

**ARCAIR**<sup>®</sup>

AN ESAB<sup>®</sup> BRAND



# INDUSTRIAL CUTTING AND GOUGING EQUIPMENT



**MANUAL GOUGING**

**TORCH & CABLE ASSEMBLIES**

Gouging Torches (600 - 1000 Amp) . . . . . 4  
 K3000™ . . . . . 6 - 7  
 K4000® . . . . . 6 - 7  
 AirPro X4000™ . . . . . 8 - 9  
 Tri-Arc® Foundry Gouging Torches (1600 - 2200 Amp) . . . . . 10 - 11  
 Straight Handle K-5 Manual Gouging Torch & Cable Assembly (1250 Amp) . . . . . 12  
 Angle-Arc CSK4000 CutSkill® Manual Gouging Torch & Cable Assemblies (1000 Amp) . . . . . 12

**ELECTRODES**

Inches of Groove Per Electrode (Pointed CopperClad® & Jointed Jetrods) . . . . . 13  
 Professional Air Carbon-Arc (Pointed, Flat, Half Round, Jointed) . . . . . 14  
 CutSkill Electrodes (Pointed, Hollow, Jointed) . . . . . 15

**WELDING CARBON PRODUCTS** . . . . . 15

**ARCAIR-MATIC® AUTOMATIC GOUGING SYSTEMS & ACCESSORIES**

N7500 Automated Gouging System & Cable Assemblies . . . . . 16  
 Arcair-Matic® Automatic BUG-O Travel System Packages . . . . . 17  
 Arcair-Matic® Automatic GULLCO Travel System Packages . . . . . 17  
 Arcair-Matic® Automatic Titan Travel System Packages . . . . . 18  
 Travel System Accessories . . . . . 19

**SLICE® EXOTHERMIC TORCH, PACKAGES & CUTTING RODS**

SLICE® Exothermic Cutting Torch . . . . . 20  
 SLICE® Battery/Utility Pack . . . . . 22  
 SLICE® Battery Ignition Source . . . . . 22  
 SLICE® Industrial Pack . . . . . 23  
 SLICE® Complete Pack . . . . . 23  
 SLICE® Striker Assembly . . . . . 24  
 SLICE® Cutting Rods . . . . . 24

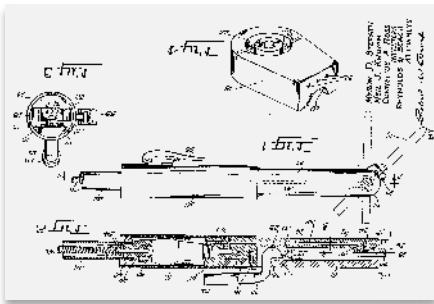
**UNDERWATER CUTTING & WELDING TORCHES & CONSUMABLES**

Sea Torch® "Combination Torch" . . . . . 25  
 Underwater Cutting Electrodes . . . . . 25  
 Sea Stinger® II Torch . . . . . 26  
 Underwater Welding & Gouging Electrodes . . . . . 26  
 Arcwater® II Torch . . . . . 26

**PROTEX® ANTI-SPATTER CHEMICALS** . . . . . 27 - 30

**WARRANTY** . . . . . 31 - 33

*This information is accurate to the best of our knowledge at the time of printing and is subject to change at any time at ESAB's sole discretion.*



**1949**  
Myron Stepath invents CAC-A cutting and gouging process. Stepath founds Arcair Co. Introduces G-3 cutting and gouging torch.



**1956**  
Introduces H-5 cutting and gouging torch.



**1961**  
Arcair relocates manufacturing to Lancaster, Ohio.

**1968**  
Introduces K-3 cutting and gouging torch.



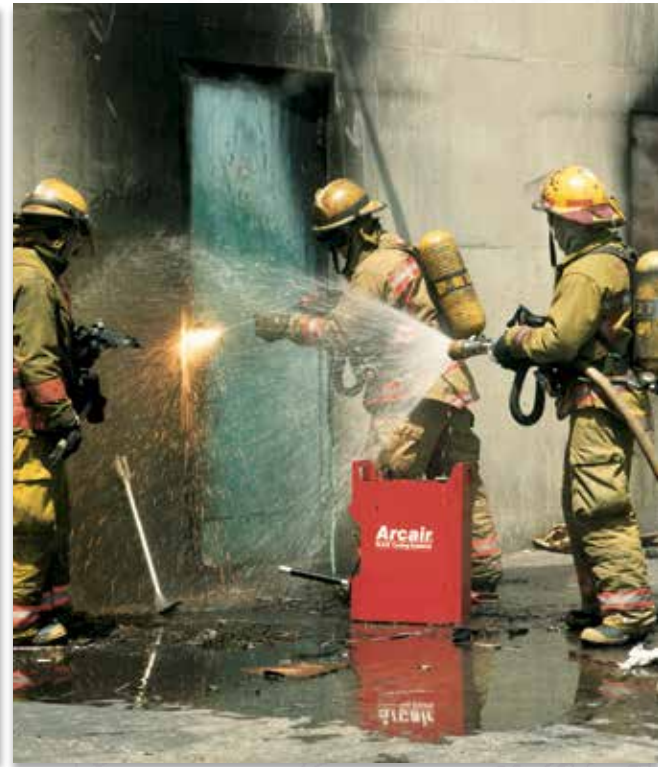
**1972**  
Introduces Underwater Cutting and Welding Torch.



**1974**  
Myron Stepath retires.

**1980s**  
SLICE® torch introduced, allowing for portable and quick cutting solutions for fire and rescue operations.

# ARCAIR IS SYNONYMOUS WITH **CARBON ARC GOUGING**



**1983**  
Introduces K4000®  
cutting and gouging torch.

**1989**  
Arcair relocated to  
Wichita, Kansas; combines  
manufacturing with Tweco.

**2004**  
Arcair relocates to  
Denton, Texas combines  
manufacturing with Victor.

**2011**  
Introduces Arcair-Matic®  
N7500 Automated Gouging  
System.

**2014**  
Arcair becomes  
An ESAB Brand

**2018**  
Introduces AirPro X4000  
gouging torch and cable  
assembly with the industry's  
first ever pneumatic arm.

## GOUGING TORCHES

### FEATURES & BENEFITS

#### IMPROVED TORCH AIR FLOW

- More efficient use of air supply
- Improved metal removal

#### FOUR HOLE HEAD ASSEMBLY

- Optimizes air flow to the arc
- Efficiently cleans slag from groove edge

#### AIR ASSIST POSITIVE AIR SHUT-OFF

- Minimizes air supply unit cycling on and off
- Allows torch usage when air supply is marginal

#### IMPROVED CABLE ELECTRICAL CONDUCTION

- Improves cable service life
- Decreases heat build up in cable and torch

#### SUPERIOR OUTER CABLE COVER

- Durable cover for improved cable life in a harsh environment
- Resists breakdown due to exposure to heat produced by gouging

#### INSULATED CONNECTION BOOT & HOOK-UP KIT

- Makes for easy torch hook-up
- Virtually eliminates the possibility of arcing when contacting electrically hot parts

## IMPROVED CARBON-ARC TORCH CABLE BOOT DESIGN

### FEATURES & BENEFITS

- **Patented two-piece boot design**  
Molded from a hard nylon reinforced fiber polymer made to withstand the substantial abuse in shop and field applications
- **Helps prevent accidental arcing**  
No chance of the “boot” pulling away from the power connection as seen with prior “boot” design
- **Ease of replacement in the field**  
Threaded screws holds the two halves together and can be loosened with a standard straight blade screwdriver
- **Available in two (2) different molded “boot” housing configurations**

#### Conventional Boot (Part No. 94-105-032)

- Accepts one 4/0 welding cable from the power supply and one 3/4” (19 mm) diameter air hose assembly providing current and compressed air

#### Quick-Connect Hook-Up Kit (Part No. 94-463-046)

- Twist lock-style power connection and air hose extending from the rear of the torch cable. This option allows the operator to connect or disconnect the incoming power lead and air line quickly and easily



**THE “BEST” JUST GOT BETTER**

**Help prevent accidental arcing in your workplace**

Patent No. D708,240 S



Angle-Arc®  
Gouging Torches



Straight Handle  
Gouging Torches



Tri-Arc®  
Gouging Torches



**Conventional**  
Replacement Part No. 94-105-032



**Quick-Connect Hook-Up Kit**  
Replacement Part No. 94-463-046

**NOTE:** Replacement Boots will fit onto all Arcair manual hand torch cable assemblies having an amperage range of 1000 Amps or less.

# GOUGING TECHNIQUES FOR SPECIFIC MATERIALS

## CARBON STEEL & LOW ALLOY STEEL, SUCH AS ASTM A514 & A517

Use DC electrodes with DCEP (electrode positive). AC electrodes with an AC transformer can be used, but for this application, AC is only half as efficient as DC.

## STAINLESS STEEL

Use DC electrodes with DCEP (electrode positive). AC electrodes with an AC transformer can be used, but for this application, AC is only half as efficient as DC.

## CAST IRON INCLUDING MALLEABLE AND DUCTILE IRON (NODULAR)

Use 1/2" (12.7 mm) or larger diameter CCDC electrodes at the highest rated amperage. Use an angle of 70° off the workpiece and the depth of gouge should not exceed 1/2" (12.7 mm) per pass.

## COPPER ALLOYS (COPPER CONTENT 60% AND UNDER)

Use CCDC electrodes with DCEN (electrode negative) at the electrode's highest amperage rating.

## ALUMINUM BRONZE AND ALUMINUM NICKEL BRONZE (NAVAL PROPELLER ALLOY)

Use CCDC electrodes with DCEN (electrode negative) at the electrode's highest amperage rating.

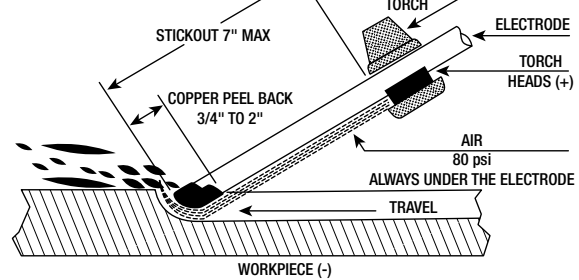
## NICKEL ALLOYS (NICKEL CONTENT OVER 80% OF MASS)

Use CCAC electrodes with AC current.

## NICKEL ALLOYS (NICKEL CONTENT UNDER 80% OF MASS)

Use CCDC electrodes with DCEP (electrode positive) at the electrode's highest amperage rating.

## PRINCIPLES OF AIR CARBON ARC



## MAGNESIUM ALLOYS

Use CCDC electrodes with DCEP (electrode positive) and prior to welding, wire brush the groove.

## ALUMINUM

Use CCDC electrodes with DCEP (electrode positive). You must brush with a stainless wire brush before welding. Electrode stick-out (length of electrode between torch and workpiece) should not exceed 3" (76.2 mm).

## TITANIUM, ZIRCONIUM, HAFNIUM, AND THEIR ALLOYS

Do not cut or gouge to prepare for welding or remelting unless you mechanically remove the surface layer from the cut/gouge surface.

NOTE – If you preheat for welding, preheat for gouging

## CURRENT REQUIREMENTS

Electrode Diameter	1/8"	5/32"	3/16"	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	1"	3/8" Flat	5/8" Flat
	3.2 mm	4.0 mm	4.8 mm	6.4 mm	7.9 mm	9.5 mm	13 mm	16 mm	19 mm	25 mm	9.5 mm Flat	16 mm Flat
Minimum amps DC	60	90	200	300	350	450	800	1000	1250	1600	250	300
Maximum amps DC	90	150	250	400	450	600	1000	1250	1600	2200	450	500
Minimum amps AC	-	-	200	300	-	350	-	-	-	-	-	-
Maximum amps AC	-	-	250	400	-	450	-	-	-	-	-	-

## GOUGING TORCH SELECTION GUIDE

Copperclad Electrodes	Amperage Range				Recommended	Alternate
	90 – 450	450 – 1000	1000 – 1400	1400 – 2000		
1/8" - 3/8" Round (3.2 mm - 9.5 mm) 3/8" & 5/8" Flats (9.5 mm & 15.9 mm)					K3000™	
5/32" – 1/2" Round (4.0 mm – 12.7 mm) 3/8" & 5/8" Flats (9.5 mm & 15.9 mm)					AirPro X4000®	K4000™
5/16" - 5/8" Round (7.9 mm - 15.9 mm)					K-5	Tri-Arc®, AirPro™ X4000, K4000®
5/16" – 1" Round (7.9 mm – 25.4 mm)					Tri-Arc®	

## WHICH TORCH IS RIGHT FOR YOU?

Torch Model	Amperage (Maximum)	Swivel Cable	Swivel Cable Lengths (Ft)	Air-Cooled Water-Cooled	Handle Design	Body/ Upper Arm Construction	Application	Special Features
K3000™	600	360°	7 ft & 10 ft	Air-Cooled	Small & Ergonomic	Brass	Medium Duty	All brass torch parts with a copper head assembly having 4-hole design
K4000®	1000	360°	7 ft & 10 ft	Air-Cooled	Small & Ergonomic	Brass	Heavy Duty	All brass torch parts with a copper head assembly having 4-hole design
AirPro™ X4000	1000	360°	7 ft & 10 ft (2 m & 3 m)	Air-Cooled	Small & Ergonomic	Brass	Heavy Duty	All brass torch parts with a copper head assembly having 4-hole design, pneumatically operated upper arm
K-5	1250	340°	7 ft & 10 ft	Air-Cooled	Straight	Brass	Heavy Duty	All brass torch parts with a copper head assembly having 4-hole design
Tri-Arc®	2200	340°	7 ft & 10 ft	Air-Cooled & Water-Cooled	Straight	Copper	Heavy Duty	Versatility with three (3) different head assemblies to choose from to meet any metal removal application

## ANGLE-ARC® MANUAL GOUGING TORCHES

### FEATURES & BENEFITS

#### NATURAL 15° TORCH ANGLE

- Greater operator comfort

#### DURABLE FRONT INSULATORS

- High impact and heat resistant protecting the torch metal parts

#### 360° SWIVEL CABLE

- Less cable twist
- Less strain on operator

#### POSITIVE GRIP HANDLE

- Greater operator feel and ease in positioning the torch

#### REDUCED WEIGHT

- Optimum cable and torch weight to minimize fatigue

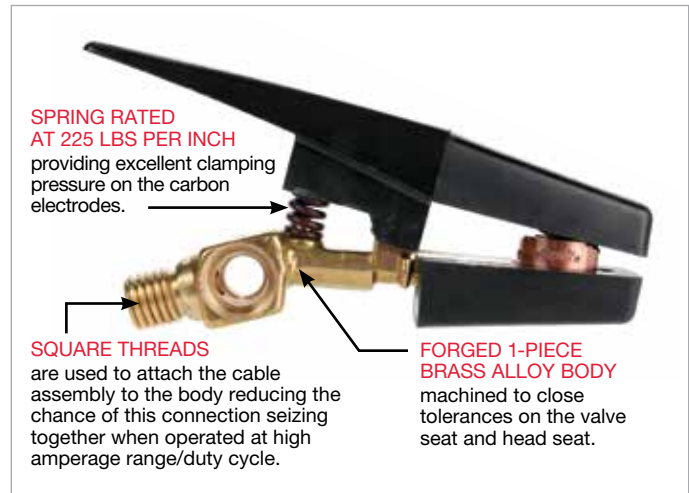
#### HIGH QUALITY CABLE HOSE

- Best quality cable hose offers high heat and abrasion resistance
- Non-conductive

### K3000



### K4000



#### HEAVY-DUTY INSULATORS,

lever and handle that are all made from fiberglass reinforced thermoset polyester molding compound to withstand the heat and be impact resistant.





## K3000™

Medium Duty - General repair and maintenance jobs such as mining, construction, and all types of metal fabrication.



### AMPERAGE RANGE

- 90 – 600 amps

### ELECTRODE SIZE

- Pointed – 1/8" – 3/8" round (3.2 mm – 9.5 mm)
- Jointed - 5/16" – 3/8" round (7.9 mm – 9.5 mm)
- Flat – 3/8" and 5/8" (9.5 mm – 15.9 mm)
- Half Round – 5/8" (15.9 mm)

### AIR REQUIREMENTS

- psi – 80
- kg/cm<sup>2</sup> – 5.6
- cfm – 22
- l/min – 624

Part No.	Description
01-065-001	Torch Only
61-065-006	Torch w/7 ft (2.1 m) 360° Swivel Cable
61-065-002	Torch w/7 ft (2.1 m) 360° Swivel Cable & Insulated Hook-Up Kit
61-065-007	Torch w/10 ft (3 m) 360° Swivel Cable
61-065-003	Torch w/10 ft (3 m) 360° Swivel Cable & Insulated Hook-Up Kit

## K4000®

Heavy Duty - Heavy metal removal applications such as weld preparations in pressure vessel shops and shipyards.



### AMPERAGE RANGE

- 90 – 1000 amps

### ELECTRODE SIZE

- Pointed – 5/32" – 1/2" round (4.0 mm – 12.7 mm)
- Jointed – 5/16" – 1/2" round (7.9 mm – 12.7 mm)
- Flat – 3/8" and 5/8" (9.5 mm – 15.9 mm)
- Half Round – 5/8" (15.9 mm)

### AIR REQUIREMENTS

- psi – 80
- kg/cm<sup>2</sup> – 5.6
- cfm – 25
- l/min – 708

Part No.	Description
01-082-002	Torch Only
61-082-008	Torch w/7 ft (2.1 m) 360° Swivel Cable
61-082-006	Torch w/7 ft (2.1 m) 360° Swivel Cable & Insulated Hook-Up Kit
61-082-009	Torch w/10 ft (3 m) 360° Swivel Cable
61-082-007	Torch w/10 ft (3 m) 360° Swivel Cable & Insulated Hook-Up Kit

## SWIVEL CABLE ASSEMBLY OPTIONS

K3000 360° Swivel Cable



K4000 360° Swivel Cable



Part No.		Description
K3000	K4000	
70-088-107	70-084-207	7 ft (2.1 m) 360° Swivel Cable Assembly
70-088-110	70-084-210	10 ft (3 m) 360° Swivel Cable Assembly



## AIRPRO™ X4000 PNEUMATIC GOUGING TORCH & CABLE ASSEMBLY

### FEATURES & BENEFITS

#### EASY TO LOAD

- Uses compressed air to raise and lower the upper arm; no force required to load/unload electrodes

#### SIMPLE OPERATION

- To gouge, press the rocker switch and slide lock forward to lock in place to begin the airflow through the torch assembly; simply slide the lock back and release the rocker switch to stop

#### NO LEAKS

- Positive air valve to eliminate compressed air from leaking

#### POSITIVE GRIP HANDLE

- Greater operator feel and ease in positioning the torch

#### DURABLE FRONT INSULATORS

- High impact and heat resistance protecting the torch metal parts



#### PNEUMATICALLY OPERATED

upper arm for ease of inserting/adjusting the carbon electrode in the torch head assembly.

#### ROCKER SWITCH

allowing the insertion/adjustment of the carbon electrode and compressed air on/off. No air flow through the torch and cable assembly without initiating flow through the rocker switch



PATENT PENDING

HIGH IMPACT,  
heat resistant insulators

LOWER PROFILE  
and positive grip handles

## AIRPRO™ X4000

Introducing the next generation air carbon-arc metal removal torch and cable assembly, AirPro X4000. The unique, patent-pending, pneumatically operated upper arm and air valve design eliminates air leakage through the torch and cable when turned off, making this torch assembly the best in the market.



### COMFORTABLE AND EASY TO USE

- Ship and Offshore Yards
- Civil Construction
- Pipe Construction
- Repair and Maintenance
- Heavy Fabrication
- Industrial and General Fabrication
- Mining
- Steel Erectors

### AMPERAGE RANGE

- 90 – 1000 amps

### ELECTRODE SIZE

- Pointed – 3/16" – 1/2" round (4.7 mm – 12.7 mm)
- Jointed – 5/16" – 1/2" round (7.9 mm – 12.7 mm)
- Flat – 3/8" and 5/8" (9.5 mm – 15.9 mm)
- Half Round – 5/8" (15.9 mm)

### AIR REQUIREMENTS

- psi – 80
- kg/cm2 – 5.6
- cfm – 25
- l/min – 708

Part No.	Description
01-084-002	AirPro X4000 Torch Only
61-084-008	AirPro X4000 Torch & Cable Assembly 7 ft. (2.1 m) – 360° Swivel
61-084-006	AirPro X4000 Torch & Cable Assembly 7 ft. (2.1 m) – 360° Swivel & Insulated Hook-up Kit
61-084-009	AirPro X4000 Torch & Cable Assembly 10 ft. (3 m) – 360° Swivel
61-084-007	AirPro X4000 Torch & Cable Assembly 10 ft. (3 m) – 360° Swivel & Insulated Hook-up Kit

## SWIVEL CABLE ASSEMBLY



Part No.	Description
70-084-407	7 ft (2.1 m) 360° Swivel Cable
70-084-410	10 ft (3 m) 360° Swivel Cable
94-463-046	Quick Connect Hook-Up Kit



## TRI-ARC® FOUNDRY GOUGING TORCHES

### FEATURES & BENEFITS

#### THREE TORCHES IN ONE

- Designed for foundry applications, defect removal, general purpose applications, and padwashing by just changing head assemblies

#### HIGH IMPACT, HEAT RESISTANT INSULATORS

- Provides protection for the torch metal parts

#### FORGED BODY

- Provides cooler operation, improved air flow and greater current ratings

#### POWERFUL INSULATED COIL SPRING & HIGH STRENGTH UPPER ARM

- Insures positive electrode contact at all angles

#### BETTER BALANCE

- Streamline design and high strength fluted handles reduce operator fatigue

#### EASY CABLE INSTALLATION

- No need to disassemble the torch, just slide the sleeve from the rear of the handle

#### HEAVY-DUTY INSULATORS,

lever and handle that are all made from fiberglass reinforced thermoset polyester molding compound to withstand the heat and be impact resistant.

### TRI-ARC TORCH HEADS

#### DEFECT REMOVAL HEADS

- For removal of defects and fine removal application
- Accepts electrode diameters – 3/8" (9.5 mm) through 3/4" (19.05 mm)



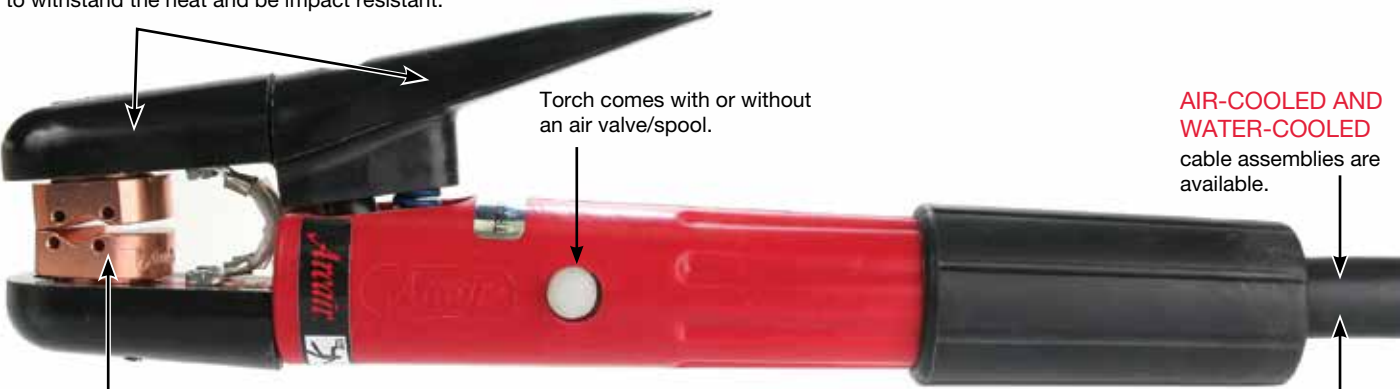
#### GENERAL PURPOSE CLEANING HEADS

- For removal of defects, fin removal, padwashing, and piercing applications
- Accepts electrode diameters – 1/2" (12.7 mm) through 1" (25.4 mm)



#### PADWASHING HEADS

- For padwashing applications only
- Heads are fixed on a 35° work angle
- Accepts electrode diameters – 1/2" (12.7 mm) through 3/4" (19.05 mm)



Torch comes with or without an air valve/spool.

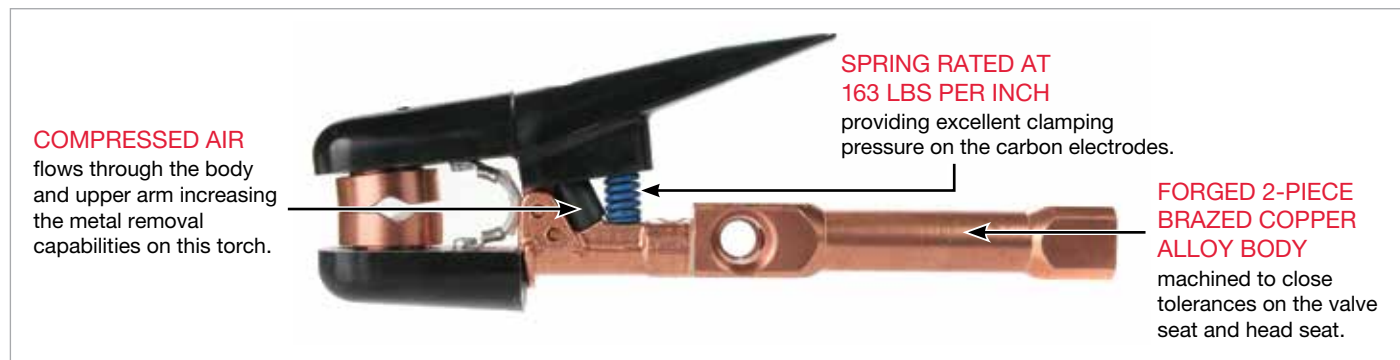
AIR-COOLED AND WATER-COOLED cable assemblies are available.

#### SWITCHABLE HEAD ASSEMBLIES

machined from copper alloy designed for foundry applications - DEFECT REMOVAL - GENERAL PURPOSE - PADWASHING.

#### RUGGED AND DURABLE CABLE

assemblies offered for applications requiring 1600 to 2200 amps.



COMPRESSED AIR flows through the body and upper arm increasing the metal removal capabilities on this torch.

SPRING RATED AT 163 LBS PER INCH providing excellent clamping pressure on the carbon electrodes.

FORGED 2-PIECE BRAZED COPPER ALLOY BODY machined to close tolerances on the valve seat and head seat.

## TRI-ARC®

Foundry - General foundry work, pad washing, defect, nails, sprue and interior work



### AMPERAGE RANGE

- 450 – 2200 amps

### ELECTRODE SIZE

- 5/16" – 1" Round (7.9 mm – 25.4 mm)

### AIR REQUIREMENTS

- psi – 80
- kg/cm<sup>2</sup> – 5.6
- cfm – 33
- l/min – 934

Part No.	Description	Electrode Size
<b>NO HEADS IN TORCH</b>		
02-991-411	Torch Only	–
62-991-417	Torch & 7 ft (2.1 m) Cable	–
<b>NO HEADS IN TORCH – NO VALVE</b>		
02-991-426	Torch Only	–
<b>DEFECT REMOVAL HEADS</b>		
94-378-298	Replacement Heads	3/8" (9.5 mm) thru 3/4" (19.05 mm)
<b>PADWASHING HEADS</b>		
94-378-286	Replacement Heads	1/2" (12.7 mm)
94-378-289	Replacement Heads	5/8" (15.9 mm)
94-378-283	Replacement Heads	3/4" (19.05 mm)
<b>GENERAL PURPOSE CLEANING HEADS</b>		
94-378-267	Replacement Heads	1/2" (12.7 mm)
94-378-270	Replacement Heads	5/8" (15.9 mm)
94-378-273	Replacement Heads	3/4" (19.05 mm)
94-378-343	Replacement Heads	1" (25.4 mm)

Note: The cable assembly that comes standard on the assemblies is Part No. 74-143-607, 7 ft (2.1 m) long and rated for 1600 amperes maximum.

## SWIVEL CABLE ASSEMBLY OPTIONS



Part No.		Description
7 ft (2.1M)	10 ft (3M)	
74-143-607	74-143-610	Std. Duty - 340° Swivel Cable Assembly
74-161-907	–	E-H-D 340° Swivel Cable Assembly
74-085-207	74-085-210	Water-Cooled Cable Assembly – Non-Swivel



Part No.	Description
70-128-507	7 ft (2.1 m) 340° Swivel Cable Assembly
70-128-510	10 ft (3 m) 340° Swivel Cable Assembly

## STRAIGHT HANDLE MANUAL GOUGING TORCHES

### FEATURES & BENEFITS

#### RELIABLE TORCH DESIGN

- Market leader for over 60+ years
- Greater operator comfort

#### ACCEPTS A WIDE RANGE OF CCDC GOUGING ELECTRODES

- 5/16" (7.9 mm) - through 5/8" (15.9 mm) round

#### DURABLE FRONT INSULATORS

- High impact and heat resistant protecting the torch metal parts

#### SWIVEL CABLE

- Less cable twist
- Less strain on the operator

#### HIGH QUALITY CABLE HOSE

- Best quality cable hose offers high heat and abrasion resistance
- Non-conductive

#### RUGGED CONSTRUCTION OVERALL

- Can withstand harsh environments

## K-5

Extra Heavy-Duty - Heavy metal removal applications such as weld preparations in pressure vessel shops, shipyards and defect removal in foundries.



#### AMPERAGE RANGE

- 450 - 1250 amps

#### ELECTRODE SIZE

- Pointed - 5/16" - 1/2" round (7.9 mm - 12.7 mm)
- Jointed - 5/16" - 5/8" round (7.9 mm - 15.9 mm)
- Half Round - 5/8" (15.9 mm)

#### AIR REQUIREMENTS

- psi - 80
- kg/cm<sup>2</sup> - 5.6
- cfm - 30
- l/min - 850

Part No.	Description
01-104-003	Torch Only
61-104-007	Torch w/7 ft (2.1 m) 360° Swivel Cable
61-104-008	Torch w/10 ft (3 m) 360° Swivel Cable

## CUTSKILL MANUAL GOUGING TORCHES

### FEATURES & BENEFITS

#### NATURAL 15° TORCH ANGLE

- Greater operator comfort

#### DURABLE FRONT INSULATORS

- High impact and heat resistant protecting the torch metal parts

#### 360° SWIVEL CABLE

- Less cable twist
- Less strain on operator

#### POSITIVE GRIP HANDLE

- Greater operator feel and ease in positioning the torch

#### REDUCED WEIGHT

- Optimum cable and torch weight to minimize fatigue

#### HIGH QUALITY CABLE HOSE

- Best quality cable hose offers high heat and abrasion resistance
- Non conductive

## CSK4000

Heavy-Duty - Heavy metal removal applications such as weld preparations in pressure vessel shops and shipyards.



#### ELECTRODE SIZE

- Pointed - 5/32" - 1/2" round (4.0 mm - 12.7 mm)
- Jointed - 5/16" - 1/2" round (7.9 mm - 12.7 mm)
- Flat - 3/8" and 5/8" (9.5 mm - 15.9 mm)
- Half Round - 5/8" (15.9 mm)

#### AIR REQUIREMENTS

- Maximum Amperage - 1000 amps
- Compressed Air - 80 psi (5.6 kg/cm<sup>2</sup>)
- Compressed Air Flow Rate - 28 cfm (0.79 m<sup>3</sup>/min)
- Torch and Cable Weight: 5.4 lbs (2.4 kg)

Part No.	Description
01-088-000	Torch Only
61-088-007	Torch & 7 ft (2.1 m) Cable Assembly
61-088-010	Torch & 10 ft (3 m) Cable Assembly
70-088-007	7 ft (2.1 m) Cable Assembly
70-088-010	10 ft (3 m) Cable Assembly

# INCHES OF GROOVE PER ELECTRODE

## POINTED COPPERCLAD DC ELECTRODES

Groove Depth	5/32" x 12" (4.0 mm x 30.5 cm)	3/16" x 12" (4.8 mm x 30.5 cm)	1/4" x 12" (6.5 mm x 30.5 cm)	5/16" x 12" (8.0 mm x 30.5 cm)	3/8" x 12" (9.5 mm x 30.5 cm)	1/2" x 14" (12.7 mm x 35.6 cm)
1/8" (3.2 mm)	65" (165 cm)	70" (178 cm)	81" (206 cm)	NR	NR	NR
5/32" (4.0 mm)	57" (145 cm)	65" (165 cm)	70" (178 cm)	81" (206 cm)	NR	NR
3/16" (4.8 mm)	NR	57" (145 cm)	66" (168 cm)	72" (183 cm)	82" (208 cm)	NR
1/4" (6.4 mm)	NR	46" (117 cm)	58" (147 cm)	66" (168 cm)	72" (183 cm)	112" (285 cm)
5/16" (8.0 mm)	NR	20" (51 cm) – 2P	46" (117 cm)	58" (147 cm)	59" (150 cm)	100" (254 cm)
3/8" (9.5 mm)	NR	12" (30 cm) – 2P	24" (61 cm) – 2P	47" (119 cm)	59" (150 cm)	88" (224 cm)
1/2" (12.7 mm)	NR	NR	14" (36 cm) – 2P	26" (66 cm) – 2P	47" (119 cm)	73" (185 cm)
5/8" (15.9 mm)	NR	NR	NR	16" (41 cm) – 2P	26" (66 cm) – 2P	57" (145 cm)
3/4" (19.05 mm)	NR	NR	NR	NR	16" (41 cm) – 2P	43" (109 cm)
7/8" (22.0 mm)	NR	NR	NR	NR	NR	35" (89 cm) – 2P
1" (25.4 mm)	NR	NR	NR	NR	NR	28" (71 cm) – 2P

Note: All figures derived from gouging mild steel under laboratory conditions. Field results may vary due to type of metal, power source, compressed air supply,

operators experience and other parameters.

NR = Not Recommended

2P = Two (2) Passes

## JOINTED COPPERCLAD DC ELECTRODES

Groove Depth	5/16" x 14" (7.9 mm x 35.6 cm)	3/8" x 17" (9.5 mm x 43.2 cm)	1/2" x 17" (12.7 mm x 43.2 cm)
5/32" (4.0 mm)	160" (406 cm)	NR	NR
3/16" (4.8 mm)	142" (361 cm)	206" (523 cm)	NR
1/4" (6.4 mm)	125" (318 cm)	172" (437 cm)	260" (660 cm)
5/16" (7.9 mm)	112" (284 cm)	150" (310 cm)	188" (478 cm)
3/8" (9.5 mm)	84" (213 cm)	136" (345 cm)	157" (399 cm)
1/2" (12.7 mm)	72" (183 cm) – 2P	103" (262 cm)	140" (356 cm)
5/8" (15.9 mm)	48" (122 cm) – 2P	75" (191 cm) – 2P	102" (259 cm)
3/4" (19.05 mm)	NR	57" (145 cm) – 2P	90" (229 cm)
7/8" (22.0 mm)	NR	NR	80" (203 cm)
1" (25.4 mm)	NR	NR	72" (183 cm)

Note: All figures derived from gouging mild steel under laboratory conditions. Field results may vary due to type of metal, power source, compressed air supply, operators experience and other parameters.

NR = Not Recommended

2P = Two (2) Passes

## ARCAIR AIR CARBON-ARC ELECTRODES

### FEATURES & BENEFITS

#### DESIGNED SPECIFICALLY FOR THE AIR CARBON-ARC PROCESS

- Contain a precise formulated blend of carbon and graphite
- The most efficient metal removal performance in today's market
- Superior metal removal rates, cool operation, and uniform diameters

#### IDEAL FOR A BROAD RANGE OF APPLICATIONS

- Creating u-grooves for weld joint
- Removing old welds
- Gouging out cracks
- Cleaning and repairing castings
- Removing hard surface material
- Rough machining

### POINTED COPPERCLAD DC ELECTRODES

Part No.	Description	Application
22-023-003*	1/8" (3.2 mm) x 12" (30.5 cm) CCDC Pointed	A standard, all purpose gouging electrode. Its controlled copper coating improves electrical conductivity (for more efficient, cooler operation) and helps maintain electrode diameter at the point of the arc.
22-983-003	5/32" (4.0 mm) x 12" (30.5 cm) CCDC Pointed	
22-033-003	3/16" (4.8 mm) x 12" (30.5 cm) CCDC Pointed	
22-043-003	1/4" (6.4 mm) x 12" (30.5 cm) CCDC Pointed	
22-053-003	5/16" (7.9 mm) x 12" (30.5 cm) CCDC Pointed	
22-063-003	3/8" (9.5 mm) x 12" (30.5 cm) CCDC Pointed	
22-082-003	1/2" (12.7 mm) x 14" (35.6 cm) CCDC Pointed	

Note: Standard 50 pieces per carton unless noted. \* 100 pieces per carton.

### POINTED PLAIN DC ELECTRODES

Part No.	Description	Application
21-983-003	5/32" (4.0 mm) x 12" (30.5 cm) DC Pointed	General purpose electrodes without the copper plating to avoid any chance of copper contamination in the base material. Same high quality blend of carbon and graphite used in other electrodes.
21-033-003	3/16" (4.8 mm) x 12" (30.5 cm) DC Pointed	
21-043-003	1/4" (6.4 mm) x 12" (30.5 cm) DC Pointed	
21-053-003	5/16" (7.9 mm) x 12" (30.5 cm) DC Pointed	
21-063-003	3/8" (9.5 mm) x 12" (30.5 cm) DC Pointed	

Note: Electrodes will glow incandescent due to not having the copper plating and a penciling affect will take place along the outside diameter of the electrode. Standard 50 pieces per carton unless noted.

### POINTED COPPERCLAD AC ELECTRODES

Part No.	Description	Application
20-033-003	3/16" (4.8 mm) x 12" (30.5 cm) CCAC Pointed	Designed for use with A.C. power supplies. Rare earth material is added to the electrodes to stabilize the arc and enhance the operating characteristics. 12" (305 mm) long.
20-043-003	1/4" (6.4 mm) x 12" (30.5 cm) CCAC Pointed	
20-063-003	3/8" (9.5 mm) x 12" (30.5 cm) CCAC Pointed	

### FLAT COPPERCLAD DC ELECTRODES

Part No.	Description	Application
35-099-003	3/8" (9.5 mm) x 3/16" (4.8 mm) x 12" (30.5 cm) Flat	Specially designed for close tolerance metal removal and scarfing applications. Excellent for general gouging applications, removing weld crowns, repairing or making dies, removing temporary welded dogs, and scarfing billets.
35-033-003	5/8" (15.9 mm) x 3/16" (4.8 mm) x 12" (30.5 cm) CCDC Flat	

Note: Standard 50 pieces per carton unless noted.

### HALF ROUND COPPERCLAD DC ELECTRODES

Part No.	Description	Application
25-103-003	5/8" (15.9) x 5/16" (7.9 mm) x 12" (30.5 cm) CCDC Half-Round	Versatility of having both a round and flat electrode for the various gouging applications. Excellent for removing weld crowns, repairing or making dies, removing temporary welded dogs, and scarfing billets.

Note: Standard 50 pieces per carton unless noted.

### JOINTED JETRODS® COPPERCLAD DC ELECTRODES

Part No.	Description	Application
24-052-003	5/16" (7.9 mm) x 14" (35.6 cm) CCDC Jointed	Provides continuous electrode feed and increased savings, especially in production operations. Suited for both hand held foundry applications and or automated gouging systems.
24-062-003	3/8" (9.5 mm) x 14" (35.6 cm) CCDC Jointed	
24-064-003	3/8" (9.5 mm) x 17" (43.2 cm) CCDC Jointed	
24-082-003	1/2" (12.7 mm) x 14" (35.6 cm) CCDC Jointed	
24-084-003	1/2" (12.7 mm) x 17" (43.2 cm) CCDC Jointed	
24-104-003	5/8" (15.9 mm) x 17" (43.2 cm) CCDC Jointed	
24-124-003	3/4" (19.05 mm) x 17" (43.2 cm) CCDC Jointed	

Note: Standard 100 pieces per carton unless noted.



# CUTSKILL ELECTRODES

## POINTED COPPERCLAD DC ELECTRODES

Part No.	Description	Application
22-033-003C	3/16" (4.8 mm) x 12" (30.5 cm) CCDC Pointed	A standard, all purpose gouging electrode. Its controlled copper coating improves electrical conductivity (for more efficient, cooler operation) and helps maintain electrode diameter at the point of the arc.
22-043-003C	1/4" (6.4 mm) x 12" (30.5 cm) CCDC Pointed	
22-053-003C	5/16" (7.9 mm) x 12" (30.5 cm) CCDC Pointed	
22-063-003C	3/8" (9.5 mm) x 12" (30.5 cm) CCDC Pointed	
22-082-003HC	1/2" (12.7 mm) x 14" (35.6 cm) CCDC Pointed	

Note: Standard 50 pieces per carton unless noted.  
 \* 100 pieces per carton.

## HOLLOW POINTED COPPERCLAD DC ELECTRODES

Part No.	Description	Application
22-033-003HC	3/16" (4.8 mm) x 12" (30.5 cm) CCDC Pointed	General purpose electrodes having the same high quality blend of carbon and graphite used in other electrodes, but with a hole down the center of the electrode.
22-043-003HC	1/4" (6.4 mm) x 12" (30.5 cm) CCDC Pointed	
22-053-003HC	5/16" (7.9 mm) x 12" (30.5 cm) CCDC Pointed	
22-063-003HC	3/8" (9.5 mm) x 12" (30.5 cm) CCDC Pointed	
22-082-003HC	1/2" (12.7 mm) x 14" (35.6 cm) CCDC Pointed	
22-082-003HC	1/2" (12.7 mm) x 14" (35.6 cm) CCDC Pointed	

Note: Standard 50 pieces per carton.

## JOINTED COPPERCLAD DC ELECTRODES

Part No.	Description	Application
24-064-003C	3/8" (9.5 mm) x 17" (43.2 cm) CCDC Jointed	Provides continuous electrode feed for greatly increased savings, especially in production operations.
24-084-003C	1/2" (12.7 mm) x 17" (43.2 cm) CCDC Jointed	
24-104-003C	5/8" (15.9 mm) x 17" (43.2 cm) CCDC Jointed	
24-124-003C	3/4" (19.05 mm) x 17" (43.2 cm) CCDC Jointed	
24-164-003C*	1" (25.4 mm) x 17" (43.2 cm) CCDC Jointed	
24-164-003C*	1" (25.4 mm) x 17" (43.2 cm) CCDC Jointed	

Note: Standard 100 pieces per carton unless noted  
 \* - 25 pieces per carton.

ELECTRODES

# WELDING CARBON PRODUCTS

Carbon Plates and Carbon Rods

## FEATURES & BENEFITS

### WIDE RANGE OF APPLICATIONS TO CONTROL THE FLOW OF WELD METAL

- Repair broken corners
- Repair broken gears
- Dams or molds for weld deposit

### ELIMINATES THE NEED FOR MANY JIGS AND FIXTURES

- Substantial time and labor savings



## CARBON PLATE

Part No.	Description
48-043-012	1/4" (6.4 mm) x 12" (30.5 cm) x 12" (30.5 cm)
48-063-012	3/8" (9.5 mm) x 12" (30.5 cm) x 12" (30.5 cm)
48-083-012	1/2" (12.7 mm) x 12" (30.5 cm) x 12" (30.5 cm)
48-123-012	3/4" (19.05 mm) x 12" (30.5 cm) x 12" (30.5 cm)
48-163-012	1" (25.4 mm) x 12" (30.5 cm) x 12" (30.5 cm)

## CARBON ROD

Part No.	Description
47-123-000	3/4" (19.05 mm) x 12" (30.5 cm)
47-143-000	7/8" (22.23 mm) x 12" (30.5 cm)
47-164-000	1" (25.4 mm) x 17" (43.2 cm)
47-183-000	1-1/8" (28.6 mm) x 12" (30.5 cm)
47-203-000	1-1/4" (31.8 mm) x 12" (30.5 cm)
47-243-000	1-1/2" (38.1 mm) x 12" (30.5 cm)
47-323-000	2" (50.8 mm) x 12" (30.5 cm)

## ARCAIR-MATIC® N7500

### AUTOMATED GOUGING SYSTEM

The Arcair-Matic N7500 gouging system is highly productive for any metal fabrication operation where gouging and welding represents a large portion of the work schedule. This applies to almost all metals, including stainless steel, carbon, manganese, and chrome-moly steels.



### DIGITAL LCD REMOTE PENDANT

- Ease of use – start/stop function, travel delay, electrode diameter
- Rough machining feature to stall the feed of the electrode to compensate for pitted area or out-of-round steel rolls, thereby maintaining the concentricity of the shaft/roll
- US Patent No. US 9101998 B2
- “Travel delay” function assures excellent groove geometry at the very beginning of the groove, thereby eliminating the need for a starting pad
- Shock-absorbent bumper
- Remote Pendant incorporates an emergency stop switch (E-Stop) when pressed in, will take precedence over any other “stop” signal and will drop out the engaged contactor in the power supply stopping the flow of current to the carbon electrode.



### TORCH HEAD

- Small and lightweight while accepting the wide range of Arcair jointed Jetrods Copperclad DC carbons, 5/16" (7.9mm) through 3/4" (19.05mm)
- Can be oriented 360 degrees in any direction giving flexibility to fit the application



### DIGITAL CIRCUITRY CONTROL BOX

- Redesigned digital circuitry control box
- A synergic mode ensures conformity to pre-determined, pre-selected groove depth and width specifications
- Can be used with CC/CV power supplies and the system utilizes the contactor in the welding power supply unit thereby eliminating the need for an external contactor used on prior models



### COMPLETE N7500 GOUGING SYSTEM

Part No.	Description
65-991-015	Includes Remote Pendant, Control Box, Torch Head, Air Regulator and Electrode Tube Holder

### SYSTEM CABLE ASSEMBLY OPTIONS\*

Part No.	Description
<b>110V AC POWER SUPPLY CABLE</b>	
96-130-304	10 ft (3 m)
<b>220V AC POWER SUPPLY CABLE</b>	
96-130-305	10 ft (3 m)
<b>PENDANT CABLE ASSEMBLY</b>	
96-170-069	14" (0.36 m)
96-170-070	15 ft (5 m)
96-170-071	25 ft (8 m)
96-170-072	50 ft (15 m)
<b>MOTOR CABLE ASSEMBLY</b>	
96-130-335	3 ft (0.9 m)
96-130-336	15 ft (5 m)
96-130-337	25 ft (8 m)
96-130-338	50 ft (15 m)
<b>POWER SUPPLY COMMUNICATION CABLE ASSEMBLY</b>	
96-130-339	15 ft (5 m)
96-130-340	25 ft (8 m)
96-130-341	50 ft (15 m)
<b>DC POWER CABLES</b>	
96-130-254	4 ft (1.2 m)
96-130-256	15 ft (5 m)
96-130-300	25 ft (8 m)

NOTE: Minimum 2 Power Cables Required

### AIR HOSE ASSEMBLY

94-396-051	4 ft (1.2 m)
94-396-049	15 ft (5 m)
94-396-048	25 ft (8 m)

\*Must be ordered separately

## ALL POSITION TRAVEL SYSTEMS

Arcair, the industry leader in air carbon-arc products partnered with leading travel system manufacturers to create the best all-around metal removal system providing superior performance, flexibility, versatility, and safety for your metal removal applications.

BUG-O® and GULLCO® tractors are ideal for out of position metal removal applications since both incorporate an aluminum track that guides the tractor down the weld seam with the ability to keep the Arcair-Matic N7500 torch head on track with a mechanical rack device.

### BUG-O TRAVEL SYSTEM PACKAGES

#### ALL TRAVEL SYSTEMS INCLUDE A COMPLETE N7500 AUTOMATED GOUGING SYSTEM

- Remote Pendant
- Control Box
- Torch Head
- Arcair Electrode Tube Holder
- Arcair Air Regulator



#### BUG-O TRAVEL SYSTEM SPECIFICATIONS

Description	Part No.*	Carriage	Master Drive Unit	Arc Gouging Control Module	Arcair Mounting Group	Cable Mounting Assembly	Rail	On/Off Magnet
Rigid - 110 VAC	71-023-140	MPD-1065 (12" Releaseable Carriage)	MPD-1000 (110 VAC)	AGS-1002	AGS-4172	BUG-2975	ARR-1080 (Heavy-Duty Aluminum Rail)	ARM-2010 (5 Magnets)
Rigid - 220 VAC	71-023-141	MPD-1065 (12" Releaseable Carriage)	MPD-1002 (220 VAC)	AGS-1002	AGS-4172	BUG-2975	ARR-1080 (Heavy-Duty Aluminum Rail)	ARM-2010 (5 Magnets)
Flex - 110 VAC	71-023-142	FMD-1105 (Hi-Flex Carriage w/ Handle & Clamp)	MPD-1000 (110 VAC)	AGS-1002	AGS-4172	--	FMD-2170 (Hi-Flex Rail)	FMD-2010 (8 Magnets)
Flex - 220 VAC	71-023-143	FMD-1105 (Hi-Flex Carriage w/ Handle & Clamp)	MPD-1002 (220 VAC)	AGS-1002	AGS-4172	--	FMD-2170 (Hi-Flex Rail)	FMD-2010 (8 Magnets)

\* System Part No. includes the BUG-O items as noted along with the Arcair-Matic N7500 System

### GULLCO TRAVEL SYSTEM PACKAGES

#### ALL TRAVEL SYSTEMS INCLUDE A COMPLETE N7500 AUTOMATED GOUGING SYSTEM

- Remote Pendant
- Control Box
- Torch Head
- Arcair Electrode Tube Holder
- Arcair Air Regulator



#### GULLCO TRAVEL SYSTEM SPECIFICATIONS

Description	Part No.*	Carriage	Rack Box	Rack Bar	Welding Gun Attachment	Track	Track Magnet Devices
Rigid - 110 VAC	71-023-144	GK-200-RHB-N (GULLCO "KAT" Variable Speed Travel Carriage - 110 VAC)	GK-171-650 (GULLCO Heavy Duty Rack Box)	GK-171-047-2 (GULLCO 18" Long Heavy Duty Square Rack Bar)	GK-165-047-2 (GULLCO 4-Motion Semi-Automatic Welding Gun Attachment)	GK-165-052-1 (GULLCO 96" Aluminum Alloy Standard Track)	GK-165-215 (6 GULLCO Track Magnet Devices)
Rigid - 220 VAC	71-023-145	GK-200-RHC-N (GULLCO "KAT" Variable Speed Travel Carriage - 220 VAC)	GK-171-650 (GULLCO Heavy Duty Rack Box)	GK-171-047-2 (GULLCO 18" Long Heavy Duty Square Rack Bar)	GK-165-047-2 (GULLCO 4-Motion Semi-Automatic Welding Gun Attachment)	GK-165-052-1 (GULLCO 96" Aluminum Alloy Standard Track)	GK-165-215 (6 GULLCO Track Magnet Devices)

\* System Part No. includes the GULLCO items as noted along with the Arcair-Matic N7500 System.

BUG-O is a registered trademark of the Weld Tooling Corporation. Gullco is a registered trademark of Gullco Enterprises Limited. The aforementioned registered trademarks are in no way affiliated with Arcair. Arcair is a registered trademark of ESAB.

ARCAIR-MATIC

## STRAIGHT LINE FLAT POSITION CARRIAGE

### TITAN TRAVEL SYSTEM PACKAGES

For metal removal applications in the flat position only, Arcair offers a machine carriage system that can carry the complete Arcair-Matic N7500 system and can be easily lifted on and off the work surface with an overhead crane. The track section consists of a steel "T" bar, machined on each end to permit joining additional sections easily. The same machine carriage can come with "outrigger" wheels to guide the carriage down the work surface, ideal for bridge girder back-gouging applications.

### ALL TRAVEL SYSTEMS INCLUDE A COMPLETE N7500 AUTOMATED GOUGING SYSTEM

- Remote Pendant (72-008-020)
- Control Box (72-008-021)
- Torch Head (05-124-001)
- Arcair Electrode Tube Holder (94-893-082)
- Arcair Air Regulator (71-000-073)

With the exception of the Power Communication Cable Assembly, all other System Cable Assemblies, 110V AC Power Cable, Pendant Cable, Motor Cable, DC Power Cable, and Air Hose Assemblies are included.



ARCAIR TITAN TRAVEL SYSTEM SPECIFICATIONS

Description	Part No.*	Horizontal Rack Bar	Vertical Rack Bar	Outrigger Wheel Pkg	Track	Pointer Assembly	Magnet Supports	Cable-Hose Clamp	Lift Bracket
Titan Machine Carriage System Package with Track - 110 VAC	71-022-704	71-099-073	71-099-074	-	71-022-501 (Arcair 10 ft "T" Steel Track Section)	71-022-502	71-022-504 (3 Magnets)	71-022-506	94-111-168
Titan Machine Carriage System Package w/ Outrigger Wheel Package - 110 VAC	71-022-705	71-099-073	71-099-074	80345	-	-	-	71-022-506	94-111-168

\* System Part No. includes the items as noted along with the Arcair-Matic N7500 System.

ARCAIR-MATIC

### TITAN WITH OUTRIGGER WHEEL PACKAGE



# ARCAIR TITAN MACHINE CARRIAGE

Ideal for any automated applications in metal fabrication operations where gouging, welding and cutting represents a large portion of your work schedule. And that applies to almost all metals, including stainless, carbon, manganese, and chrome-moly steels.

## FLAT PLATE WORK

Arcair Titan Machine Carriage is designed for low maintenance and high performance in straight line operation such as automated air-carbon arc gouging, cutting or welding operations. Available in speed ranges from either 6 – 80 i.p.m. (15.2 – 203.2 cm/min).

### SPECIFICATIONS:

- Length: 24" (61 cm)
- Width: 21" (53.3 cm)
- Height: 5-7/8" (14.9 cm)
- Weight: 61 lbs (27.7 kg)

### WEIGHT CAPACITY:

Flat Position: 300 lbs (136.1 kg)

### MOUNTING AREA:

254 Sq inches (1,639 sq cm)



## TITAN® MACHINE CARRIAGE

Part No.	Description
71-022-501	Titan Machine Carriage - 6-80 ipm (110 VAC, 60 Hz)

## ACCESSORIES

### TRACK ASSEMBLY

Part No.	Description
71-022-502	Track Section 10 ft (3 m) Long

### MAGNETIC AND SUPPORT BAR ASSEMBLY

(3 each required per 10 ft)

Part No.	Description
71-022-504	Magnet and Support Bar Assembly

ARCAIR-MATIC

# ARCAIR HORIZONTAL & VERTICAL RACK BAR POSITIONERS

## FEATURES & BENEFITS

### RUGGEDNESS, RIGIDITY

- Made from heavy gauge aluminum and brass to operate under severe operating conditions

### ACCURACY & EASE OF OPERATION

- Precision machined parts ensures accurate torch/tool positioning
- Positioners do not need to be disassembled to reposition or remove

## HORIZONTAL RACK BAR POSITIONER

### SPECIFICATIONS:

- Length: 26" (66.04 cm)
- Width: 4" (10.16 cm)
- Height: 9-5/8" (24.45 cm)
- Weight: 4.47 lbs (2.02 kg)



Part No.	Description
71-099-073	Horizontal Rack Bar Assembly

## VERTICAL RACK BAR POSITIONER

### SPECIFICATIONS:

- Width: 4-1/2" (11.43 cm)
- Height: 13-7/8" (35.24 cm)
- Depth: 6" (15.24 cm)
- Weight: 3.06 lbs (1.39 kg)



Part No.	Description
71-099-074	Vertical Rack Bar Assembly

## SLICE® EXOTHERMIC CUTTING SYSTEM

### FEATURES & BENEFITS

#### VERSATILE - UNLIKE ANY OTHER CUTTING TECHNOLOGY

- Cuts right through hard-to-cut materials
  - Mild, stainless steel and alloy steels
  - Cast iron
  - Aluminum, magnesium and other non ferrous metals
  - Slag and refractory materials
  - Pierces through concrete or brick

#### FAST CUTTING SPEEDS

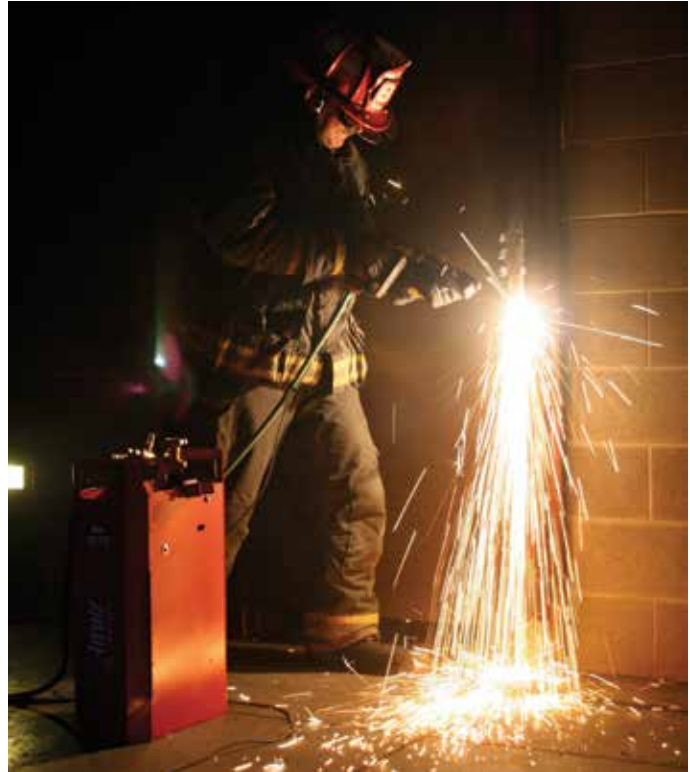
- No-preheat required
- Cut sooner and finish every job faster

#### COMFORTABLE AND EASY TO USE

- Pistol grip style handle
- Lightweight shield to protect the operator from heat and sparks
- Lever operated oxygen control

#### CARRY ALL CONVENIENCE

- Several portable SLICE packs to choose from
  - Utility Pack
  - Battery Pack
  - Industrial Pack
  - Complete Pack



**WATCH A VIDEO OF THE ARCAIR SLICE PACK IN ACTION AT [WWW.ARCAIRSLICE.COM](http://WWW.ARCAIRSLICE.COM)**

#### SPECIFICATIONS:

- Main Voltage (Input): 12 V Battery (Not Included)
- Length Of Power Cable & Oxygen Hose: 10 ft. (3 m)
- Power Cable AWG Size: #10, #6, #1
- Certification Mark (Standards): CE
- Dimensions L x W x H: 8.25 in. x 5.75 in. x 4 in. (209.6 mm x 146.1 mm x 101.6 mm)
- Weight SLICE Cutting Torch w/ #10: 3.78 lbs (1.71 kg)
- Weight SLICE Cutting Torch w/ #6: 4.37 lbs (1.98 kg)
- SLICE Cutting Torch w/ #1: 6.3 lbs (2.86 kg)

SLICE

Part. No.	Description
03-003-012	SLICE Cutting Torch w/ #10 Power Cable (When Igniting w/ 12V Battery & Cutting w/o Power)
03-003-011	SLICE Cutting Torch w/ #6 (When Igniting 12V Battery & Cutting w/o Power)
03-003-010	SLICE Cutting Torch w/ #1 (Up to 200 A w/ Power)

**USE 1/4" & 3/8" DIAMETER**

of cutting rods by simply changing the collet nut and collet chuck

**LIGHTWEIGHT SHIELD**

to help protect the operator from heat and sparks

**EASY TO SQUEEZE LEVER**

on the handle for easy oxygen control

**INDUSTRIAL GRADE OXYGEN HOSE**

10 ft (3 m) length is standard

**PISTOL GRIP**

designed handle is comfortable and easy to use



# TIPS FOR USING SLICE EXOTHERMIC CUTTING EQUIPMENT

## TIPS FOR CUTTING

Cutting procedures will vary from job to job. Study the cutting rates chart for specific cutting speeds.

Normal cutting is done by using a drag technique. Once the rod is in contact with the piece to be cut, drag the rod in the direction of the cut. If the operator can't see the kerf, the speed of cut is too fast. If the rod is being used too rapidly the progress of the cut is too slow and the rod is being used without cutting. REMEMBER, the cutting rods consume as long as the oxygen is flowing. Maintain the proper travel speed at all times. NOTE: Use a sawing motion when material to be cut is thicker than 1-1/2 to 2 inches to ensure a complete melt through.

Use a smooth motion to complete the cut. Be careful not to hit nearby material with the rod when cutting in "close quarters." After completing the cut, release the oxygen control lever in the handle. THE CUTTING ROD WILL CONTINUE TO BURN AS LONG AS OXYGEN IS SUPPLIED. Hold the torch safely away from you until the rod cools.

## TIPS FOR PIERCING SURFACES

The SLICE Torch can be used to pierce solids. Special procedures must be used when piercing. When piercing, use a collet extension (and shield). This extension adds life to the torch and hand shield, and greatly improves operator safety and comfort. Always hold the torch at arm's length and wear plenty of protective clothing, eye and ear protection. Cutting rods can get stuck inside the pierced hole. If possible, remove the cutting rod from the hole before releasing the oxygen lever.

With any thermal cutting equipment blowback is most likely to occur when the user is piercing holes. Cutting rods may burn unevenly. Slowly swirl the cutting rod as it enters a pierced hole. Cutting rods may burn out on the sides. Correct the problem by removing the cutting rod from the pierce point, shut the oxygen off, and replace the cutting rod.

To pierce follow these steps:

- Strike cutting rod on striker.
- Hold torch at arm's length.
- Keep the cutting rod at a 90° angle (perpendicular) to the pierce point.
- Slowly push cutting rod in at pierce point until you're at proper depth or until you've achieved burn through.

The pierce procedure is also used to cut concrete. By piercing a series of holes where a user wants to cut concrete, the concrete becomes easier to fracture. This helps reduce the time it would take to actually cut the concrete.

## OXYGEN USAGE

This cutting process uses standard industrial grade oxygen to support the exothermic reaction and to remove the molten metal. All SLICE equipment uses standard oxygen fittings. The most commonly recommended operating pressure is 80 psi. Applications such as cutting material sections 3" and thicker might require higher operating pressures. Pressures as low as 40 psi have been used to perform operations such as washing off rivet heads and scarfing out small cracks for repair.

The oxygen consumption rate for the SLICE cutting rods at 80 psi is 7 to 7.5 cfm for the 1/4" (6.35 mm) diameter cutting rods and 11 to 12 cfm for the 3/8" (15.87 mm) diameter cutting rods. This rate will vary if a different operating pressure is used.

## ROD BURNTIME

Listed are the approximate burntimes for the various SLICE rod diameters and lengths:

1/4" x 22" (6.4 X 559 mm)	.....	40 - 45 seconds
1/4" x 44" (6.4 X 1118 mm)	.....	80 - 90 seconds
3/8" x 18" (9.5 X 457 mm)	.....	30 - 35 seconds
3/8" x 36" (9.5 X 914 mm)	.....	60 - 70 seconds

## APPLICATION DATA

The best techniques for the SLICE equipment will change from job to job. The enclosed charts present the results of extensive testing of the SLICE Torch. Four things contribute to good cutting:

- 1) Electrical current.
- 2) Type of material being cut.
- 3) Environmental conditions.
- 4) Experience of the operator(s).

These data result from studies of the first two (2) items in this list. Since data were collected in a LABORATORY, actual results obtained will vary because of changes in the environment. Too, these tests were conducted by highly experienced users. The way in which you use the SLICE Torch will also cause your results to vary.

In any application, some adjustments in operating conditions are necessary. The charts are presented only as a guideline. Results will vary. You can approximate these results by using the data presented as a starting point, then adjusting for your job.

Here is a sample of some cutting rates that can be obtained using the SLICE Equipment. Cutting rates in this chart were obtained using 80 PSI oxygen pressure, battery ignition (no power cutting) and 1/4" x 22" (356 x 559 mm) cutting rods. These cutting rates will vary when using different rods, when cutting with power or using a different oxygen pressure. This chart does not represent all materials SLICE will cut nor all thicknesses used in fabrication. When cutting composite materials or metals not listed, locate the listed type that most closely matches the metal to be cut. This information is only meant as a reference to the efficiency and versatility that a user can realize using the SLICE Equipment.

## CUTTING RATES

Material Being Cut	Thickness		Cut/in Rod		Cut Speed	
	in.	cm	in.	cm	in/min	cm/min
Carbon Steel	1/8	.318	2.25	5.7	72	183
	1/4	.635	1.50	3.8	52	132
	3/8	.953	1.38	3.5	42	106
	1/2	1.27	1.25	3.2	35	89
Stainless Steel	3/4	1.91	0.75	1.9	22	56
	1/8	.318	2.00	5.1	65	165
	1/4	.635	1.13	2.9	36	91
Aluminum	1/4	.635	1.75	4.4	58	147
	3/8	.953	1.25	3.2	38	97
	3/4	1.91	0.75	1.9	23	58

This data is the result of averaging lab tests. The actual results will vary.



## SLICE BATTERY/UTILITY PACK

Go anywhere and cut, burn, or pierce virtually any metallic, non-metallic or composite material with this exothermic cutting pack.

Comes with all the necessary equipment and cutting rods required to do cutting when combined with standard industrial grade oxygen to support the exothermic reaction and to remove the molten metal.



- New heavy-duty storage case to hold/store the equipment when not in use
- Improved torch handle & rubber shield to improve the operators grip and provide protection from molten spray when piercing
- Improved striker assembly that incorporates a slide mechanism that allows the operator to only expose a small portion of the ignition bar (copper) which increases the life of the striker copper bar

### BATTERY PACK ONLY:

- Improved battery ignition source with improved features over prior model
  - Faster recharging of a “dead” battery
  - Better visual “gas gauge” indicating battery condition
  - Over-charging safe guard

### SPECIFICATIONS:

- Main Voltage (Input): 120 V AC 60 Hz / 220 V AC 50 Hz (Battery Pack)
- Output Voltage: 12 V DC
- Type Of Battery: Seal lead acid
- Recharge Time (fully drained battery): 6 h
- Exothermic Cutting Rods: 1/4 in. x 22 in. Uncoated – 25 pieces
- Length Of Power Cable & Oxygen Hose: 10 ft. (3 m)
- Power Cable AWG Size: #10
- Certification Mark (Standards): CE
- Main Voltage (Input): 22.25 in. x 20 in. x 5.5 in. (565.15 mm x 508 mm x 139.7 mm)
- Weight Battery Pack: 27.9 lbs (12.66kg)
- Weight Utility Pack: 20.9lbs (9.48 kg)

Part. No.	Description
63-991-041	SLICE Battery Pack – 120 V AC 60 Hz
63-991-044	SLICE Battery Pack – 220 V AC 50 Hz
63-991-047	SLICE Utility Pack

## SLICE BATTERY IGNITION SOURCE

The improved battery ignition source features faster recharging, better visual gas gauge and over-charging safe guard.

Accepts the SLICE cutting torch power connection that has the twist-lock power pin and the SLICE Striker Assembly that completes the circuit when the SLICE rod held in the cutting torch comes in contact with the Striker copper bar. With oxygen flowing through the torch and cutting rod the exothermic reaction begins and cutting can start. Simply release the oxygen lever on the torch to stop the burn.



- All connections to the battery ignition source are labelled for ease of use
- Illuminated lights “GAS GAUGE” signifies the level of the battery current output to ignite the cutting rod
- Experienced operators can expect to achieve 115+ ignitions from a fully charged battery
- Charging time to bring a fully drained battery up to a fully charged status is 6 hours

### SPECIFICATIONS:

- Main Voltage (Input): 22-30 V DC
- Battery: Lead Acid
- Output Voltage: 12 V DC
- Internal Battery Status Display: LED
- Charging Mode: Constant Voltage
- Adapter Input: Input: 100 – 240 VAC, 50 – 60 Hz, 1.4 A Max
- Adapter Output: 24 V DC, 2.7 A
- Certification Mark (Standards): CE
- Dimensions L x W x H: 6.4in.x 4.6 in. x 7.4 in. (162.6 mm x 116.8 mm x 188 mm)
- Weight: 7.1lbs. (3.22 kg) – Battery Case & Power Adapter

Part. No.	Description
96-076-040	SLICE BatteryIgnition Source
96-076-041	PowerAdapter w/ NAM Power Lead



## SLICE INDUSTRIAL PACK

A self-contained cutting system lends itself well for maintenance / repair inside of manufacturing facilities.

- Improved torch handle & rubber shield to improve the operators grip and provide protection from molten spray when piercing
- Improved striker assembly that incorporates a slide mechanism that allows the operator to only expose a small portion of the ignition bar (copper) which increases the life of the striker copper bar
- Improved battery box with improved features over prior model
  - Faster recharging of a “dead” battery
  - Better visual “gas gauge” indicating battery condition
  - Over-charging safe guard
- Storage shelf on the cart to place a 12volt battery for the power to ignite the SLICE rod and begin exothermic cutting action. 12volt battery not included with system
- System includes a battery charger mounted on the cart to recharge the 12volt battery as needed



### SPECIFICATIONS:

- Main Voltage (Input): 120 V AC 60 Hz
- Output Voltage: 12 V DC
- Exothermic Cutting Rods: 1/4 in. x 22 in. Uncoated – 25 pieces
- Length Of Power Cable & Oxygen Hose: 10 ft. (3 m)
- Power Cable AWG Size: #10
- Certification Mark (Standards): CE
- Dimensions L x W x H: 20 – 5/8 in. x 48 – 3/8 in. x 20 in. (523.8 mm x 1228.7 mm x 508 mm)
- Weight: 81.2 lbs (36.8 kg)

Part. No.	Description
63-991-045	SLICE Industrial Pack – 120 V AC 60 Hz



## SLICE COMPLETE PACK

A self-contained cutting system lends itself well to the emergency / forced entry type cutting situations where seconds count.

- Improved torch handle & rubber shield to improve the operators grip and provide protection from molten spray when piercing
- Improved striker assembly that incorporates a slide mechanism that allows the operator to only expose a small portion of the ignition bar (copper) which increases the life of the striker copper bar
- Improved battery box with improved features over prior model
  - Faster recharging of a “dead” battery
  - Better visual “gas gauge” indicating battery condition
  - Over-charging safe guard



### SPECIFICATIONS:

- Main Voltage (Input): 120 V AC 60 Hz & 220 VAC 50 Hz
- Output Voltage: 12 V DC
- Recharge Time (fully drained battery): 6 h
- Exothermic Cutting Rods: 1/4 in. x 22 in. Uncoated – 25 pieces
- Length Of Power Cable & Oxygen Hose: 10 ft. (3 m)
- Power Cable AWG Size: #10
- Certification Mark (Standards): CE
- Dimensions L x W x H (Without Cylinder): 15 in. x 25 in. x 8 in. (400.05 mm x 638.18 mm x 206.38 mm)
- Dimensions L x W x H (With Cylinder): 15 in. x 27 in. x 8 in. (400.05 mm x 688.98 mm x 206.38 mm)
- Weight Without Cylinder: 39.05 lbs ( 17.71 kg)
- Weight With Cylinder: 70 lbs. (31.75 kg)

Part. No.	Description
63-991-040	SLICE Complete Pack – 120 V AC 60 Hz
63-991-042	SLICE Complete Pack – 220 V AC 50 Hz

SLICE

## SLICE STRIKER ASSEMBLY



The SLICE Striker comes standard with a #10 AWG Power Cable with a twist-lock brass pin that can connect to the SLICE battery ignition source. The same twist-lock pin can be inserted into the mating receptacle on a plier type clamp found in the SLICE Utility Pack (please see separate fact sheet for details).

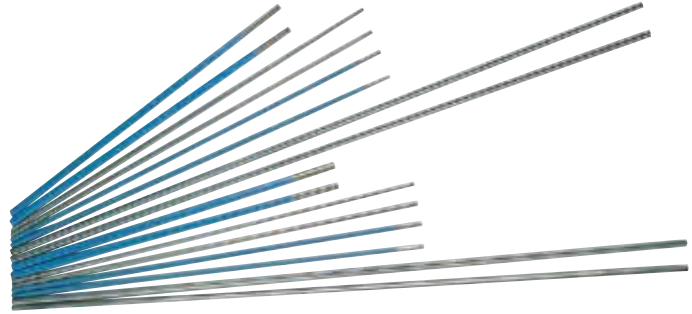
- Improved striker assembly that incorporates a slide mechanism that allows the operator to only expose a small portion of the ignition bar (copper) which increases the life of the striker copper bare
- Robust handle insulator material that can handle impact with the ground and high temperature rating

### SPECIFICATIONS:

- Length Of Power Cable & Oxygen Hose: 3 m (10 ft.)
- Power Cable AWG Size: #10 AWG
- Certification Mark (Standards): CE
- Dimensions L x W x H: 9.5 in. x 1.5 in. x 1.75 in. (241.3 mm x 38.1 mm x 44.5 mm)
- Weight: 1.2 lbs (.54 kg)

Part. No.	Description
72-012-010	SLICE Striker Assembly

## SLICE CUTTING RODS



Unlike any other cutting process used today, the Arcair® SLICE systems can cut, burn or pierce virtually any metallic, non-metallic or composite material. Specially designed flux coated cutting rod, patented single piece construction maintains the balance necessary to sustain the exothermic reaction.

- Specially Designed Cutting Rod
- One piece patented construction maintains the balance necessary to sustain the exothermic reaction
- Cutting rod sustains the burn without constant electrical power once ignited

Part. No.	Description
42-049-003	SLICE Exothermic Cutting Rods, Flux Coated, 1/4 x 22 – 100 Pcs
42-049-002	SLICE Exothermic Cutting Rods, Flux Coated, 1/4 x 22 – 25 Pcs
43-049-009	SLICE Exothermic Cutting Rods, Uncoated, 3/8 x 36 – 25 Pcs
43-049-007	SLICE Exothermic Cutting Rods, Uncoated, 3/8 x 18 – 50 Pcs
43-049-002	SLICE Exothermic Cutting Rods, Uncoated, 1/4 x 22 – 25 Pcs
43-049-005	SLICE Exothermic Cutting Rods, Uncoated, 1/4 x 44 – 25 Pcs
42-049-005	SLICE Exothermic Cutting Rods, Flux Coated, 3/8 x 18 – 50 Pcs
43-049-003	SLICE Exothermic Cutting Rods, Uncoated, 1/4 x 22 – 100 Pcs

Part. No.	Description
94-463-032	3/8" Collet Conversion Kit

# SEA TORCH® "COMBINATION TORCH"

Underwater Cutting & Welding Torch

## FEATURES & BENEFITS

### ONE PIECE BODY CONSTRUCTION

- Fully insulated electrically for safety in normal operation
- Prohibits oxygen leakage in the torch body
- Bright orange for high visibility to the diver

### COMBINATION TORCH

- Torch can be used for oxygen-arc cutting
- Underwater welding

### TAPERED COLLET BODY

- Brings the bare surface of an electrode into contact for the entire length of the collet
- Solid grip and increased contact area decreases the risk of arcing between the collet and electrode

### EQUIPPED WITH A SPARK ARRESTOR

- Spark arrestor located behind the collet for safe operation
- Ball check valve in the torch handle gives additional protection

### SPECIFICATIONS:

- Equipped with 10 ft (3 m) power cable
- Length: 8-3/4" (22.2 cm)
- Weight: 4.5 lbs (2.04 kg) with cable



Part No.	Description
14-050-124	Sea Torch 5/16" (7.9 mm) Cutting Collet
14-050-126	Sea Torch 3/8" (9.5 mm) Cutting Collet



# UNDERWATER CUTTING ELECTRODES

## FEATURES & BENEFITS

### OXYGEN-ARC AND EXOTHERMIC CUTTING ELECTRODES

- Oxygen-arc cutting electrodes requires current to be present during the cutting process
- Exothermic cutting electrodes only require current to ignite the electrode and once ignited the rod will continue to burn as long as there is oxygen flowing

### WATER-PROOF COATING

- All cutting electrodes are coated with a water-proof coating



### SEA-CUT® CUTTING ELECTRODES

"Oxygen-Arc Process" (50 per carton)

Part No.	Diameter	Length
42-059-007	5/16" (7.9 mm) – .113" ID (2.9 mm)	14" (45.7 cm)



### TUFF-COTE® CUTTING ELECTRODES FLUX COATED

"Oxygen-Arc Process" (50 per carton)

Part No.	Diameter	Length
42-059-008	5/16" (7.9 mm) – .113" ID (2.9 mm)	14" (45.7 cm)



### SEA-JET® CUTTING ELECTRODES

"Exothermic Process" (50 per carton)

Part No.	Diameter	Length
42-066-006	3/8" (9.5 mm)	18" (45.7 cm)



### SEA-DRAGON™ CUTTING ELECTRODES

"Exothermic Process" (50 per carton)

Part No.	Diameter	Length
42-075-005	3/8" (9.5 mm)	18" (45.7 cm)

UNDERWATER

## SEA-STINGER® II TORCH

Underwater Welding Torch



### FEATURES & BENEFITS

#### LIGHTWEIGHT AND DURABLE

- Proven design that gives the diver-welder an easy to use electrode holder
- Repairable replaceable cable and internal parts extend its service life

#### ACCEPTS SEVERAL DIFFERENT DIAMETER OF WELDING ELECTRODES

- 1/8" (3.2 mm), 5/32" (4.0 mm) and 3/16" (4.8 mm) welding electrodes

#### SPECIFICATIONS:

- Equipped with 10 ft (3 m) Power Cable
- Length: 6" (15.24 cm)
- Weight: 3.65 lbs (1.66 kg) with cable

Part. No.	Description
14-050-128	Sea-Stinger II Torch

## UNDERWATER WELDING ELECTRODES

### FEATURES & BENEFITS

#### EXCELLENT BEAD CONTOUR

- All position, flux coated SMAW electrode

#### FILLET WELDS ARE FLAT WITH GOOD BASE METAL WETTING

- Helps keep undercut to a minimum

#### EASY SLAG REMOVAL

- Keeps chipping and grinding to a minimum
- Lower risk of slag inclusions

#### PRODUCED WELDS WHICH PASS BEND AND X-RAY REQUIREMENTS

- As defined by the AWS D3.6 specification for underwater welding



### SEA-WELD WELDING ELECTRODES

Part No.	Electrode Size	Per Carton
42-024-002	1/8" (3.2 mm) x 14" (35.6 cm)	150
42-984-004	5/32" (4.0 mm) x 14" (35.6 cm)	100
42-034-007	3/16" (4.8 mm) x 18" (45.7 cm)	75

## ARCWATER® II TORCH

Underwater Gouging Torch

### FEATURES & BENEFITS

#### DESIGNED FOR UNDERWATER GOUGING OPERATIONS

- Similar to gouging above water with the exception of using a high velocity of pressurized water in place of compressed air
- Uses sea water at 90 psi (6.32 kg/cm<sup>2</sup> or 620 kPa) over the pressure at the depth of use
- Minimum water flow rate of 3.5 gallons (13.25 liters) per minute required

#### OXYGEN FREE

- Eliminates the risk of hydrogen gas pocket explosions

#### EASY TO USE

- Handle can be used left or right handed divers
- Used out-of position

#### CONVERTS INTO A WELDING TORCH EASILY

- Simply change out the collet to accept welding electrodes

#### SPECIFICATIONS:

- Equipped with 10 ft (3 m) Power Cable
- Length: 9-3/4" (22.2 cm)
- Weight: 5.5 lbs (2.5 kg)



Part. No.	Description
14-050-127	Arcwater II Torch

## UNDERWATER GOUGING ELECTRODES



### ARCWATER GOUGING ELECTRODES

(50 Per carton)

Part No.	Diameter	Amperage	Length
42-059-006	5/16" (7.9 mm)	350 - 450	9" (22.9 cm)

# PROTEX® PRODUCT LINE

PROTEX



**ARCAIR**  
AN ESAB BRAND

**PROTEX® Extra**

ANTI-SPATTER PLUS GUN PROTECTOR  
PROTECTION ANTI-ECLABOUSSURES  
SUPERIEURE POUR BUSES  
ARTISANAL/CAUDURAS MÁS PROTECTOR DE PISTOLA

- Easy to Use
- Non-Toxic
- Non-Flammable
- Greater Coverage
- Dries Fast
- Environmentally Safe
- Facile à Utiliser
- Non Toxique
- Non Inflammable
- Champ d'application plus grand
- Séchage Rapide
- Ecologique
- Facile de Utiliser
- Non Toxique
- Non Inflammable
- Meilleure Couverture
- Séchage Rapide
- Meilleure Adhérence

NET CONTENTS • CONTENU NET • CONTENIDOS NETO  
24 oz. (710 mL) Cat. No. 53-024-580 (Case of 12)

## PROTEX ORIGINAL ANTI-SPATTER

### FEATURES & BENEFITS

#### FIRST CHOICE FOR BIG JOBS IN WELDING, CUTTING, OR GOUGING

- Reduces spatter and protects from slag spoiling clean edges
- Protects the parent metal, fixtures, large weldments and jigs from spatter and slag
- Use it during heat treating to protect surfaces from scale

#### ENVIRONMENTALLY SAFE

- Non-toxic and non-flammable



Container Size	Part No.
1 Gallon (3.8 L) — Case of 4)	53-011-000
5 Gallon (19 L)	53-015-000
55 Gallon (208 L) Drum	53-018-000

## PROTEX EXTRA ANTI-SPATTER

### FEATURES & BENEFITS

#### REDUCES SPATTER ADHESION TO PARENT METAL

- Spray or brush onto the parent metal and you are ready to weld in less than one minute

#### ENVIRONMENTALLY SAFE

- Non-toxic and non-flammable



Container Size	Part No.
24 oz (710 mL) — Case of 12	53-024-500
1 Gallon (3.8 L) — Case of 4	53-014-500
5 Gallon (19 L)	53-015-500
55 Gallon (208 L) Drum	53-018-500

# PROTEX PLUS ANTI-SPATTER

## FEATURES & BENEFITS

### REDUCES ADHESION TO PARENT METAL

- Spray onto the parent metal to reduce spatter or slag from adhering

### ENVIRONMENTALLY SAFE

- An aerosol anti-spatter
- Contains no chlorinated solvents, fluorocarbons, silicones

Container Size	Part No.
16 oz (473 mL) Can — Case of 12	57-021-106



PROTEX

# PROTEX ZINC RICH COLD GALVANIZING

## FEATURES & BENEFITS

### CORROSION PROTECTION

- Its zinc content “sacrifices” itself to any metal higher (nobler) than zinc in the chemistry’s periodic table such as steel
- Forms a chemical bond to the parent metal

Container Size	Part No.
16 oz (473 mL) Can — Case of 12	57-031-002



## PROTEX TIP-DIP ANTI-SPATTER

### FEATURES & BENEFITS

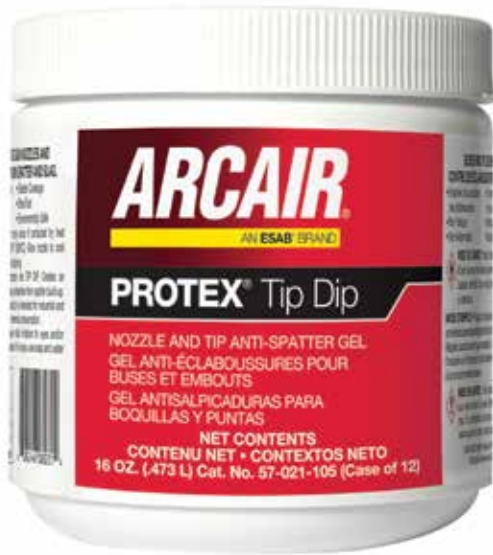
#### PROTECTS SPATTER BUILD UP ON GMAW NOZZLES AND CONTACT TIPS

- High heat resistance to minimize spatter build-up

**Note:** Allow nozzles to cool below red heat before dipping (ignition may occur above 1000°F).

#### ENVIRONMENTALLY SAFE

- Non-toxic



Container Size	Part No.
16 oz (454 gr) Jar — Case of 12	57-021-105

## PROTEX ALCLEAN

### FEATURES & BENEFITS

#### REMOVES OXIDES, DIRT AND GRIME FROM ALUMINUM PLATE, CASTINGS AND JOINT AREAS PRIOR TO WELDING

- Spray or brush on large areas

**Note:** may turn 2000 Series aluminum black.



Container Size	Part No.
1 Quart (946 mL) — Case of 12	57-021-200
1 Gallon (3.8 L) — Case of 4	57-014-000







# WARRANTY



ESAB <sup>®</sup> WARRANTY PERIOD	3	2	1	90
	YRS.	YRS.	YR.	DAY
<b>ESAB FILLER METALS</b>				
ESAB filler metals are guaranteed from defects in material or workmanship and will conform with ESAB's published product specifications for 12 months after the date of shipment, provided that the products are stored and maintained in accordance to ESAB's Storage Guidelines (Document GEN-27116/NA/EN/03-14-18). This warranty does not cover defects derived from the filler metal selection or from the welding operations, which are the sole responsibility of the purchaser and may have an effect in the product's performance. In case of warranty breach, ESAB will have the right to exchange, or accept the return by the Purchaser of existing inventory and issue credit at the price paid by the Purchaser, plus any shipping costs incurred by the purchaser in connection with the purchase of such Product after ESAB has had the opportunity to analyze the claim. No products may be returned to ESAB without ESAB's written authorization.				
<b>ESAB WELDING EQUIPMENT</b>				
<b>ESAB MIG Welding (GMAW) Equipment</b>				
Power Sources & Wire Feeders – Manual & Semi-Automatic	☐			
Automatic & Robotic GMAW Controls, etc.	☐			
GMAW Torches*				☐
<b>ESAB Submerged Arc Welding (SAW) Equipment</b>				
LAF / TAF series Power Sources	☐			
Multitrac, Mastertrac, MiniMaster, ArcMaster, G Master, Tandem	☐			
Controls & Accessories – Flux Recovery System, Joint Tracking and Positioning System, etc.			☐	
<b>ESAB TIG Welding (GTAW) &amp; Stick Welding (SMAW) Equipment</b>				
Power Sources	☐			
GTAW Torches*, Heliarc Outfits				☐
<b>Optional Kits for ESAB Power Sources and Wire Feeders</b>				
Digital Meters, Pulse Kit, Post/Pre Flow, etc.			☐ <sup>1</sup>	
<b>ESAB Remote Controls and Mechanized Controls</b>				
Foot Controls, Hand Controls, Pendants, Arc Starters, UEC-8 Control, J-Governor Control, etc.				☐
<b>ESAB WELDING EQUIPMENT</b>				
<b>ESAB Plasma Equipment</b>				
Power Sources (other than HP 125)	☐			
Automatic Plasma Controls – Flow Control, Plumbing Boxes, etc.	☐			
Plasma Torches*			☐	
<b>ESAB Automation Products</b>				
Miggytrac Tractors			☐	
Orbital Tig – Power sources, controls, accessories and heads			☐	
Applied Automation (CaB, Gantrac, and Walltrac systems)			☐	
Positioners and Turning Rolls			☐	
Engineering Products (FSW, Laser Hybrid, and NGW)			☐	
<b>Miscellaneous</b>				
Cartridge for Eye-Tech Helmets			☐	
Water Circulators			☐	
Remanufactured Equipment			☐	
Special Customer Order Equipment	☐			
<b>ESAB AUTOMATIC CUTTING MACHINES</b>				
SGX, Combirex, Suprarex, Numorex, Telerex Models			☐ <sup>2</sup>	
Crossbow			☐ <sup>3</sup>	
Replacement Parts				☐


WARRANTY


- \* ESAB strongly recommends the use of original equipment replacement parts for its equipment. While the use of aftermarket parts does not automatically void ESAB's warranties for its equipment, any obligations arising from ESAB's warranty will be voided if the design, manufacture, or composition of parts or components not manufactured by ESAB are a material cause of the malfunction or poor performance of (or damage to) the equipment.
- (1) Same period as associated power sources and wire feeders.
  - (2) For breakdowns or failures occurring more than 6 months after shipment the Purchaser is responsible for ESAB's labor cost or expense of repair or replacement of any components or parts thereof which ESAB's examination proves to be defective.
  - (3) The Purchaser is responsible for ESAB's labor cost or expense of repair or replacement of any components or parts thereof which ESAB's examination proves to be defective.


  WARRANTY PERIOD	LIFETIME	10	7	3	2	1	90	+
		YRS.	YRS.	YRS.	YRS.	YR.	DAY	
EDGE™ 2.0 Series regulators	☐							
Legacy SR Series regulators		☐						
300 series torches and handles		☐						
All "G" Series regulators			☐					
400 series torches and handles			☐					
TurboTorch*				☐				
HP&I Brass Regulators/Manifolds, Oxygen Conservers, All other Victor Medical products					☐			
Steel Cylinders, Cutting Machine Motor (i.e. VCM200)						☐		
HP&I Stainless Regulators/Manifolds (non-corrosive gas), Parts in Rental Applications						☐		
HP&I Corrosive Gas Regulators/Manifolds							☐	


 	WARRANTY PERIOD	LIFETIME	10 YRS.	7 YRS.	3 YRS.	2 YRS.	1 YR.	90 DAY	+ LABOR
EDGE™ 2.0 Series regulators		☐							
Legacy SR Series regulators			☐						
300 series torches and handles			☐						
All "G" Series regulators				☐					
400 series torches and handles				☐					
TurboTorch®					☐				
HP&I Brass Regulators/Manifolds, Oxygen Conservers, All other Victor Medical products						☐			
Steel Cylinders, Cutting Machine Motor (i.e. VCM200)							☐		
HP&I Stainless Regulators/Manifolds (non-corrosive gas), Parts in Rental Applications							☐		
HP&I Corrosive Gas Regulators/Manifolds								☐	

 	WARRANTY PERIOD	4 YRS.	3 YRS.	2 YRS.	1 YR.	180 DAY	90 DAY	+ LABOR
Cutmaster® TRUE™ (Power Source)		☐						☐
Drag-Gun® Plus, PAK® 200					☐			☐
AirCut® 15C, CutSkill® units (Power Source), Stand Off Controls, 1Torch®, SureLok®, XTR, XT / XT-301, Maximizer® torches					☐			☐
All Other "Torch and Leads" Packages						☐		☐
Replacement Repair Parts							☐	
A40i, A60i, Cutmaster A80, Cutmaster A120 (US Power Supply)		☐						☐
A40i, A60i, Cutmaster A80, Cutmaster A120 (Non US Power Supply)			☐					☐
Ultra-Cut XT™ and Auto-Cut XT™ (Power Supplies & Components)				☐				☐ 1 yr.
XT™ / XT™-301 Torch (Excluding Consumable Parts)					☐			☐
Repair/Replacement Parts							☐	

	WARRANTY PERIOD	3 YRS.	2 YRS.	90 DAY	+ LABOR
MST 3-in-1 Machines (Power Source)				☐	
TIG Welding Machines (Power Source)				☐	
OxyFuel Outfits, Tote, Torch Kit, Regulators, Cutting Attachment, Cutting Welding Handle, Straight Cutting Torch, AirFuel Torches, Auto-Darkening Helmets				☐	
MIG Guns & TIG Torches supplied with Power Source					☐

	WARRANTY PERIOD	1 YR.	180 DAY	90 DAY	30 DAY	+ LABOR
TC and TCV Water Coolers			☐			
TSC-96 Smoke Collector: 1 year for parts, no warranty for labor			☐			
Professional MIG Guns (i.e. PulseMaster™ MIG Guns & PullMaster™, Spray Master®, Eliminator®, Supra™, Classic No. #, SEFC, etc)				☐		
All Other Products (Including Fusion™ MIG Guns, WeldSkill® MIG and Spool Guns)					☐	

	WARRANTY PERIOD	3 YRS.	2 YRS.	1 YR.	180 DAY	90 DAY	30 DAY	+ LABOR
ArcMaster®, PowerMaster®, Ultrafeed®, Fabricator® 3 in 1, Portable DC Welders 161S, 201TS & 186 AC/DC, Ultima® 150, WC-100B		☐						☐
Auto-Darkening Welding Helmet (Electronic Lens) Head Gear assembly which is 1 month			☐					
Victor® Regulator for Fabricator® 3 in 1: 2 years for parts, no warranty for labor			☐					
95S, Water Recirculators: 1 year for parts and labor				☐				☐
All Plasma Welding Consoles (i.e WC-1 Controller, WF-100 Capstain Feeder, etc)				☐				☐
Plasma Welding Torch and Leads Packages					☐			☐
Gas Regulators for "Supplied with Power Sources"					☐			
Remote Controls						☐		
Replacement Repair Parts						☐		
MIG and TIG Torches (Supplied with Power Sources)							☐	
Firepower Welders: 5-2-1 years for parts, no warranty for labor								☐

	WARRANTY PERIOD	1 YR.	180 DAY	90 DAY	30 DAY	+ LABOR
Arcair® N7500		☐				
All Other Products					☐	

	WARRANTY PERIOD
Contact your Stoodly representative for warranty information on this Product.	

## WARRANTY CLAIMS

For all warranty claims, Purchaser should contact ESAB with all relevant details such as ESAB part number, manufacturing date code, heat and control numbers, serial number, complete description of the difficulty encountered, length of time in service, the conditions under which the Products failed, and original purchase price paid.

**For: Welding Equipment/  
Automated Cutting Systems Goods**  
Phone 843-664-4416  
Fax 800-446-5693

**For: Filler Metal Goods**  
Please contact your ESAB Sales Account Manager. If you are an end user, please contact your local Authorized ESAB distributor for assistance with warranty claims.

**For: Mechanized Cutting Systems**  
Phone 843-664-4405  
Fax 843-664-5539

ESAB will determine whether to have the Products returned for inspection and repair or handled in some other manner (for example: shipping replacement Products "no charge" or issuing credit). Credit for Welding Equipment/Automated Cutting Systems may be subject to a depreciation charge based on length of time the Products were in service.

Written approval in the form of a Return Authorization form ("RA") will be issued if Purchaser is to return Products for repair or replacement. **UNDER NO CIRCUMSTANCES ARE ANY PRODUCTS TO BE RETURNED WITHOUT PRIOR WRITTEN AUTHORIZATION FROM ESAB.** A copy of the RA must accompany the return shipment of the Products to ESAB, and the Products must be received within 30 days of issuance of the RA. Any RA remaining open after 30 days will be cancelled, and the Purchaser will be billed for any "no charge" replacement Products supplied. Any Products subsequently returned against a cancelled RA will be returned to the Purchaser freight collect.

If a returned Product is determined to have failed for reasons other than defects in materials or workmanship within the scope of the warranty policy or if the applicable warranty has expired, Purchaser will be contacted for disposition. If such a Product is to be returned to Purchaser, freight charges will be borne by Purchaser, and Purchaser also will be billed for any "no charge" replacement Products supplied during the investigation of the complaint.

**LIMITED WARRANTY:** ESAB® warrants to the party purchasing Products directly from ESAB or from an Authorized Distributor of ESAB ("Purchaser") that those products listed in the Warranty Period section below ("Products") will be free of defects in workmanship or material for the relevant period specified in the Warranty Period section below beginning on the date that the Products are delivered to the Purchaser. If the Purchaser is buying Products from a party expressly authorized by ESAB in writing to sell ESAB Products (an "Authorized Distributor") rather than from ESAB directly then, notwithstanding the foregoing or anything to the contrary herein, in no event shall the warranty period extend more than the time stated in the Warranty Period section below plus 1 year from the date ESAB delivered the Product to the Authorized Distributor. To the extent that any Product identified herein incorporates parts and materials manufactured by ESAB and parts and materials manufactured by third parties, ESAB makes the warranties set forth in this Limited Warranty section only with respect to the parts and materials of the Products manufactured by ESAB. ESAB's warranty on any products that are not manufactured by ESAB and any parts and materials incorporated into Products that are not manufactured by ESAB is limited to extending to Purchaser any warranty offered by the original manufacturer with respect to that product, part or material to the extent that the warranty is assignable. Should any failure to conform to this warranty appear within the time period applicable to the ESAB Products as stated in the Warranty Period section below, ESAB shall correct such defects by suitable repair or replacement, at ESAB's sole option, of any components or parts of the Product determined by ESAB to be defective upon notification thereof and substantiation that the Product has been stored, installed, operated, and maintained in accordance with ESAB's specifications, instructions, recommendations and recognized standard industry practice, and not subject to abuse, misuse, neglect, alteration, accident, improper care and/or maintenance including lack of lubrication and protection from the elements and use of non-ESAB genuine parts (including consumables) that are a material cause of the Product defect. Such repair or replacement shall be performed by ESAB at no cost or expense to the Purchaser other than travel and accommodation costs and expenses for the ESAB Service Engineer should in-plant service be necessary.

**EXCEPT AS SPECIFIED IN THIS LIMITED WARRANTY SECTION, ESAB HEREBY EXPRESSLY DISCLAIMS ANY AND ALL REPRESENTATIONS AND WARRANTIES, WHETHER WRITTEN OR ORAL, WHETHER EXPRESS OR IMPLIED, WHETHER ARISING BY CONTRACT, AT LAW, IN EQUITY, BY STRICT LIABILITY OR OTHERWISE, WITH RESPECT TO THE PRODUCTS, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, ANY WARRANTY AGAINST REDHIBITORY DEFECTS, AND ANY WARRANTY AGAINST PATENT, COPYRIGHT, TRADEMARK, TRADE NAME, TRADE SECRET INFRINGEMENT AND ANY OTHER TYPE OF INTELLECTUAL PROPERTY RIGHT INFRINGEMENT UNDER THE LAWS OF ANY NATION, INCLUDING, WITHOUT LIMITATION, THE LAWS OF THE U.S. THIS WARRANTY BECOMES INVALID IF REPLACEMENT PARTS, COMPONENTS OR ACCESSORIES NOT MANUFACTURED BY ESAB ARE USED WHICH MAY IMPAIR THE SAFETY OR PERFORMANCE OF ANY ESAB PRODUCT OR ARE A MATERIAL CAUSE OF THE MALFUNCTION OR POOR PERFORMANCE (OR DAMAGE TO) THE EQUIPMENT. THIS WARRANTY IS INVALID IF THE PRODUCT IS SOLD BY ANY PARTY OTHER THAN ESAB OR AN AUTHORIZED DISTRIBUTOR.**

**EXCEPTIONS TO LIMITED WARRANTY:** Notwithstanding the foregoing or anything to the contrary herein, the warranty described in the Limited Warranty section above shall not apply to:

1. ESAB Filler Metals Products whose defect is derived from the filler metal selection or from the welding operations, which are the sole responsibility of the Purchaser and may have an effect on the Product's performance;
2. ESAB Automatic Cutting Machine Products or components thereof that have been subject to misuse or accident, or improper installation, maintenance or application nor to any parts which are subject to normal wear or deterioration such as lenses, fuses, lamps, scrapers, electrodes, shunts, pump impellers, pump casings for waterjet, cutting nozzle and other consumable type Products;

3. Routine mechanical, electrical and electronic adjustments made to ESAB Automatic Cutting Machine Products or components thereof such as are described and explained in the instruction manuals furnished with the Products (such adjustments are the responsibility of the Purchaser);
4. Electrical or electronic parts of ESAB Automatic Cutting Machine Products damaged by improper voltage supplies, improper electrical connections to the equipment or improper grounding techniques.

### **For ESAB Automatic Cutting Machine Products only:**

1. Freight charges after the installation period or 30 days from the shipment date of the ESAB Automatic Cutting Machine Products, whichever comes first, for parts replaced under warranty are the responsibility of the Purchaser; and
2. Any and all warranties on such ESAB Automatic Cutting Machine Products are automatically void if arc welding is performed on any part of the ESAB Automatic Cutting Machine Products without the express approval of an authorized ESAB representative.

### **For ESAB Filler Metals Products only:**

1. In case of warranty breach, ESAB will have the right to exchange, or accept the return by the Purchaser of existing inventory of such defective ESAB Filler Metals Products and issue credit at the price paid by the Purchaser, plus any shipping costs incurred by the Purchaser in connection with the purchase of such ESAB Filler Metals Product after ESAB has had the opportunity to analyze the claim.

**LIMITATION OF LIABILITY:** ESAB's total liability to Purchaser and any third parties with respect to the Products (whether as to Products delivered or for delayed delivery or for non-delivery of Products and whether the claim is based on warranty, on contract, on negligence, on tort, on strict liability, on Products defects or otherwise), shall not exceed the amount of the purchase price of the Products with respect to which the claim is made, and ESAB is hereby released from any claim in excess of the aggregate purchase price of those Products upon which the claim is based. IN NO EVENT SHALL ESAB BE LIABLE TO PURCHASER OR ANY THIRD PARTIES FOR ANY CIRCUMSTANTIAL, CONSEQUENTIAL, CONTINGENT, EXEMPLARY, INCIDENTAL, INDIRECT, LIQUIDATED, MATERIAL, PUNITIVE, SPECIAL, SPECULATIVE OR OTHER DAMAGES, INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOST PROFITS OR REVENUES, LOST BUSINESS OR BUSINESS INTERRUPTIONS ARISING IN ANY MANNER IN CONNECTION WITH THIS OFFER AND THE SALE, DELIVERY AND USE OF THE PRODUCTS. Without limiting the generality of the foregoing, Purchaser assumes any and all risks and liability for the results obtained by use of the Products in combination with any other equipment or materials or in the practice of any process, whether in terms of operation costs, general effectiveness, success or failure. The remedies of the Purchaser set forth herein are exclusive.

**ESAB limited warranty shall not apply to: Consumable Parts for MIG, TIG, Plasma welding, Plasma cutting and Oxyfuel torches, O-rings, fuses, filters or other parts that fail due to normal wear.**

- \* Warranty repairs or replacement claims under this limited warranty must be submitted by an authorized ESAB repair facility within thirty (30) days of the repair.
- \* No employee, agent, or representative of ESAB is authorized to change this warranty in any way or grant any other warranty, and ESAB shall not be bound by any such attempt. Correction of non-conformities, in the manner and time provided herein, constitutes fulfillment of ESAB's obligations to purchaser with respect to the Product.
- \* This warranty is void, and seller bears no liability hereunder, if purchaser used replacement parts or accessories which, in ESAB's sole judgment, impaired the safety or performance of any ESAB Product. Purchaser's rights under this warranty are void if the Product is sold to purchaser by unauthorized persons.

# ARCAIR<sup>®</sup>

AN ESAB<sup>®</sup> BRAND



ESAB / [esab.com](http://esab.com)



U.S. Customer Care: 800-426-1888  
Canada Customer Care: 1-877-935-3226  
International Customer Care: 940-381-1212



89-1501 / NA / English / 04-05-19 / Note: Specifications subject to change without notice. Products may vary from those pictured.