

Methanol-ready Valve Spindles & Seat Rings

1st generation of
methanol-ready valve
spindles and seat rings
for new builds and
retrofits



MÄRKISCHES WERK

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Methanol - pushing the material limits

In the pursuit of net-zero CO₂ emissions, methanol remains one of the most promising alternative fuels for large bore engines. However, as a potent solvent, its use as an alternative fuel source presents a material compatibility challenge for valves and seat rings due to severe tribocorrosion and metal-on-metal contact. MWH understands these risks and has been rigorously testing the compatibility of MW WR Superalloys and valve/seat ring base materials with methanol.

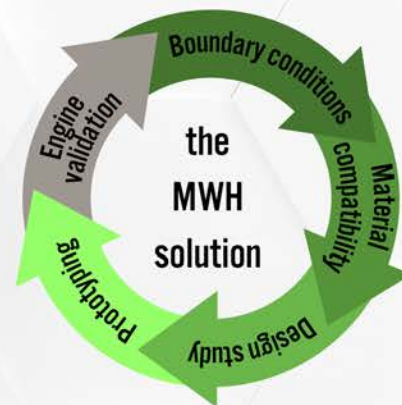
Based on field experience with methanol, extensive material compatibility tests and experience from almost 80 years of valve production, MWH is launching the 1st generation of methanol intake & exhaust valves and seats for large bore engines.



MWH's bespoke valve wear test rig with integrated environmental chamber simulates valve closure and peak firing pressure up to 900°C

Better materials, better methods

Compared to leading commercially available hardfacing alloys, MW WR Superalloys exhibited the lowest wear and corrosion values in every compatibility test performed with methanol to-date. Our customers can be confident that we're doing our homework so that their methanol engines are equipped to do the hard-work.



MWH is ready for what's next

As a problem solver for all things related to cylinder head systems, we go far beyond component design and manufacturing in what we can do for our customers. It is for this reason that engine builders from around the globe come to us when they want the highest performance without compromise – MWH is ready for what's next.



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