

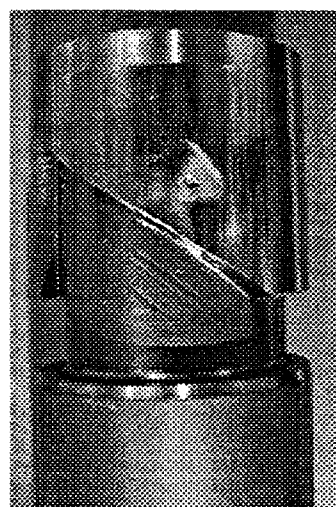
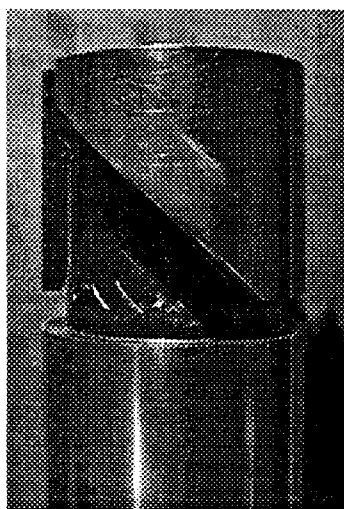
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**M 601**  
**M 453**

## **Pump element for fuel injection pump**

On high-powered Diesel engines perfect atomization of the injected fuel leads to an optimum combustion and consequently to a reduction of the fuel consumption. However, for exact atomization short injection periods and high injection pressures are basic requirements.

The resulting enormous load on the whole injection system involves high quality requirements with regard to manufacture and used material.

On the pump elements used now traces of cavitation in the upper part of the plunger are caused by this mode of operation which are harmless up to a point and do not influence the function of the pump element. Frequently such elements are replaced prematurely due to overcaution, although they would still have worked properly for some thousand service hours. Elements with traces of cavitation, as shown in the picture, are still fully operable and can be used further without hesitation. Only if the edge itself is attacked, the injection behaviour is affected. If exchange is absolutely necessary, if possible, all elements should be replaced at the same time.



At present, in close cooperation with the component suppliers, Krupp MaK is developing a pump element excluding the appearance of these traces of cavitation, too. As soon as such an element is available you will be informed by your competent MaK representative.