



International Equipment Catalogue



A LINCOLN ELECTRIC COMPANY

The Harris Products Group

The Harris Products Group was formed by combining two strong names in the brazing and soldering consumables and the gas apparatus business: Harris Calorific and J.W. Harris.

The merger resulted from series of acquisitions by The Lincoln Electric Company.

Harris Calorific is a manufacturer of gas welding and cutting equipment, industrial and specialty gas regulation equipment and gas distribution systems. J.W. Harris is a major producer of soldering, brazing and welding alloys; it manufactures high quality alloys and specializes in phosphorus/ copper and phosphorus/ copper/ silver brazing alloys for the air-conditioning and refrigeration industries.

The result of this merger is a very powerful combination of customer service teams working together to provide best-in-class service to Harris customers. The Harris products are manufactured by skilled craftsmen using state-of-art technology, with a focus on quality and product testing, to provide customers with the best and most reliable products: 100% tested, 100% of the time, for consistency and precision.

The Harris Products Group includes facilities in the United States, Italy, Poland, Spain, Germany, Mexico and Brazil, giving the Company a broad global footprint.

Today Harris is very proud to supply products and equipment of the highest quality to the global cutting, brazing, soldering and welding markets in over 95 different countries.



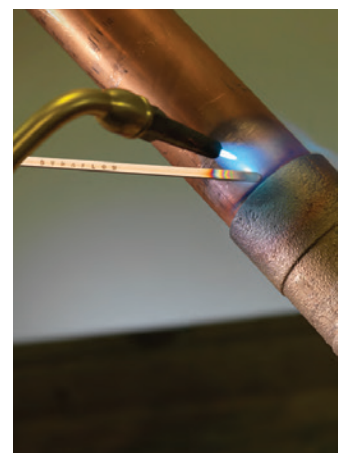
CUT



WELD



SOLDER



BRAZE

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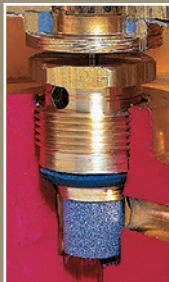


REGULATORS

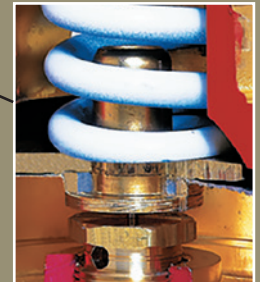
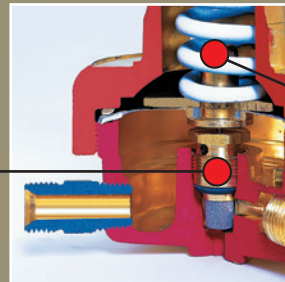


Harris has a heritage of designing and manufacturing precision-built industrial regulators with durable, time-tested materials. The Harris industrial regulators put it all together:

- proven safety features,
- quality manufacturing processes,
- consistency in performance,
- 7 years warranty*,
- the best overall value.



One piece encapsulated seat with internal filter



Tamper proof, self reseating internal safety relief valve IRV

Every Harris industrial regulator has a unique, one-piece encapsulated seat with an internal filter. In addition to safety benefits of keeping dangerous particulates from entering the high-pressure seating area, the Harris encapsulated seat also helps prevent regulator failure.

GENERAL FEATURES:

- Harris regulators are designed and manufactured according to the most recent international standards:
 - ISO 2503 for cylinder pressure and flow regulators;
 - pressure gauges conform to ISO 5171;
- High pressure capsule seat with PTFE (Teflon) sealing surface;
- Compressed gas regulators "D" version have tamperproof self-reseating internal safety relief valve (IRV);
- All regulators supplied with inlet and outlet to suit country.

"Harris makes products that are **durable and built to last**, that's why we offer a 7-years warranty on our industrial regulators."



* limited, details in "Warranty terms and conditions"

25GX

MODEL



SINGLE STAGE CYLINDER REGULATOR

MODEL SHOWN:
25GX-1,5-AC

APPLICATIONS:

Heavy duty, large, strong regulator for the professionals.

FEATURES:

- ▶ Forged brass body for maximum strength;
- ▶ Maximum inlet pressure of 230 bar;
- ▶ Enough flow to cut up to 400 mm steel;
- ▶ Large Ø 70 mm diaphragm stabilizes working pressure;
- ▶ Durable chromed bonnet;
- ▶ Side entry.



MODEL NO.	GAS	MAX INLET PRESSURE (bar)	DELIVERY PRESSURE (bar)	MAX AIR FLOW (m³/h)	DELIVERY PRESSURE GAUGE (bar)	SUPPLY PRESSURE GAUGE (bar)
25GX-1,5-AC	Acetylene	25	0-1,5	52	0-2,5	0-40
25GX-4-LP	Propane	25	0-4	25	0-6	0-40
25GX-D4-0X	Oxygen	230	0-4	112	0-6	0-315
25GX-D4*	Argon, CO ₂ , Nitrogen, Air, Methane	230	0-4	112	0-6	0-315
25GX-AD-4*	Helium, Hydrogen	230	0-4	112	0-6	0-315
25GX-D10-0X	Oxygen	230	0-10	170	0-16	0-315
25GX-D10*	Argon, CO ₂ , Nitrogen, Air, Methane	230	0-10	170	0-16	0-315
25GX-AD-10*	Helium, Hydrogen	230	0-10	170	0-16	0-315
25GX-D15-0X	Oxygen	230	0-15	275	0-25	0-315
25GX-D15*	Argon, CO ₂ , Nitrogen, Air, Methane	230	0-15	275	0-25	0-315
25GX-AD-15*	Helium, Hydrogen	230	0-15	275	0-25	0-315

*The regulator is available for all the listed gases. When ordering always specify gas.

S45

MODEL



SINGLE STAGE WITH TWO GAUGES

MODEL SHOWN:
S45S-1,5-AC

APPLICATIONS:

Heavy duty, large, strong regulator for the professionals.

FEATURES:

- ▶ Forged brass body for maximum strength;
- ▶ Maximum inlet pressure of 230 bar;
- ▶ Enough flow to cut up to 400 mm steel;
- ▶ Large Ø 70 mm diaphragm stabilizes working pressure;
- ▶ Side entry (vertical optional);
- ▶ Diaphragm in Stainless Steel;
- ▶ Valve seat in PTFE (Teflon);
- ▶ Brass T-screw.



MODEL NO.	GAS	MAX INLET PRESSURE (bar)	DELIVERY PRESSURE (bar)	MAX AIR FLOW (m³/h)	DELIVERY PRESSURE GAUGE (bar)	SUPPLY PRESSURE GAUGE (bar)
S45S1,5-AC	Acetylene	25	0-1,5	52	52	0-40
S45S-4-LP	Propane	25	0-4	25	25	0-40
S45DS-4-0X	Oxygen	230	0-4	112	112	0-315
S45DS-4	Argon, CO ₂ , Nitrogen, Air, Helium, Hydrogen, Methane	230	0-4	112	112	0-315
S45DS-10-0X	Oxygen	230	0-10	112	170	0-315
S45DS-10	Argon, CO ₂ , Nitrogen, Air, Helium, Hydrogen, Methane	230	0-10	170	170	0-315

*The regulator is available for all the listed gases. When ordering always specify gas.

896

MODEL



TWO STAGE WITH TWO GAUGES

MODEL SHOWN:
896-1,5-AC

APPLICATIONS:

Used where stable outlet pressure is required; Ideal for quality cutting applications, laboratory systems or precision machine cutting. Also ideal for heavy machine cutting, hand cutting and gouging.

FEATURES:

- ▶ Forged brass body for maximum strength;
- ▶ Maximum inlet pressure of 230 bar;
- ▶ First stage reduces full cylinder pressure by approximately 90%;
- ▶ Large Ø 70 mm second stage diaphragm accurately controls delivery pressure;
- ▶ Durable chromed bonnet;
- ▶ Side entry (vertical optional);
- ▶ "B" version fitted with black bonnet and black gauge case.



MODEL NO.	GAS	MAX INLET PRESSURE (bar)	DELIVERY PRESSURE (bar)	MAX AIR FLOW (m³/h)	DELIVERY PRESSURE GAUGE (bar)	SUPPLY PRESSURE GAUGE (bar)
896-1,5-AC	Acetylene	25	0-1,5	25	0-2,5	0-40
896-4-LP	Propane	25	0-4	19	0-6	0-40
896D-4-OX	Oxygen	230	0-4	95	0-6	0-315
896D-4*	Argon, CO ₂ , Nitrogen, Air, Helium, Hydrogen, Methane	230	0-4	95	0-6	0-315
896D-10-OX	Oxygen	230	0-10	100	0-16	0-315
896D-10*	Argon, CO ₂ , Nitrogen, Air, Helium, Hydrogen, Methane	230	0-10	100	0-16	0-315
896D-15-OX	Oxygen	230	0-15	120	0-25	0-315
896D-15*	Argon, CO ₂ , Nitrogen, Air, Helium, Hydrogen, Methane	230	0-15	120	0-25	0-315

*The regulator is available for all the listed gases. When ordering always specify gas.

651

MODEL



TWO STAGE FLOWMETER REGULATOR WITH SHIELDING GAS SAVING FEATURE

MODEL SHOWN:
651-30L-AR

APPLICATIONS:

All types of welding. Designed to deliver high accuracy gas flow and to reduce the consumption of shielding gas.

FEATURES:

- ▶ Two Stage flowmeter regulator;
- ▶ Forged brass body for maximum strength;
- ▶ Cylinder gas supplied;
- ▶ Inlet filter to protect against contamination;
- ▶ Precise gas flow control;
- ▶ Strong, resistant with good 360° visibility flowmeter made of polycarbonate;
- ▶ Side entry;
- ▶ Lockable version available.



MODEL NO.	GAS	MAX INLET PRESSURE (bar)	FLOW (Lpm)	SUPPLY PRESSURE GAUGE (bar)	FLOWGAUGE (Lpm)
651-30L-AR	Argon / CO ₂	300	0-30	0-400	0-34
651-20L-AR	Argon / CO ₂	300	0-20	0-400	0-20
651-20L-ARH	Argon / H ₂	300	0-20	0-400	0-20

351

MODEL



ECONOMICAL ZERO COMPENSATED FLOWMETER REGULATOR

MODEL SHOWN:
351-30L-CD

APPLICATIONS:

Light duty gas shielded welding.

FEATURES:

- ▶ Built smart and priced economically;
- ▶ Compact design;
- ▶ Design is more resistant to CO₂ freeze-up and gauge damage than typical flow control devices;
- ▶ Saves gas - operates at pressures lower than typical.



MODEL NO.	GAS	MAX INLET PRESSURE (bar)	FLOW (Lpm)	SUPPLY PRESSURE GAUGE (bar)	FLOWGAUGE (Lpm)
351-30L-AR	Argon	230	0-30	0-315	0-30
351-30L-CD	CO ₂	230	0-30	0-315	0-30

D-F 801

MODEL



FLOWMETER REGULATOR

MODEL SHOWN:
801DB-30-F

APPLICATIONS:

Ideal for all welding applications.

FEATURES:

- ▶ Forged brass body for maximum strength;
- ▶ Maximum inlet pressure 230 bar;
- ▶ "B" version fitted with black bonnet and black gauge case.



MODEL NO.	GAS	MAX INLET PRESSURE (bar)	FLOW (Lpm)	SUPPLY PRESSURE GAUGE (bar)	FLOWGAUGE (Lpm)
801D-15-F-AR/CD	Argon / CO ₂	230	0-15	0-315	0-15
801DB-15-F-AR/CD					
801D-30-F-AR/CD	Argon / CO ₂	230	0-30	0-315	0-30
801DB-30-F-AR/CD					
801D-20-F-FG	Formiergas	230	0-20	0-315	0-20
801DB-20-F-FG					
801D-50-F-FG	Formiergas	230	0-50	0-315	0-50
801DB-50-F-FG					

DB-F 811

MODEL



ELECTRICALLY HEATED FLOWMETER REGULATOR

MODEL SHOWN:
811DB-30-F

APPLICATIONS:

Ideal for all welding applications where high and continuous flow of CO₂ is required with accurate flow control.

FEATURES:

- ▶ Maximum inlet pressure 230 bar;
- ▶ CE marked;
- ▶ Two independent heating elements controlled by thermostat;
- ▶ Stabilized temperature up to 30 Lpm continuous CO₂;
- ▶ Overheating protection with resettable thermal fuse;
- ▶ Insulation IP 64 (EN 60529);
- ▶ Voltage: 110 and 240 volts versions;
- ▶ 3 meters long power cable.



MODEL NO.	GAS	MAX INLET PRESSURE (bar)	FLOW (Lpm)	SUPPLY PRESSURE GAUGE (bar)	FLOWGAUGE (Lpm)
811DB-15-F	CO ₂	230	0-15	0-315	0-15
811DB-30-F	CO ₂	230	0-30	0-315	0-30

987

MODEL



HIGH PRESSURE CYLINDER REGULATOR

MODEL SHOWN:
987AS-170

APPLICATIONS:

- ▶ Designed to operate with high pressure cylinder;
- ▶ High pressure testing, charging accumulators, pressurising aircraft struts, oil refineries, chemical plants, research laboratories and general industry;
- ▶ Ideal also for high pressure manifold distribution.

FEATURES:

- ▶ Maximum inlet pressure 300 bar;
- ▶ Stainless steel diaphragm on first stage- no internal contamination;
- ▶ High pressure capsule seat with Kel-F (CTFE) sealing surface;
- ▶ Corrosion resistant, forged brass, body and bonnet;
- ▶ Bronze bonnet bushing and stainless steel T screw;
- ▶ Inlet is heavy duty- 15 mm thread with metal to metal seal;
- ▶ Outlet is a 1/4" external diameter copper tube compression fitting;
- ▶ Models available for all non-corrosive compressed gases;
- ▶ Same regulator used for lightweight gases, without vibration.



MODEL NO.	GAS	MAX INLET PRESSURE (bar)	DELIVERY PRESSURE (bar)	MAX AIR FLOW (m ³ /h)	DELIVERY PRESSURE GAUGE (bar)	SUPPLY PRESSURE GAUGE (bar)
987S-100*	Argon, CO ₂ , Nitrogen, Air, Helium, Hydrogen, Oxygen, Methane	300	0-100	400	0-315	0-400
987AS-170*	Argon, CO ₂ , Nitrogen, Air, Helium, Hydrogen, Oxygen, Methane	300	0-170	500	0-315	0-400
CLIMATESTER	Nitrogen	300	0-55	120	0-70	0-400

*The regulator is available for all the listed gases. When ordering always specify gas.

8700

MODEL



HIGH PRESSURE CYLINDER REGULATOR

MODEL SHOWN:
8700

APPLICATIONS:

Used where stable outlet pressure is required; Ideal for quality cutting applications, laboratory systems or precision machine cutting. Also ideal for heavy machine cutting, hand cutting and gouging.

FEATURES:

- ▶ Forged brass body for maximum strength;
- ▶ Maximum inlet pressure of 230 bar;
- ▶ First stage reduces full cylinder pressure by approximately 90%;
- ▶ Large Ø 70 mm second stage diaphragm accurately controls delivery pressure;
- ▶ Durable chromed bonnet;
- ▶ Side entry (vertical optional);
- ▶ "B" version fitted with black bonnet and black gauge case.



MODEL NO.	GAS	MAX INLET PRESSURE (bar)	DELIVERY PRESSURE (bar)	MAX AIR FLOW (m ³ /h)	DELIVERY PRESSURE GAUGE (bar)	SUPPLY PRESSURE GAUGE (bar)
8700 3000psi*	Argon, CO ₂ , Nitrogen, Air, Helium, Hydrogen, Oxygen, Methane	380	0-205	330	0-280	0-400
8700 4500psi*	Argon, CO ₂ , Nitrogen, Air, Helium, Hydrogen, Oxygen, Methane	380	0-300	330	0-400	0-400

*The regulator is available for all the listed gases. When ordering always specify gas.

603

MODEL



INERT GAS GUARD

MODEL SHOWN:
603

APPLICATIONS:

Designed to eliminate the pressure surge at the beginning of each weld in MIG/TIG welding, maintains a constant flow and pressure with each weld, permits gas savings over 60%.

FEATURES:

- ▶ Harris Inert Gas Guards are designed to save shielding gases in two ways:
 - by reducing the gas surge when a MIG gun or TIG torch is activated. As they are designed to reduce the pressure held in supply hose, gas waste is reduced when the gun or torch is triggered;
 - by delivering a controlled flow rate.
- ▶ Operators will typically set shielding gas flow rates higher than necessary for a welding operation. Once set by a supervisor, the Inert Gas Guard delivers the precise amount of flow for the operation, eliminating the needless waste of gas.

WHERE TO USE:

- ▶ Connect Model 603 between your existing flowmeter and hose to torch;
- ▶ Table below shows part numbers to fit each flowmeter outlet thread.



MODEL NO.	GAS	MAX INLET PRESSURE (bar)	DELIVERY PRESSURE (bar)	INLET	OUTLET
603Z-001				G 3/8"-RH-UNI ISO 228	G 3/8" A-RH-UNI ISO 228
603Z-002	Argon / CO ₂	15	0.6-0.9	9/16"-18-UNF-2B-RH	9/16"-18-UNF-2A-RH
603Z-003				G 1/4"-RH-UNI ISO 228	G 1/4" A-RH-UNI ISO 228



THE HARRIS PRODUCTS GROUP
www.harrisproductsgroup.com

CUTTING EQUIPMENT



Harris offers torches specifically designed for the best performance possible with each fuel gas.

Harris cutting torches feature brazed connections for strength and durability. All torches are available for use with all fuel gases and are available with cutting capacities of up to 1000 mm.

OVERVIEW

Harris specializes in straight cutting torches that use readily available, low cost and safe alternate fuels. Harris pioneered and perfected the low-pressure injector mixer that maximizes performance when using alternate fuels.

Designed and manufactured according to ISO 5172.

TYPICAL APPLICATIONS

- Metal fabrication
- Shipbuilding
- Maintenance
- Construction

Standard torches are not supplied with inlet hose connections or cutting tips.



VH31

MODEL

VICTOR® STYLE HANDLE

MODEL SHOWN:
VH31 with FBA

FEATURES:

- ▶ Welds up to 50 mm;
- ▶ Cuts up to 200 mm;
- ▶ Tough extruded brass handle;
- ▶ Stainless steel ball valves.



PART NO.	GAS COMPATIBLE CUTTING ATTACHMENT	THREAD OXYGEN	THREAD FUEL GAS	WEIGHT (Kg)	LENGTH (mm)
VH31	VH24	9/16"-18-UNF-RH	9/16"-18-UNF-LH	0,751	283

Available with or without FBA, please specify.

VH24

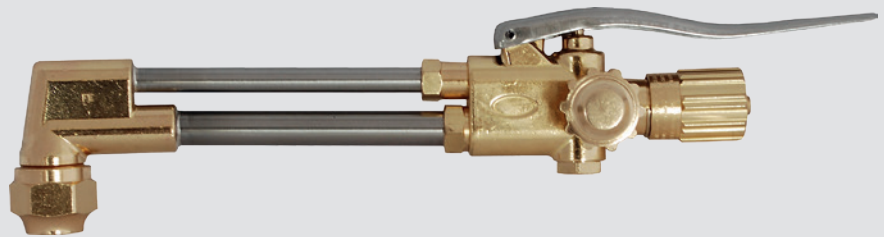
MODEL

VICTOR® STYLE CUTTING ATTACHMENT

MODEL SHOWN:
VH24

FEATURES:

- ▶ Cuts up to 200 mm;
- ▶ Spiral mix system;
- ▶ Design for maximum operator safety;
- ▶ Stainless steel Tubes;
- ▶ Use with 1-101-HV and GPN.



PART NO.	HEAD ANGLE	COMPATIBLE CUTTING TIPS	COMPATIBLE HANDLE	WEIGHT (Kg)	LENGTH (mm)
VH24	90°	1-101-HV & GPN	VH31	0,855	253

V242

MODEL

VICTOR® STYLE HAND CUTTING TORCH

MODEL SHOWN:
V242

FEATURES:

- ▶ Cuts up to 200 mm;
- ▶ Head mixing and equal pressure design for maximum operator safety;
- ▶ Triangular tube design;
- ▶ Brazed tube connections;
- ▶ Use with 1-101-HV and GPN tips.



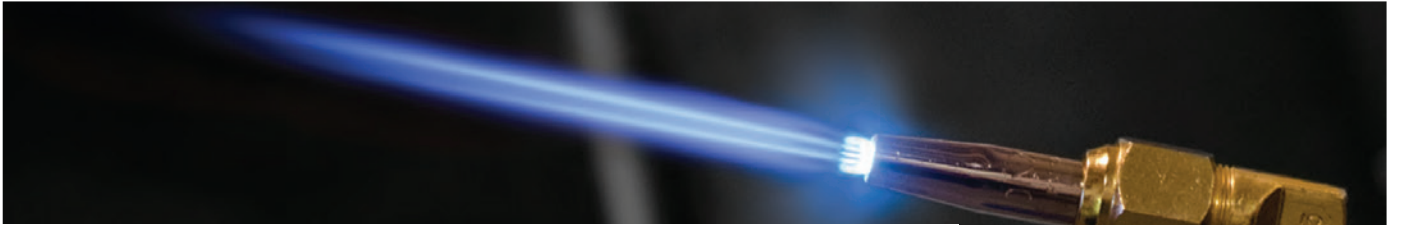
V242 EQUAL PRESSURE TORCHES (FOR ACETYLENE AND ALTERNATIVE FUELS)

90°HEAD		70°HEAD		LENGTH (mm)
PART NO.	WEIGHT (Kg)	PART NO.	WEIGHT (Kg)	
V242-2	1,30	V242A	1,30	470
V242-2L	1,35	V242A-L	1,35	530
V242-2L-36	1,70	V242A-L-36	1,70	900

Available with or without FBA, please specify.



**TOUGH JOBS DEMAND
RUGGED EQUIPMENT
THAT'S WHY PROS
CHOOSE HARRIS**



1-101-I HV MODEL

OXY-ACETYLENE ONE PIECE CUTTING TIPS

MODEL SHOWN:
1-101-HV

► Oxy-Acetylene Tip Chart - One Piece



PART NO.	PLATE THICKNESS (mm)	TIP SIZE	OXYGEN (bar)	ACETYLENE (bar)
1-101-000HV	0 - 3	000	1,4 - 1,7	0,20 - 0,35
1-101-00HV	3 - 8	00	1,4 - 1,7	0,20 - 0,35
1-101-0HV	8 - 15	0	1,7 - 2,4	0,20 - 0,35
1-101-1HV	15 - 25	1	2,1 - 2,4	0,20 - 0,35
1-101-2HV	25 - 50	2	2,4 - 3,1	0,20 - 0,50
1-101-3HV	50 - 75	3	2,8 - 3,4	0,30 - 0,70
1-101-4HV	75 - 100	4	2,8 - 3,4	0,35 - 0,70
1-101-5HV	100 - 150	5	3,1 - 3,8	0,50 - 0,90
1-101-6HV	150 - 200	6	3,1 - 3,8	0,50 - 1,00

GPN MODEL

OXY-PROPANE/NATURAL GAS TIP CHART - TWO PIECE

MODEL SHOWN:
GPN

► Oxy-Propane/Natural Gas Tip Chart - Two Piece



PART NO.	PLATE THICKNESS (mm)	TIP SIZE	OXYGEN (bar)	FUEL GAS (bar)
GPN-000	0 - 3	000	1,4 - 1,7	0,15 - 0,35
GPN-00	3 - 8	00	1,4 - 1,7	0,15 - 0,35
GPN-0	8 - 15	0	1,7 - 2,4	0,20 - 0,35
GPN-1	15 - 25	1	2,1 - 2,4	0,20 - 0,40
GPN-2	25 - 50	2	2,4 - 3,1	0,20 - 0,55
GPN-3	50 - 75	3	2,8 - 3,4	0,30 - 0,60
GPN-4	75 - 100	4	2,8 - 3,4	0,40 - 0,60
GPN-5	100 - 150	5	3,1 - 3,8	0,40 - 0,70
GPN-6	150 - 200	6	3,1 - 3,8	0,40 - 0,80



MACHINE CUTTING



Harris machine cutting torches are designed to handle all types of machine cutting applications. Rugged and dependable, these torches provide up to 380 mm cutting capacity. Harris machine cutting torches are available in two tube and three tube design for all fuel gases at pressures as low as 0,015 bar.

2TF
198
MODEL

MACHINE CUTTING TORCH

MODEL SHOWN:
198-2T
198-2TF

FEATURES:

- ▶ Solid head for maximum strength;
- ▶ Standard 32 mm or 35 mm diameter barrel;
- ▶ Inlet threads 9/16 x 18 UNF;
- ▶ Quick opening cutting oxygen valve for immediate full flow;
- ▶ Separate preheat and cutting oxygen valves for high and low preheat control;
- ▶ Cutting capacity up to 380 mm;
- ▶ Use with 6290 cutting tips.



EQUAL PRESSURE "E" TYPE TORCHES (FOR ACETYLENE AND ALTERNATIVE FUELS)

PART NO.	STYLE	TYPE	WEIGHT (Kg)	LENGTH (mm)	BARREL Ø (mm)
198-2TE	3 tube	Equal pressure	1,33	250	32
198- 2F	2 tube	Low pressure	1,28	250	32
198-2TF	3 tube	Low pressure	1,33	250	32

VVC 6290 MODEL

MACHINE CUTTING TIPS

MODEL SHOWN:
6290-VVC
6290-NH

FEATURES:

- ▶ Minimalize kerf;
- ▶ Increased cutting speeds, reduces heat input;
- ▶ High quality machine cuts, reduces afterwork;
- ▶ Used with low cost fuel gases.



6290-VVC HIGH SPEED OXY-PROPANE CUTTING TIP CHART - PLATED SHELL

PART NO.	PLATE THICKNESS (mm)	CUTTING SPEED (mm/min)	CUTTING OX PRESSURE (bar)	PREHEAT OX PRESSURE (High1 - Low) (bar)	CUTTING OX FLOW (l/h)	PREHEAT OX FLOW (High - Low) (l/h)	PREHEAT FUEL FLOW (High - Low) (l/h)	HEATING POWER (High - Low) (Kcal/h)	KERF WIDTH (mm)
6290-5/0VVC	1 - 4	750 - 550	4,0	0,7 - 0,4	650	1410 - 900	350 - 230	7800 - 5100	1,3
6290-4/0VVC	4 - 6	700 - 520	2,5	1,0 - 0,5	1130	1410 - 900	350 - 230	7800 - 5100	1,5
6290-3/0VVC	6 - 9	650 - 480	5,0	2,5 - 0,7	2260	2800 - 1200	700 - 300	15600 - 6700	1,8
6290-00VVC	9 - 12,5	630 - 450	5,0	2,5 - 0,7	2540	2800 - 1200	700 - 300	15600 - 6700	1,8
6290-0VVC	12,5 - 20	600 - 400	6,0	2,5 - 0,7	3530	2800 - 1200	700 - 300	15600 - 6700	2,0
6290-0½VVC	20 - 35	550 - 360	7,0	2,5 - 0,7	4000	2800 - 1200	700 - 300	15600 - 6700	2,0
6290-1VVC	35 - 60	480 - 220	7,0	2,5 - 0,7	5560	2800 - 1200	700 - 300	15600 - 6700	2,3
6290-1½VVC	60 - 75	310 - 200	6,5	2,5 - 0,7	7070	2800 - 1200	700 - 300	15600 - 6700	2,8
6290-2VVC	75 - 100	280 - 190	6,5	2,5 - 0,7	8000	2800 - 1300	700 - 330	15600 - 7400	3,0
6290-2VVC	100 - 125	240 - 180	7,0	2,5 - 0,7	9000	2800 - 1300	700 - 330	15600 - 7400	3,0
6290-2½VVC	125 - 150	200 - 160	6,5	2,5 - 0,7	11170	2800 - 1300	700 - 330	15600 - 7400	3,3
6290-3VVC	150 - 175	180 - 150	7,0	2,5 - 0,7	12000	2800 - 1300	700 - 330	15600 - 7400	3,5
6290-4VVC	175 - 200	180 - 150	6,5	2,5 - 0,7	14850	3000 - 1300	750 - 330	16700 - 7400	4,0
6290-5VVC	200 - 225	150 - 130	6,0	2,8 - 0,7	16410	3000 - 1510	750 - 380	16700 - 8500	5,0
6290-5½VVC	225 - 250	130 - 110	6,0	2,8 - 0,7	16980	3000 - 1630	750 - 410	16700 - 9100	6,4
6290-5NH	225 - 250	130 - 110	4,0	2,8 - 0,7	16980	3000 - 1880	750 - 470	16700 - 10500	6,4
6290-6NH	250 - 275	130 - 110	4,0	2,8 - 0,7	19520	3000 - 1880	750 - 470	16700 - 10500	6,4
6290-7NH	275 - 300	120 - 100	4,5	3,5 - 0,7	23340	3580 - 2510	900 - 630	20100 - 14000	6,4
6290-8NH	300 - 380	110 - 90	4,5	3,5 - 0,7	26170	3580 - 2510	900 - 630	20100 - 14000	7,6

⁽¹⁾ For a fast start, necessary when performing piercing and/or cutting thickness over 200 mm, use "high preheat". For thickness up to 200 mm, switch from high to low preheat - just cut, it has started.
- All pressures are measured at torch inlet. - Use minimum 0,3 (bar) fuel gas pressure for equal pressure torches. - Use maximum 0,2 (bar) fuel gas pressure for injector equipment.

VAX 6290 MODEL

MACHINE CUTTING TIPS

MODEL SHOWN:
6290-VAX

FEATURES:

- ▶ Minimalize kerf;
- ▶ Increased cutting speeds, reduces heat input;
- ▶ High quality machine cuts, reduces afterwork;
- ▶ Used with low cost fuel gases.



6290-VAX HIGH SPEED OXY-ACETYLENE CUTTING TIP CHART - PLATED SHELL

PART NO.	PLATE THICKNESS (mm)	CUTTING SPEED (mm/min)	CUTTING OX PRESSURE (bar)	CUTTING OX FLOW (l/h)	PREHEAT OX FLOW (l/h)	ACETYLENE FLOW (l/h)	HEATING POWER (Kcal/h)
6290-1VAX	0 - 8	650	2,5 - 4,0	850 -1250	400	350	4740
6290-2VAX	8 - 15	600	5,0	2400	450	420	5690
6290-3VAX	15 - 35	550	7,0	4000	500	440	5960
6290-4VAX	35 - 75	450	7,0	5000	580	500	6780
6290-5VAX	75 - 150	300	5,0	9000	660	600	8130
6290-6VAX	150 - 200	150	6,5	13500	600	800	10840

Use maximum 0,2 (bar) fuel gas pressure for injector equipment.
Use minimum 0,3 (bar) fuel gas pressure for equilibrated pressure torches.

**HAVING THE RIGHT TOOLS FROM
HARRIS WILL RESULT IN
A JOB WELL DONE,
EVERY TIME**



A LINCOLN ELECTRIC COMPANY

HARRIS SUPER

MODEL

HARRIS SUPER PORTABLE CUTTING SYSTEMS

MODEL SHOWN:
HARRIS SUPER

Harris Super is an innovative machine with a body structure systematized for different types of oxy-fuel cutting and automatic welding work.

FEATURES

- ▶ Straight line and circle cutting or welding;
- ▶ Double Cone Stepless Drive System, maintaining constant travel speed even with high temperatures and allowing greater speed control;
- ▶ Plate Rider Torch Option, automatically maintains torch distance during cutting;
- ▶ Modular straight 1800 mm rail sections (to be ordered separately);
- ▶ Circle rail \varnothing 40-360 mm and \varnothing 1150-2400 mm (to be ordered separately);
- ▶ Speed meter dial indication with conversion scale;
- ▶ Cutting torch unit for square or V-bevel cutting, equipped with the Harris cutting torch model 198-4;
- ▶ Double or triple cutting torch unit available on request.



THE PACKAGE INCLUDES:

- ▶ Cutting machine with connecting lead and rubber connection hose from machine to cutting torch;
- ▶ Harris cutting torch model 198 with 3 tips;
- ▶ Tool set;
- ▶ Operation manual.

PART NO.	DESCRIPTION	NOTE
PCS-SUPER-110F	HARRIS Super 110 V	Propane
PCS-SUPER-220F	HARRIS Super 220 V	
PCS-SUPER-110	HARRIS Super 110 V	Acetylene
PCS-SUPER-220	HARRIS Super 220 V	
PCS RAIL	Straight rail 1800 mm	To be ordered separately
PCS CIRRAIL	Circle rail	

SPECIFICATIONS

Cutting Thickness	Up to 300 mm
Cutting Speed	80-800 mm/min
Speed Control	Single cone speed system, mechanical regulation
Power Source	110V, 220V AC
Weight	11 kg
Overall Measurement	430 mm (L) x 170 mm (W) x 215 mm (H)
Cutting Torch	Propane: 198-4F, Acetylene: 198-4
Cutting Tips	Propane: 6290-VVC (size 5/0 to 5½) - 6290-NH (size 6-7), Acetylene: 6290-VAX (size 1 to 6)

HARRIS PLUS

MODEL

HARRIS PLUS PORTABLE CUTTING SYSTEMS

MODEL SHOWN:
HARRIS PLUS

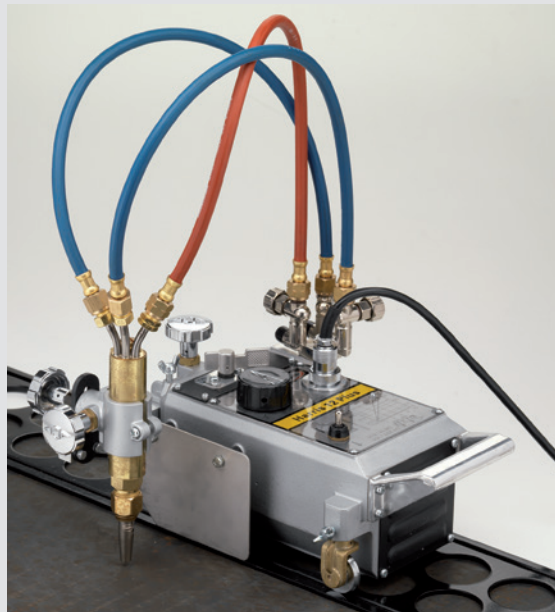
The Harris Plus is a more portable version of the Harris Super, designed with the same precision and capabilities.

FEATURES

- ▶ Straight line and circle oxy fuel cutting;
- ▶ Stepless Drive System, maintaining constant travel speed even with high temperatures and ensuring stable, trouble-free cutting;
- ▶ Light Weight -9,5 kg- easy to carry and use;
- ▶ Modular straight 1800 mm rail sections (to be ordered separately).

THE PACKAGE INCLUDES:

- ▶ Cutting machine with connecting lead and rubber connection hose from machine to cutting torch;
- ▶ Harris cutting torch model 198 with 3 tips;
- ▶ Tool set;
- ▶ Operation manual.



SPECIFICATIONS

Cutting thickness	3-150 mm
Cutting speed	150-800 mm/min
Speed control	Single one speed system, mechanical regulation
Power source	110V, 220V AC
Weight	9,5 kg
Overall measurement	360 mm (L) x 140 mm (W) x 175 mm (H)
Cutting torch	Propane: 198-4F, Acetylene: 198-4
Cutting tips *	Propane: 6290-VVC (size 5/0 to 2½), Acetylene: 6290-VAX (size 1 to 5)

PART NO.	DESCRIPTION	NOTE
PCS-PLUS-110F	HARRIS Plus 110 V	Propane
PCS-PLUS-220F	HARRIS Plus 220 V	
PCS-PLUS-110	HARRIS Plus 110 V	Acetylene
PCS-PLUS-220	HARRIS Plus 220 V	
PCS RAIL	Straight rail 1800 mm	To be ordered separately

IRONWORKER KIT

MODEL

CUTTING AND WELDING KIT

MODEL SHOWN:
IRONWORKER KIT

FEATURES

- ▶ Compatible with VICTOR® equipment;
- ▶ Spiral mix system;
- ▶ Heavy duty S45 regulators;
- ▶ Kit complete with goggles, lighter with flints and 6 m hose.



CUTS UP TO 150 mm - WELDS UP TO 20 mm

PART NO.	HANDLE	MIXER	CUTTING ATTACHMENT	CHECK VALVES	CUTTING TIPS	WELDING TIP	SINGLE STAGE OXYGEN REGULATOR	SINGLE STAGE FUEL GAS REGULATOR	ACCESSORIES
Ironworker	VH31	E-43HV	VH24	188SHTL 188SHTR	1-101-1 HV	23A90-3	S45-10-OX	S45-1,5-AC	6 m hose (4300591), goggles (4304482), lighter (26S), flints (26L)

INFERNO

MODEL

INFERNO KIT

MODEL SHOWN:
INFERNO

APPLICATIONS:

- ▶ Repairing road surfaces;
- ▶ Removing paint;
- ▶ Burning brush, weeds and stumps;
- ▶ Melting snow and ice.

FEATURES:

- ▶ 126.000 Kcal/h;
- ▶ Brass valve for flame adjustment;
- ▶ 3 m gas hose;
- ▶ Flint striker.



THE HARRIS PRODUCTS GROUP
www.harrisproductsgroup.com



MODEL SHOWN:
188-T (L & R)
188-TT (L6 & R6)
188-GG (L & R)

FLASHBACK ARRESTORS REGULATOR TYPE

FLASHBACK ARRESTORS

FEATURES

- ▶ Prevent reverse flow of gases with built-in check valve;
- ▶ Extinguish flashback fire with sintered metal filter;
- ▶ Thermal cut-off which positively shuts off the gas in case of hose fire, burn or repeated flashbacks (only T version);
- ▶ Pressure operated cut-off which positively shuts off the gas when pressure exceeds (only 3T version).



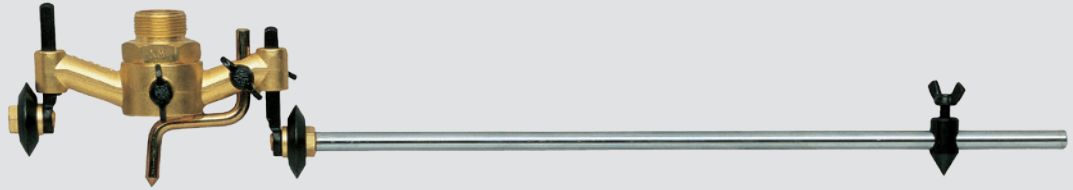
PART NO.	TYPE	FUEL GAS	MAX FLOW (l/h)	MAX PRESSURE (bar)*				INLET THREAD	OUTLET THREAD
				OX	AC	LPG	H ₂		
188-L	Regulator	Fuel gas	30,000	-	1,5	5	3,5	9/16"-18-UNF-2B-LH	9/16"-18-UNF-2A-LH
188-R	Regulator	Ox	100,000	25	-	-	-	9/16"-18-UNF-2B-RH	9/16"-18-UNF-2A-RH
188-TL	Regulator	Fuel gas	30,000	-	1,5	5	3,5	9/16"-18-UNF-2B-LH	9/16"-18-UNF-2A-LH
188-TR	Regulator	Ox	100,000	25	-	-	-	9/16"-18-UNF-2B-RH	9/16"-18-UNF-2A-RH
188-TTL6	Hose to hose	Fuel gas	20,000	-	1,5	4	4,0	∅ hose 1/4" (6 mm)	∅ hose 1/4" (6 mm)
188-TTR6	Hose to hose	Ox	65,000	20	-	-	-	∅ hose 1/4" (6 mm)	∅ hose 1/4" (6 mm)
188-GGL	Torch	Fuel gas	20,000	-	1,5	4	4,0	9/16"-18-UNF-2A-LH	9/16"-18-UNF-2B-LH
188-GGR	Torch	Ox	65,000	15	-	-	-	9/16"-18-UNF-2A-RH	9/16"-18-UNF-2B-RH

*1 bar=100 kPa

ROLLER GUIDES & CIRCLE CUTTING ATTACHMENTS

ROLLER GUIDES & CIRCLE CUTTING ATTACHMENTS

MODEL SHOWN:
R-69-3B



PART NO.	ANGLE	CONNECTION FOR TIPS	CUTTING ATTACHMENTS / CUTTING TORCHES	NOTES
I-69-4	90°	6290	142, 62-5, 42-3, 42-4, 49-3, 572, 72-3, 73-3, 242, 273	Single wheel guide
I-69-5		3690	36-2	
I-69-6		6290	142, 62-5, 42-3, 42-4, 49-3, 572, 72-3, 73-3, 242, 273	
I-69-6-HV	45°-135°	1-101-HV	V-Series	
I-69-7		3690	36-2	
R-69-3B	90°	6290	142, 62-5, 42-3, 42-4, 49-3, 572, 72-3, 73-3, 242, 273	
R-69-4C		8290	NM-250, 880-NM, 59-3, 242-NM, 273-NM	
R-69-880		6290	880, 573	
R-69-A		2890	28, H28	

C-9

MODEL

CALIBRATED TIP CLEANER FOR HAND CUTTING TIPS

MODEL SHOWN:
C-9



26 SL

MODEL

LIGHTER WITH FLINT

MODEL SHOWN:
26-SL



D-1013

MODEL

CYLINDER KEY

MODEL SHOWN:
D-1013



HOSES

MODEL

HOSES

MODEL SHOWN:
4300533

- ▶ 15m X 1/4" twin red/green
- ▶ 30m X 1/4" twin red/green
- ▶ 100m X 1/4" twin red/green



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▶ **Robust. Genuine Harris®.**



▶ **Safe. Genuine Harris®.**



▶ **Fast. Genuine Harris®.**



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