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## ARM ALUMINIUM RECOVERY MACHINE<sup>®</sup>

was conceived, designed and developed in order to help extruders eliminate and recover the aluminium butt.

# Recovering aluminium rather than dissolving it in the soda is a quantifiable financial benefit.

The machine allows to eliminate the aluminium residue, that is also called butt, anytime a die-holder with incorporated feeder plate is used.

In the traditional process the entire stack, die-holder and die or simply die and butt, is immersed in the soda bath, a very expensive process, particularly health aggressive and implying also the burden of waste disposal.

The machine on the contrary allows cutting the butt in a simple and easy way and avoids the waste of some kilos of recyclable aluminium. The actual cost saving and the amortization in a few months deserves the attention of every extruder. The machine is equipped with a movable table with hydraulic feed enabling carrying out automatic rectilinear cuts of the butt.

The workbench is mounted on round cylindrical guides with recirculating ball bushes, eliminating sliding friction also under heavy load.

#### ARM - ALUMINIUM RECOVERY MACHINE® is

provided with a graduated scale, displaying the selected cutting length with stop at the cutting end.





### **1 • MAIN STRONG POINTS**

#### SAFETY

High safety degree during cutting operations thanks to the protections, installed all around the table, and to the opening on the 2 loading sides, provided with a safety limit switch.
By positioning the die in the specific vice, one avoids dangerous rotations during cutting operations.

#### ERGONOMICS

The operator's strain is considerably reduced thanks to the cutting operation run by the machine.

#### PERFORMANCE

- The appliance offers a huge saving, easily calculated.
- The soda process is considerably reduced both in terms of costs and time; besides it is easy to recover some Kilos of aluminium and to transform it for the subsequent extrusion.

## **2 • SPECIAL FEATURES**

The machine is manufactured with a welded and tempered steel structure duly designed to resist to cutting strength.

The hydraulic clamp, which allows die locking during the cutting stage, is driven by a double acting hydraulic cylinder with a stroke of 200 mm and has a tightening working capacity up to Ø 520 mm.

The "V" shaped plate allows optimal positioning and centring of the die.

The lubrication with vegetable oil by means of a pneumatic micro vaporizer allows you to adjust the pulsations per minute and the amount of liquid to spray.





## **3 • OPERATING INSTRUCTIONS**

The following operations are valid for all types of dies:

- Place the die with butt within the "V" shaped plate.
- Make sure that all the protections are positioned correctly and start the machine.
- Close the hydraulic vice in order to block the die.
- Stretch the blade by turning the handwheel.
- Position the blade-guide rod a few mm from the butt so as to optimise the cutting operation.
- Start the control unit that runs all the hydraulic parts.
- The motor makes rotate the handwheels and consequently the blade until the set speed is reached.
- Adjust the cutting speed by means of the potentiometer GVX 1000
- Set the cutting length by the handgrip located on the table and the millimetric bar.
- Adjust the table feed by turning the specific potentiometer.
- When the table terminates the butt cutting, a plate activates the table micro, which blocks the travel.







## **4 • TECHNICAL SPECIFICATIONS**

Projection	600 mm
Number of handwheels	2
Handwheels diameters	625 mm
Table dimensions	600x760 mm
Cutting travel	500 mm
Maximum opening in height	550 mm with "V" shaped plate
	560 mm without "V" shaped plate
Maximum die diameter	520 mm
Band saw length & width	5.060 mm x 27 mm x Z 2/3
Engine power	4 Kw
4-pole engine	1.400 rounds/min
Hydraulic engine power	0,75 Kw
Blade speed after first cuttings	between 700 & 800 m/min
Blade feed after first cuttings	about 70 mm/minute
Average life of a blade	300-350 butt cuttings
Net overall length	1.590 x 1.300 x h 2.450 mm
Maximum overall length including movements	1.590x1.530 mm
Base overall length	1.250 x 800 mm
Approximate weight	1.200 Kg

#### NB

For best results it is recommended that the first 6 cuts are done at ½ the feed rate (30mm/min or 1.2"/min). If this procedure is not followed the blade life will significantly decrease. This is the standard procedure for all band saws not just the ARM.

For an ideal lubrication of the saw blade we recommend the use of the lubricant BARALDI-MOTUL Tech STAG 40/2 BC. Vegetable compound, specially studied for the cutting of the aluminium butt with ARM and for cutting both hot and cold billets by means of circular saws.

The machine is supplied in compliance with CE standards or alternative ones.

ARM - ALUMINIUM RECOVERY MACHINE<sup>®</sup>: a CO.M.P.ES. S.p.A. trademark.

Compes reserves the right to apply without prior notification any technical modification deemed necessary or as a function of specific requests.