

## ALO 191S

### Induction tooth hardening of bandsaw blades



#### THE SYSTEM COMPRISES:

Feed unit  
Hardening generator and inductor  
Closed coolant system

#### CAPACITY:

Band width 6 - 50 mm  
Band thickness 0.6 - 1.4 mm  
Tooth pitch 0.5 - 4 tpi

- High efficiency and low energy consumption generator with air-cooled oscillator tube.
- Band feeder with a pulling 4-wheel drive system designed for accurate speed and guiding.
- Electromagnetic brake for optimal control of band tension.
- High reproducibility due to accurate digital/analogue settings of power, speed and work coils.
- Fast and easy start up and change over.

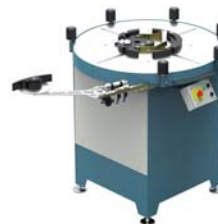
#### OPTIONS / ACCESSORIES:



ALO 90915/16/17/18  
Collapsible coil center



ALO 831  
Double coiler



ALO 880  
Electric coiler

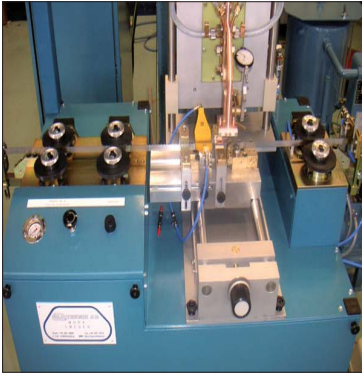


ALO 106 CUBE  
Coil handling system

## MACHINE DESCRIPTION

### Band feeder

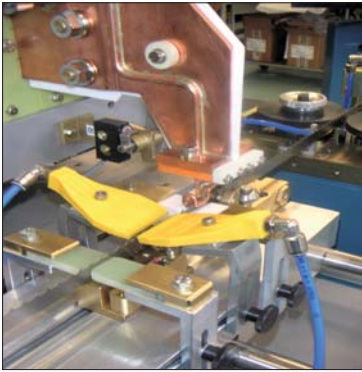
The band feeder consists of two units, one 4 wheel feed unit and one two wheel unit with an adjustable brake to control the band tension using an electro magnetic friction brake. The rolls are made of hardened tool steel with knurled circumference. The four rolls on the feed unit are driven by a AC-motor. The speed is controlled by a frequency controller. The oscillating circuit with the inductor are located between the brake and the feed units such that the band is pulled through the inductor at a controlled tension. The teeth are quenched in air by means of a pair of nozzlers.



*Band feed unit*

### Generator

The hardening generator is enclosed in an aluminium cabinet and equipped with a separate oscillating circuit connected to the cabinet via a coaxial cable. The generator is air cooled, thus limiting the cooling water requirements to inductor only. The generator is equipped with a chopper for infinitely variable control of the output power.



*Inductor and air quench nozzles*

### Inductor

The inductor is made of copper tubing and can be custom made for different pitches and band gauges. They are adjustable in height for different blade widths and sideways for different blade gauges. The inductors are interchangeable and can easily be replaced.

### Closed circuit coolant/circulation system

The closed circuit cooling system is used for cooling of HF-generators and similar equipment where clean nonconductive cooling water with controlled temperature and constant waterpressure is required.

## TECHNICAL SPECIFICATION:

Band width:	6 - 50 mm (other widths on request)
Band thickness:	0.6 - 1.4 mm
Tooth pitch:	0.5 - 4TPI
Capacity:	5 - 10 m/min
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):	10 kVA

Other customer requirements may be discussed between customer and ALO.

