REMINGTON VALVE, LLC
SEVERE SERVICE
METAL SEATED BALL VALVES (MSBV’S)
PRODUCT LINES

- **General Severe Service**
  - ½ through 24 inch
  - 150, 300, 600, 900, 1500, 2800, 3200 and 4500# ANSI Class
  - RF Flanged, Butt Weld, RTJ, Clamp Ends, Socket Weld
  - Class VI Shut Off
  - Full or Regular Port

- **Power Generation**
  - ½ through 2 ½ inch
  - 1500#, 3200#, 4500# Limited Class
  - Socket Weld, Butt Weld
  - A105, F22, F11, F91
  - Class VI Shut Off
  - Boiler Pressure Code Compliant
COATINGS – NOT ALL ARE CREATED EQUAL

REMINGTON VALVE, LLC USES THE LATEST SPRAY EQUIPMENT IN THE INDUSTRY AND HAS MECHANIZED THE PROCEDURES TO PROVIDE CONSISTENT, REPEATABLE AND RELIABLE COATED PARTS. THE BOND STRENGTH, THICKNESS AND OXIDATION RATE ARE ALL CONTROLLED BY PRESET PARAMETERS. OTHERS IN THE INDUSTRY USE SPRAY TECHNIQUES THAT DO NOT ACHIEVE THE BOND STRENGTH AND BASE PENETRATION THAT ALL REMINGTON BALL AND SEAT SETS ACHIEVE.

- HVOF - High Velocity Oxygen Fueled
  + Sprayed at velocities approaching Mach III
  + At Temperatures of 5600° F
  + Thickness of finished coating => .008
  + Parameters to reduce thermal cycling
  + Applied in a compressive state

- Benefits of HVOF Coatings
  - High density, low porosity
  - Improved corrosion barrier
  - Higher hardness ratings
  - Improved wear resistance
  - High bond strength >10,000 psi
  - Thick coatings > .008
  - Smoother as-sprayed surfaces

Special Coatings – Colmonoy Spray and Fuse
Remington automates its lapping system to:

+ Provide consistency in lapped ball and seat sets.
+ Obtain bubble tight shut-off capabilities.
+ Reduce the amount of human intervention in sealing components.
+ Lower costs.

Remington also vacuum tests ball and seat sets before being placed in the valve body, ensuring tight shutoff.
GENERAL SERVICE VALVE

KEY FEATURES

- Designed per ASME B16.34.
- Body Materials
  - Carbon Steel, Stainless Steel, Hastelloy, Titanium, Super Duplex, any high alloy material.
- End Connects
  - RFF, RTJ, Hub, BW, SW… Custom ends and face to face call outs available.
- Bore Sizes:
  - Full Port
  - Regular Port
  - Reduced and custom Cv’s
GENERAL SERVICE VALVE

- Keyed stem for ease of automation.
- Hardened non-twist stem.
- ISO mounting flange, mount actuators any direction.
- Extended bonnets available for cryogenic service.
- Live loading of packing.
- Anti-emissions packing.
- Solid anti-extrusion ring.
- Coated bearing surfaces.
- Carbon, stainless, all alloys.
- Full port, regular port or custom CV.
- Weld in overlays for corrosive applications.
- Locked in seat prevents movement in bi-directional, upset flow conditions.
- Flanged, socket weld, butt weld, threaded and non-standard ends.
- Solid excluder rings prevent solid buildup.
- Loaded seats for thermal expansion and constant sealing under low pressure.
- Protected seat faces with wiping action.
- Bubble-tight shut-off ball and seats.
APPLICATIONS

Materials of Construction
- Body Materials
  - Carbon Steel, Stainless Steels, High Nickel Alloy, High Temperature
- Stem Design
  - High Yield Strength
  - Hardened for Anti Gauling
  - Blow Out Proof Design
- Packing
  - Live Loaded
  - Anti Extrusion
  - AW Chesterton Packing
  - Die Formed Rings
- Ball And Seat
  - Base Material Per Application
  - No Ridge Lapping
  - Coating Thickness Min .008
- Coating
  - HVOF, Spray and Fuse
  - Chrome Carbide, Tungsten Carbide
  - Colmonoy
  - Hardened for High Cycle Applications
- Gland Flange
  - Stainless Steel
- Mounting Flange
  - Easily Adaptable for actuation
  - Integral Open Closed Stops
- Actuation
  - Pneumatic
  - Electric
  - Hydraulic
- Available in all Stainless Mounting

GENERAL SERVICE VALVE

- Coke Drum Isolation: Overhead Vapor Line, Feed Isolation
- Blowdown
- Heater Isolation
- Cutting Water Isolation
- Safety Relief Valve Isolation
- Control Valve Isolation and Bypass
- Heater Drain Valves
- Lockhopper (High Cycle)
- Hydrogen Isolation
- Nitrogen Isolation
- 3rd and 4th Stage Separator Isolation
- Slurry Loop Isolation
- Fractionator Bottom Pump Isolation and ESD
- Heater Isolation
- CO Boiler Steam Isolation
- CO Boiler Start-Up Vent
- Hydrogen Isolation
- Catalyst Feed and Withdrawal
- Catalyst Isolation
- Control Valve Isolation
- Coal Powder Feed
- Lockhopper
- Char Isolation Valves
- Ash Water Isolation
- Black Water Isolation
- Oxygen Isolation (Low and High Temperature)
- Nitrogen Isolation
- Slurry Service
- High Temperature Syngas
POWER GENERATION VALVE

KEY FEATURES

- Designed to meet Boiler Code Specifications and ASME B16.34 Limited Class
- Body Materials
  - A105 (Carbon Steel)
  - A182 F22, F11, F91
  - A182 F347, 316
- End Connections
  - Socket Weld
  - Butt Weld
  - Flanged
- Operators
  - Lever
  - Pneumatic
  - Electric
REMINGTON POWER VALVE

KEYED STEM FOR EASE OF AUTOMATION.
STEM LOCKING RING PREVENTS STEM MOVEMENT.
BLOW-OUT PROOF STEM DESIGN ASME COMPLIANT.
LIVE LOADING OF PACKING.
ANTI-EMISSIONS PACKING.
COATED BEARING SURFACES AND ANTI-EXTRUSION RINGS.
TDP-1 BORES SIZES.

HARDENED NON-TWIST STEM.
ISO MOUNTING FLANGE, MOUNT ACTUATORS ANY DIRECTION.
CARBON STEEL, CHROME MOLY BODIES.
PROTECTED SEAT FACES WITH WIPING ACTION.
FLANGED, SOCKET WELD, BUTT WELD, THREADED ENDS.
LOADED SEATS FOR THERMAL EXPANSION AND CONSTANT SEALING UNDER LOW PRESSURE.
BUBBLE-TIGHT SHUT-OFF BALL AND SEATS. ZERO LEAKS.

SEAT CORROSION RESISTANT. THERMALLY Matched TO BALL. ZERO LEAKS.
POWER VALVE APPLICATIONS

Materials of Construction

• Body Materials
  - Carbon Steel, Chrome Moly

• Stem Design
  - High Yield Strength
  - Hardened for Anti Gauing
  - Blow Out Proof Design

• Packing
  - Live Loaded
  - Anti Extrusion
  - AW Chesterton Packing
  - Die Formed Rings

• Ball And Seat
  - Base Material 410 SS or Inconel 718
  - No Ridge Lapping
  - Coating Thickness Min .008

• Coating
  - HVOF, Spray and Fuse
  - Chrome Carbide, Tungsten Carbide
  - Colmonoy
  - Hardened for High Cycle Applications

• Gland Flange
  - Stainless Steel

• Mounting Flange
  - Easily Adaptable for actuation
  - Integral Open Closed Stops
  - Mount Valve Any Orientation

• Actuation
  - Pneumatic
  - Electric
  - Hydraulic

• Available in all Stainless Mounting

Main Steam Drains
Main Steam Stop Before & After Seat Drains
Main Steam Turbine Isolation
Main Steam Attemporator
HP Turbine Bypass
Turbine Drains
Extraction Steam Isolation
Extraction Steam Drain Valves
Feed water inlet isolation
Feed water outlet isolation
By-pass isolation
Shell side vents
Shell side drains
Level control isolation
Shell side instrument isolation
Thermal Drains
Pump Discharge Isolation
Main Line Isolation
Rupture Disk Isolation
Instrument Isolation
Vents and Drains
Sootblower Systems