

ALO 690-81 Combi

Setting and Induction flex hardening of ABCIII hand hack saw
Setting and induction hardening of carbon hand hack saw



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

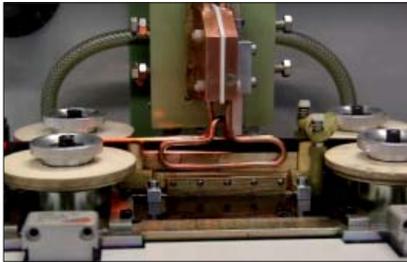


ALO 61201
Grinding fixture

MACHINE DESCRIPTION

ALO 681-S setting machine

The blades are fed from the feed magazine containing approx. 700 blades. The setting machine is fully automatic and all functions are controlled by a PLC. The feed magazine will feed one blade at a time to the setting unit where they are accurately set. Portions at each end of the blades may be left unset. Setting symmetry and over all set is easy to adjust with micrometers. During set operation, the blade is clamped hard to ensure a very accurately set result both for raker and wavy set patterns.

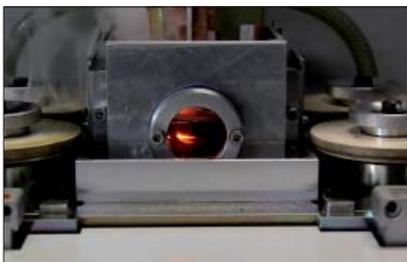


ABCIII blade hardening

ABCIII material

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.



Carbon blade hardening with inductor immersed in quench oil tank

Carbon blades

the work coil, which is placed in a quench chamber and immersed in the quenching medium, is made of round copper tubing and is designed to simultaneously heat the teeth and the back of the blade. It is adjustable in height to permit optimisation of the heat pattern. The work coil is interchangeable and can easily be replaced.

To change set up between ABCIII and Carbon configuration is done easily by change of inductor and guide or quench chamber.



Collect magazine

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):	32 kVA
Blade steel grade:	ABCIII, M2 or E945

Other customer requirements may be discussed between customer and ALO

