

The Jet Edge Hydraulic Versacutter is a portable abrasivejet cutting and beveling system. Rigid and flexible tracks allow the Hydraulic Versacutter to operate on flat or curved surfaces. The system is used in a variety of cutting applications including pipelines, steel reinforced concrete, reactor vessels and fabricated metal structures. It is especially suited for cutting in hazardous zones where flames and heat are restricted.

The Versacutter carriage is a sealed unit that contains a hydraulic motor. The hydraulic motor is connected to a gear reducer and a drive sprocket. The sprocket engages the track to drive the carriage along the track. Guide wheels support the carriage by clamping it onto the track. A lever retracts the drive sprocket so the drive unit can be positioned freely on the track and extends the drive sprocket to engage the holes in the track. The carriage has several clamps and tubes to adjust the position of a cutting head.



The Versacutter includes two 8' sections of track; one rigid, one flexible. Additional track sections can be connected up to any desired length, limited only by the reach of the support equipment hoses. Track sections are bolted together for extended cuts. The rigid track is used on flat surfaces. The track is stiffened with two support rails. Mounting plates can be attached to the support rail allowing the track to be bolted to a surface. The flexible track is used on cylinders and undulating surfaces. A winch is mounted to one end of the track. A cable connects to the end of the track and the winch. The flexible track is mounted to standoffs and magnetic standoffs; the magnetic standoffs work on ferrous surfaces.

A pneumatic delivery system meters the abrasive from the hopper to the cutting head. The micrometer controlled slidegate measuring device features a large readout dial and a positive setting lock for accurate and repeatable abrasive delivery. The hopper holds up to 400 pounds of abrasive for hours of uninterrupted cutting. Quick setup and maneuverability are achieved by mounting the hopper on pneumatic tires, and the weight-saving design enables operation in difficult overhead and vertical applications.

### Carriage Dimensions

Height:	9-1/2 in (241 mm)
Width:	9-1/32 in (230 mm)
Length:	14-7/8 in (378 mm)

### Carriage Weight:

23 lb (10.4 kg)

### Track Weight:

32 lb (14.5 kg) per 96 in (2438 mm) track section

### Magnetic Standoff:

70–80 lb (32–36 kg) holding power

### Movement Speed:

0–7.5 ipm (0–190 mm/min)

### Hydraulic Supply

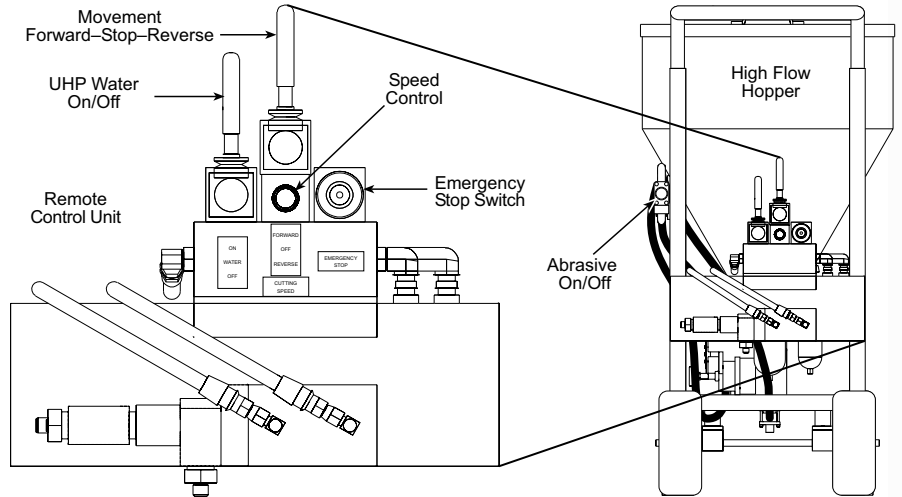
Pressure:	1500 psi (103 bar)
Flow:	1–4 gpm (4.5–18.2 lpm)

### Operation

The Hydraulic Versacutter is operated by a remote control unit. The remote control unit is designed to hang on the rear brace of the abrasive hopper.

The remote control unit includes several valves to control the operation of the hydraulic cutting package:

- A three-position valve ports hydraulic fluid to the hydraulic motor to move the carriage forward, reverse, and stop movement.
- Two flow control valves adjust the forward and reverse speeds.
- A two-position valve turns the UHP water on and off.
- An emergency stop valve can turn off the hydraulic fluid flow and UHP water from the Hydraulic Versacutter.



### Abrasive Hopper

Height	43 in (109 cm)
Width	23 in (58 cm)
Depth	36 in (92 cm)
Weight	85 lbs (38 kg)
Capacity	400 lbs (180 kg)
Power	60 psi air (4 bar)
Delivery rate	0.25 to 3 lbs/min (.11 to 1.4 kg/min)

### Permalign® II Abrasive Head

Length	10.94 in (27.8 cm)
Weight	4.00 lbs ( 1.8 kg)
Operating air pressure (min)	60 psi (4 bar)
Water pressure (max)	60,000 psi (4100 bar)
Orifice range	.005 - .025 in (.127 - .635 mm)
Nozzle range	.020 - .065 ID (.508 - 1.65 mm)

### High Flow Abrasive Head (suited for cutting 2-3' thick sections.)

Length	7.55 in (19.1 cm)
Weight	4.00 lbs ( 1.8 kg)
Operating air pressure (min)	60 psi (4 bar)
Water pressure (max)	45,000 psi (3100 bar)
Orifice range	.020 - .042 in (.51 - 1.07 mm)
Nozzle range	.095 - .125 ID (2.41 - 3.18 mm)

### Hydraulic Versacutter Controls

- Movement:** A three-position valve selects the movement of the Hydraulic Versacutter. The valve stays in the set position. The middle position stops the Hydraulic Versacutter movement.
- UHP Water:** A two-position valve turns the ultra high pressure water on and off.
- Speed Control:** Two flow control valves (one on the front, one on the back) adjust the hydraulic flow that sets the forward and reverse speeds of the Hydraulic Versacutter.
- Abrasive Control:** A two-position valve controls the compressed air supply that operates the abrasive supply from the hopper. The abrasive control valve is mounted to the hopper. (Not Shown)
- Emergency Stop:** Pressing the Emergency Stop button stops the hydraulic fluid flow to the Hydraulic Versacutter and the UHP water to the cutting head. The emergency stop valve latches when it is pressed; the valve must be reset to the out position for the remote control unit to function.

