the contact tip **virtually eliminates cross-threading issues** (see page 8 for more information)
- QUICK LOAD® liners require less than half the time and effort to replace compared to conventional liners (see page 12 for more information)



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[Tregaskiss.com/
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or see page 30 for our
hard copy configurator



Scan here
to view the
TOUGH GUN
TA3 MIG gun
spec sheet



AVAILABLE OPTIONS

- Air blast
- Wire brake
- TOUGH GUN I.C.E.® technology (see page 37 for more information) is available for select models

AMPERAGE RATINGS*

- 100%: 350 amps with Mixed Gases

*Gun performance unchanged. Ratings are based on tests that comply with new 2013 IEC 60974-7 standards.



LSR+ UNICABLE WITH SMOOTHTURN™ TECHNOLOGY

These newly improved LSR+ uncables incorporate new SmoothTurn technology to maximize production uptime.

Conventional style uncables typically come with a connection that limits rotational capabilities and produces torsional stress in the cable. Unlike conventional uncables, the LSR+ incorporates a rotating power connection that reduces this stress during rotation. Additionally, a protective external conduit contributes to cable longevity by shielding components from harsh welding environments.

STRESS-RELIEVING FEATURES

- SmoothTurn™ technology reduces frictional forces on internal components increasing overall cable life up to 300%
- Enhanced electrical connections provide a more stable arc, resulting in less spatter and longer cable life
- Unique internal components improve support and bend radius of the cable during heavy robot articulation



TOUGH GUN TA3 ROBOTIC AIR-COOLED MIG GUN CONFIGURATOR

Ready to take on any challenge, TOUGH GUN® TA3 robotic air-cooled MIG guns minimize downtime and improve welding performance on through-arm robotic welding systems.

1 ROBOT MAKE AND MODEL

MAKE	MODEL	DIGIT
Yaskawa® Motoman®	EA1400N or SSA2000**	M01
	EA1900N or MA1900**	M02
	EA1400 (XRC)**	M16
	EA1900 (XRC)**	M17
	MA3100**	M31
	AR1440, MA1440, MH12	M35
	AR 2010, MA2010	M38
	MA3120	M39
	AR1730, MH24	M40
FANUC®	100iC, 100iC-12L, M10iA-12*	F05
	120iC*	F06
	100iC-6L*	F07
	120iC-10L, 120iC-12L*	F08
	100iC-8L*	F10
	100iD, 100iD-12^^	F11
	100iD-8L^^	F12
	100iD-10L^^	F14
	120iD^^	F15
	120iD-12L^^	F16
ABB®	IRB1600ID, IRB1520ID*	A24
	IRB2600ID 15/1.85*	A28
	IRB2600ID 8/2.00*	A29
	IRB1660ID*	A30

Configurations for other robot makes and models available, see SP-TA3 spec sheet or online gun configurator.

2 GUN MOUNT AND OPTIONS

DESCRIPTION	DIGIT
Clutch	1
Clutch + Air Blast	2
Solid Mount	3
Solid Mount + Air Blast*	4
Clutch + Wire Brake	5
Clutch + Wire Brake + Air Blast	6
Solid Mount + Wire Brake	7
Solid Mount + Wire Brake + Air Blast*	8

TA1

F11

3

3

C

3 NOZZLE

PART NUMBER	TYPE	DESCRIPTION	MATERIAL	O.D.	DIGIT
401-6-62	HD	5/8" Bore, 1/8" Recess - Long Taper	Copper	1.062"	A
401-81-62	HD	5/8" Bore, 1/8" Stick Out - Long Taper	Copper	1.062"	B
401-4-62	SD	5/8" Bore, 1/8" Recess - Short Taper	Copper	0.938"	C
401-8-62	SD	5/8" Bore, 1/8" Stick Out - Short Taper	Copper	0.938"	D
401-48-62	Bottleneck	5/8" Bore, Flush Tip	Copper	0.938"	G
401-87-62	HD	5/8" Bore, 1/8" Stick Out - Long Taper	Brass	1.062"	M
401-30-62	SD	5/8" Bore, 1/8" Stick Out - Bottleneck	Brass	0.938"	3
401-14-62	HD	5/8" Bore, 1/8" Recess - Short Taper (Thread-On)	Copper	1.062"	U
401-20-62	HD	5/8" Bore, 1/8" Stick Out - Short Taper (Thread-On)	Copper	1.062"	Z
401-43-62	SD	5/8" Bore, 1/8" Recess - Short Taper (Thread-On)	Copper	0.938"	1
401-18-62	SD	5/8" Bore, 1/8" Stick Out - Short Taper (Thread-On)	Copper	0.938"	2
401-30-62T	SD	5/8" Bore, 1/8" Stick Out - Bottleneck (Thread-On)	Brass	0.938"	4
N/A	N/A	Configured without consumables™	N/A	N/A	0



4 NECK

PART NUMBER	DESCRIPTION	ANGLE	DIGIT
405-22QC	Air-Cooled, Short Length	22	A
405-45QC	Air-Cooled, Short Length	45	C
405-22QCL	Air-Cooled, Medium Length	22	B
405-45QCL	Air-Cooled, Medium Length	45	E
590-45-X.XXX	TOUGH GUN I.C.E., Short Length**	45	H

5 CONTACT TIP*

DESCRIPTION	PART NUMBER	DIGIT
AccuLock™ Copper**	T-A0XXCH	5
AccuLock Chrome Zirconium***	T-A0XXZH	6
AccuLock HDP***	T-A0XXWH	7
Configured without consumables**	N/A	0

6 WIRE SIZE† & LINER TYPE

STANDARD LINER^x

WIRE SIZE	DIGIT
0.030" (0.8 mm)	B
0.035" (0.9 mm)	C
0.039" (1.0 mm)	D
0.045" (1.2 mm)	E
0.052" (1.3 mm)	G
5/64" (2.0 mm)	H
1/16" (1.6 mm)	J

QUICK LOAD PRO LINER^{xx}

WIRE SIZE	DIGIT
0.035" (0.9 mm)	A
0.039" (1.0 mm)	N
0.045" (1.2 mm)	P
0.052" (1.3 mm)	W
1/16" (1.6 mm)	Y

IF CONFIGURED WITHOUT CONSUMABLES**

WIRE SIZE	DIGIT
N/A	0

7 POWER PIN#

FEEDER BRAND	PART NUMBER	DIGIT
Euro	425-10E	E
Fronius®	214-41	F
Lincoln®	214-40	L
Miller® (Auto Xcess™)	214-1	M
Miller (Auto-Continuum®)	214-1	N
OTC Daihen®	214-39	D
Panasonic®	214-30	P
Tweco® #4	214	T
Tweco® #5	214-12	W

5

E

N

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ONLINE AT**
[Tregaskiss.com/
ConfigureMyGun](http://Tregaskiss.com/ConfigureMyGun)



*Solid mount models only

**Clutch mount models only

***Not compatible with Contact Tip options 5, 6, or 7

^Must be configured with a Miller® or Panasonic® power pin

^^Solid mount models only; must be configured with a Miller or Lincoln® power pin

^^^Must be configured with a Miller power pin

•Air blast option not available for FANUC® configurations equipped with TOUGH GUN I.C.E.® technology

••Available for FANUC and ABB®; XXXX represents nozzle O.D.

•••Available for wire sizes between 0.035" and 0.052"

+XX=wire size

++Not available for 0.055" wire sizes

+++Available for wire sizes between 0.030" and 0.045"

‡Wire size option determines contact tip and liner size

‡‡If you are configuring a gun that will plug into a Fronius® feeder, please contact Tregaskiss Tech Support with feeder model number

‡QUICK LOAD liner comes standard on all configurations UNLESS equipped with wire brake, in which case conventional liner is required

‡‡This liner features a special profile and coating for applications requiring extra wire feedability; Not available in lengths longer than 6 feet; Not compatible with wire brake selections

°If configuring gun without consumables, "0" must be selected for Nozzle, Contact Tip, AND Wire Size & Liner Type options.

Some limitations exist. Please consult our online configurator or your Customer Service representative to ensure that the part number configured using these pages is accurate prior to placing an order.

TOUGH GUN CA3 ROBOTIC AIR-COOLED MIG GUNS

Designed for high-volume production environments, fully configurable TOUGH GUN® CA3 robotic air-cooled MIG guns are engineered for precision, durability, accuracy, repeatability, minimal downtime and fast and easy maintenance.

FEATURES & BENEFITS

- Replaceable conventional unicable design offers extended service life and ease of serviceability
- Dual layer cable outer jacket, cable guide and increased copper content contribute to extended service life
- Durable neck clamp provides consistent clamping force for repeatability and TCP accuracy
- Many tool center point and working envelope options due to wide variety of standard necks and mounting arms
- Clutch and solid mount models available

THE CONSUMABLE ADVANTAGE

- AccuLock™ R consumables offer an enhanced contact tip-to-diffuser design which increases tip life, plus the coarse thread on the contact tip **virtually eliminates cross-threading issues** (see page 8 for more information)
- QUICK LOAD® liners require less than half the time and effort to replace compared to conventional liners (see page 12 for more information)



**CONFIGURE
ONLINE AT**
[Tregaskiss.com/
ConfigureMyGun](http://Tregaskiss.com/ConfigureMyGun)
or see page 34 for our
hard copy configurator



Scan here
to view the
**TOUGH GUN
CA3 MIG gun
spec sheet**



AVAILABLE OPTIONS

- Air blast
- Wire brake
- TOUGH GUN I.C.E.® technology (see page 37 for more information)

AMPERAGE RATINGS*

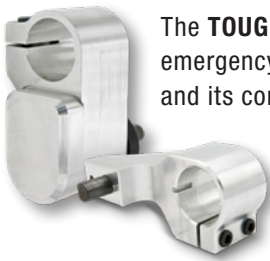
- 100%: 385 amps with Mixed Gases

*Gun performance unchanged. Ratings are based on tests that comply with new 2013 IEC 60974-7 standards.

TOUGH GUN ROBOTIC PERIPHERALS

TOUGH GUN CLAMPS AND MOUNTING ARMS

TOUGH GUN® clamps and mounting arms are made of tough yet resilient aluminum. These products are engineered to provide a robust and durable connection for the TOUGH GUN CA3 robotic air-cooled MIG gun.



The **TOUGH GUN clutch clamp** triggers an emergency stop in the event of a robotic collision and its compact design allows for a larger working envelope. The **TOUGH GUN solid mount clamp** is available for clutchless models, offering the same increased working envelope.

For precision and repeatability, the **TOUGH GUN mounting arm** features a positive-stop keyway that locates the key on the front housing body in the same position every time when components, or the entire MIG gun, is replaced.



TOUGH GUN INSULATING DISCS

TOUGH GUN insulating discs help protect your investment by insulating robots and their controllers from the weld currents. Discs are available with different bolt patterns for attaching TOUGH GUN robotic MIG guns to various brands of robots.



LEGACY TOUGH GUN CLUTCH

Compatible with legacy TOUGH GUN G1 Series MIG guns, the original TOUGH GUN clutch is designed to e-stop your robot with a deflection of only 1° in the event of a robotic collision.



LEGACY TOUGH GUN SOLID ARM MOUNT

Made of high-strength aluminum, the TOUGH GUN solid arm mount can replace a clutch on legacy TOUGH GUN G1 Series systems using collision detection software.



TOUGH GUN NECK CHECKING FIXTURES

For applications where verification of tooling is a requirement, the TOUGH GUN neck checking fixture provides the opportunity to verify the accuracy of the neck to the intended tool center point (TCP). Further, an adjustment handle is provided to help implement minor adjustments if required.

- Accommodates a wide variety of standard necks
- Special kits are available for customized Tregaskiss® necks



TOUGH GUN CA3 ROBOTIC AIR-COOLED MIG GUN CONFIGURATOR

Fully configurable, TOUGH GUN® CA3 robotic air-cooled MIG guns are engineered for precision, durability, accuracy and repeatability and can withstand even the harshest welding environments.

1 GUN STYLE

CABLE STYLE	DIGIT
Clutch	1
Solid Mount*	2

2 NECK

PART NUMBER	DESCRIPTION	ANGLE	DIGIT
405-22QC	Air-Cooled, Short Length	22	A
405-45QC	Air-Cooled, Short Length	45	B
405-180QC	Air-Cooled, Short Length	180	C
405-22QCL	Air-Cooled, Medium Length	22	D
405-45QCL	Air-Cooled, Medium Length	45	E
590-22-X.XXX	TOUGH GUN I.C.E.®, Short Length*	22	H

5 CABLE LENGTH

LENGTH (FT)	DIGIT
3.0	A
3.5	B
4.0	C
4.5	D
5.0	E
5.5	F
6.0	G
6.5	H
7.0	J
7.5	K
8.0	L
8.5	M
9.0	N
9.5	P
10.0	R
12.0	S
15.0	T

RA1

1

A

A

A

3 OPTIONS

CABLE STYLE	DIGIT
No Option	A
Wire Brake	B
Air Blast	C
Wire Brake + Air Blast	E

6

For use with Contact Tip + Diffuser digits A, B and C

SLIP-ON NOZZLE**

PART NUMBER	TYPE	DESCRIPTION	MATERIAL	O.D.	DIGIT
401-6-62	HD	5/8" Bore, 1/8" Recess - Long Taper	Copper	1.062"	A
401-81-62	HD	5/8" Bore, 1/8" Stick Out - Long Taper	Copper	1.062"	D
401-8-62	SD	5/8" Bore, 1/8" Stick Out - Short Taper	Copper	0.938"	G
401-48-62	Bottleneck	5/8" Bore, Flush	Copper	1.062"	K
401-71-62	HD	5/8" Bore, 1/8" Recess - Long Taper	Brass	1.106"	N
401-87-62	HD	5/8" Bore, 1/8" Stick Out - Long Taper	Brass	1.062"	P
401-30-62	SD	5/8" Bore, 1/8" Stick Out - Bottleneck	Brass	0.938"	3

4 CONTACT TIP** + DIFFUSER

DESCRIPTION	CONTACT TIP SERIES NUMBER	RETAINING HEAD PART NUMBER	DIGIT
AccuLock™ Copper for Slip-On Nozzles*	T-A0XXCH	D-ATSH	A
AccuLock Chrome Zirconium for Slip-On Nozzles†	T-A0XXZH	D-ATSH	B
AccuLock HDP for Slip-On Nozzles††	T-A0XXWH	D-ATSH	C
AccuLock Copper for Thread-On Nozzles*	T-A0XXCH	D-ATTH	D
AccuLock Chrome Zirconium for Thread-On Nozzles†	T-A0XXZH	D-ATTH	E
AccuLock HDP for Thread-On Nozzles††	T-A0XXWH	D-ATTH	F
Configured without consumables°°	N/A	N/A	0

For use with Contact Tip + Diffuser digit 0

IF CONFIGURED WITHOUT CONSUMABLES°°

PART NUMBER	TYPE	DESCRIPTION	MATERIAL	O.D.	DIGIT
N/A	N/A	Configured without consumables	N/A	N/A	0



CONFIGURE ONLINE AT
Tregaskiss.com/
ConfigureMyGun

7 CONTROL CABLE

PART NUMBER	DESCRIPTION	DIGIT
N/A	No Cable	0
519-2	Bare End - 5 meter	1
519-4	18" 4-Pin Amp CPC Series Connector (Motoman®/Miller®)	3

A

3

1

C

M

For use with Contact Tip + Diffuser digits D, E and F

THREAD-ON NOZZLE^{^^}

PART NUMBER	TYPE	DESCRIPTION	MATERIAL	O.D.	DIGIT
401-14-62	HD	5/8" Bore, 1/8" Recess - Long Taper	Copper	1.062"	D
401-18-62	HD	5/8" Bore, 1/8" Stick Out - Long Taper	Copper	1.062"	E
401-43-62	SD	5/8" Bore, 1/8" Stick Out - Short Taper	Copper	0.938"	G
401-20-62	Bottleneck	5/8" Bore, Flush	Copper	1.062"	L
401-30-62T	HD	5/8" Bore, 1/8" Recess - Long Taper	Brass	1.106"	4

*Control cable option not available for solid mount models

**XX = wire size

***Wire Size option determines contact tip and liner size

^^For wire sizes between 0.030" and 0.045", X="8"; For wire sizes between 0.052" and 3/32", X="9"

^^Nozzle options differ based on retaining head / gas diffuser. Please carefully refer to headings in Nozzle column for nozzle selection

*X.XXX represents nozzle O.D.

**This liner features a special profile and coating for applications requiring extra wire feedability; Not available in cable lengths longer than 6 feet; Not compatible with wire brake

•Not available for 0.055" or 0.078" wire sizes

‡Available for 0.035", 1.0 mm and 0.045" wire sizes

‡‡Available for 0.035", 1.0 mm, 0.045" and 0.052" wire sizes

°°If configuring gun without consumables, "0" must be selected for Contact Tip + Diffuser, Nozzle, AND Wire Size & Liner Type options.

8 WIRE SIZE^{***} & LINER TYPE

STANDARD LINER

WIRE SIZE	DIGIT
0.030" (0.8 mm)	B
0.035" (0.9 mm)	C
0.039" (1.0 mm)	D
0.045" (1.2 mm)	E
0.052" (1.3 mm)	G
1/16" (1.6 mm)	J
0.070" (1.8 mm)	K
3/32" (2.4 mm)	M

ALUMINUM LINER

WIRE SIZE	DIGIT
0.035" (0.9 mm)	R
1/16" (1.6 mm)	T
0.045" (1.2 mm)	U

IF CONFIGURED WITHOUT CONSUMABLES^{°°}

WIRE SIZE	DIGIT
N/A	0

QUICK LOAD PRO LINER^{°°}

WIRE SIZE	DIGIT
0.035" (0.9 mm)	A
0.039" (1.0 mm)	N
0.045" (1.2 mm)	P
0.052" (1.3 mm)	W
1/16" (1.6 mm)	Y

9 POWER PIN

FEEDER BRAND	PART NUMBER	DIGIT
Euro	425-20E	E
Fronius® (North America Style)	214-17	F
Lincoln (Short)	214-40	S
Lincoln® (Short Swivel)	214-7	L
Miller® (Short Robotic)	214-1	M
OTC Daihen®	214-39	D
Panasonic® (Short)	214-30	P
Tweco #4	214	T
Tweco #5	214-12	W

Some limitations exist. Please consult our online configurator or your Customer Service representative to ensure that the part number configured using these pages is accurate before placing an order.

TREGASKISS BA1 COBOT AIR-COOLED MIG GUNS

WEBSITE QUICKLINK:
Tregaskiss.com/BA1

www://

BRINGING THE SAME DEPENDABLE WELDING PERFORMANCE TO COBOTS

When it comes to cobots (collaborative robots), a quick-to-implement and easy-to-use automation solution that keeps cobot operations agile and profitable is crucial. A cobot should bring more productivity to a welding operation – but if its MIG gun is prone to failures and its consumables quickly wear out, downtime can erase those productivity gains.

Tregaskiss® BA1 cobot air-cooled MIG guns deliver through their proven durability and overall simplicity of design so users can depend on the BA1 cobot MIG gun and AccuLock™ consumables to keep their cobot up and running, no matter what the welding job is.

INCREASED UPTIME AND THROUGHPUT

- Tregaskiss robotic MIG guns have a proven history of durability in high-volume, multi-shift production environments.
- Metal-to-metal keyed connections hold the BA1 cobot MIG gun in place in the mounting arm and keep the strong, aluminum-armored neck firmly in place in the gun body.
- Optional free drive button allows for the operator to manually move the cobot to the desired weld position

QUICK AND EASY MAINTENANCE

- The guns and gun necks rarely need to be replaced – and when they do, all that's required is loosening a small number of fasteners with one tool.
- Tregaskiss BA1 cobot MIG guns use AccuLock contact tips, which last significantly longer than other tip options – and when contact tips do need to be replaced, they're fast and easy to install.



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ONLINE AT
Tregaskiss.com/
ConfigureMyGun



Scan here to
view the BA1
Cobot MIG gun
spec sheet



AccuLock™
CONSUMABLES

See pages 4-9

TOUGH GUN I.C.E. TECHNOLOGY

WEBSITE QUICKLINK:
Tregaskiss.com/ICE



TOUGH GUN I.C.E.® technology boosts the duty cycle of our already highly robust air-cooled TOUGH GUN® MIG guns by providing water-cooled benefits through our I.C.E. (Integrated Cooling Enhancer) component. This component circulates water at the nozzle, keeping front-end consumables running cooler and lasting longer.

TOUGH GUN I.C.E. technology is an option for TOUGH GUN robotic and 350 amp MA1 fixed automatic air-cooled MIG guns, resulting in a hybrid air- and water-cooled MIG gun solution.

MAINTENANCE MADE EASY

- Air-cooled uncable runs independently of water lines
- All water-cooling components are external
- Shut-off valves are located at the I.C.E. connections

COOLING

- Existing TOUGH GUN robotic and 350 amp MA1 fixed automatic air-cooled MIG guns can be retrofit with TOUGH GUN I.C.E. technology
- If water-cooling capability is lost, the original air-cooled product remains operational
- Cooler running front-end parts extend the life of consumables

INCREASED SAFETY

- Water avoids contact with power leads and remains virtually uncontaminated, preventing water from becoming electrically charged
- Neck runs cooler than typical air-cooled products

COMPATIBILITY & CONVENIENCE

- Compatible with the TOUGH GUN TT4A and TT4E reamer (see page 41 for more information)
- Compatible with AccuLock™ R and TOUGH LOCK® consumables (see pages 8-11 for more information)



TREGASKISS FIXED AUTOMATIC MIG GUNS

Tregaskiss fixed automatic MIG guns are engineered for hard tooling applications requiring a simple, durable and repeatable MIG gun. These automatic torches can be configured with the same consumables as your Bernard® semi-automatic or Tregaskiss robotic MIG guns to simplify your inventory.

TREGASKISS MA1 FIXED AUTOMATIC AIR-COOLED MIG GUNS

- Achieve maximum uptime and throughput. With the high-performance consumables, armored neck and body, and simple internal connections, these MIG guns are quick and easy to maintain.
- Available in both cable and cableless (also known as Auto Heads) 350 and 385 amp models
- Power cable equipped guns feature a spring-guard strain relief to prevent kinking and abrasion
- Air-cooled neck is made from aircraft-grade aluminum
- 350 amp model is compatible with TOUGH GUN I.C.E.® technology, which boosts the duty cycle (see page 37 for more information)

AccuLock™
CONSUMABLES

See pages 4-9

**CONFIGURE
ONLINE AT**
Tregaskiss.com/
ConfigureMyGun



Scan here to view
the MA1 MIG gun
spec sheet



TREGASKISS MW1 FIXED AUTOMATIC WATER-COOLED MIG GUNS

- These water-cooled MIG welding guns feature high-performance consumables, an armored neck and body, and simple internal connections which allow for quick and easy maintenance
- Available in 500 and 600 amp models
- Spring-guard strain relief prevents kinking and abrasion
- Water-cooled neck is made from stainless steel and is silver brazed and leak tested
- 600 amp water-cooled model has a thread-on heavy duty nozzle

AccuLock™
CONSUMABLES

See pages 4-9

Scan here to view
the MW1 MIG Gun
spec sheet



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ONLINE AT
Tregaskiss.com/
ConfigureMyGun



TREGASKISS AW2 FIXED AUTOMATIC WATER-COOLED MIG GUNS

Designed for dependable performance in high amperage, high temperature hard tooling welding applications. These guns feature a simple design with threaded connections and minimal number of replacement parts.

- Available in both cable and cableless 600 amp models
- Power cable equipped guns are available in lengths of 3 to 25 feet in 1/2-foot increments
- Internal threaded connections stay tight inside the anti-vibration compression fit body for good electrical connectivity and longer life

Scan here to view
the AW2 MIG gun
spec sheet



AccuLock™
CONSUMABLES

See pages 4-9



TREGASKISS ROBOTIC WATER-COOLED MIG GUNS

WEBSITE QUICKLINKS:
Tregaskiss.com/RWC
Tregaskiss.com/ConfigureMyGun



PERFORMANCE YOU CAN COUNT ON IN THE TOUGHEST WELDING APPLICATIONS

The Tregaskiss® 600 amp robotic water-cooled MIG gun is ready to take on your most demanding welding applications. Its robust design is tough and dependable enough to maximize productivity when welding thick plate or running prolonged duty cycles.

ROBUST CONSTRUCTION

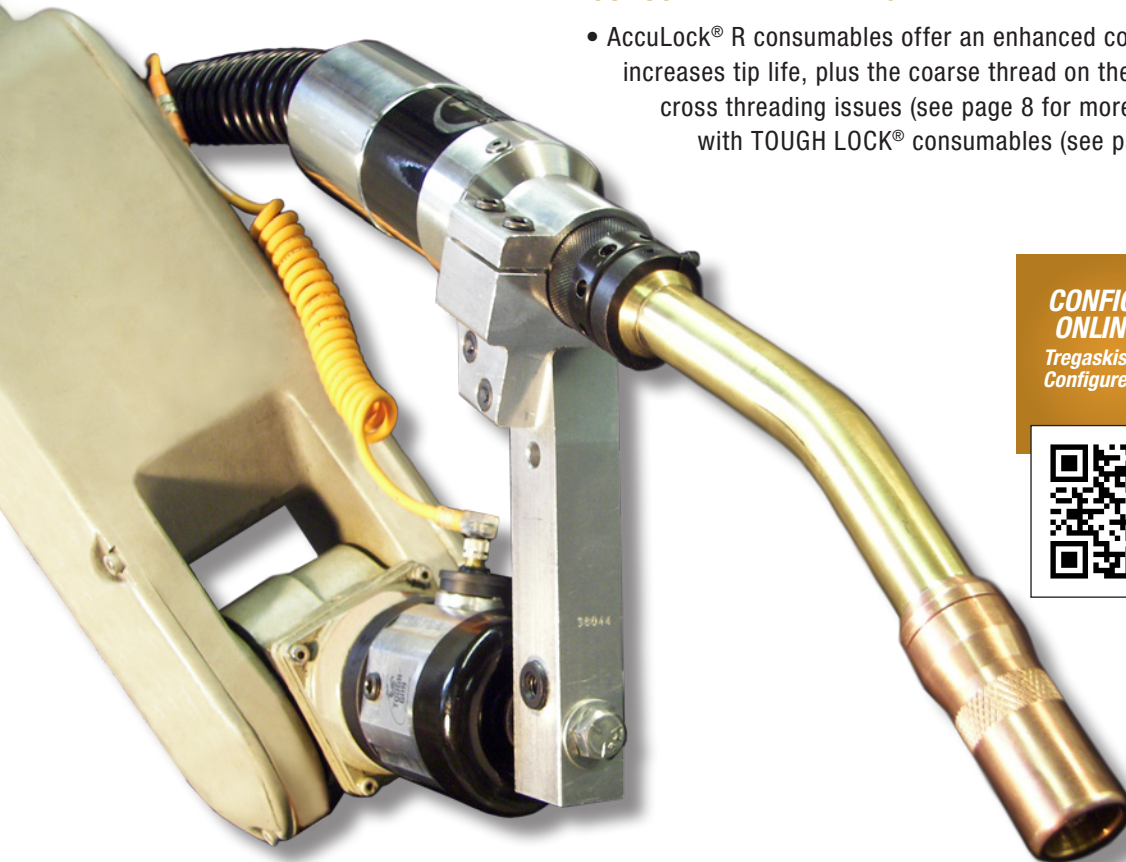
- Durable stainless steel docking body
- Quick-connects allow the cable to swivel and provide support for the liner, resulting in smooth, consistent wire feeding
- Maintenance-friendly features include accessible front housing, quick-change fittings and replaceable components

ENHANCED PERFORMANCE

- Withstands the heat generated from welding thick plate or prolonged duty cycles
- Water-cooled power cable and neck keep front-end consumables running cool
- Neck features four cooling channels to optimize cooling efficiency

THE CONSUMABLE ADVANTAGE

- AccuLock® R consumables offer an enhanced contact-to-diffuser design which increases tip life, plus the coarse thread on the contact tip virtually eliminates cross threading issues (see page 8 for more information). Also compatible with TOUGH LOCK® consumables (see page 11).



**CONFIGURE
ONLINE AT**
Tregaskiss.com/
ConfigureMyGun



Scan here to view
the Tregaskiss
robotic water-cooled
MIG gun spec sheet



TOUGH GUN® TT4A AND TT4E REAMER NOZZLE CLEANING STATIONS

WEBSITE QUICKLINK:
Tregaskiss.com/TT4reamer

www://



POWER THROUGH THE TOUGHEST SPATTER FOR INCREASED UPTIME AND WELD QUALITY

The TOUGH GUN TT4 reamer is a robotic nozzle cleaning solution that maximizes uptime through superior cleaning performance, high durability components and features that allow quick and easy maintenance. You'll spend less time maintaining and troubleshooting your robotic welding equipment and more time getting product out the door!

Choose between the TOUGH GUN TT4A reamer (Analog model), or the TOUGH GUN TT4E reamer (Ethernet model) further enhanced with digital ethernet communication for better integration.

NEW STANDARD FEATURES:

- Anti-spatter reservoir with tethered cap and increased fluid volume capacity
- Fluid level indicator sends a signal to the robot operator and the PLC/robot when the anti-spatter liquid is running low
- Dedicated motor lubricator maximizes performance and protects your robotic investment by extending the life of the motor
- Spray containment unit helps prevent air contamination, improving the air quality of the working environment and maintaining the cleanliness of the weld cell

REDUCE DOWNTIME, SAFETY INCIDENTS AND COSTLY WELD DEFECTS RELATED TO ANTI-SPATTER

Automating spatter removal extends the life of your robotic MIG guns and consumables, benefiting your production uptime, throughput and your bottom line.

PURCHASE WITH CONFIDENCE

Industry-leading 2-year warranty on all TOUGH GUN TT4 reamers, or extended 3-year warranty with exclusive use of TOUGH GARD® anti-spatter liquid



Scan here to view the TT4A and TT4E reamer spec sheet



TOUGH GUN TT4A AND TT4E REAMER SPECIFICATIONS

Rated Voltage	24VDC
Operating Voltage	± 10% of rated voltage
Power Requirements	Max. wattage in operation 5.3 W
Air Requirements (minimum)	80 to 100 PSI (5.0 to 7.0 bar) at 16 CFM (7.5 L/s)
Air Motor (at min. air requirement)	Stall torque at 80 PSI (5.5 bar) = 83 in. -lbs (9.4 Nm)
Weight	(put double tilde here) 50 lbs. (23 kg)*
Product Dimensions (L x W x H)	13.5" x 11.25" x 21.0" (343 mm x 286 mm x 534 mm)*
Compatible with:	TOUGH GUN® reamer stand (see page 42) TOUGH GARD® multi-feed system (see page 43)

*Optional features are sold separately or added as options when ordering, and can change the weight and physical dimensions of the product.

TREGASKISS TOUGH GUN® TT4A AND TT4E REAMER ACCESSORIES

OPTIONAL ACCESSORIES



WIRE CUTTER

The TOUGH GUN® wire cutter removes the ball-end of the welding wire to provide smooth arc starts and consistent wire stick-out. This wire cutter easily cuts a variety of wire types from stainless steel to aluminum to flux-core in wire sizes up to 1/16".

Our unique carbide cutter blade design provides eight indexable cutting surfaces that ensure low cost operation over the long haul and are precision-ground to outlast other wire cutters.

The TOUGH GUN wire cutter is the perfect complement to your TOUGH GUN TT4A and TT4E reamer and mounts directly to the top of the unit. It can also be easily mounted in a remote location which allows it to be used with virtually any robotic welding equipment.

REPLACEMENT CUTTER BLADES

Designed for use with TOUGH GUN TT4A and TT4E reamer models, Tregaskiss cutter blades are engineered from harder, stronger material for enhanced performance and durability.



V-BLOCKS

Compatible with Tregaskiss® and most competitive consumables, these 4-sided v-blocks ensure your cutter is concentric with your consumables and your nozzle bore to guarantee the most effective ream. Choose from a wide variety of v-block options when configuring your new TOUGH GUN TT4A and TT4E reamer.

NOZZLE DETECT

Nozzle detect for the TOUGH GUN TT4A and TT4E reamer uses a proximity sensor mounted on the side of the reamer that can be used independent of the ream cycle. The robot positions the front end of the MIG gun close to the sensor to detect the presence of the nozzle. If the nozzle is present, a signal is then sent back to the robot controller or PLC.

A nozzle detect system can help alert maintenance personnel that the nozzle is no longer present before a weld is attempted. This helps to reduce rework and scrap caused by welding without a nozzle.



FILTER REGULATOR

The filter/regulator unit from Tregaskiss is another recommended accessory that helps extend the life of your TOUGH GUN TT4A or TT4E reamer. The filter cleans the air supply to the reamer and restricts debris from reaching the motor, keeping it uncontaminated and ensuring maximum performance and longer life. The regulator works to ensure optimal air pressure is achieved at the unit.

TOUGH GUN REAMER STAND

Tregaskiss provides a competitively priced, fixed height durable stand for all TOUGH GUN TT4 reamer models. Stands can be ordered in heights between 18 and 45 inches.

The stand's simple design facilitates quick and accurate reamer change-outs via the compatibility with the reamer quick-change base plate, and the standardized 8.5" x 6.5" hole pattern on the floor mounting plate allows stands to be easily swapped between stations.



TOUGH GARD ANTI-SPATTER LIQUID

WEBSITE QUICKLINKS:
Tregaskiss.com/TOUGHGARD
Tregaskiss.com/Multi-Feed

www://

TOUGH GARD® anti-spatter liquid was developed to address the performance requirements of metal fabricators. TOUGH GARD anti-spatter liquid won't harm machinery, it cleans up easily with no residue and it's safe for the environment. Helping prevent spatter adhesion and extending the life of consumables, TOUGH GARD anti-spatter liquid reduces downtime thus lowering operating and maintenance costs.

SUPERIOR PERFORMANCE

Tregaskiss R&D studies* show that TOUGH GARD anti-spatter liquid outperforms other brands on the market (see Figure 1).

*Results based on continuous GMAW – 6 minutes, 0.045" wire, E480S-6, 300A, Ar-CO₂ gas mix

Figure 1



No Anti-Spatter



Competitive Anti-Spatter



TOUGH GARD Anti-Spatter



PART #	PACKAGE SIZES
TG-101-05	5 U.S. Gal. / 18.92 L
TG-101-55	55 U.S. Gal. / 208.3 L
TG-101-01	1 U.S. Gal. / 3.78 L
TG-101-32SP (Spray Bottle)	25.36 fl. oz. / 750 mL
TG-101-14S	14 fl. oz. / 414 mL

TOUGH GARD MULTI-FEED SYSTEM

The TOUGH GARD multi-feed system for anti-spatter solution can connect up to ten TOUGH GUN TT4A or TT4E reamer stations. This system eliminates the need to refill anti-spatter reservoirs on a frequent basis, resulting in lower operating costs, reduced downtime and increased safety.

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)
HOSE (SOLD SEPARATELY)	
TG-103-100	100' Multi-Feed Hose (UV Rated)
TG-103-200	200' Multi-Feed Hose (UV Rated)

For replacement parts, see OM-MF owner's manual for more information (available online at Tregaskiss.com/manuals).



SERVICE AND SUPPORT

In addition to the online tools and resources we provide that are available 24/7, more personal customer support is also available:



CUSTOMER SERVICE

Phone: 1-855-MIGWELD (644-9353)

Email: cs@itwmig.com

Our Customer Service department can be reached by phone or email from 7:00 a.m. to 4:00 p.m. CST Monday through Friday to assist with:

- Manufacturer's Suggested Pricing and product availability
- Product configuration
- Answering consumables compatibility questions such as which diffuser/tip/nozzle is compatible with your MIG gun
- Warranty claims



TECHNICAL SUPPORT

Phone: 1-855-MIGWELD (644-9353), Option #3

Email: tech.support@itwmig.com

Our Technical Service team is ready to answer your technical support questions from 7:00 a.m. to 4:00 p.m. CST Monday through Friday. This team provides the following services to support customers both pre- and post-sale:

- Troubleshooting inquiries
- Replacement parts identification and stocking recommendations
- CAD model requests
- Assistance with product configuration
- Training – product, maintenance, technical, etc.
- Consumable optimization

We will respond to all questions as soon as possible, but please note that it could take up to 2 business days to respond to CAD requests submitted via email.



YOUR WELDING DISTRIBUTOR

Your welding distributor is also a comprehensive resource for welding and cutting information and process or equipment troubleshooting. Distributors can help you choose the products and accessories that are right for you and your specific application. To locate a welding distributor in your area, visit the **Where To Buy** link on our websites.

ONLINE RESOURCES

Visit us online for immediate access to the most up-to-date information.

Tregaskiss.com



VIDEOS

Check out our WhyBuy videos and find valuable how-to videos on our YouTube channels. Subscribe today!



ONLINE PRODUCT CONFIGURATORS

Use our mobile-friendly online configurators to build the MIG gun or reamer part number you need, plus get access to additional resources and an expanded replacement parts list with diagram.

Tregaskiss.com/ConfigureMyGun



LET'S GET SOCIAL

Join our online community today!



AMPERAGE E-NEWSLETTER

This electronic publication from Bernard and Tregaskiss features informative articles on improving welding performance, product announcements, contests and more. Subscribe today!

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Whether you are new to welding or a seasoned professional, we have informative technical articles and case studies to help you get the most out of your applications.

Tregaskiss.com/articles



TECH CONNECTION PRODUCT NEWS

Your connection to Bernard and Tregaskiss product improvements, new product information and other product updates.

Tregaskiss.com/TechConnection

TREGASKISS

MAXIMIZING THROUGHPUT. MINIMIZING COSTS.

Automated welding applications require flexible, repeatable solutions that maximize production uptime and throughput while minimizing costs. This is why industrial manufacturers rely on Tregaskiss and its proven track record for delivering reliable and resilient robotic MIG welding guns, fixed automatic MIG guns, nozzle cleaning stations and innovative welding gun consumables.

BERNARD

ENGINEERED FOR SIMPLICITY. BUILT FOR DURABILITY.

Industrial semi-automatic welding operations benefit from welding products that are built to withstand the rigors of multi-shift use, high heat, and abusive environments. Long-lasting, easy to maintain Bernard semi-automatic MIG guns combined with AccuLock™ S consumables means more uptime, fewer errors and less troubleshooting for welders.

THE TEAM BEHIND THE BRANDS

The shared team behind Tregaskiss and Bernard routinely listens and responds to the needs of our customers. Through the strength of our people and their dedication to practical product innovation, ISO production quality standards, and superior service and support, we strive to remain our customers' #1 choice.

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