

## **Influence of the Surface Structure of the Embedded Cylinder Liners on the Degree of Form Fit**

Cast cylinder liners are an established cylinder bearing surface technology in aluminium-cylinder crank cases. As a technical, fundamental prerequisite, the highest possible degree of form fit must be generated between the cast-iron cylinder liner and the aluminium cylinder crank case, such that on the one hand the cylinder liner sits tightly in the engine block and, on the other, the heat of combustion can be diverted correctly in the direction of the water jacket. Previous simulation results could only provide a point of reference for the liner bonding based on the height of the melting temperature during the casting process. New investigations also take the structure of the liner into account. The lecture describes the procedure for formatting the simulation through to comparison with an actual casting.