## The Transfer of Premium Racing Technology

The new MAHLE Motorsport range of bearings contains technology that has been transferred from MAHLE's F1 bearing technology. Where possible, the big end bearings in our motorsport range are manufactured with a "racing notch" which maximizes the cross-sectional area for good interference fit and eliminates disruption to the bearing bore and consequently to the all-important oil film. It is not possible to apply a racing notch if the notch is positioned on the end of the bearing.

## Benefits of the Racing Notch

There are two main benefits of the racing notch:

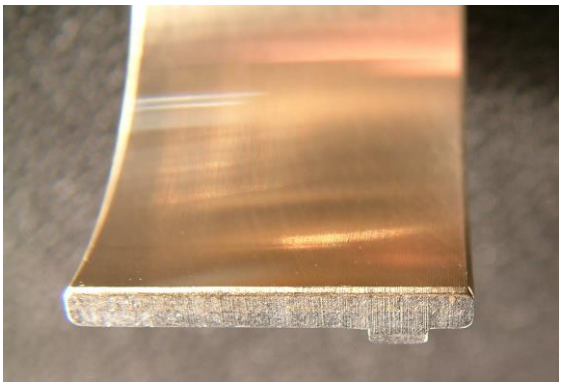
1. The first is that it enables the cross sectional area of the joint face to remain fully intact such that the hoop stresses in the bearing caused by the interference fit with the housing are equally distributed.

    - A conventional notch requires a section of the material to be pressed back from the joint face which reduces the cross sectional area and therefore there is less material with which to support the load imposed by the interference fit of the bearing assembly.

    - The racing notch allows the contact pressure between the bearing and housing to be maximised if required. This allows the housing to provide maximum support for the bearing and the optimum heat transfer from the bearing into the housing.

2. The second advantage is that the bore of the bearing remains uninterrupted which creates a better surface for the formation of the oil film and it also removes an oil leakage path.

The racing notch allows an uninterrupted joint face



The racing notch allows an uninterrupted bore surface