WEDGEPLUG VALVE
Non Lubricated

PACIFIC VALVES
Long Beach, California

May 17, 2001

CRANE

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PACIFIC Valves - History

- "Pacific Valve and Pump Exchange" formed in 1934, Long Beach CA. USA
- 1942 Gate, Globe and Check Valve Range.
- 1955 HF ACID valve range introduced.
- 1971 Purchased by Clayton Mark Company
- 1975 Clayton Mark became Mark Controls Corporation
- May 1994 Mark Controls Corporation purchased by Crane Co.
- Nov 1997 Crane Co. acquires Stockham Valves & Fittings.
- June 1999 Stockham Wedge Plug Valve relocated to PACIFIC VALVE, Long Beach, CA

CRANE
PACIFIC VALVES
PRODUCT OVERVIEW

- REFINING PRODUCTS
  - Wedgeplug Valve
    - Class 150 to 900
    - 1/2" to 30"
    - WCB, C5, C12, CF8M
    - Port Sizes - 70%, & 100%
    - Steam Jacketed Valves
  - HF Alkylation Valves
    - WCB / Monel Trim, Solid Monel
    - API 600 / API 602 Bolted Bonnet, Gate, Globe & Check Valves
    - WCB, Alloys, Stainless Steels

PACIFIC VALVES
PRODUCT OVERVIEW

- Power Generation Products
  - Pressure Seal Bonnet; High Pressure, High Temp
  - Parallel Slide / Wedge Gate Design
  - T-Pattern / Y-Pattern Globe & Check Valves
  - WCB, WC6, WC9, C12, C12A, CF8M
**Wedgeplug Valve - History**

- 1920 - Wedgeplug designed by an FCC plant engineer, New Orleans, Louisiana.
- 1997 - CRANE Co. acquires Stockham Valves & Fittings.
- 1999 - Wedgeplug Valve re-located to CRANE PACIFIC VALVES, Long Beach operation.
Wedgeplug
MAIN Applications

- Coking
- Fluid Catalytic Cracking
- Vis-Breaking Cracker
- Ethylene / Olefins
- Fueling - Clean Services

Wedgeplug
Areas of Applications

- Coking
  - Transfer Feed Lines
  - Coke Drum Vapor Lines
  - Isolation of Atmospheric Blow-down
  - Fractionator Lines
  - Re-Cycle Lines

- Ethylene / Olefins
  - Main Transfer Line Isolation
  - Quench Filter Oil Lines
  - De-Coke Isolation
  - Cryogenic Storage Isolation Shut Off
  - Fuel Oils Pumps
  - Furnace Feed Lines
Wedgeplug
Areas of Applications

- Fluid Cat. Cracking
  - Dry Catalyst storage hoppers
  - Dry Catalyst Transfer Lines
  - Super Heaters, Boilers & Exchangers
  - Main Slurry Pump Lines
  - Steam Generator lines
  - Reactor Transfer Lines
  - Reformer feed lines
  - Fractionator column bottoms

- Vis-Breaking
  - Furnace Cracking
    - Furnace Isolation / Quenching Pipeline
  - Soaker Cracking
    - Furnace Isolation / Quenching Pipeline
    - Filter Isolation below the main fractionator
    - Pair of Filters in parallel require frequent cleaning

Wedgeplug
OTHER Applications

- Slurries: Coal Slurry, Fluidized Iron Ore
- Molten Sulfur, Asphalt, Molten Coal Tar
- Chemical Processing
  - Phthalic Anhydride
  - Ethylene Di-Chloride
  - Vinyl Chloride
  - Polymers
- Pulp & Paper Mills
  - Bleaching, Liquors, Lime Mud, Chemical Recovery.
Wedgeplug
FEATURES & BENEFITS

- Metal to Metal Seating in Open & Closed Positions
- Purge Capability
- Flush Capability
- Double Block & Bleed
- Material Flexibility
- Lifting Plug Design
- Seated by Vertical Thrust
- Fire Safe
- Temperature Range
- Slurry Applications
- Seats Protected from Erosion & Corrosion, increases Valve Life
- Eliminates Fugitive Emissions.
- Cleans Seat area, Preventing Leakage created by Particulate Matter
- Positive isolation upstream & down stream. One Valve does the job of Two.
- Combinations of Materials & Trims available to meet applications.
- Prevents wear due to Plug Rotation. Eliminates Galling.
- Not position seated, like Ball Valves
- Meets API 607, API 86A & BS6522. Ensures Critical Safety in event of Fire Situation
- Cryogenic to 1850°F. One Valve design for ANY service, at ANY Temperature.
- Operates like a straight run of pipe, Seats are not exposed. Extends Valve Life.

Purging and Flushing

- Purge creates protective critical area free of material accumulation
- Flushing keeps valve seats clean

Purge Supplied
- Steam, Air, Nitrogen or Compatible Liquids
  - Steam purge must applied at 25 psig min / 50 psig max, above line pressure
  - Air or Nitrogen purge must be applied at 25 psig min / 50 psig max, above line pressure
  - Liquid purge must be applied at 5 PSIG min/ 10 max, above line pressure
  - Heavy viscous material required differential pressure up to 100 psi.
- Consult Pacific Valves for process specific purging and flushing recommendations.
**OLD OPERATOR Vs. NEW**

GROUP 4 (OLD STYLE)  
GROUP 4 (NEW STYLE)

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**WedgeTorque Operator**

- Improvements:
  - Eliminated all Iron Parts
  - Standard C5 Yoke material
  - Upper O-Ring & Lower Grease Seal
  - Increase Strength
  - Fits Existing Valves
  - Upper & Lower Thrust Bearings

CRANE
Automation Wedgeplug

- Electric Actuator
- Air Motor
- Hydraulic
- Pneumatic
- Electro/Hydraulic
- Mechanical Interlock
WEDGEPLUG VALVE

PACIFIC VALVES
Long Beach, California

THANK YOU