

## Surface hardening apparatus (S<sub>trahlen</sub> A<sub>uftragen</sub> P<sub>olieren</sub>)

Surface hardening apparatus for tools, moulds and wear and tear components



# Kühner

**S**trahlen **A**uftragen **P**olieren

Surface hardening apparatus' for:

- Tools
- Moulds
- Wear and tear components



**SAP** offers an attractive way to reduce wear and tear and to increase the endurance of metal tools.

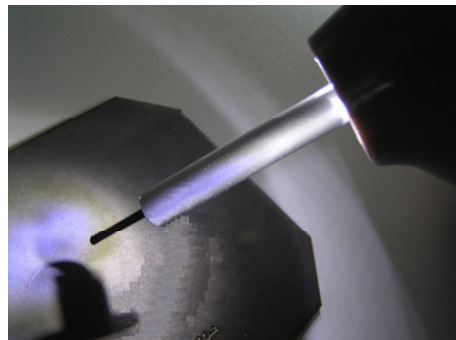
**Because of this it can lower your costs.**

The steadily rising cost pressure of production makes this to an important consideration nowadays.

The apparatus is easy to maintain, robust and can be used with several machines/tools.

**SAP creates layers of high hardness, by applying carbide on the treated surfaces.**

- Layer hardness (depending on the basic material) of 70-75 HRc
- Layer thickness of 5- 25µm, easy to adjust on the apparatus
- Fast and precise localised surface hardening without shape distortion or lowering of the hardness of the basic material



## Technical information:

Electrical connection: 220 V ~                      Current consumption: max. 160 VA  
Dimensions:                      450 mm x 135 mm x 310 mm  
Weight:                      9,15 kg, incl. accessories

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Auf der Ay 32

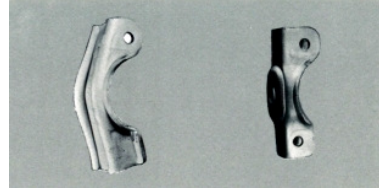
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## Problem solving and main application areas for the SAP:

### 1. Die casting:

- to avoid erosion of the casting mould;  
improved unloading

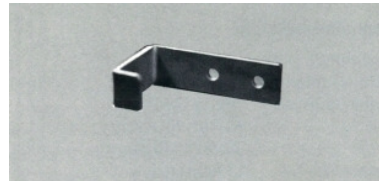


### 2. Blanking:

- coating the plunger avoids cold welding;  
increasing the endurance of the tools

### 3. Pultrusion:

- avoids cold welding, irregular section  
thickness, cup base fracture

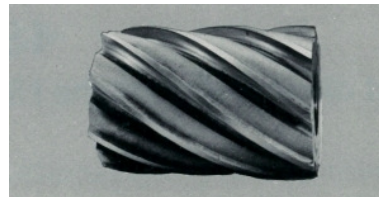


### 4. Forming by bending:

- avoids cold welding

### 5. Chipping:

- Increasing the endurance of the tools  
by chipping grey cast, Al ,Ms and  
other metals



### 6. Hot press moulding

- To elongate the endurance of the moulds

## Accessories:

Application pistol,  
contact clamp,  
power cable

2 Electrodes, 50 mm long and sizes:

- 1 mm; 1,5 mm and 2 mm
- 1 mm; 1,5 mm and 2 mm

Weight: 9,15 kg incl. accessories

Measure: 450 mm x 135 mm x 310 mm

