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## Plug Valve Kit Interchangeability

### Background

Weir SPM offers replacement kits for all plug valve assemblies. These kits allow for a quality rebuild of all Weir SPM plug valve assemblies. In addition, the kits serve as OEM replacements for all 2" and 3" FMC DR plug valve assemblies. This is due to full interchangeability of the components. Below is a summary:

- Weir SPM has been offering OEM plug valve replacement kits since 1988.
- 2" and 3" kits are fully interchangeable with the FMC DR plug valve.
- Interchangeability of parts has been verified by extensive measurements, and testing. This includes third party analysis, destructive testing, and field-testing.
- All components are designed for long life (see material specifications below).
- All components offer field performance equal or exceeding FMC products. DNV Type Approval and PED (CE) certification for all pressure bearing kit components.

### Documentation

#### Material Specifications

All Weir SPM plug valve kit components have been produced to the most exacting standards. Below is a summary of the critical items:

#### Plug

This cylindrical member can be rotated within the assembly in order to allow/prevent the passage of fluid.

- Floating design improves performance and reduces wear.
- Precision ground Nickel plated surface.
- Minimum surface hardness of 60 Rc.
- Excellent resistance to corrosion.

#### Seal Segments

These items create a sealing surface between the OD of the plug and the ID of the body.

- Machined from high strength AISI 8620.
- Case hardened to 55 Rc for long life, and greater resistance to erosion.
- Cosmoline coating for resistance to oxidation.



#### Side Segments

These items assist in aligning the seal segments and ensure proper orientation.

- Phenolic material for greater resistance to acids and solvents.
- Impervious to corrosion.
- Suitable for H<sub>2</sub>S and standard service application.

The Weir Way

[INNOVATIVE ACTION]

[COLLABORATIVE MINDSET]

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# Weir SPM: Product Bulletin

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## Elastomer Seals

These items create high pressure seals between removable components.

- Acrylonitrile-Butadiene material (standard service applications) for excellent resistance to oils and greases.
- Fluoroelastomer material (H<sub>2</sub>S applications) for NACE compliance and excellent resistance to chemicals and acids.
- O-rings are manufactured in accordance with ASTM D148.

## Grease Fitting

This item allows for lubrication to be applied to the internal cavities.

- Giant Button Head style for easy lubrication.
- Machined from high strength 4140.
- Suitable for H<sub>2</sub>S and standard service applications.
- Includes full material traceability.
- Includes dual internal seal surfaces for greater reliability.

## **Summary**

Weir SPM has offered quality OEM replacement plug valve components since 1988. Our products have an excellent track record, and are well received by the industry. In addition, extensive testing has verified that all 2" and 3" kit components are interchangeable and offer performance equal or greater than FMC. Contact Weir SPM Engineering for additional technical information regarding plug valve components.