

# **Rotary Valves**

Heavy Duty. Outstanding Wear Resistance. High Performance. Rugged Construction.



## WHO WE ARE

Avweld have been at the forefront of innovation in the manufacturing and repair of rotary valves for many years. Some of our improvements include reduced rotor to stator clearance, modified sweepers for reduced blocking on end plates, spring loaded seal rings and the application of hardfacing to both rotor vanes and stator bore.

We are paramount in the manufacture and repair of Heavy Duty Rotary Valves in Australia, offering everything from simple rebuilds to complete overhaul. The most significant features of our modifications are AV100 Tungsten Carbide coating to the stator bore, hardfacing of rotor tips and spring loaded hardfaced side seal rings. These modifications have increased the life 3-5 times that of a standard valve



# Features of Avweld Rotary Valves

- Diamond Ground Rotor O.D. for accurate clearances.
- 2. Eight vane rotors for efficient sealing.
- 3. Skewed vanes for efficient shearing action.
- Top and bottom knife blades for efficient cutting of strips reducing bore wear due to drag through.
- Over end sealing with Tungsten Carbide to inlet of housing. Reduces wear between rotor end plate and stator bore.
- Spring loaded Tungsten Carbide seal rings fitted to end plates. Zero maintenance as screws do not need tightening during service. Giving a zero clearance seal at the top of the side cavity for less by-pass.

## OTHER AVAILABLE OPTIONS

- 1. Wear Resistant Housing
- HVOF (Hyper Velocity Oxygen Fuel) applied AV100 Tungsten Carbide to the bore of the valve.
- PTA Tungsten Carbide overlay bore to depth of 1.5-2mm. Gives maximum protection. Lasts up to 4 times longer than HVOF Tungsten Carbide.
- 2. Hardfaced Vane Edges for long life and efficient shearing action
- Tungsten Carbide welded tips. Maximum wear resistance and medium impact resistance.
- Stellite® 6 welded tips. Excellent wear resistance and very good impact resistance.

# Industries in which Rotary Valves manufactured and refurbished by Avweld have proven themselves

Timber Pulp & Paper Cement
Wood Chip MDF Mining

Minerals Handling Food Pharmaceutical
General Purpose Ore Processing Manufacturing

Petro Chemical



- Tungsten Carbide coated packing gland journal.
   Allows use of hard or soft packing with no risk of wear again reducing maintenance and reducing by-pass.
- 8. Extremely Heavy Duty Fabrication of all components out of mild steel or stainless steel for easy rebuilding and overlaying.
- Outrigged heavy duty bearings ensure accurate centralisation maintaining superior clearance through the life of the Rotary Valve.
- 10. Choice of right angle shaft mounted gearmotors, coupling, chain drive or belt driven.
- 11. All components are heat treat stress relieved, removing any residual stress created by the welding processes and greatly reducing the possibility of cracks developing even in the most extreme applications.



#### STANDARD ROTARY VALVE SIZES

● 150x150● 637x660

● 250x250● 760x1000

450x4502000x2000



# Other Services provided by Avweld

- Thermal Spraying Fully automatic Robotic Cell for HVAF, HVOF, Plasma, Arc Spray & Spray Fuse
- Specialised Welding Cast Iron, Stellite®, MIG, TIG & PTA
- 9 axis Fully Automatic Robotic Welding System to deposit PTA, MIG, Pulse MIG, Subarc, Open-Arc & TIG
- Hardfacing Chrome Carbide, Tungsten Carbide, etc.
- · Machining and Grinding (large capacity)
- Design and Manufacturing including Vacuum Pumps



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