



KOLBENSCHMIDT engine bearing shells for MAN

Design differences in the locking lugs

Engine manufacturer	Engines	Product
MAN	D2066... (various) D2676... (various) D2868... (various)	Engine bearing shells (e.g. conrod bearing shells)

Situation

MAN uses conrod bearing shells with round locking lugs for newer engines. The locking lugs of the corresponding conrod bearing shells from KOLBENSCHMIDT have a rectangular shape for patent reasons.

Background information

Locking lugs make it easier to establish the correct axial positioning of the engine bearing shells during mounting. The function of the locking lugs is no longer required during engine operation.

It is often assumed that the locking lugs should prevent the engine bearing shells from twisting. This assumption is incorrect. Engine bearing shells have a press fitting in the housing bore in mounted state. The press fit is achieved by making the diameter of the engine bearing shells a few 1/100 mm larger than the housing bore. When the bearing caps are tightened, the engine bearing shells are held securely in the bore via the surface pressure on all sides.



Locking lugs of the OE engine bearing shells. This shape, which is also known as "moon version", is also protected by patent.



Rectangular locking lugs at KOLBENSCHMIDT engine bearing shells

In the event of disruptions in operation, e.g. caused by inadequate lubrication, seizures, overheating or a damaged or excessively large bore, the locking lugs are unable to prevent the engine bearing shells from twisting. In this case, the locking lugs are bent back or shorn off.

Summary

Although the locking lugs of the KOLBENSCHMIDT engine bearing shells look different than the corresponding OE version, the function is the same.

The KOLBENSCHMIDT engine bearing shells with rectangular locking lugs are made especially for these applications and can be used without restriction.