

**Mehr als
95 Jahre
Dieselerfahrung**



A close-up photograph of a metal component featuring a threaded hole. The threads are clearly visible, showing a standard double-flute design. The metal has a dark, possibly oxidized or painted, finish. The lighting highlights the circular geometry and the depth of the hole.

A diagram showing a cross-section of a multi-layered structure, possibly a shell or a biological tissue. It features several concentric layers. The outermost layer is a thick, dark grey band. Inside this, there are several thinner, lighter grey layers. The innermost part of the structure is a bright yellow, irregularly shaped region that resembles a flame or a starburst. The overall shape is roughly circular or oval, with some internal lines suggesting a complex internal structure.

A diagram showing a cross-section of a pipe joint. A purple arrow points from the left towards the joint, indicating the direction of flow.



The screenshot shows the FEA software interface. At the top, a text box contains the instruction: "Engine start/stop with F8. Next test step with F4 + Component selection with F11 <<". Below this, the mesh is displayed with various boundary conditions and material properties. A bar chart at the bottom shows the results of the simulation, with values ranging from 33.3 to 40.0. The chart has 12 bars, with the 7th bar being red and the others green. The values are: 33.3, 33.4, 33.5, 32.4, 32.8, 33.8, 33.7, 7, 9, 10, 11, 12.

A 3D CAD model of a micro-actuator. The model shows a central cylindrical shaft with a cross-section of diameter $\varnothing$. The shaft is connected to a base with two horizontal arms. A vertical dimension line on the left indicates a height of μm . At the bottom, two curved arrows indicate a rotational degree of freedom.

- erhöhter Kraftstoffverbrauch
- Leistungsabfall
- verminderte Lebensdauer von Pumpe und Motor
- Ausfälle und Motorschäden