# Simec cutting solutions

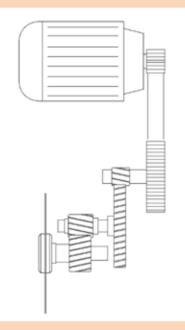
# MEC 2000

Automatic metal cutting machine for high production with a high quality of cut in tolerance and perpendicularity, adapt for any kind of solid bars as well as tubes in round, square or rectangular section, or profiles.

Round tube: from Ø 10mm, to Ø 100mm; Square tube: from 10x10mm, to 80x80mm; Rectangular: from 10x20mm, to 60x100mm;

Bar: from Ø 10mm, a Ø 40mm.

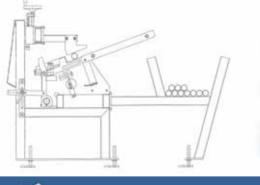




# STANDARD CUTTING HEAD

- ▶ Inclined cutting advancing from behind saw head mounted on prismatic guides, with possibility of adjusting any possible play between the slides and the head, with automatic centralized lubrication.
- ► Composed with hardened and ground helicoidal gears to obtain an high operating rate, without any play or vibration of the saw blade.
- ▶ Blade speed: from 30rpm to 400rpm can be adjusted through inverter directly from the interface UNI eTOP 05.
- ► HSS or TCT blade.
- ▶ Diameter the blade min Ø 250 mm max 350 mm.
- ► Oil mist blade lubrication.

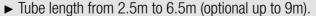
#### **LOADERS TYPE**



# AUTOMATIC SLOPE LOADER "M"

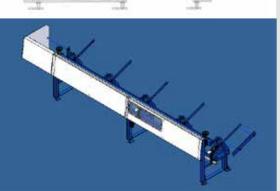
Suitable for the following material dimension:

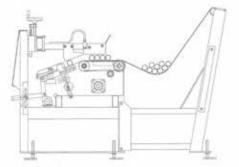
- ► Round tubes from Ø 10mm to Ø 90mm.
- ► Square tubes from 10x10mm to 100X100mm.
- ► Rectangular tubes from 10x10mm to 120x80mm.
- ▶ Wall thickness up to 5mm for steel and stainless steel.

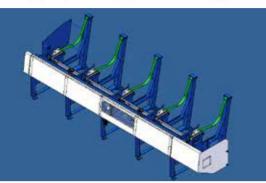


- ► Loader gripper to feed the material into the machine.
- ► Load capacity limited to the inclined chute.
- ▶ Loader support to position the material on the inclined plane.

Others options will be indicated in an official quote.







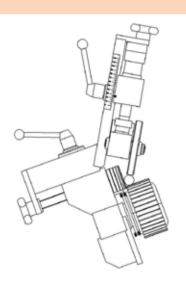
### **AUTOMATIC BUNDLE LOADER "BM"**

Suitable for the following material dimension:

- ► Round tubes from Ø 10mm to Ø 90mm.
- ► Square tubes from 10x10mm to 100X100mm.
- ► Rectangular tubes from 10x10mm to 120x80mm.
- ▶ Wall thickness up to 5mm for steel and stainless steel.
- ► Tube length from 2.5m to 6.5m (optional up to 12m).
- ► Carrying capacity 4000kg (for a 6.5m loader).
- ► Automatic vertical and horizontal in-feeding device from the bundle of tubes to the cutting machine.
- ► Loader gripper to feed the material into the machine.

Others options will be indicated in an official quote.

# **CUTTING MACHINE DEVICE**



Infeeding device, showing the pressure rollers (adjusted manually) and the feeding rollers.

- ➤ The whole feeding rollers device rises to avoid any scratch on the tube from the cutting plane.
- ► Quick release vice jaws for guick tooling changes.
- ▶ Double clamping vices, on both sides of the saw blade.
- ► Hydraulic clamping vice.
- ► Feeding of the tubes done by motorized rollers, made in Wulkolan.
- ▶ Pressure rollers are manually adjusted according with the tube dimensions.
- ► Horizontal hydraulic vices holding the tube on both sides of the cut to obtain a clean cut.
- ► Automatic unloader where the pieces go down on a deflector that has two position (one position for good pieces an one for scrap).
- ▶ Manual length stop device, positioned manually through the rack.
- ▶ Discharge systems with 2 positions as standard.

#### **CUTTING MACHINE OPTIONALS**



CN900 length stop.

- ▶ Possibility to cut stainless steel changing the pulley on the cutting head.
- ► CN900 version with one motorized length stop device which can be moved on the 3 meter rack positioned over the discharge.
- ► Heating device for the hydraulic oil.
- ► Chips conveyor.
- ► Customized discharge device.
- ▶ Digital read for the manual length stop.
- ► Extra metal fence protection.
- ► Intrusion shutters photocell.
- ► Prismatic jaws.
- ► Profile jaws for small thickness.
- ➤ Optional loading system choices: slope loader (type M), bundle loader (type BM), chain loader (type CM).

Other options will be indicated in an official quote.

# **DEBURRING MACHINE SB 3000A**

This machine is normally inline the cutting unit and is used for remove the burr from the edges of the tube. The pieces, fall from the discharge of the cutting unit within the deburring machine where, an automatic chain, bring the pieces through the steel brushes and then discharge them.



# CHARACTERISTIC:

This machine is suitable for the following material dimension:

- ► Round tubes: from Ø 12mm to Ø 80mm.
- ► Square tubes: from 12x12mm to 80X80mm.
- ▶ Pieces length: from 200mm to 3000mm.
- ▶ Inclined plane with sensor of minimum and maximum accumulation of tubes.
- ► Chain with teeth for tube transport.
- ▶ Speed of transport adjustable to reach a production up to 3000 pieces/h.
- ► Brushes Ø 300mm length 445mm.
- ▶ Possibility to adjust the intensity of brush and the kind of deburr (internal, external or both).
- ▶ One brush is stationary while the other is moveable on its slides up to 3000mm.

#### **OPTIONAL:**

- ► Automatic movement of the brush support thought the 3 meter rack position on the deburring machine.
- ► Plastic teeth cover.
- ► Air-blow on the machine output
- ► Stainless steel brushes.