

# 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

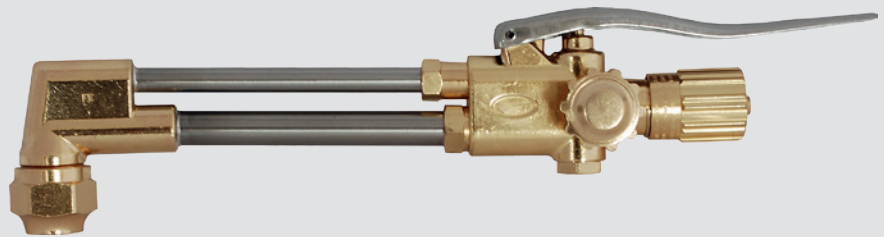
MODEL

## 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.



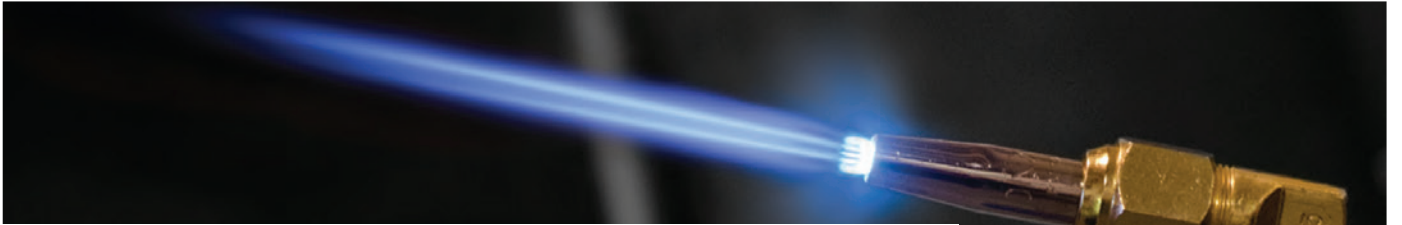
### V242 EQUAL PRESSURE TORCHES (FOR ACETYLENE AND ALTERNATIVE FUELS)

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



# 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

<sup>(1)</sup> 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**



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