

# ARCAIR IS SYNONYMOUS WITH CARBON ARC GOUGING



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



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



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

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

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

## Extreme™ 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.



## Gouging Torch Selection Guide

Copperclad Electrodes	Amperage Range					Recommended	Alternate
	90 – 450	450 - 1000	1000 -1400	1400 – 2000	2000 - 2400		
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)	█					K4000 <sup>®</sup>	K3000™
5/16" - 5/8" Round (7.9 mm - 15.9 mm)		█				K-5	K4000 <sup>®</sup> , Tri-Arc <sup>®</sup>
5/16" – 1" Round (7.9 mm – 25.4 mm)		█				Tri-Arc <sup>®</sup>	

## Which Torch Is Right For You?

Torch Model	Amperage (Maximum)	Swivel Cable	Swivel Cable Lengths (Feet)	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 <sup>®</sup>	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
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 <sup>®</sup>	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

## 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" 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" 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.

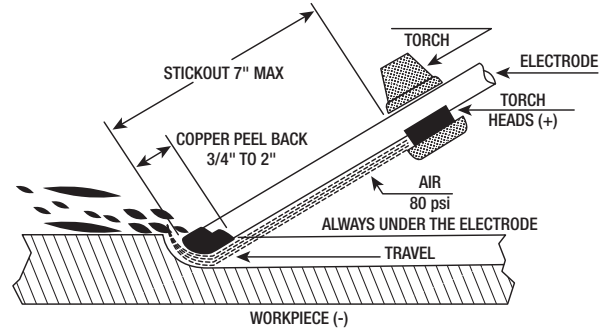
### NICKEL ALLOYS (NICKEL CONTENT OVER 80% OF MASS)

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" 3.2 mm	5/32" 4.0 mm	3/16" 4.8 mm	1/4" 6.4 mm	5/16" 7.9 mm	3/8" 9.5 mm	1/2" 13 mm	5/8" 16 mm	3/4" 19 mm	1" 25 mm	3/8" Flat 9.5 mm Flat	5/8" 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	--	--	--	--	--	--

### 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

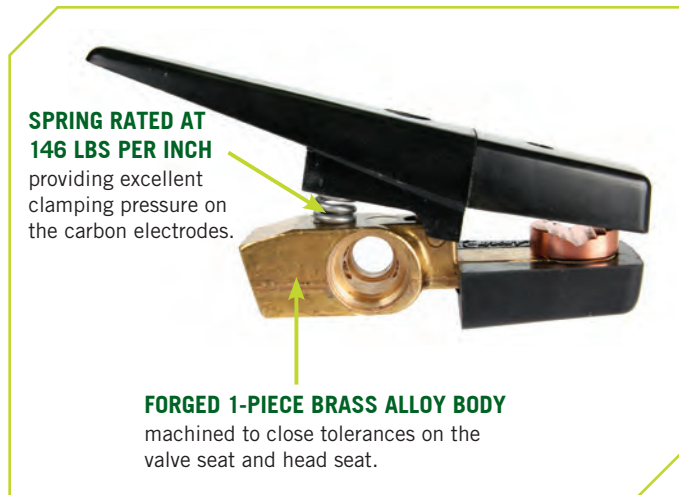
##### REDUCED WEIGHT

- Optimum cable and torch weight to minimize fatigue

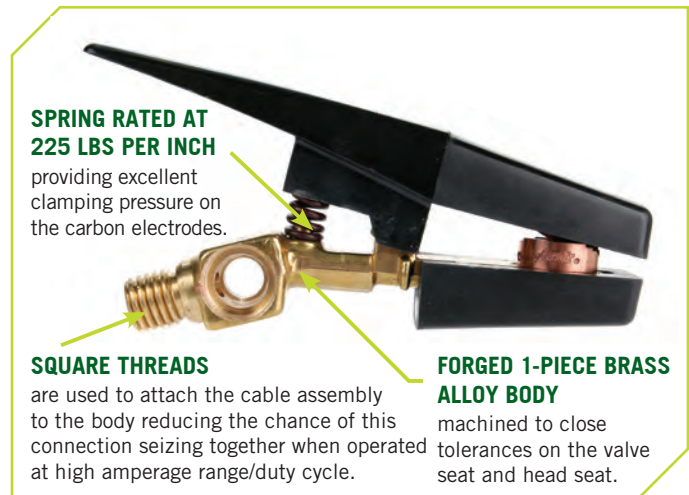
##### HIGH QUALITY CABLE HOSE

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

K3000™

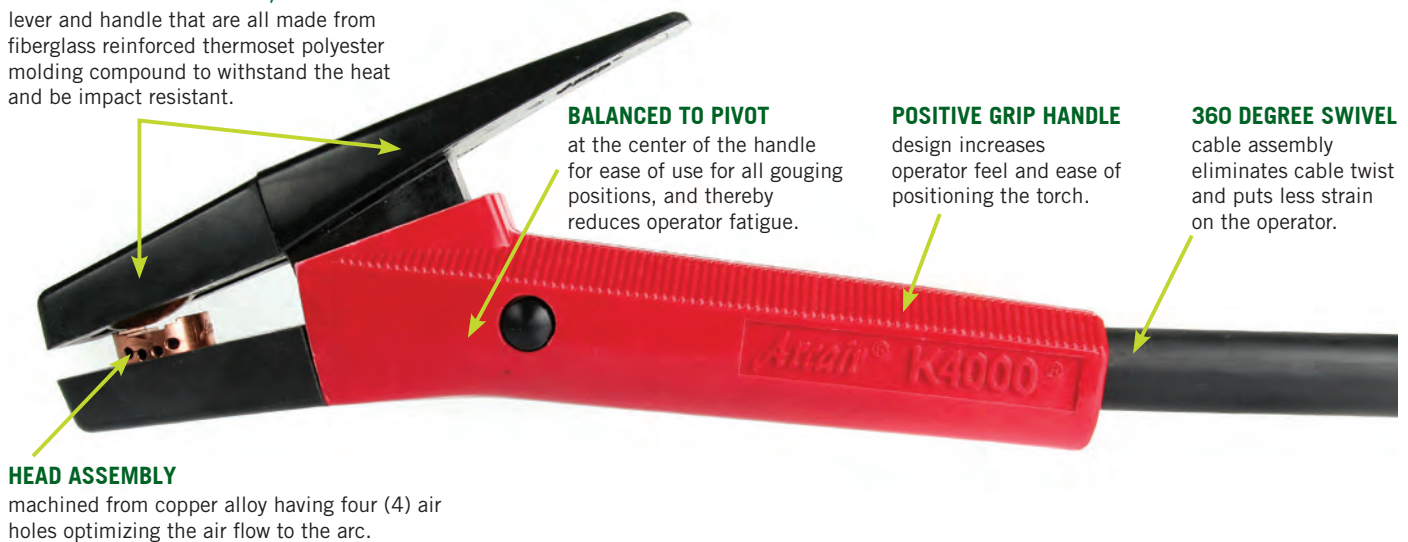


K4000®



#### 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.



# Manual Gouging Torches

ANGLE-ARC

## K3000™

Medium Duty - General repair and maintenance jobs in areas 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



GOUGING TORCHES

**ARCAIR®** Cutting and Gouging Systems

Int'l Customer Care: 1-940-381-1212 / FAX 1-940-483-8178  
VictorTechnologies.com

### 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

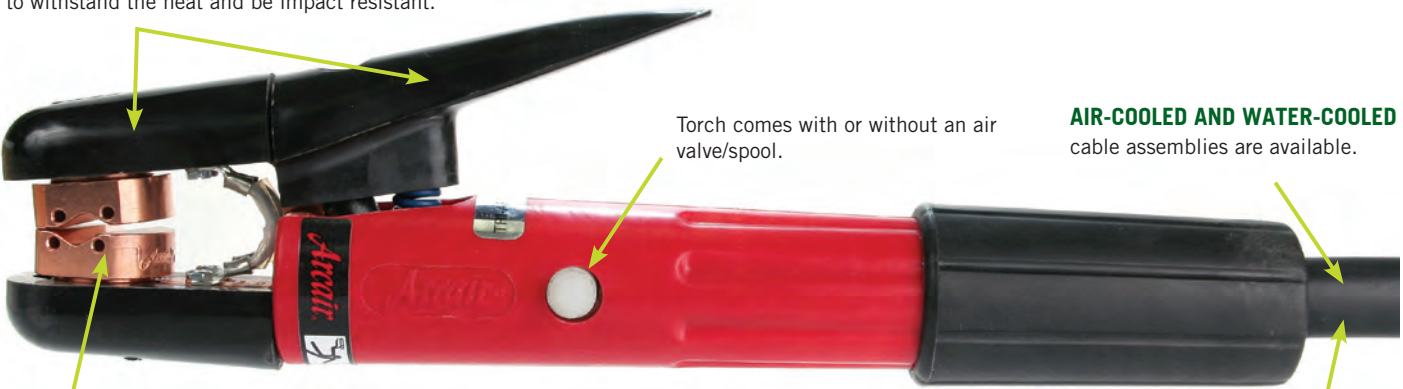
- Streamline design and high strength fluted handles reduce operator fatigue

##### 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.



Torch comes with or without an air valve/spool.

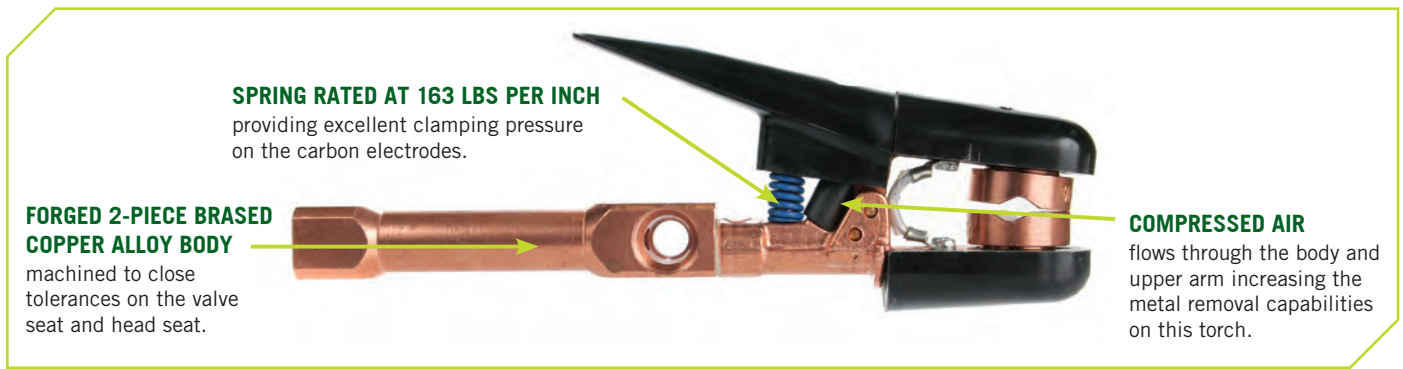
AIR-COOLED AND WATER-COOLED cable assemblies are available.

##### 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.



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

##### FORGED 2-PIECE BRASED COPPER ALLOY BODY

machined to close tolerances on the valve seat and head seat.

##### COMPRESSED AIR

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

#### 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)



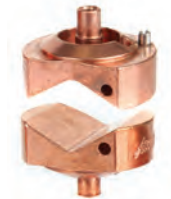
##### GENERAL PURPOSE CLEANING HEADS

- 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)



# Manual Gouging Torches

TRI-ARC

## 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 REQUIRMENTS

- 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>		
02-991-425	Torch Only	5/16" (7.9 mm) thru 3/4" (19.05 mm)
62-991-435	Torch & 7 ft (2.1 m) Cable	
94-378-298	Replacement Heads	
<b>PADWASHING HEADS</b>		
02-991-413	Torch Only	1/2" (12.7 mm)
62-991-419	Torch & 7 ft (2.1 m) Cable	
94-378-286	Replacement Heads	
02-991-414	Torch Only	5/8" (15.9 mm)
62-991-420	Torch & 7 ft (2.1 m) Cable	
94-378-289	Replacement Heads	
02-991-415	Torch Only	3/4" (19.05 mm)
62-991-421	Torch & 7 ft (2.1 m) Cable	
94-378-283	Replacement Heads	
<b>GENERAL PURPOSE CLEANING HEADS</b>		
02-991-416	Torch Only	1/2" (12.7 mm)
62-991-422	Torch & 7 ft (2.1 m) Cable	
94-378-267	Replacement Heads	
02-991-417	Torch Only	5/8" (15.9 mm)
62-991-423	Torch & 7 ft (2.1 m) Cable	
94-378-270	Replacement Heads	
02-991-418	Torch Only	3/4" (19.05 mm)
62-991-424	Torch & 7 ft (2.1 m) Cable	
94-378-273	Replacement Heads	
02-991-424	Torch Only	1" (25.4 mm)
94-378-343	Replacement Heads	
02-991-428	Torch Only	5/8" (15.9 mm)
02-991-429	Torch Only	3/4" (19.05 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

## Swivel Cable Assembly Options

K-5 Swivel Cable



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

GOUGING TORCHES

## Manual Gouging Torches

STRAIGHT HANDLE & ANGLE-ARC

### 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 CCDC Copperclad 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

ELECTRODES

### Jointed Jetrods® CCDC 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) CCDC 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) CCDC Pointed	
21-043-003	1/4" (6.4 mm) x 12" (30.5 cm) CCDC Pointed	
21-053-003	5/16" (7.9 mm) x 12" (30.5 cm) CCDC Pointed	
21-063-003	3/8" (9.5 mm) x 12" (30.5 cm) CCDC Pointed	
21-083-003	1/2" (12.7 mm) x 12" (30.5 cm) CCDC 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" 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 5/32" (4.0 mm) x 12" (30.5 cm) CCDC 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	3/8" (9.5 mm) x 5/32" (4.0 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" (30.5 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

### 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	

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	

Note: Standard 100 pieces per carton unless noted

\* - 25 pieces per carton

### Jointed Copperclad DC Electrodes

Part No.	Description	Application
22-023-003C*	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.
22-983-003C	5/32" (4.0 mm) x 12" (30.5 cm) CCDC Pointed	
22-033-003C	3/16" (4.8 mm) x 12" (30.5 cm) CCDC Pointed	
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	
22-082-003C	1/2" (12.7 mm) x 14" (35.6 cm) CCDC Pointed	

Note: Standard 50 pieces per carton unless noted

\* 100 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)



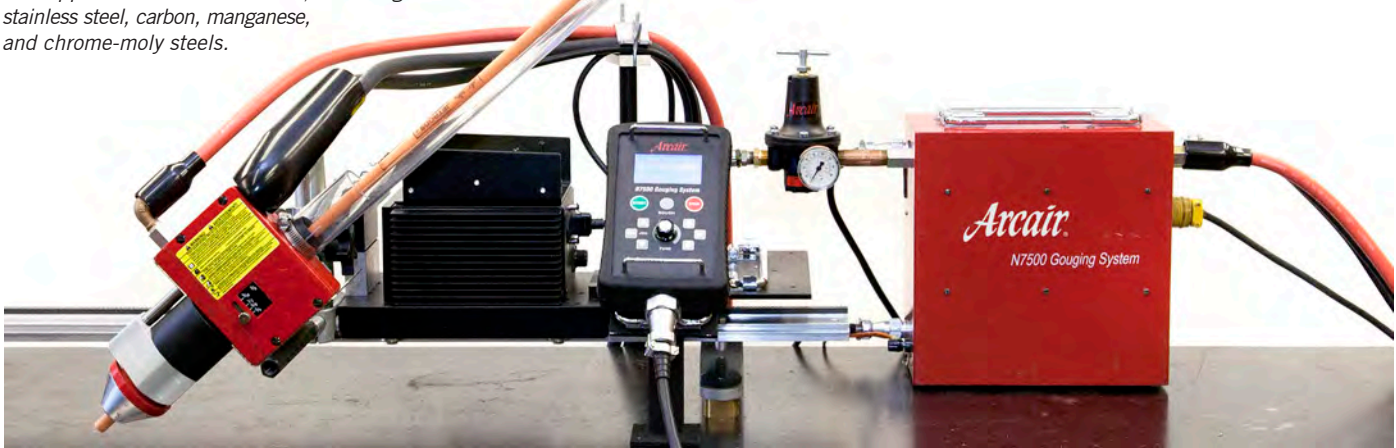
### Carbon Rod

Part No.	Description
47-183-000	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
- “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
- Patent Pending



#### Torch Head

- Redesigned Torch Head with an extended front end – gives the operator better view of the weld seam that's being back-gouged
- 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