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ALO 690-81

## ALO 690-81

Setting and Induction flex hardening of HSS hand hacksaw blades



### CAPACITY:

Blade length: 250 - 320 mm  
Blade width: 12 - 13 mm  
Band thickness: 0.5 - 0.7 mm  
Tooth pitch: 14 - 32 TPI  
Production speed: 18-24 blades / min

### THE SYSTEM COMPRISES:

Pay off magazine  
Setting machine type ALO 681-S  
Hardening generator and inductor  
Closed cooling system  
Collect magazine

### OPTIONS / ACCESSORIES:

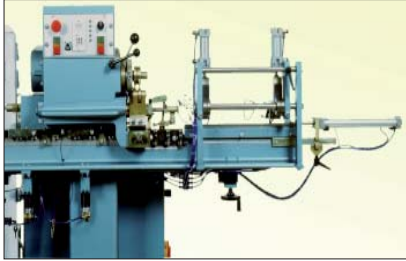


ALO 81-60  
Set gauge

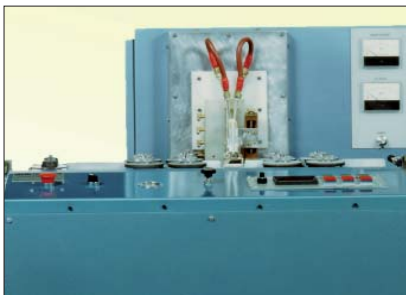


ALO 61201  
Grinding fixture





Setting unit



Hardening unit



Collect magazine

## MACHINE DESCRIPTION

### Blade feed unit

The blades are fed from the feed magazine containing approx. 700 blades into the setting machine where they are accurately set, either wavy or raker acc. to choice. After setting, they are fed into the blade feed unit by means of an air motor. Two pairs of ceramic rollers driven by a servo motor feeds the blades into the work coil, where they are accurately guided by means of a ceramic guide system. In the work coil the teeth and the back edge are hardened and the rest remains soft, thus giving a very flexible blade.

The blades are air quenched and transported out of the work coil by means of two pairs of ceramic rollers. A 5th set of rollers feeds the blades into the pay off magazine. All the rollers and guides are manufactured from a suitable ceramic material to give positive drive.

### ALO 681-S setting machine

The setting machine is fully automatic and all functions are controlled by a programmable controller. The feed magazine will feed one blade at a time to the setting unit. Portions at each end of the blades may be left unset.

Setting symmetry and over all set is easy to adjust with micrometers.

During the setting operation, the blade is clamped hard to make it possible for the oscillatory moving setting tools to set the teeth to perfection in both raker and wavy set patterns.

### Collect magazine

The magazine consists of a pair of screw feeders and a stacking magazine. The blades drop down to the screw feeder which transports the blades into the magazine where they are vertically stacked.

## TECHNICAL SPECIFICATION:

Blade length:	250 - 320 mm
Blade width:	12 - 13 mm
Blade thickness:	0.5 - 0.7 mm
Tooth pitch:	14 - 32 TPI
Setting tolerance:	0.02 mm
Approx. setting / hardening speed:	18-24 blades / min
Approx magazine capacity:	700 blades
Air pressure:	6.3 bar
Standard voltage:	400VAC $\pm$ 10% 3-phase, 50-60 Hz $\pm$ 1% directly earthed system, other voltages available upon request.
Power consumption (at max output power):	25 kVA
Blade steel grade:	ABC3, M2 or E945

Other customer requirements may be discussed between customer and ALO

