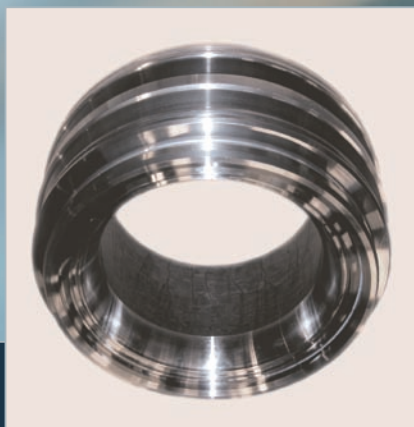


# W-seat

Increasing TBOs



# W-seat

## Extended TBOs and longer lifetimes

The successful adoption of the W-seat by the market confirms the many years of research and development work, both in scientific tests and long-term in-service trials.

This latest generation of valve seat has further improved the overall conditions of the seat contact area, leading to increased time between overhauls.

The key to the new geometry of the W-seat is the two narrow concentric contact areas. The effect of these narrow contact areas is to crush and squeeze out all carbon particles which are trapped between the spindle and the bottom piece. As the photographs below show, this is achieved without giving rise to any appreciable dent marks.

In order to meet the requirements for high strength, the W-seat is made from solid, low-alloy steel, with an induction hardened seating surface. This innovation also results in a considerable economical advantage — saving the expense of welding a costly, hard-facing material onto the seat.

The introduction of this cost-effective W-seat has made it possible to reduce the price while simultaneously increasing the expected time between overhauls, as well as significantly increasing the expected total number of hours in service.

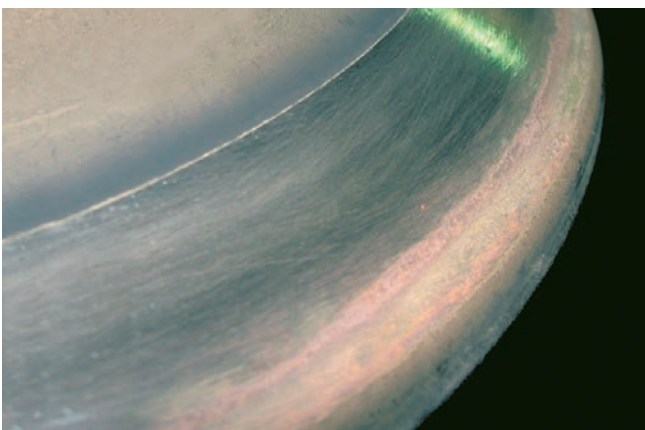
Minor gas leakages and dent marks are no longer to be considered harmful, and can be disregarded when evaluating the condition of the seats.

So far, running hours of up to 40,000 hours have been obtained without needing to grind the seat. Further, reports from vessels in service confirm the generally extended mean time between overhauls of the valve seats.

It should also be noted that in order to obtain the full benefit of the prolonged time between overhauls, MAN Diesel recommends using a premium type of sealing ring between the exhaust valve and the cylinder cover. If problems are found in this respect, MAN Diesel can supply newly developed seals, instead of the previously used O-rings. For more information, contact our Spare Parts Department.

The W-seat can be used on all types of MC engines as well as the majority of earlier designs of MAN B&W two-stroke engines, regardless of the spindle type.

*The spindle and seat had both been in operation for over 16,400 hours and are still in perfect service condition*



### Original quality spare parts from MAN Diesel assure your company:

- Latest design and knowledge built in
- High-quality, reliable spares
- MAN Diesel quality assurance
- Extended guarantee on certain parts
- Readily available, worldwide

Just as trading under difficult conditions requires first class personnel, so does machinery require first class maintenance and spares. The main engine is only as reliable as the spare parts installed. Do not reduce the reliability of your vessel by allowing non-original, low-standard parts on board.



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