

A E F 50.8mm (2") HF TUBE MILL

COMPLETELY RE-MANUFACTURED

TOOLED

WITH NEW ELECTRICS \*\*\*\*\*

### 1) DECOILER

Mandrel drum with 4 segments, manual expansion; pneumatic disk brake for material tensioning and emergency stop

### 2) LINE ENTRY EQUIPMENT

--Manual shearing machine

--Twin welding clamps

--MIG welding machine, **NOT INCLUDED**

The above placed on a single baseframe (to allow removing it during operation).

### 3) VERTICAL STRIP ACCUMULATOR

### 4) STRIP ENTRY GUIDE

Four rollers, in couples; on two saddles for strip side-guiding.

## **5) FORMING UNITS**

6 steel heads; upper roll movement (up/down) with jack and torsion bar. Shaft diameter: 76mm.

4 self-centering side-guides with rotating shafts

## **7) WELDING CLAMPS**

With three horizontal-axis idle rollers to forge the tube in the weld area, allowing all required adjustments.

## **8) OUTSIDE SCARFING UNIT (2 TOOLS)**

Outside scarfing unit with 2 tools; independent movements for a fine adjustment of tooling and simultaneous quick-lifting of both tools in the event of a line stop. Each tool comes with vertical and horizontal movements of axis, perpendicular to tube.

The contrast-base of tools is in hard wood.

At exit of unit a "V"-shaped roller is placed, having vertical movement for tube guiding

## **09) COOLING SYSTEM**

Water-tight tank tunnel for pipe cooling; with vertical adjustment to suit for different tube diameters

## **10) TUBE SIZING UNITS**

3 steel heads; upper roll movement (up/down) with jack system and torsion bar. Shaft diameter: 76mm.

3 self-centering side-guides with rotating shafts

## **11) TURKSHEADS**

2 turksheads for straightening tube.

3 movements: vertical, horizontal, and rotating (in respect to tube axis).

## **12) HIGH PERFORMANCE FLYING CUTOFF SAW**

With:

- cutting head
- sliding car
- fixed motorized basement
- hydraulic unit
- electrics

### **CUTTING HEAD**

Motorized disc saw; AC motor, 9 kW - driven by inverter

Disc diameter: 350mm

Feeding is by an adjustable-stroke hydraulic cylinder

### **SLIDING CAR**

The forward and reverse motion of car are by servomotor

A set of pneumatic clamps hold tube during cutting operation

The car slides on hardened and ground guides. The system is complete of with 4 wheels, adjustable by eccentrics to ensure accuracy of sliding

## **FIXED MOTORIZED BASEMENT**

Steel basement, complete with fixing plates

Servomotor for motion

## **HYDRAULIC UNIT**

Hydraulic unit for the movements of cutting head

## **ELECTRICS**

The workcycle is controlled by a PLC; the cut synchronization, by a dedicated NC

## **TECHNICAL DATA**

Cut: slow saw, burr type

Dia. of cutting disc: 350mm

Disc thickness: 3mm

Direction: right to left

Material tensile strength max (N/mm<sup>2</sup>): 700

Process material: carbon steel

Tube dia.: 12/50mm

Tube max length: 12000mm

Max speed: 100m / min

Accuracy over 6000 mm length:  $\pm 1.5$ mm

Max speed,  $\varnothing$  350mm cutting discs: 280m / min

Motor: AC, 9 kW

Cutting head advance: hydraulic

Sliding car motion: servomotor

Sliding car length: ca. 3500mm

Cutting disc cooling: by emulsive

Cutting disc lubrication: by oil mist

Electric power: 400V 50 Hz

Pneumatic pressure: 6 bar

### 13) TUBE OFF-LOADING ROLL TABLE

### 14) HF WELDER

H.F. welding machine: 100 kW, VT 100 Type by THERMATOOL  
(revamped)

### 15) EMULSIVE SYSTEM

Paper filter for emulsive, hydraulic connection scheme of filter to heat exchanger and pumps. **Excluded from price: pumps for circulation of emulsive, cooling water from wells, piping and heat exchanger.**

### 16) TOOLING

#### ROLL TOOLING FOR:

Ø 15mm / 18mm / 19mm / 20mm / 22mm / 25.4mm /  
28mm / 30mm / 32mm / 38mm / 50.8mm

SQUARE 15x15mm / 20x20mm / 40x40mm

RECTANGULAR 20x10mm / 25x15mm / 45x35mm