

# Clean Air™ Fume Extraction MIG Gun

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Fume Extraction  
MIG Welding Guns



<b>Quick Specs</b>	<b>Applications</b>	<b>Processes</b>	<b>Wire Size</b>	<b>Rated Output</b>
	Heavy Equipment Shipbuilding & Repair Fabrication	MIG (GMAW) Flux Cored (FCAW)	0.023" - 1/8" (0.06 mm - 3.2 mm)	300A, 400A 500A, 600A
			<b>Duty Cycle</b>	100% CO <sub>2</sub> Gas 60% Mixed Gas

Closely matching the weight, handle size and industrial-grade performance as Bernard BTB Semi-Automatic Air-Cooled MIG Guns, the Bernard Clean Air Fume Extraction MIG Gun is an industrial duty capture solution that helps to provide a cleaner, more compliant work environment.

Now with **even more options** to meet the needs of your welding application, Clean Air Guns are fully configurable with your choice of straight handle or **new curved handle**.



- Suitable for use with solid and flux-cored wire
- Compatible with vacuum systems from most major manufacturers
- Crush- and snag-resistant vacuum hose has threaded connections for easy replacement and eliminates the need for a protective cover
- Suction Control Valve allows balance of suction with shielding gas flow to protect against porosity
- Rubber overmold on straight handle model provides comfort and control



CONFIGURE  
**YOUR**  
MIG GUN  
ONLINE

Build your fume extraction gun to match your application



IMPROVED FLEXIBILITY  
REDUCED  
WRIST  
FATIGUE

Reduce wrist and hand fatigue with hose swivel



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# Consumables

(available through configurator)

## Centerfire™ Consumable Series

### Contact Tips

<b>T-023</b> 0.023" (0.6 mm)	<b>T-062</b> 1/16" (1.6 mm)
<b>T-030</b> 0.030" (0.8 mm)	<b>T-072</b> 0.072" (1.8 mm)
<b>T-035</b> 0.035" (0.9 mm)	<b>T-078</b> 5/64" (2.0 mm)
<b>T-039</b> 0.039" (1.0 mm)	<b>T-094</b> 3/32" (2.4 mm)
<b>T-045</b> 0.045" (1.2 mm)	<b>T-109</b> 7/64" (2.8 mm)
<b>T-052</b> 0.052" (1.4 mm)	<b>T-125</b> 1/8" (3.2 mm)

\* For 300 amp only

### Nozzles

<b>N-5818C</b> 5/8" Bore, 1/8" Recess, Copper
<b>N-5814C</b> 5/8" Bore, 1/4" Recess, Copper
<b>N-3414C</b> 3/4" Bore, 1/4" Recess, Copper
<b>NS-1218B*</b> 1/2" Bore, 1/8" Recess, Brass
<b>NS-1218C*</b> 1/2" Bore, 1/8" Recess, Copper
<b>NS-5818C*</b> 5/8" Bore, 1/8" Recess, Copper

### Diffusers

<b>DS-1*</b> Small, Brass
<b>D-1</b> Large, Brass

### Nozzle Shrouds

<b>1390132*</b> Standard (long)
<b>1390134</b> Standard (long)
<b>1390142</b> Short (not configurable; purchase separately)

## Quik Tip™ Consumable Series

### Contact Tips

<b>T1030</b> 0.030" (0.8 mm)	<b>T1068</b> 0.068" (1.7 mm)
<b>T1035</b> 0.035" (0.9 mm)	<b>T1072</b> 0.072" (1.9 mm)
<b>T1039</b> 0.039" (1.0 mm)	<b>T1564</b> 5/64" (2.0 mm)
<b>T1045</b> 0.045" (1.2 mm)	<b>T1332</b> 3/32" (2.4 mm)
<b>T1052</b> 0.052" (1.4 mm)	<b>T1764</b> 7/64" (2.8 mm)
<b>T1116</b> 1/16" (1.6 mm)	

### Nozzles

<b>N1C58Q</b> 5/8" Bore, Plated Copper
<b>N1C34Q</b> 3/4" Bore, Plated Copper

### Diffusers

<b>D118Q</b> 1/8" Recess
<b>D114Q</b> 1/4" Recess

### Nozzle Shrouds

<b>1390133</b> Standard (long)
<b>1390142</b> Short (not configurable; purchase separately)

## TOUGH LOCK™ Consumable Series

### Contact Tips

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

### Nozzles

<b>401-6-62</b> 5/8" Bore, 1/8" Recess, Copper
<b>401-5-75</b> 3/4" Bore, 1/4" Recess, Copper

### Retaining Head

<b>404-44</b> Brass
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### Nozzle Shrouds

<b>1390135</b> Standard (long)
<b>1390142</b> Short (not configurable; purchase separately)

# Liners

(available through configurator)

## QUICK LOAD™ Liner

### 10' (3.05 m) Gun Lengths

<b>415-35-10Q</b> for 0.035" - 0.045" wire
<b>415-116-10Q</b> for 0.045" - 1/16" wire

### Liner Retainers (Required for Initial Installation)

<b>415-26</b> for 0.030" - 5/64" wire
<b>415-24</b> for 0.078" - 3/32" wire

### 15' (4.57 m) Gun Lengths

<b>415-23-15Q</b> for 0.023" wire
<b>415-30-15Q</b> for 0.030" wire
<b>415-35-15Q</b> for 0.035" - 0.045" wire
<b>415-564-15Q</b> for 1/16" - 5/64" wire
<b>415-332-15Q</b> for 0.078" - 3/32" wire

### 25' (7.62 m) Gun Lengths

<b>415-35-25Q</b> for 0.035" - 0.045" wire
<b>415-564-25Q</b> for 1/16" - 5/64" wire
<b>415-332-25Q</b> for 0.078" - 3/32" wire

## Universal Conventional Liner

### 10' (3.05 m) Gun Lengths

<b>L3A-10</b> for 0.035" - 0.045" wire
<b>L4A-10</b> for 0.045" - 1/16" wire

### 15' (4.57 m) Gun Lengths

<b>L1A-15</b> for 0.023" - 0.030" wire
<b>L2A-15</b> for 0.030" - 0.035" wire
<b>L3A-15</b> for 0.035" - 0.045" wire
<b>L4A-15</b> for 0.045" - 1/16" wire
<b>L6A-15</b> for 5/64" wire
<b>L7A-15</b> for 3/32" wire
<b>L8A-15</b> for 7/64" - 1/8" wire

### 25' (7.62 m) Gun Lengths

<b>L1A-25</b> for 0.023" - 0.030" wire
<b>L2A-25</b> for 0.030" - 0.035" wire
<b>L3A-25</b> for 0.035" - 0.045" wire
<b>L4A-25</b> for 0.045" - 1/16" wire
<b>L7A-25</b> for 3/32" wire
<b>L8A-25</b> for 7/64" - 1/8" wire

# Necks

(available through configurator)

## Necks for Straight Handle Model

<b>1040084</b> 45°, Medium	<b>2390029</b> Vacuum Tube Assy, 45°
<b>1040085</b> 60°, Medium	<b>2390030</b> Vacuum Tube Assy, 60°

## Necks for Curved Handle Model

<b>1040081</b> 30°, Medium	<b>2390026</b> Vacuum Tube Assy, 30°
<b>1040082</b> 45°, Medium	<b>2390027</b> Vacuum Tube Assy, 45°
<b>1040083</b> 60°, Medium	<b>2390028</b> Vacuum Tube Assy, 60°

# Power Pins

(available through configurator)

## Bernard™

<b>2520076</b>	Strain Relief
<b>2200140</b>	Power Pin (Includes O-Rings)
<b>4924</b>	Wire Assy. (2 Req'd)
<b>4925</b>	Locking Sleeve
<b>4916</b>	Wave Spring
<b>4912</b>	Snap Ring External
<b>4911</b>	Snap Ring Inverted

## Euro™

<b>2520080</b>	Strain Relief
<b>5060T</b>	Euro Block Assembly
<b>4816</b>	Adapter Nut
<b>AutoLength™ Pin</b>	
<b>425-820</b>	Power Pin for 0.030" - 0.045"
<b>425-920</b>	Power Pin for 0.052" - 3/32"
<b>425-11</b>	Adapter Nut

## Lincoln®

<b>2520077</b>	Strain Relief
<b>214-2-1</b>	Power Pin
<b>414-400-35</b>	Power Pin Insulator
<b>GLM1</b>	Gas Line Assy.
<b>SCL1N</b>	Trigger Control Plug
<b>AutoLength Pin</b>	
<b>214-82</b>	Power Pin for 0.030" - 0.045"
<b>214-92</b>	Power Pin for 0.052" - 3/32"

## Miller®

<b>2520077</b>	Strain Relief
<b>2200137</b>	Power Pin (Includes O-Rings)
<b>214-116</b>	Power Pin Tip for 0.023"-1/16"
<b>214-332</b>	Power Pin Tip for 5/64"-3/32"
<b>214-9</b>	Power Pin Tip for 7/64"-1/8"
<b>GN2021</b>	Trigger Control Plug

### AutoLength Pin

<b>214-81</b>	Power Pin for 0.030" - 0.045"
<b>214-91</b>	Power Pin for 0.052" - 3/32"
<b>214-9</b>	Power Pin Tip for 7/64" - 1/8"

## Tweco® #4

<b>2520077</b>	Strain Relief
<b>214</b>	Power Pin (Includes O-Rings)
<b>414-400-30</b>	Power Pin Insulator
<b>GN2021</b>	Trigger Cable Adaptor, Miller
<b>SCT1N</b>	Trigger Control Lead, Standard
<b>SCL1N</b>	Trigger Control Lead, Lincoln
<b>SCX1N</b>	Trigger Control Plug, NAS Plug

### AutoLength Pin

<b>214-80</b>	Power Pin for 0.030" - 0.045"
<b>214-90</b>	Power Pin for 0.052" - 3/32"

## Tweco #5

<b>2520077</b>	Strain Relief
<b>214-12</b>	Power Pin (Includes O-Rings)
<b>414-400-29</b>	Power Pin Insulator
<b>GN2021</b>	Trigger Control Plug, Miller
<b>SCT1N</b>	Trigger Control Lead, Standard
<b>SCL1N</b>	Trigger Control Lead, Lincoln
<b>SCX1N</b>	Trigger Control Plug, NAS Plug

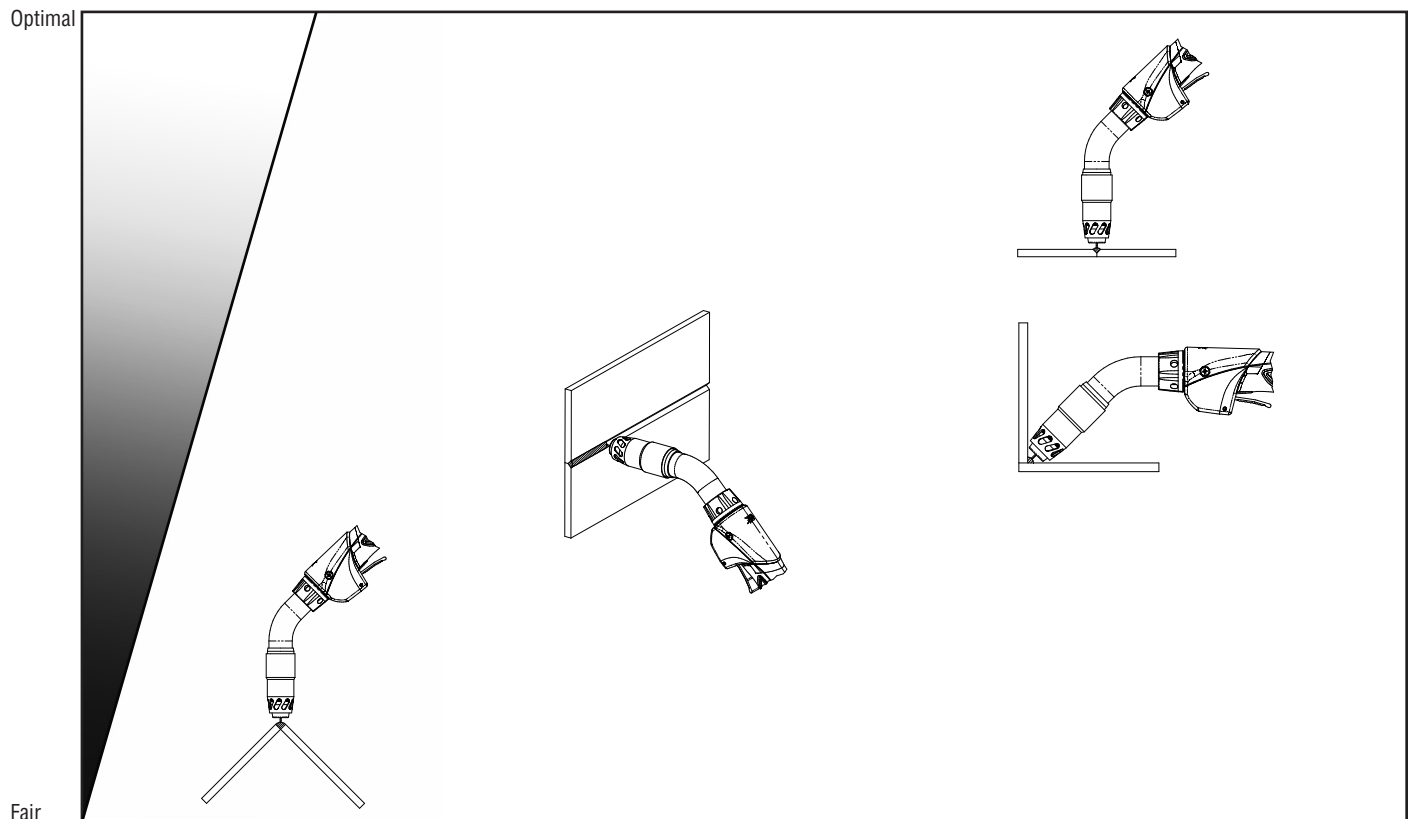
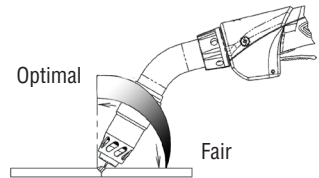
### AutoLength Pin

<b>214-81</b>	Power Pin for 0.030" - 0.045"
<b>214-91</b>	Power Pin for 0.052" - 3/32"

# Fume Capture Optimization

Follow the diagram below for optimizing the efficiency of fume capture when welding with a fume extraction MIG gun. The joints and positions of welds will affect the efficiency of fume capture.

Optimal capture efficiency is achieved when fume gun is positioned directly above the weld puddle.



Fair

# Ordering Information

Amperage	Cable Length	Handle & Trigger	Neck	Contact Tip	Wire Size	Power Pin	Liner
CL30	15	N	J	8	E	M	C
<b>CL30</b> 300 amp <i>Max. wire size 5/64"</i>	<b>08</b> 8 ft. (2.44 m)	<b>N</b> Straight Std Trigger	<b>I**</b> Fixed, Med., 30°	<b>3</b> TOUGH LOCK™ Heavy Duty	<b>A^</b> 0.023"(.6 mm)	<b>B</b> Bernard™	<b>C</b> Universal Conventional
<b>CL40</b> 400 amp <i>Max. wire size 5/64"</i>	<b>10</b> 10 ft. (3.05 m)	<b>T*</b> Curved Std Trigger	<b>J</b> Fixed, Med., 45°	<b>5</b> Quik Tip™	<b>B</b> 0.030"(.8 mm)	<b>E</b> Euro	<b>Q</b> QUICK LOAD™ Liner^^
<b>CL50</b> 500 amp <i>Max. wire size 3/32"</i>	<b>12</b> 12 ft. (3.66 m)		<b>K</b> Fixed, Med., 60°	<b>8</b> Centerfire™	<b>C</b> 0.035"(.9 mm)	<b>L</b> Lincoln®	<b>L</b> QUICK LOAD Liner
<b>CL60</b> 600 amp <i>Max. wire size 1/8"</i>	<b>15</b> 15 ft. (4.57 m)				<b>D</b> 0.039"(1.0 mm)	<b>M</b> Miller®	<b>L</b> AutoLength™ System^^^
	<b>20</b> 20 ft. (6.16 m)				<b>E</b> 0.045"(1.2 mm)	<b>S</b> Tweco® #4 (Lincoln Lead)	
	<b>25</b> 25 ft. (7.63 m)				<b>H</b> 0.052"(1.4 mm)	<b>T</b> Tweco #4 (Std. Lead)	
					<b>I</b> 1/16"(1.6 mm)	<b>U</b> Tweco #4 (NAS Plug)	
					<b>K</b> 5/64"(2.0 mm)	<b>W</b> Tweco #5 (Std. Lead)	
					<b>L</b> 3/32"(2.4 mm)		
					<b>M</b> 7/64"(2.8 mm)		
					<b>N</b> 1/8"(3.2 mm)		
					<b>Aluminum</b>		
					<b>Q</b> 0.035"(.9 mm)		
					<b>R</b> 3/64" (1.19 mm)		
					<b>S</b> 1/16" (1.6 mm)		

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

\* Available with 300 amp and 400 amp models only.

\*\* Available with curved handle model only.

^ Available with Centerfire Contact Tip option 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 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.

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Subject to Change - The information presented in this spec sheet is accurate to the best of our knowledge at the time of printing.  
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