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# STEEL SONOTRODES

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Special development  
Metal welding  
20 kHz; 6 work surfaces; knurled



Rectangle – Levels – Sonotrode for  
the welding of fabrics;  
35 kHz; 2 slots; knurled



Special development  
Metal welding  
20 kHz; 6 work surfaces; knurled

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Steel is commonly considered an extreme delicate material for the construction of sonotrodes.

However, we have actually been manufacturing steel sonotrodes at a high rate of success for decades. Such sonotrodes are particularly used at the cutting and welding processing of films and fabrics.

Film or fabric processing requires of the highest precision. The mode of oscillation of the for this purpose deployed sonotrodes has to be clearly longitudinal and the amplitude has to be distributed as evenly as possible – lateral oscillations have to be avoided.

But we also manufacture steel sonotrodes used at ultrasonic metal welding.

These also have to meet specific demands. The necessity of some very specific new geometries at the work surfaces for extreme special applications is common.

We frequently perform such special developments.

The advantages of steel sonotrodes lie on the fact that they are more cost-effective than Titanium plated sonotrodes and that they can be reground, within certain limits, without losing their hardness of approx. 58-60 HRC. (Steel sonotrodes for film and fabric processing have usually metal-metal contact, and are, therefore, subject to a particular abrasion. We manufacture sonotrodes in such a way that in most of the cases a repeated regrinding is possible.)

At our factory we are able to quench and temper steel sonotrodes in our own hardening plant, and thus we control the whole process. The resulting quality advantages are considerable. In addition, it enables us to deliver faster, as we do not depend on external delivery times.



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