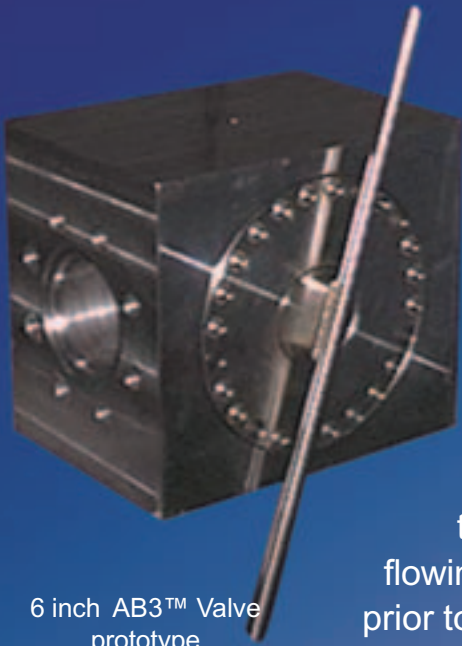


# AB3<sup>TM</sup> DOUBLE BLOCK & BLEED THROUGH BORE ISOLATION VALVE COMPACT



6 inch AB3<sup>TM</sup> Valve  
prototype

**The AB3<sup>TM</sup> Valve can be described as a compact, quarter-turn, full-bore, double block and bleed, expanding plug valve.**

The AB3<sup>TM</sup> Valve has been progressively developed and tested over the last seven years from an original design concept. It is a full through-bore valve that is more compact than alternative designs. It incorporates a pair of hard-coated metal seal plates that are diametrically opposed and held against the flowing ports. When opening the valve, the seal plates retract prior to rotating 90° into the fully open position.

Most isolation valves in use today are ball, gate or taper plug types, which sometimes require critical seat machining. The AB3<sup>TM</sup> Valve has a parallel bore of constant diameter throughout its entire length. Manufacture is simplified as it can be cylindrically honed to achieve a consistently good surface finish.

The valve, being extremely compact, would normally be supplied using a forged block, rather than a shaped valve body. It can be supplied machined to suit API, ASME or any proprietary compact flange connection system.

Valve operation can be either manual (or ROV), or actuated. For manual operation, a torque multiplier tool could be used to avoid the need for an associated gearbox.

Whereas expanding split gate valves with a similar double block and bleed function already exist, they are bulkier and heavier.

The AB3<sup>TM</sup> Valve is manufactured from materials suitable for use by the oil, gas and chemical industries.



Prototype AB3<sup>TM</sup> Valve  
with end caps removed