

for MITSUI—MAN B&W engine, Introduction of Wide-seat type exhaust valve seat		No. 096	
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ENGINE TYPE	ME / ME-C / ME-B	DATE	5 June 2017

For the purpose of increasing cooling efficiency and reducing temperature level of exhaust valve seat area, design of the exhaust valve bottom seat has been changed. Wide-seat type exhaust valve seat is applied to newly built engine as standard specification and feature improvement. Hereby, we are pleased to introduce the new Wide-seat type exhaust valve seat.

This Wide-seat has been tested on service vessel by licensor MAN Diesel and Turbo (MDT), and good result was obtained.

1. About the Wide-seat type exhaust valve seat

With Wide-seat type exhaust valve seat, heat transfer area is increased by increasing the contact area of exhaust valve seat and exhaust valve spindle. As a result, cooling efficiency of exhaust valve seat area is improved (Figure 1).

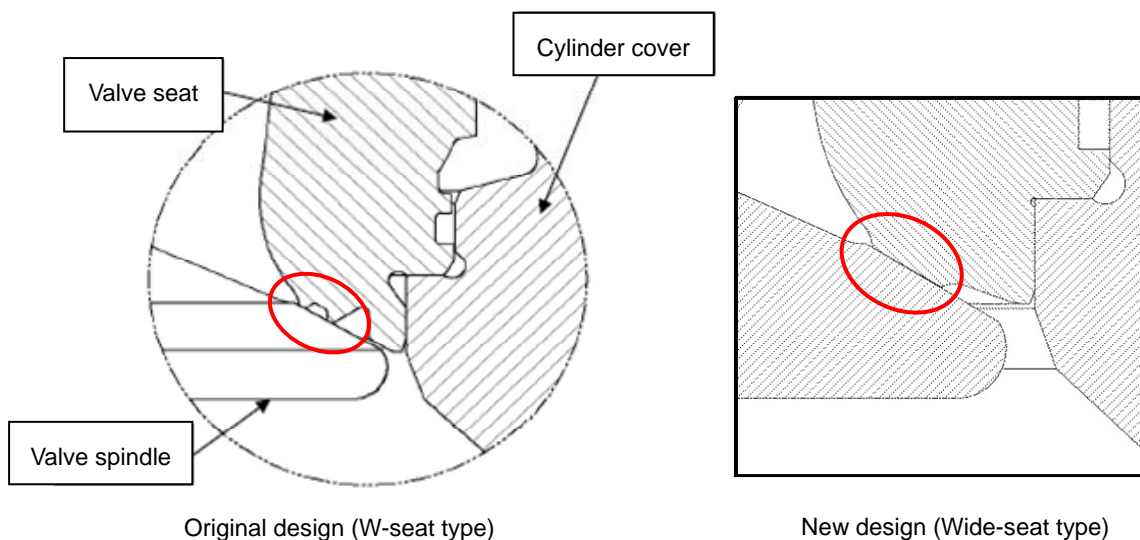


Figure 1: Original and new valve seat figure comparison

PRIORITY			
IMMEDIATELY <input type="checkbox"/>	AT FIRST OPPORTUNITY <input type="checkbox"/>	WHEN CONVENIENT <input type="checkbox"/>	OTHERS <input checked="" type="checkbox"/>

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From the results of temperature measurement after installed the new design valve seat, temperature on the seat area of valve spindle was decreased by 25 - 30°C at all engine load. Heat increase of exhaust valve can be suppressed especially in low load area (Figure 2).

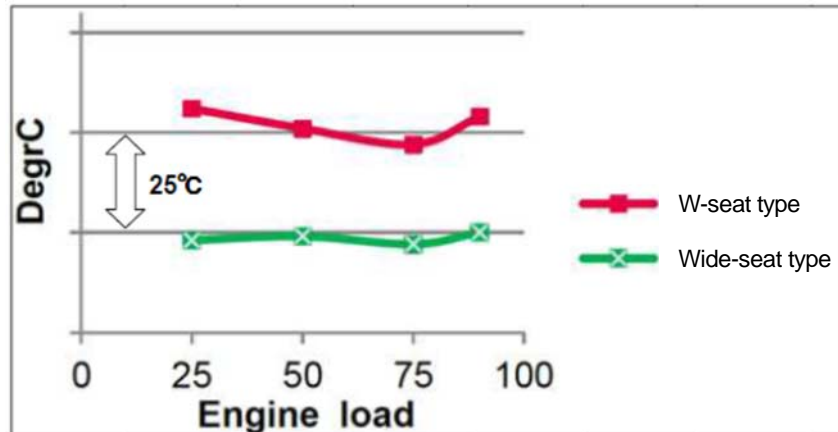


Figure 2: Temperature of seat area on exhaust valve spindle

2. Service result

Good results have been confirmed from MDT test on service vessel (Figure 3).



Figure 3: Photo from test vessel (G70ME-C9)

3. Modifying to Wide-seat

There is no influence to engine performance and maintenance procedure by applying the Wide-seat. It can be applied regardless of exhaust valve spindle specification, such as Nimonic or Dura-Spindle.

In addition to compatibility, modification from W-seat to Wide-seat is possible by only replacing the exhaust valve seat.

Applicable engine type is ME/ME-C/ME-B engine. For other engine type, please contact us separately.

For orders and inquiries

Product orders can be placed to any MES Technoservice branches and regional offices as usual, and please clearly state "Wide-seat" in your order.

Please refer to Service Notes No.111 (SN111) for contact and inquiries.