

SEMI-AUTOMATIC

& CONSUMABLES



ABOUT BERNARD

BERNARDWELDS.COM

For immediate access to the most up-to-date information, visit us online!

- Locate your nearest Bernard Authorized Distributor at **BernardWelds.com/Locator**
- Find product literature, videos, technical documentation and troubleshooting information
- Configure your Bernard MIG Gun online at BernardWelds.com/ConfigureMyGun

TREGASKISS.COM

Visit Tregaskiss.com for robotic MIG welding product information and other valuable robotic welding resources

VIDEOS

Want to know what sets us apart from the competition? Check out our WhyBuy videos at **BernardWelds.com/WhyBuy** and see for yourself.



SEMI-AUTOMATIC MIG GUN CONFIGURATORS

Configure the right semi-automatic MIG gun for your welding application today. Build your industrial-grade BTB Semi-Automatic Air-Cooled or Clean Air™ Fume Extraction MIG Gun online, or if you're looking for a light- to medium-duty MIG welding gun, you can find the TGX™ MIG Gun that's right for you. Visit **BernardWelds.com/ConfigureMyGun** to get started!

GET SOCIAL WITH BERNARD

Check us out on YouTube at **YouTube.com/TheBernardDifference** and follow us on LinkedIn at **LinkedIn.com/company/Bernard-Welding**. Find us on Facebook at **Facebook.com/BernardWelds.** Join our online community today!







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Subject to Change — The information presented in this catalog is accurate to the best of our knowledge at the time of printing. Please visit BernardWelds.com for the most up-to-date information.

BERNARD BTB AIR-COOLED MIG GUNS

WEBSITE QUICKLINKS:

BernardWelds.com/BTB BernardWelds.com/ConfigureMvGu



OPTIMIZE FOR PRODUCTIVITY, STANDARDIZE FOR SIMPLICITY.

According to the American Welding Society (AWS), there will be a shortage of 400,000 welders by 2024.

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.

ONLINE AT ConfigureMyGun

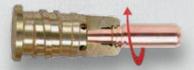
FIXED OR ROTATABLE NECKS

- 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 7 for more information

HIGH PERFORMANCE CONSUMABLES

- Available with Centerfire[™]. Quik Tip[™] or TOUGH LOCK™ Consumables
- See pages 16-20 for more information





Quik Tip Consumables Cutaway



TOUGH LOCK Consumables Cutaway

MULTIPLE HANDLE AND TRIGGER OPTIONS

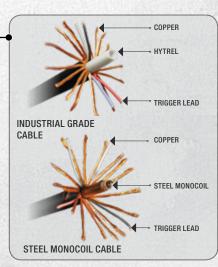
- Choose between seven different curved and straight handle styles
- New C Series Straight Handle features comfortable overmolding and ergonomic rear swivel at no extra cost!
- Wide selection of handles and easy-to-change trigger options allow guns to be matched to user preference or welding application
- Triggers are designed and built to last more than one million cycles
- See page 6 for more information



- 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)

NEW!! C Series Straight Handle

XDERNARD"



DOUBLE-LIFE MIG GUN SYSTEM*



The Double-Life MIG Gun System features identical handles and internal connections on the front and back. Once the front end of the cable becomes worn, simply "flip-flop" the switch and neck from the front of the gun with the power pin on the back and get twice the life out of your MIG gun!

*Available for BTB MIG Guns with T and C Series Straight power pins.

LINER OPTIONS

■ The Universal Conventional Liner is compatible with all legacy Q-Gun™, S-Gun[™], T-Gun[™] Air-Cooled MIG Guns to simplify and reduce inventory

See page 21 for more information

■ Save time by loading your liner from the front of your gun with the innovative QUICK LOAD™ Liner

See page 22 for more information

■ The QUICK LOAD Liner AutoLength™ System is a revolutionary system designed to minimize downtime, wire feeding and quality issues commonly associated with short liner length

See page 23 for more information

ACCESSORIES

- 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

and all BTB MIG Guns, which allows you

- Neck coupler
- Neck guard and grip

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BERNARD BTB AIR-COOLED MIG GUNS

WEBSITE QUICKLINKS:

BernardWelds.com/BTB BernardWelds.com/ConfigureMvGun



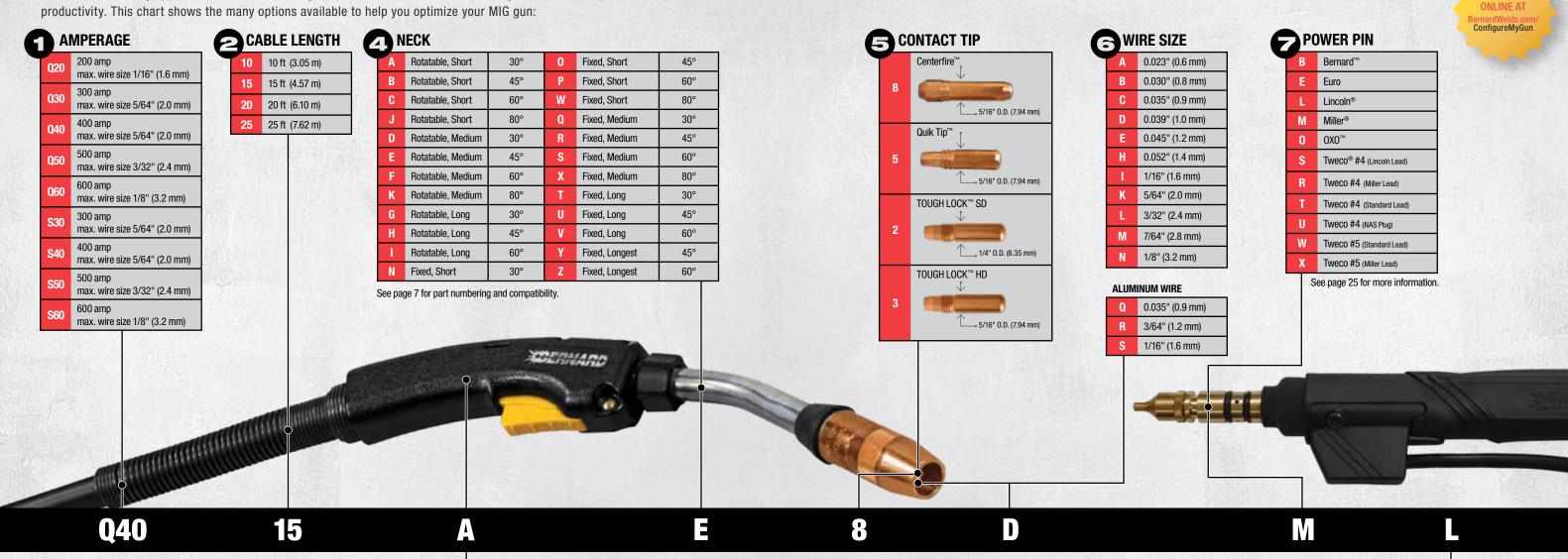
CHOOSE YOUR WEAPON — BTB MIG GUN CONFIGURATOR

Dual Schedule Switch

Locking Dual Schedul

Handle

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:



HANDLE AND TRIGGER Q20, Q30 **B** Series Standard Trigger **T Series** Q20, Q30 Standard Trigger C Series Q20, Q30, Q40 Standard Trigger Locking Trigger Straight Q50, S30, S40 **Dual Pull Trigger** Small **Dual Schedule Dual Pull Trigger** Curved Straight Handle Switch Handle Handle Insight[™] Limited Q40 **T Series** Q30, Q40, Q50, Q60 **B** Series Standard Trigger Standard Trigger (available only with Miller® power pin) Locking Trigger Straight S30, S40 Locking Trigger Curved Dual Pull Trigger Dual Pull Trigger Handle Handle **Dual Schedule Switch Dual Schedule Switch** Locking Dual Schedule Locking Dual Schedule O Series Q40, Q50, Q60 **O Series** Q20, Q30, Q40 Standard Trigger Standard Trigger See page 6 for more information. S40, S50, S60 **Locking Trigger** S30, S40 **Locking Trigger** Curved Small **Dual Pull Trigger** Handle Curved

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

| АМР | CENT | ENTERFIRE QUIK 1 | | TIP TOUGH LOCK | | | |
|---|----------|------------------|----------|----------------|---------------|---------------|----------|
| | Diffuser | Nozzle | Diffuser | Nozzle | Diffuser (SD) | Diffuser (HD) | Nozzle |
| 200 | DS-1 | NS-1218B | D118Q | N1C58Q | 404-18 | N/A | 401-4-62 |
| 300 | DS-1 | NS-5818C | D118Q | N1C58Q | 404-18 | 404-26 | 401-6-62 |
| 300 (T Series Small Straight Handle Only) | DS-1 | NS-5818C | D118Q | N1C58Q | 404-18 | 404-26 | 401-4-62 |
| 400 | D-1 | N-5818C | D118Q | N1C58Q | 404-18 | 404-26 | 401-6-62 |
| 500 | D-1 | N-5814C | D114Q | N1C34HQ | N/A | 404-26 | 401-5-62 |
| 600 | D-1 | N-3414C | D114Q | N1C34HQ | N/A | 404-26 | 401-5-75 |

LINER Universal Conventional Liner QUICK LOAD™ Liner* QUICK LOAD Liner AutoLength™ System**

*Available for wire sizes 0.023" to 3/32" **Available for wire sizes 0.030" to 3/32"

^{*}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.

WEBSITE QUICKLINKS:

BernardWelds.com/BTB BernardWelds.com/ConfigureMyGun



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 |

^{*}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, Locking Dual Schedule Switch | Standard | Standard, Locking, Dual Pull, Dual Schedule Switch, Locking Dual Schedule Switch | Standard, Locking, Dual Pull, Dual Schedule Switch, Insight Ltd. | | |
| Cable | Industrial Grade | Industrial Grade | Industrial Grade or Steel Monocoil for 300, 400 amp only | Industrial Grade or Steel Monocoil | Industrial Grade | Industrial Grade or Steel Monocoil for 300, 400 amp only | Industrial Grade or Steel Monocoil for 300, 400 amp only | | |
| Double- Life MIG Gun System | - | - | - | - | - | √ | √ | | |

BTB MIG GUN NECK OPTIONS

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



T Series Small Straight Handle



T Series Straight Handle



C Series Straight Handle



B Series Small Curved Handle



B Series Curved Handle



O Series Small Curved Handle



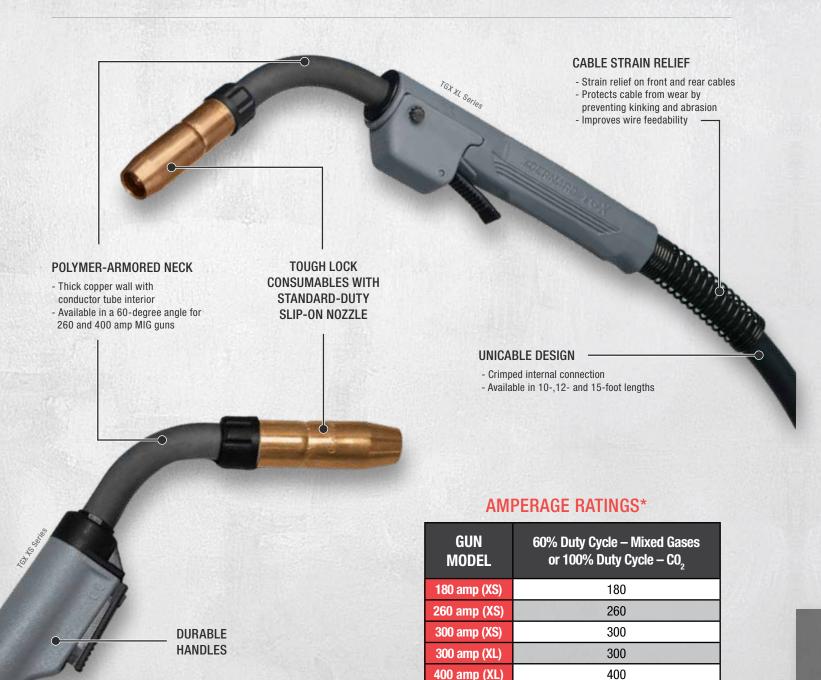
O Series Curved Handle

| Neck Type | | Angle/Length | Pa | rt# |
|--|---|--------------|----------------------------------|---------------------------------|
| Fixed | 0 | 45, Short | 205 | 5-45 |
| | P | 60, Short | 205 | 5-60 |
| | R | 45, Medium | 315 | 5-45 |
| | S | 60, Medium | 315 | 5-60 |
| - | U | 45, Long | 405- | 45NB |
| | V | 60, Long | 405- | 60NB |
| Neck Type | | Angle/Length | Part # (T Series Handle Type) | Part # (C Serie Handle Type) |
| Fixed | 0 | 45, Short | 305-45 | 305-45CT |
| | P | 60, Short | 305-60 | 305-60CT |
| | R | 45, Medium | 405-45 | 405-45CT |
| The state of the s | S | 60, Medium | 405-60 | 405-60CT |
| | U | 45, Long | 505-45 | 505-45CT |
| | V | 60, Long | 505-60 | 505-60CT |
| | Υ | 45, Longest | 405-45LL | 405-45LLCT |
| | Z | 60, Longest | 405-60LL | 405-60LLCT |
| Neck Type | | Angle/Length | Pa | rt# |
| Rotatable | A | 30, Short | QT2-30 | |
| | В | 45, Short | QT2 | 2-45 |
| | C | 60, Short | QT2-60 | |
| | J | 80, Short | QT2-80 | |
| | D | 30, Medium | QTS | 3-30 |
| | Ε | 45, Medium | QTS | 3-45 |
| - | F | 60, Medium | QTS | 3-60 |
| | K | 80, Medium | QT3 | 3-80 |
| | G | 30, Long | QTS | 5-30 |
| | Н | 45, Long | QTS | 5-45 |
| | 1 | 60, Long | QT5 | 5-60 |
| Neck Type | | Angle/Length | Pa | rt# |
| Fixed | N | 30, Short | QT2 | 2-30 |
| | 0 | 45, Short | QT2 | 2-45 |
| | P | 60, Short | QT2 | 2-60 |
| | W | 80, Short | QT2 | 2-80 |
| | Q | 30, Medium | QTS | 3-30 |
| | R | 45, Medium | QT3 | 3-45 |
| - | S | 60, Medium | QTS | 3-60 |
| | X | 80, Medium | QTS | 3-80 |
| | T | 30, Long | QTS | 5-30 |
| | U | 45, Long | QTS | 5-45 |
| | V | 60, Long | QT5 | 5-60 |



FOR LIGHT- TO MEDIUM-DUTY WELDING APPLICATIONS

The Bernard™TGX™ Series is perfect for low volume, light- to medium-duty welding and is a durable, attractively priced choice. TGX MIG Guns are available in XS Series (180, 260, 300 amp) and XL Series (300, 400 amp) models and are compatible with TOUGH LOCK™ and TOUGH ACCESS™ Consumables.



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

BERNARD TGX™ EASY AS 1-2-3! PROGRAM

The TGX Easy As 1-2-3! Program is a unique retail system that allows a TGX MIG Gun to be assembled to your exact specifications in your welding distributor's retail store. Distributors benefit from the program by being able to offer 150 different MIG gun combinations while reducing inventory by up to 75 percent.

Answer the following quick and easy questions to determine which part numbers are required for your gun.

QUESTION 1

What amperage and cable length do you need? Your answer determines the gun chassis you require.

| AMPERAGES | GUN LENGTHS | | | | |
|--------------|-------------|-----------------|--------|--|--|
| AWIFENAUES | 10' | 12 ¹ | 15' | | |
| 180 amp (XS) | XS1810 | XS1812 | XS1815 | | |
| 260 amp (XS) | XS2610 | XS2612 | XS2615 | | |
| 300 amp (XS) | XS3210 | XS3212 | XS3215 | | |
| 300 amp (XL) | XL3010 | XL3012 | XL3015 | | |
| 400 amp (XL) | XL4010 | XL4012 | XL4015 | | |

QUESTION 2

What wire feeder model are you using? Your answer determines the feeder connection and control plug you require.

| FEEDER BRAND | POWER PIN PART # /NAME | REQUIRED ADAPTOR | REQUIRED Control Plug |
|-----------------|---------------------------------|---------------------|--------------------------|
| DNAND | /NAME | ADAFIUN | CUNTRUL PLUG |
| Miller® | 214-1 Miller | N/A | 419-4 |
| Lincoln® | 214-2 Lincoln | N/A | 419-6 |
| Hobart® | 214 Tweco #4 (Standard Lead) | N/A | 419-8 |
| | 214-1 Miller | 417-64 | 419-4 |
| Euro (various) | 214 Tweco #4 (Standard Lead) | 417-65 | 419-8 |

NOTE: Euro not available for 180 or 260 amp guns.

If your feeder does not appear in the chart above, please contact Bernard Customer Service by email at cs@itwmig.com or by phone at 1-855-MIGWELD (644-9353).

QUESTION 3

What wire size are you using? Your answer determines the contact tip and liner you require.

| WIRE SIZE * | TOUGH LOCK™ SD CONTACT TIP PART #** | TOUGH LOCK HD CONTACT TIP PART #*** | LINER PART # |
|-----------------|--|--|--------------|
| 0.030" (0.8 mm) | 403-14-30-05 | 403-20-30-05 | L1A-15 |
| 0.035" (0.9 mm) | 403-14-35-05 | 403-20-35-05 | L2A-15 |
| 0.045" (1.2 mm) | 403-14-45-05 | 403-20-45-05 | L3A-15 |
| 1/16" (1.6 mm) | N/A | 403-20-116-05 | L4A-15 |

- * 0.030" compatible with 180 amp only. 0.045" not compatible with 180 or 260 amp guns. 1/16" compatible with 400 amp only.
- ** Standard-duty contact tips only compatible with 180 and 260 amp guns.
- *** Heavy-duty contact tips not compatible with 180 or 260 amp guns.



BERNARD TGX READY TO WELD PROGRAM

If you prefer a factory-built gun, the TGX Ready to Weld Program is the perfect solution. This program offers a variety of factoryassembled TGX MIG Guns that are ready to weld right out of the box. Just order the part number best suited to your welding application using our online configurator at BernardWelds.com/ConfigureMyGun or visit BernardWelds.com/ReadyToWeld to refer to the part number chart.





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 | ✓ | \checkmark |
| Internal Trigger Leads | ✓ | _ |
| Replaceable Liner | ✓ | _ |
| Fixed Liner | - | √ |
| Optional Dual Schedule Switch | ✓ | _ |
| Hi-Viz™ Neck | √ | _ |
| Quik Tip™ Contact Tips | ✓ | _ |
| Centerfire™ Contact Tips | | ✓ |
| Wire Size 0.045" - 5/64" | ✓ | _ |
| Wire Size 1/16" - 3/32" | <u> </u> | ✓ |

DURA-FLUX™ SELF-SHIELDED FCAW 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



- Ultra heavy-duty steel monocoil power cables that are highly resistant to kinking for exceptional wire feed 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



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BERNARD FUME EXTRACTION MIG GUNS





BERNARD CLEAN AIR™ FUME EXTRACTION MIG GUNS

GET RIGHT TO THE SOURCE!

For a cleaner, more compliant work environment, get right to the source and extract fumes at the weld with the Clean Air 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 Universal Conventional Liners, front-loading QUICK LOAD™ Liners or the QUICK LOAD Liner
 AutoLength™ System



| 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 | ✓ | ✓ |
| Quik Tip™ Contact Tips | ✓ | ✓ |
| TOUGH LOCK™ Contact Tips | ✓ | ✓ |
| Universal Conventional Liners | ✓ | ✓ |
| QUICK LOAD™ Liners | ✓ | ✓ |
| QUICK LOAD Liner AutoLength™ System | ✓ | ✓ |
| Handle Overmolding | _ | ✓ |
| 360 Degree Hose Swivel | <u> </u> | ✓ |

IS WELD JOINT VISIBILITY AND ACCESS AN ISSUE?

Consider the **new 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, large Centerfire Consumables and large Quik Tip Consumables.



1.43" tall

Short Nozzle St Shroud



Standard Nozzle Shroud 3.5" tall



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

BERNARD WATER-COOLED MIG GUNS

WEBSITE QUICKLINK:
BernardWelds.com/Water-Cooled



SPECIALTY NECKS



BERNARD W-GUN™ WATER-COOLED MIG GUNS

Bernard W-Gun 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
- Available in 600 amp models

BERNARD T-GUN™ 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



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 MIG Gun:

FLEX NECKS FOR B SERIES, O SERIES AND C SERIES HANDLES (BTB MIG GUNS)

- Save labor and time change, rotate or bend neck to desired angle without tools
- Connection improves conductivity for better weld quality, lessens heat to increase operator comfort
- Available in 6" and 8" lengths and are easily removable for jump liner changeover
- Compatible with Centerfire™ or Quik Tip™ Consumables

FLEX NECKS FOR T SERIES HANDLES (BTB MIG GUNS)

- Bend angle up to 80 degrees
- Braided copper conductor tube
- Can be replaced without disturbing cable connections
- Compatible with select TOUGH LOCK™ and TOUGH ACCESS™ Consumables

Q-NECK COUPLER

- 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

- High-temperature rubber sleeve
- Designed to reduce heat exposure and help user hold neck in a steady position
- Improves overall weld quality and reduces operator fatigue

NECK GRIP FOR STRAIGHT HANDLE MIG GUNS WITH FIXED NECKS

- Heavy-duty metal spring
- Designed to reduce heat exposure and help user hold neck in a steady position
- Improves overall weld quality and reduces operator fatigue

SPECIALTY NECKS

- Multiple lengths and bends available for limited access positions and improved operator comfort
- Additional charges and/or extra lead times may apply







MIG GUN CONSUMABLES





CENTERFIRE CONSUMABLES

WEBSITE QUICKLINK:



To assist you in selecting the consumable series that's compatible with your MIG gun, please consult the reference chart below:

CONSUMABLES AND MIG GUN SERIES COMPATIBILITY CHART

| | Centerfire™ | Quik Tip™ | TOUGH LOCK™ | TOUGH ACCESS™ |
|--|-------------|-----------|-------------|---------------|
| BTB MIG Guns | ✓ | ✓ | ✓ | SP |
| TGX™ MIG Guns | CK | CK | ✓ | ✓ |
| W-Gun™ MIG Guns | ✓ | ✓ | | _ |
| T-Gun MIG Guns (water-cooled) | _ | - | SP | _ |
| Clean Air [™] Fume Extraction Series | √ | ✓ | ✓ | _ |
| Dura-Flux™ Gun with Replaceable Cable Liner | _ | ✓ | 1 | _ |
| Dura-Flux Gun with Fixed Cable Liner | ✓ | _ | _ | _ |

GUIDE: Comp

SP Compatible, but may require special parts. Check Spec Sheet for details.

CK Compatible, but requires conversion kit

Are you looking for a particular feature or option in your consumable series? Please see the comparison chart below:

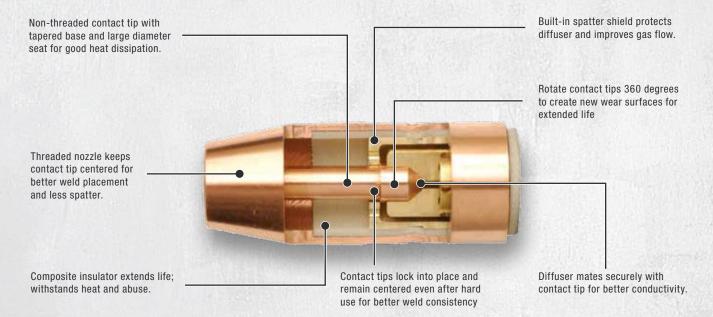
CONSUMABLES COMPARISON CHART

| | Centerfire ™ | Quik Tip™ | TOUGH LOCK™ | TOUGH ACCESS™ |
|--|---------------------|-----------|-------------|---------------|
| Standard-Duty | ✓ | ✓ | ✓ | ✓ |
| Heavy-Duty | ✓ | ✓ | ✓ | ✓ |
| "Drop in" Contact Tip (no threads) | ✓ | _ | | _ |
| Threaded Contact Tips | - | ✓ | ✓ | ✓ |
| Extra Heavy-Duty Tips Available | _ | _ | ✓ | _ |
| Tapered Tips Available | ✓ | ✓ | ✓ | ✓ |
| Chrome Zirconium Tips Available | _ | _ | ✓ | ✓ |
| Threaded Nozzles | ✓ | ✓ | ✓ | - 11/2 m |
| Slip-on Nozzles | _ | ✓ | ✓ | ✓ |
| Nozzle has Built-in Spatter Shield | ✓ | _ | - 1 E (| - |
| Competitive Conversion Parts Available | ✓ | ✓ | ✓ | _ |
| Compact Size - Hard to Access Welds | - | _ | | ✓ |
| Taper Lock - Tip to Diffuser/Head | √ | √ | ✓ | ✓ |
| Taper Lock - Diffuser/Head to Neck | ✓ | ✓ | ✓ | _ |

SEE HOW IT ALL ADDS UP TO GREAT PERFORMANCE

Bernard believes that it's important to choose longer-lasting consumables to **reduce downtime for replacement, minimize rework, and manage costs.** Centerfire™ Series Consumables are easy-to-use and provide better arc starts, less spatter and more consistent welds. Ideal for heavy-duty and light commercial applications.

Easy replacement with no tools required - simply unscrew the Centerfire Nozzle by hand, replace the non-threaded contact tip, and hand-tighten the nozzle.



Please see the Centerfire Consumable Series Spec Sheet (SP-CFC) at BernardWelds.com/spec for a complete list of part numbers.

Centerfire HD Series

Ideal for heavy-duty applications such as shipbuilding, fabrication and other heavy equipment manufacturing operations. Heavy-Duty Centerfire 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.



DID YOU KNOW THAT YOU CAN USE CENTERFIRE CONSUMABLES ON YOUR TGX™ MIG GUNS?

Please view the chart below for part numbers:

CENTERFIRE CONVERSION SERIES

| Gun Model | Desired Nozzle | Adaptor | Insulator | Gas Diffuser |
|------------|----------------|---------|-----------|--------------|
| TGX Series | Small | N/A | 4323R | DS-1T |
| | Large | N/A | 4423R | D-1T |

TOUGH LOCK CONSUMABLES

WEBSITE QUICKLINK: Tregaskiss.com/TOUGHLOCK



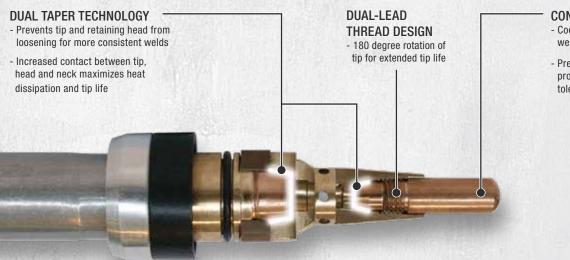
COMPETITIVE CONVERSION SERIES CONSUMABLES

WEBSITE QUICKLINK:
BernardWelds.com/Conversion



Use TOUGH LOCK[™] Consumables to **achieve lower operating costs** and **increase productivity!** This system features the innovative TOUGH LOCK Contact Tip and Retaining Head with Dual Taper Technology that locks these consumables from the contact tip to the neck for consistent and accurate performance.

- Dual Taper Technology locks gun from contact tip to the neck to prevent loosening due to vibration
- Compatible with BTB, TGX, Clean Air and T-Gun Water-Cooled Series



CONTACT TIP

- Cooler tip temperature reduces wear and extends tip life
- Precision machined using a process that tightly control tip

TREGASKISS NOZZLES

Engineered to be extremely durable and long-lasting, Tregaskiss Nozzles are made of hard-drawn copper or brass. The smooth surface finish and rounded edges help to minimize weld spatter build-up.

- Available in a wide variety of styles and materials
- Brass insert in nozzles maintains inner diameter and prevents rocking of nozzle
- High-temperature-resistant fiberglass insulator electrically insulates nozzle from the retaining head
- Heavy-duty crimp holds all three layers together

Please see the TOUGH LOCK Consumable System Spec Sheet (SP-TLC) at BernardWelds.com/spec for a complete list of part numbers.

Not currently using a Bernard MIG Gun? You can still experience immediate benefits from Centerfire™ or TOUGH LOCK™ Consumables through the use of competitive conversion parts. Enhance performance and standardize consumables for all your gun brands to **minimize inventory management costs.**

CENTERFIRE CONVERSION CHART

| Gun Manufacturer | Gun Model | Desired Nozzle | Adaptor | Insulator | Gas Diffuser |
|--------------------|---|-------------------|----------------|-----------------------|--------------|
| Lincoln® | Magnum [®] 300, Magnum 400 | Small | - Not Required | 4323R | DS-1T |
| | | Large | | 4423R | D-1T |
| | 160 MINI MIG | Small | 1380020 | 4323R | DS-1 |
| | | Large | 1380020 | 10012 | D-1 |
| | No. 3, No. 4 TUFF-N-LITE, SUPRA® XT (HD Consumables) | Small | Not Required | 4323R | DS-1T |
| T | | Large | | 4423R | D-1T |
| Tweco [©] | Spray Master® 450 | Small | Not Required | 4323R (2 required) | DS-1T |
| | | Large | Notricquired | 4423R | D-1T |
| | ELC 250, ELC 350, Spray Master 250, Spray Master 350 | Small | 1380012 | 4323R | DS-1 |
| | | Large | 1380012 | 10012 | D-1 |

Brand and product names shown above are trademarks of their respective owners.

NOTE: More options available at BernardWelds.com/Conversion.

TOUGH LOCK CONVERSION CHART

| Gun Manufacturer | Gun Model | Gun Neck | TOUGH LOCK Heavy-Duty Retaining Head | Neck Insulator | Adaptor | QUICK LOAD™ Liner Retainer |
|---------------------|--------------------|----------------------------|---|-------------------|---------|----------------------------------|
| Binzel [®] | ALPHA | N/A | 404-46 | 402-11 | N/A | N/A |
| Lincoln | Lincoln Magnum 300 | KP1929 / KP1928 /KP1941 | 404-20 | 402-14 | N/A | N/A |
| | Lincoln Magnum 400 | | | | | |
| | Tweco #3 | 63J-60 | | | | |
| Tweco | Tweco #4 | 64J-60 | 404-20 | | | |
| | Spray Master 350 | MS63-60 | | 402-14 | N/A | 415-37* |
| | Spray Master 450 | MS64H-60 | | | | |
| | Weldskill 400 | 64A-60 |] | | | |
| | MINI MIG | N/A | N/A | 402-19 | 404-64 | N/A |

Brand and product names shown above are trademarks of their respective owners.

Note: The 404-20 TOUGH LOCK Retaining Head will fit on most necks with an external 9/16" -18 thread, regardless of angle.

*Order the 415-37 QUICK LOAD Liner Retainer to use QUICK LOAD Liners for wire sizes .030" through 5/64".





ADDITIONAL CONSUMABLES

WEBSITE QUICKLINKS:

BernardWelds.com/QuikTip Tregaskiss.com/TOUGHACCESS

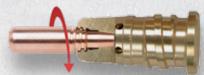


UNIVERSAL CONVENTIONAL LINERS

QUIK TIP™ CONSUMABLES

Bernard Quik Tip Contact Tips are designed with a threaded taper lock that increases tip life by providing excellent heat transfer and electrical conductivity.

- In case of burnback, a quick twist will get you back on the job within
- Quik Tip Gas Diffusers have positive nozzle stops to secure Quik Tip Contact Tips in a fixed position for superior repeatability and consistent, quality welds
- Quik Tip Nozzles are available in two styles threaded or slip-on with a variety of orifice diameters for optimal shielding gas coverage



QUIK TIP HD SERIES

Bernard Quik Tip HD Series features a two-piece nozzle comprised of a nozzle cone and nozzle body. The removable nozzle cone lowers downtime and consumable cost by allowing replacement of the cone (the most frequently damaged part of the nozzle) without removing and replacing the entire nozzle. Bernard Quik Tip HD Consumables are designed for heavy-duty applications such as shipbuilding, trailer fabrication and other heavy equipment manufacturing operations.

A quick twist is all it takes to

Please see the Quik Tip Consumable Series Spec Sheet (SP-QTC) at BernardWelds.com/spec for a complete list of part numbers.

TOUGH ACCESS™ CONSUMABLES

WORRIED ABOUT FITTING IN THOSE HARD-TO-REACH PLACES?

TOUGH ACCESS Consumables are a sleek line of welding consumables.

- Allow entry into difficult crevices that would otherwise be inaccessible due to complex fixture or weldment design
- Compatible with TOUGH LOCK™ Contact Tips
- Available in straight bore and bottleneck styles





install Quik Tip Contact Tips.

BERNARD JUMP LINER

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

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 Universal Conventional Liners, Jump Liners are available in sizes to fit 0.023" to 1/16" wire.

BERNARD UNIVERSAL CONVENTIONAL LINER

Universal Conventional Liners are compatible with all legacy Q-Gun™, S-Gun™ and T-Gun™ Air-Cooled MIG Guns, TGX™ Series and all BTB 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. Liners are available in lengths up to 25' (7.6 m) for various wire sizes. Please see chart below for part numbers and wire sizes.

| NEW UNIVERSAL LINERS | | | | | |
|----------------------|-------------|--------------|--------------|--------------|--|
| Wire Size | Liner Color | 10' (3.05 m) | 15' (4.57 m) | 25' (7.62 m) | |
| 0.023" - 0.030" | Yellow | _ | L1A-15 | L1A-25 | |
| 0.030" - 0.035" | Green | _ | L2A-15 | L2A-25 | |
| 0.035" - 0.045" | White | L3A-10* | L3A-15* | L3A-25* | |
| 0.045" - 1/16" | Red | L4A-10** | L4A-15** | L4A-25** | |
| 5/64" | Blue | _ | L6A-15 | L6A-25 | |
| 3/32" | Grey | _ | L7A-15 | L7A-25 | |
| 7/64" - 1/8" | Black | _ | L8A-15 | L8A-25 | |

^{*} Standard liner for 0.035" & 0.045" Guns



Please see the Jump Liner Spec Sheet (SP-JL) at BernardWelds.com/spec for a complete list of part numbers.



^{**} Standard liner for 1/16" Guns

Please see the Universal Conventional Liner Spec Sheet (SP-L) at BernardWelds.com/spec for a complete list of part numbers.

QUICK LOAD LINERS

WEBSITE QUICKLINK: BernardWelds.com/QUICKLOAD



QUICK LOAD LINER **AUTOLENGTH SYSTEM**

WEBSITE QUICKLINK:

BernardWelds.com/AutoLength



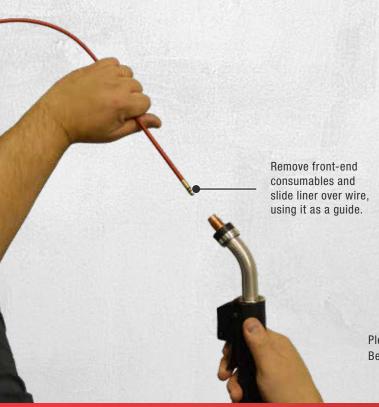
SAVE TIME AND MONEY BY LOADING YOUR LINERS FROM THE FRONT!

QUICK LOAD™ Liners require less than half the time and effort for installation when compared to conventional liners and are available in lengths up to 25'.

A QUICK LOAD Liner Retainer must be purchased separately and installed in the power pin on the first use of a QUICK LOAD Liner.

MAINTENANCE MADE EASY!

- No need to cut and waste wire!
- Avoid having to remove MIG gun from wire feeder
- For wire sizes from .023" to 3/32"
- Liners trimmed too long or too short can cause serious wire feeding issues. Be sure to trim your liner to the correct stick-out depending on the consumables you are using (please refer to the consumables spec sheet for complete details).
- No need to climb up to change liners in semiautomatic MIG guns connected to boom mounted feeders





A REVOLUTIONARY COMBINATION

The QUICK LOAD™ Liner AutoLength™ System is designed to minimize downtime, wire feeding and quality issues commonly associated with the liner being cut to an incorrect length. This new system is designed specifically for use with QUICK LOAD Liners.

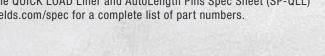
PROBLEM: Wire feeding challenges caused by liners that are too short result in inefficiency of the welding process and undesirable downtime.

SOLUTION: A system upgrade to this innovative product compensates for liners that are too short to help improve welding efficiency and reduce costly downtime.

- Allows for up to 1" (2.54 cm) forgiveness if the liner is too short
- Accommodates liner movement during welding
- Reduces issues caused by the liner being cut to an incorrect length
- Decreases burnbacks caused by misalignment between the liner and contact tip
- Improves wire feedability by enhancing wire alignment with the contact tip

| WIRE SIZE | FEEDER | AUTOLENGTH PIN PART # | INTERCHANGEABLE WITH Standard Power Pin | QUICK LOAD LINER Part # |
|-----------|-----------|--------------------------|--|----------------------------|
| | Miller® | 214-81 | 214-1 | |
| | Miller | 214-86 | 214-6-116 | |
| 0.035" - | Tweco® #4 | 214-80 | 214 | 415-35-25Q |
| 0.045" | Tweco #5 | 214-812 | 214-12 | |
| | Lincoln® | 214-82 | 214-2 | |
| | Euro | 425-820 | 425-20 | |
| | Miller | 214-91 | 214-1 | |
| | Miller | 214-96 | 214-6-332 | |
| 0.052" - | Tweco #4 | 214-90 | 214 | |
| 1/16" | Tweco #5 | 214-912 | 214-12 | 415-116-25Q |
| | Lincoln | 214-92 | 214-2 | |
| | Euro | 425-920 | 425-20 | |

Please see the QUICK LOAD Liner and AutoLength Pins Spec Sheet (SP-QLL) at BernardWelds.com/spec for a complete list of part numbers.

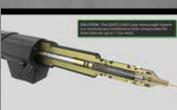


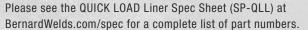
HOW DOES IT WORK?

Housed inside the power pin, this spring-loaded module applies constant pressure on the liner. This ensures that the liner remains seated properly in the retaining head and also allows for up to 1" forgiveness if the liner is cut too short.



Check out our 3D Animation or watch a product demonstration at Tregaskiss.com/ AutoLength





UNIVERSAL POWER PINS

Connect your Bernard Semi-Automatic MIG Gun with equipment from most major manufacturers using our Universal Power Pins. Please find your feeder brand and model in the chart below to select the right power pin for your MIG gun:

| FEEDER BRAND | FEEDER MODEL | POWER PIN NAME |
|---------------------------|--|-----------------------------|
| Miller® | All Miller Feeders* (*Except 10 series, 30 series, 35 series, 80 series, Migman, and XRA) | Miller |
| | 10 Series, 10E, 30 Series, 30A, 30B, 30E, 70A, 80 Series, 80A, MM10A, XRA | Bernard* |
| Lincoln® | Wirematic 250/255, SP series, IdealARC SP255, MIGPak10, MIGPak55, WeldPak100, PowerMIG series, PowerFeed 10M, PowerFeed 25M, DH-10, LF-72, LN-10, LN-15, LN-25 PRO, STT-10 (Note: When feeder equipped to accept Tweco #4 style pin) | Tweco® #4 (Lincoln Lead) |
| Lincom | PowerMig 255 and 300, SP 170, Wirematic 250 and 255, WeldPack 100 | Tweco #4 (Miller Lead) |
| | LN-7, LN-8, LN-9, LN-22, LN-23P, LN-25, Suitcase, LN-741, LN-742, Synergic 7 | Lincoln |
| | Ironman series | Miller |
| Hobart® | Beta-MIG series, Digital 2000, Dual Digital, PortaFeed series, UltraFeed series, Handler | Tweco #4 (Standard Lead) |
| | 200, 2400 (Large Pin) | Tweco #5 (Standard Lead) |
| 0X0 [®] | AVC-8Q, AVC-30Q | 0X0 |
| ESAB® NAS | MultiMaster 260, DuraDrive 4-30, DuraDrive 4-48 | Tweco #4 (NAS Plug) |
| ESAB° Airco° L-Tec° | ME-2, MIGMaster series, DigiMIG Dual, DigiPlus, DigiPulse, DipStick 160, DipPak 250, DipPak 300, Med 20, Med 40, MIGhty, MIGhty 4 HD, MIGhty V, Universal V, MIG 2E, MIG 4HD | Euro |
| Thermal Arc® | 210GM, 250GM, DIGITAL 2000, DUAL DIGITAL 2000, TAF-2, TAF-4 | Tweco #4 (Standard Lead) |
| OTC® | CM-145, CM-146, CM-147, CM-231, CM-747, DynaAuto | Bernard* |
| UIC° | CMUS-511 | Tweco #4 (Miller Lead) |

^{*} Please see the Power Pin Spec Sheet (SP-PPK) at BernardWelds.com/spec for a complete list of part numbers. Please refer to the Bernard Quick Connect Feeder Spec Sheet for appropriate kit to adapt to your feeder model.

If your feeder does not appear on the chart above, please contact Bernard Customer Service by email at cs@itwmig.com or by phone at 1-855-MIGWELD (644-9353). Brand and product names shown above are trademarks of their respective owners.



ADDITIONAL RESOURCES

AMPERAGE (JOINT ENEWSLETTER WITH TREGASKISS)

This electronic publication features an assortment of valuable welding and business management information, new product sneak peeks, announcements, and fun, interactive trivia, contests and more! Sign up for your FREE subscription at **BernardWelds.com/Amperage**.

TECHNICAL ARTICLES

Whether you are new to welding or a seasoned professional, we have resources to help you get the most out of your semi-automatic welding applications. Access informative technical articles and case studies at **BernardWelds.com/articles**.

TECH CONNECTION PRODUCT NEWS

Your connection to valuable Bernard product improvements, new product information and other product updates is published online at **BernardWelds.com/TechConnection**.

TECHNICAL SUPPORT RESOURCES

BernardWelds.com is always the most reliable resource for up-to-date and accurate support materials including:

- Technical Guides and Manuals
- ☐ Spec Sheets and Technical Inserts
- ☐ How-To Guides and Videos
- Product Updates
- ☐ Troubleshooting Information
- Recommended Operating Tips



HAVE A QUESTION?

Email us at info@bernardwelds.com

NEED TO CONTACT OUR TECHNICAL SUPPORT TEAM?

Call 1-855-MIGWELD (644-9353) or email cs@itwmig.com

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BERNARD™ BTB SEMI-AUTOMATIC AIR-COOLED MIG GUNS

Our Most Flexible and Rugged MIG Gun Offering Ever!

Build your ultimate MIG gun as you choose from an expanded list of the best features of our top MIG gun lines consolidated for your convenience into a single gun line and single online configurator at **BernardWelds.com/ConfigureMyGun.**



Pick the consumables of your choice — TOUGH LOCK[™], Centerfire[™] and Quik Tip[™] Consumables are fully compatible with all curved and straight handle BTB MIG Guns.



NEW!! Select from seven handle styles — Bernard understands that welders have strong preferences when it comes to the handle shape and size of their gun. That's why you can now pick from an even wider selection of curved and straight handles when configuring your MIG gun. **Plus**, extend the life of your T Series or C Series Straight Handle BTB MIG Gun with the **Double-Life MIG Gun System**.



Want to configure your straight handle gun with a rotatable neck? You can! Rotatable and fixed necks are available on both curved and straight handle guns.



Want to configure your curved handle gun with the QUICK LOAD™ Liner or the QUICK LOAD™ Liner AutoLength™ System?

You can do that too! BTB MIG Guns can be configured with your choice of QUICK LOAD Liner, QUICK LOAD Liner AutoLength System, or the Bernard Universal Conventional Liner.

Subject to Change — The information presented in this catalog is accurate to the best of our knowledge at the time of printing. Please visit BernardWelds.com for the most up-to-date information.



A Division of Miller Electric Mfg. LLC 449 West Corning Road, Beecher, IL 60401 USA Toll Free (Canada and USA): 1-855-MIGWELD (644-9353) International: +1-519-737-3000 Fax: 1-708-946-6726 BernardWelds.com

B600 03/18

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