

## Permalign® xP Cutting Head - 85KSI

The Permalign® xP Cutting Head combined with the OmniJet® xP achieves ultimate performance and reliability for abrasivejet cutting. This patented design reduces the number of components, minimizing overall maintenance and operational costs. The Permalign® xP entrains dry abrasive into the high velocity water stream within the mixing chamber. The resulting mixture exits through the nozzle as a high velocity, coherent abrasivejet stream capable of cutting virtually any material.

The Permalign® xP Cutting Head, when used with the OmniJet® xP, is rated for pressures up to 85,000 psi (5,900 bar), orifice sizes ranging from 0.003–0.016 in (0.076–0.406 mm), and nozzle sizes from 0.020–0.065 in (0.508–1.651mm) ID. This flexibility allows handling of small intricate cuts as well as thick cuts requiring higher abrasive and water flow rates. Nozzles constructed of either extended-life composite carbide or tungsten carbide are available.

### Consistent Alignment

The design of the Permalign® xP Cutting Head ensures consistent alignment of the water stream and abrasive nozzle without additional adjustments. The fixed location of the orifice and nozzle provides a consistent tool center point for the cutting stream.

### Superior Performance

Orifice and nozzle replacement requires no additional adjustments and provides for superior stream alignment. The Permalign® xP Cutting Head along with the OmniJet xP offers a lightweight, compact and versatile solution to your abrasivejet cutting needs.

### Specifications

• Length	10 in (254 mm) to 14 in (356 mm)
• Weight	4 lb (1.8 kg)
• Operating air pressure minimum	80-100 psi (5.5–7 bar)
• Water pressure maximum	85,000 psi (5,900 bar)
• Orifice range	0.003–0.016 in (0.076–0.406 mm)
• Nozzle range	0.020–0.065 in (0.508–1.651mm) ID

