

ALO 193-300

Induction tooth hardening and cut to length of bowsaw blades



THE SYSTEM COMPRISES:

Hardening generator
Hardening inductor
Band feeder
Air quench
Loop table
Cut to length machine
Collect magazine

CAPACITY:

Band width: 20 - 40 mm
Band thickness: 0.6 - 0.8 mm
Feed length: 300 - 915 mm
Accuracy: ± 0.1 mm
Approx. magazine capacity: 450 blades

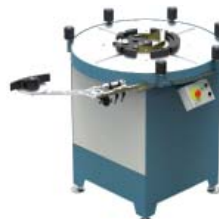
OPTIONS / ACCESSORIES:



ALO 822
Double coiler



ALO 831
Double coiler



ALO 880
Electrical coiler



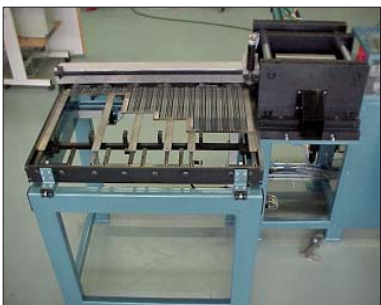
ALO 106 CUBE
Coil handling system



Hardening unit and looptable



Cut-to-length feeder and control panel



Pneumatic press and collect magazine

MACHINE DESCRIPTION

Band feeder

The band feeder consists of two units, one feed unit, the other as an adjustable brake to control the band tension by using an electro magnetic friction brake. Both units are equipped with two pairs of inclined rolls. The four rolls on the feed unit are driven by a servomotor, and the speed is controlled by a servo controller. The oscillating circuit with the inductor are located between the brake and the feed units such that the band is pulled through the inductors at a controlled tension.

Generators

The hardening generator is enclosed in separate aluminium cabinet, equipped with separate oscillating circuit connected to the cabinet via coaxial cable. The generator is air cooled, thus limiting the cooling water requirements to inductor and oscillating circuit only. The generator is equipped with an automatic anode current regulator, thus ensuring a stable power during the hardening operation.

Inductors

The interchangeable inductors are made of copper tubing and can be custom made for different pitches and band gauges. Adjustable in height for different blade widths and sideways for different blade gauges.

Air quench

The teeth are quenched with compressed air using nozzles on both sides of the teeth.

Loop table

The table consists of a welded stand with a table top of hardened steel sheet. The table top has a brim to prevent the loop falling over the edge.

Cut to length with magazine

The band is fed from the hardening unit via the loop table by means of a linear feeder. Blade lengths up to 24" are fed in one feed cycle. The punching is done with a pneumatic press. At the punching operation the tang of the blades and the holes are formed with hard metal die cutters mounted in a pillar stand. Number of blades are chosen on a keyboard and surveillance of the machine operations is done via a PLC. An air motor feeds the blades into a collect magazine, the magazine consists of a collect slot and a vertical stacking magazine.

TECHNICAL SPECIFICATION:

Band width:	20 - 40 mm
Band thickness:	0.6 - 0.8 mm
Feed length:	300 - 915 mm
Accuracy:	± 0.1 mm
Approx. magazine capacity:	450 blades
Air pressure:	6.3 bar
Standard voltage:	400VAC ±10% 3-phase, 50-60 Hz ±1% directly earthed system, other voltages available upon request.
Power consumption (at max output power):	10 kVA
Other customer requirements may be discussed between customer and supplier.	

