

OXWELD®

C-43E

MACHINE CUTTING TORCH

Torch Model	PIN	Type Construction*	Length in (mm)	Weight Lbs (Kg)
C-43-01	20826	Valveless, In-Line Conn.	32(813)	9(4.1)

*See illustration on page 4.

CAUTION

These INSTRUCTIONS are for experienced operators. If you are not fully familiar with the principles of operation and safe practices for oxy-fuel gas equipment, we urge you to read our booklet "Precautions and Safe Practices for Gas Welding, Cutting, and Heating", Form 2035. Do NOT permit untrained persons to install, operate, or maintain this equipment. Do NOT attempt to install or operate this equipment until you have read and fully understand these instructions. If you do not fully understand these instructions, contact your supplier for further information.

The torch covered in these instructions is made to exact specifications. It must be used only in combination of cutting nozzles and parts manufactured by ESAB Welding & Cutting Products, and used in gas service for which it is designed. The use of other cutting nozzles and parts that cause damage or failure to the equipment will void the warranty.

WARNING

Do NOT use torch with acetylene, Using acetylene can overheat and burn torch which can cause injury to personnel in the operation area.

The C-43 Cutting Torch is for use with any of the commonly used fuel gases such as natural gas, propane, and many of the proprietary gases EXCEPT ACETYLENE. A minimum of 5 psig fuel gas pressure is required for proper operation. The C-43 was designed for automatic cut-off operations, such as hot and cold slab cut-off, slitting, shape cutting, and end cropping. It has a 1-3/8" (35 mm) diameter barrel suitable for standard torch holders.

OPERATING INSTRUCTIONS

EQUIPMENT REQUIRED

Hoses – Use 1/2-in. (12.7 mm) cutting oxygen hose with "C" size fitting.

Use 3/8-in. (9.5 mm) I.D. hose for preheat oxygen, and fuel gas with proper "B" – size fittings (9/16" – 18 right hand threads for oxygen; 9/16 – 18 left hand threads for fuel gas).

Water Cooling – The C-43 torch is equipped with two water fittings (5/8"-18 RH male). Water is recommended for torch cooling when torch is used for hot cutting operations. Connect water supply hose to water "inlet" connection and the drain hose to "outlet". Water pressure should not exceed 50 psig. Higher pressure may damage the torch. If not operating torch during cold weather, remove plug at torch head to drain water from torch so that water does not freeze and damage the parts in the torch.

Regulation Panels – OXWELD Regulation Panels are OSHA Approved and are for station regulation of the preheat gases and cutting oxygen. They include all valves, safety devices, and oxygen filter for reliable long service life. The panels are mounted to a frame which can be easily mounted to a wall or column. OXWELD Regulation panel P/N 2116395 recommended. Be sure to read and understand all instructions packed with each regulation panel before installing or operating.

Note: *For hot cutting applications - Regulation panels do not include the capability for controlling the cooling water – these must be supplied by customer.*

**Be sure this information reaches the operator.
You can get extra copies through your supplier.**



SAFETY PRECAUTIONS



WARNING

These Safety Precautions are for your protection. They summarize precautionary information from the references listed in Additional Safety Information section. Before performing any installation or operating procedures, be sure to read and follow the safety precautions listed below as well as all other manuals, material safety data sheets, labels, etc. Failure to observe Safety Precautions can result in injury or death.



PROTECT YOURSELF AND OTHERS - Some welding, cutting and gouging processes are noisy and require ear protection. Hot metal can cause skin burns and heat rays may injure eyes. Training in the proper use of the processes and equipment is essential to prevent accidents. Also:

1. Always wear safety glasses with side shields in any work area, even if welding helmets, face shields, or goggles are also required.
2. Wear flameproof gauntlet type gloves, heavy long-sleeve shirt, cuffless trousers, high-topped shoes, and a welding helmet or cap for hair protection, to protect against hot sparks and hot metal. A flameproof apron may also be desirable as protection against radiated heat and sparks.
3. Hot sparks or metal can lodge in rolled up sleeves, trousers cuffs, or pockets. Sleeves and collars should be kept buttoned, and open pockets eliminated from the front of clothing.
4. Protect other personnel from hot sparks with a suitable non-flammable partition or curtains.
5. Use goggles over safety glasses when chipping slag or grinding. Chipped slag may be hot and can travel considerable distances. Bystanders should also wear goggles over safety glasses.



FIRES AND EXPLOSIONS - Heat from a flame can act as an ignition source. Hot slag or sparks can also cause fires or explosions. Therefore:

1. Remove all combustible materials well away from the work area or completely cover the materials with a protective non-flammable covering. Combustible materials include wood, cloth, sawdust, liquid and gas fuels, solvents, paints and coatings, paper, etc.
2. Hot sparks or hot metal can fall through cracks or crevices in floors or wall openings and cause a hidden smoldering fire on the floor below. Make certain that such openings are protected from hot sparks and metal.
3. Do not weld, cut, or perform any other hot work on materials, containers, or piping until it has been completely cleaned so that no substances on the material can produce flammable or toxic vapors. Do not do hot work on closed containers. They may explode.
4. Have fire extinguishing equipment handy for instant use, such as a garden hose, a pail of water or sand, or portable fire extinguisher. Be sure you are trained in its use.
5. After completing operations, inspect the work area to be sure that there are no hot sparks or hot metal which could cause a later fire. Use fire watchers when necessary.
6. For additional information, refer to NFPA Standard 51B, "Fire Prevention in Use of Cutting and Welding Processes", which is available from the National Fire Protection Association, Batterymarch Park, Quincy, MA 02269.



FUMES AND GASES - Fumes and gases, particularly in confined spaces, can cause discomfort or injury. Do not breathe fumes or gases from welding or cutting. Therefore:

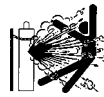
1. Always provide adequate ventilation in the work area by natural or mechanical ventilation means. Do not weld, cut, or gouge on materials such as galvanized steel, stainless steel, copper, zinc, lead, beryllium, or cadmium unless positive mechanical ventilation is provided. Do not breathe fumes and gases from these materials.
2. If you develop momentary eye, nose, or throat irritation while operating, this is an indication that ventilation is not adequate. Stop work at once and take necessary steps to improve ventilation in the work area. Do not continue to operate if physical discomfort persists.

3. Refer to ANSI/ASC Standard Z49.1 listed below for specific ventilation recommendations.
4. **WARNING:** This product, when used for welding or cutting, produces fumes or gases which contain chemicals known to the State of California to cause birth defects and, in some cases, cancer. (California Health & Safety Code §25249.5 et seq.)



EQUIPMENT MAINTENANCE - Faulty or improperly maintained equipment, such as torches, hoses and regulators, can result in poor work, but even more important, it can cause injury or death through fires. Therefore:

1. Always have qualified personnel perform the installation, troubleshooting, and maintenance work. Do not operate or repair any equipment unless you are qualified to do so.
2. Keep all oxy-fuel equipment free of grease or oil. Grease, oil, and other similar combustible materials, when ignited, can burn violently in the presence of oxygen.
3. Do not abuse any equipment or accessories. Keep equipment away from heat and wet conditions, oil or grease, corrosive atmospheres and inclement weather.
4. Keep all safety devices in position and in good repair.
5. Use equipment for its intended purpose. Do not modify it in any manner.



GAS CYLINDER HANDLING - Gas cylinders, if mishandled, can rupture or explode violently. Sudden rupture of a cylinder, valve or relief device can injure or kill you. Therefore:

1. Use the proper gas for the process and use the proper pressure reducing regulator designed to operate from the compressed gas cylinder. Do not use adaptors to mount the regulator on the cylinder. Maintain hoses and fittings in good condition. Follow manufacturer's operating instructions for mounting the regulator to the gas cylinder.
2. Always secure cylinders in an upright position by chain or strap to suitable hand trucks, benches, walls, post, or racks. Never secure cylinders to work tables or fixtures where they may become part of an electrical circuit.
3. When not in use, keep cylinder valves closed. Have the valve protection cap in place on top of the cylinder if no regulators is installed. Secure and move cylinders by using suitable hand trucks. Avoid rough handling of cylinders.
4. Locate cylinders away from heat, sparks, or flame of a welding, cutting, or gouging operation. Never strike an arc on a cylinder.
5. For additional information, refer to CGA Standard P-1, "Precautions for Safe Handling of Compressed Gases in Cylinders", which is available from the Compressed Gas Association, 1235 Jefferson Davis Highway, Arlington, VA 22202.



ADDITIONAL SAFETY INFORMATION - For more information on safe practices for oxy-fuel welding and cutting equipment, ask your distributor for a copy of "Precautions and Safe Practices for Gas Welding, Cutting, and Heating", Form 2035. Gas apparatus safety guidelines are also available on video cassettes from your distributor.

The following publications, which are available from the American Welding Society, 550 N.W. LeJuene Road, Miami, FL 33126, are recommended to you:

1. ANSI/AWS Z49.1 - "Safety in Welding and Cutting".
2. AWS F4.1 - "Recommended Safe Practices for the Preparation for Welding and Cutting of Containers and Piping That Have Held Hazardous Substances".
3. AWS SP - "Safe Practices" - Reprint, Welding Handbook.



MEANING OF SYMBOLS - As used throughout this manual: Means Attention! Be Alert! Your safety is involved.



DANGER

Means immediate hazards which, if not avoided, will result in immediate, serious personal injury or loss of life.



WARNING

Means potential hazards which could result in personal injury or loss of life.



CAUTION

Means hazards which could result in minor personal injury.

Valves – The C-43 torch is valveless. Control of the gases should be done by adjusting the regulators on the regulation panel. If a regulation panel is not used, suitable ball valves or remotely operated solenoid valves, and regulators should be installed for on-off torch control.

Pipeline Filters – Regulation panel P/N 2116395 includes an oxygen filter. If a regulation panel is not used but filters are desired, use P/N 2116734 for oxygen and P/N 2116339 for fuel gas. Filters should be installed ahead of the inlet connection of each regulator.

Adaptors/Piping – 3/4-in. (19mm) piping is recommended from each gas source to the regulators. Various commercially available adaptors will be required for the system. Be sure that all piping and adaptors are free of grease and oil. Grease, oil, and similar combustible materials once ignited burn violently in the presence of oxygen. Teflon tape or paste or an approved pipe compound must be used on all pipe threads.

Cutting Nozzles – Select desired nozzle from Cutting Data Table on page 6.

Optional Accessories

Gauge Adaptors – The following gauge adaptors are recommended for setting the gas flows (see Table). Gauge adaptors connect to the inlet connections but should be removed when cutting over hot material.

Cutting Oxygen Test Gauge Adaptor 21X48
Preheat Oxygen Test Gauge Adaptor 07X17
Fuel Gas Test Gauge Adaptor 639422

Connecting

1. Before connecting, make sure all metal seating surfaces of hoses, torch, and regulators are not damaged, clean, and free of grease and oil.
2. Connect hoses (2 oxygen; 1 fuel gas) to the proper fitting on the torch and to the manual or solenoid shutoff valves downstream of the regulator. Tighten the connecting nuts firmly using two wrenches to prevent twisting of tubes inside the torch.
3. Assemble the desired nozzle (see Table) to the torch and tighten nozzle retaining nut firmly with two 1-1/8 (29mm) open-end wrenches.

Adjusting Gas Pressures

1. Open the cutting oxygen line manual or solenoid shutoff valve. Adjust cutting oxygen regulator to the desired pressure (see Table) compensating for any line loss to the torch through hose and valve. Then immediately close the cutting oxygen shutoff valve.
2. Repeat above with the preheat oxygen, and then the fuel gas.

Note: For reliable and accurate pressure settings use gauge adaptors at torch gas inlets

TESTING FOR LEAKS

The system should be thoroughly tested for leaks when it is first hooked up, and at regular intervals thereafter. With the system pressurized down to the shutoff valves, apply Leak Test Solution suitable for oxygen service, such as P/N 998771 (8 oz. Container), on all joints and connections. Bubbling of the solution indicates leakage. If leakage is detected, tighten the connection. If this does not stop the leakage, then shut off the appropriate gas supply and open the torch valve to remove pressure from the system. Break the leaky connection, wipe metal seating surface with a clean dry cloth, and examine them for nicks and scratches. Remake the connection(s) and retest. Do not try to light the torch until you are satisfied that all connections are gas tight.

After lighting the torch and adjusting the flames, use leak test solution to check for leakage around hose connections at each valve fitting and at the nozzle nut.

Lighting And Flame Adjustment

Open the preheat oxygen and fuel gas valves and light the gas about 3 inches from the nozzle face with a friction lighter. Do NOT use a match. Use of a match can seriously burn your hand.

Adjust pressure at the regulator if necessary. The torch is designed to operate over a wide range of preheat pressures. The pressures given in the Table may be used as a starting point. Depending on the type steel being cut, small adjustments may be necessary for best performance.

Shutting Off

Close the cutting oxygen valve. Then close the preheat oxygen and fuel gas valves.

If operations are to be stopped for a half-hour or more, pressure should be released from all regulators as follows:

1. Close station valve of each gas supply.
2. Open all torch shutoff valves.
3. When pressure on each regulator gauge drops down to zero, back out the regulator pressure-adjusting screw.
4. Close torch valves.

OPERATING PRECAUTIONS

Backfire: Improper operation of the torch may cause the flames to go out with a loud “pop”. Such a backfire may be caused by contact of nozzle with the work, by spatter from the work, by the use of incorrect gas pres-

sure, or by leakage at the cutting nozzle seats due to dirt or nicks on seats or to a loose nozzle nut.

Flashback: Under certain exceptional circumstances, the flame may not “pop” out (backfire) but instead burn back inside the torch with a shrill hissing or squeal. This is called a “flashback”. A flashback should never occur if (1) the equipment is in good condition; (2) pre-heat ports on cutting nozzles or welding tips are cleaned frequently; and (3) operating pressures are correct. Should a flashback occur, IMMEDIATELY shut off the torch. Allow it to cool off for at least a minute. Then check your nozzle or tip, gas pressures, readjust regulators if necessary, and relight the torch. If flashback recurs, send the torch with the nozzle in use when flashback occurred to ESAB Remanufacturing Center, Florence, SC or to your distributor for repair.

The C-43E can be equipped for use in powder cutting operations. See your ESAB Representative or Distributor.

MAINTENANCE INSTRUCTIONS

For all repairs other than those covered below, Send the apparatus to ESAB Remanufacturing Center, Florence SC or to your ESAB distributor. Improperly repaired apparatus is hazardous.

Injector: to remove injector for cleaning or replacement, first unscrew the mixer chamber plug P/N 134Z55. Remove spring and remove injector with or w/o screw.

Examine the injector carefully, particularly the tip face projections. If it is bent or if its tip has been nicked or marred, it should be replaced by a new injector.

Before assembling inspect the torch body to make sure that it is clean and free of chips. When assembling be sure to use a new O-ring unless the old one appears to be in equal-to-new condition. Slip injector into torch then insert spring and push down hard to seat the injector against body. Then insert mixer plug and tighten plug firmly.

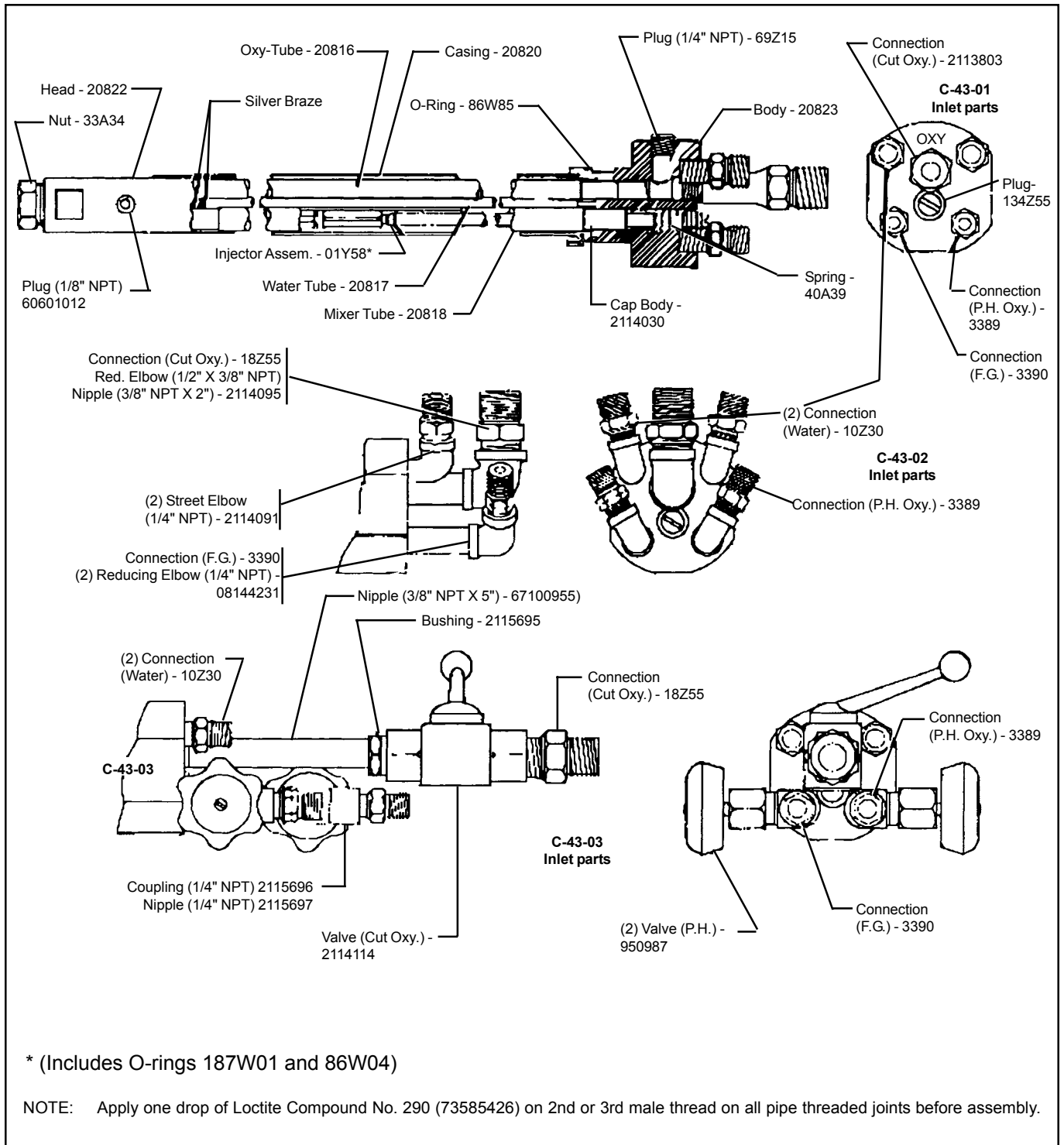
Cleaning Cutting Nozzles

Preheat Holes: If the cutting nozzle does not produce straight, uniform flames, or if any of the preheat holes become clogged, clean them by using one of the tip cleaners in the Oxweld Cleaning Kit, Part No. 753F00. Maintaining clean preheat holes is essential for quality performance of the torch.

Cutting Bores: If the cutting orifice becomes clogged or fouled, insert the sharpened, tapered end of a common wooden pencil and gently rotate until the fouling is removed. Next, insert the appropriate cleaning drill (see table) and gently push in and out. **DO NOT TWIST THE DRILL**

REPLACEMENT PARTS

To order replacement parts, identify the required parts from the drawing below and specify by part number and name. The C-43-02 (P/N 20827) and C-43-03 (P/N 20828) were discontinued in 2000. Some replacement parts will not be available after existing stock is depleted.



* (Includes O-rings 187W01 and 86W04)

NOTE: Apply one drop of Loctite Compound No. 290 (73585426) on 2nd or 3rd male thread on all pipe threaded joints before assembly.

C-43-01 Torch P/N 20826

CUTTING NOZZLES: Part Numbers, Operating Data & Cleaning Data.

GENERAL NOTES:

1. When using any of the nozzles listed in the cutting tables, the recommended hose sizes are 1/2-in. for cutting oxygen, 3/8-in. for preheat oxygen and fuel gases.
2. All gas pressures are measured at the torch inlet connections with gases flowing.
3. The tables show average values based on typical conditions. The type and quality of steel, its surface condition, the purity of oxygen, etc. will always have a bearing on the end results.
4. The cutting speeds shown in the following tables are approximate, and will vary depending on steel temperature and carbon content.

OXWELD - 1400 Series Gas Cutting Nozzles

1427 Series Natural Gas Nozzles ■ - U.S. Dimensions

Nozzle		Steel Thickness, In.	Gas Pressure, psig,			Cutting Speed, In./min.	Cleaning Drill Size		Gas Consumption cfh		
Size	Part No.		Cutting Oxygen	Preheat Oxygen	Natural Gas		Preheat	Cutting	Cutting Oxygen	Preheat Oxygen	Natural Gas
12	5470099	12	75-85	8-10	16-19	4-5	55	31	800-900	100-115	65-75
14	5470144	14	60-70	7-9	8-11	3-1/2 - 4-1/2	54	28	950-1100	115-140	75-95
16	5470100	16	55-65	9-12	11-15	3-4-1/2	53	20	1150-1330	145-175	95-115
20	5460192	20	45-55	13-18	17-23	2-1/4	52	8	1450-1700	170-225	125-150
24	5460162	24	40-50	21-25	28-33	2-3-1/2	51	C	1850-2200	225-285	170-190
28	5460193	28	30-40	28-33	39-45	2-3-1/2	50	K	1950-2400	315-350	210-235

1427 Series Natural Gas Nozzles ■ - Metric Dimensions

Nozzle		Steel Thickness, MM	Gas Pressure, psig,			Cutting Speed, In./min.	Cleaning Drill Size		Gas Consumption cfh		
Size	Part No.		Cutting Oxygen	Preheat Oxygen	Natural Gas		Preheat	Cutting	Cutting Oxygen	Preheat Oxygen	Natural Gas
12	5470099	300	5.3-6.0	0.6-0.7	1.1-1.3	100-125	55	31	22.7-25.5	2.8-3.3	1.8-2.1
14	5470144	350	4.2-4.9	0.5-0.6	0.6-0.8	90-115	54	28	26.9-31.2	3.3-4.0	2.1-2.7
16	5470100	400	3.9-4.6	0.6-0.8	0.8-1.1	75-115	53	20	32.6-37.7	4.1-5.0	2.7-3.3
20	5460192	500	3.2-3.9	0.9-1.3	1.2-1.6	65-100	52	8	41.1-48.1	4.8-6.4	3.5-4.2
24	5460162	600	2.8-3.5	1.5-1.8	2.0-2.3	50-90	51	C	52.4-62.3	7.2-8.1	4.8-5.4
28	5460193	700	2.1-2.8	2.0-2.3	2.7-3.2	50-90	50	K	55.2-68.0	8.9-9.9	5.9 - 6.7

■ 1427 Series Nozzles - Cutting speeds are based on cutting steel at room temperature and have straight cylindrical cutting bores.

1431 Series Fuel Gas Nozzles ■ - U.S. Dimensions

Nozzle		Steel Thickness, In.	Gas Pressure, psig,			Cutting Speed, In./min.	Cleaning Drill Size		Gas Consumption cfh		
Size	Part No.		Cutting Oxygen	Preheat Oxygen	Natural Gas		Preheat	Cutting	Cutting Oxygen	Preheat Oxygen	Natural Gas
120	66Z59	3-6	80-115	9	17	18-30	55	31	1350	140	110
140	66Z60	6-10	80-115	10	13	10-20	54	28	1850	225	130
160	66Z61	10-16	80-115	11	14	10-20	53	20	2100	240	135
200	66Z62	16-20	80-115	15	20	8-20	52	8	3100	275	175
240	66Z63	20-24	80-115	22	30	6-17	51	C	4700	335	225
280	66Z64	24-28	60-80	30	42	4-16	50	K	4900	405	275

1431 Series Fuel Gas Nozzles ■ - Metric Dimensions

Nozzle		Steel Thickness, MM	Gas Pressure, psig,			Cutting Speed, In./min.	Cleaning Drill Size		Gas Consumption cfh		
Size	Part No.		Cutting Oxygen	Preheat Oxygen	Natural Gas		Preheat	Cutting	Cutting Oxygen	Preheat Oxygen	Natural Gas
120	66Z59	75-150	5.6-8.1	0.6	1.2	450-760	55	31	38.2	4.0	3.1
140	66Z60	150-250	5.6-8.1	0.7	0.9	250-500	54	28	52.4	6.4	3.7
160	66Z61	250-400	5.6-8.1	0.8	1.0	250-500	53	20	59.5	6.8	3.8
200	66Z62	400-500	5.6-8.1	1.1	1.4	200-500	52	8	87	87.8	5.0
240	66Z63	500-600	5.6-8.1	1.5	2.1	150-430	51	C	133.1	9.5	6.4
280	66Z64	600-700	4.2-5.6	2.1	3.0	100-400	50	K	138.8	11.5	7.8

** 1431 Series Nozzles - Cutting speeds are based on cutting steel at temperatures over 1000°F (1832°C), and have tapered divergent cutting bores. These nozzles are used in continuous casting cut-off or plate ripping applications where it is necessary to 'slice through' quickly.

Ring Flame Fuel Gas Nozzles*** (2-Piece) - U.S. Dimensions

Nozzle Core Size	Nozzle Core Part No.	Nozzle Outer Sleeve Part No.	Steel Thickness In.	Gas Pressure, psig		Natural Gas	Cutting Speed, In./min.	Gas Consumption,		
				Cutting Oxygen	Preheat Oxygen			Cutting Oxygen	Preheat Oxygen	Natural Gas
120	2121848	2119485*	Up to 6	90-115	40	38	18-30	1350	410	215
140	2119486	2119485*	6-10				10-20	1850		
160	2119578	2119485*	10 & UP				10-20	2100		

Ring Flame Fuel Gas Nozzles*** (2-Piece) - Metric Dimensions

Nozzle Core Size	Nozzle Core Part No.	Nozzle Outer Sleeve Part No.	Steel Thickness In.	Gas Pressure, psig		Natural Gas	Cutting Speed, In./min.	Gas Consumption,		
				Cutting Oxygen	Preheat Oxygen			Cutting Oxygen	Preheat Oxygen	Natural Gas
120	2121848	2119485*	Up to 150	6.3-8.1	2.8	2.7	450-760	38.2	11.6	6.1
140	2119486	2119485*	150-250				250-500	52.4		
160	2119578	2119485*	250 & Up				250-500	59.5		

*** The "Ring Flame" Nozzles-Cutting speeds are based on cutting steel at temperatures over 1000° (1832°C), and have tapered divergent cutting bores. Applications are the same as the 1427 series nozzles. The ring flame design has a preheat gas ring (instead of holes) surrounding the cutting bore and is less susceptible to fouling due to slag blow back. The ring flame nozzles can operate up to 5-in. (127mm) off the work surface and corner starting is less critical.

**ESAB Welding & Cutting Products, Florence, SC Welding Equipment
COMMUNICATION GUIDE - CUSTOMER SERVICES**

A. CUSTOMER SERVICE QUESTIONS:

Order Entry Product Availability Pricing Delivery
Order Changes Saleable Goods Returns Shipping Information

Eastern Distribution Center

Telephone: (800)362-7080 / Fax: (800) 634-7548

Central Distribution Center

Telephone: (800)783-5360 / Fax: (800) 783-5362

Western Distribution Center

Telephone: (800) 235-4012/ Fax: (888) 586-4670

B. ENGINEERING SERVICE: Telephone: (843) 664-4416 / Fax : (800) 446-5693

Welding Equipment Troubleshooting Hours: 7:30 AM to 5:00 PM EST
Warranty Returns Authorized Repair Stations

C. TECHNICAL SERVICE: Telephone: (800) ESAB-123/ Fax: (843) 664-4452

Part Numbers Technical Applications Hours: 8:00 AM to 5:00 PM EST
Performance Features Technical Specifications Equipment Recommendations

D. LITERATURE REQUESTS: Telephone: (843) 664-5562 / Fax: (843) 664-5548

Hours: 7:30 AM to 4:00 PM EST

E. WELDING EQUIPMENT REPAIRS: Telephone: (843) 664-4487 / Fax: (843) 664-5557

Repair Estimates Repair Status Hours: 7:30 AM to 3:30 PM EST

F. WELDING EQUIPMENT TRAINING:

Telephone: (843)664-4428 / Fax: (843) 679-5864
Training School Information and Registrations Hours: 7:30 AM to 4:00 PM EST

G. WELDING PROCESS ASSISTANCE:

Telephone: (800) ESAB-123 / Fax: (843) 664-4454 Hours: 7:30 AM to 4:00 PM EST

H. TECHNICAL ASST. CONSUMABLES:

Telephone : (800) 933-7070 Hours: 7:30 AM to 5:00 PM EST

IF YOU DO NOT KNOW WHOM TO CALL

Telephone: (800) ESAB-123/ Fax: (843) 664-4452/ Web:<http://www.esab.com>

Hours: 7:30 AM to 5:00 PM EST

