# ELECTRONIC 4 ROLLS DOUBLE PINCH BENDING MACHINE
FACCIN TYPE 4HEL 3.1-48/42

<table>
<thead>
<tr>
<th>Feature</th>
<th>Unit</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max plate length</td>
<td>mm</td>
<td>3.100</td>
</tr>
<tr>
<td>Distance between uprights</td>
<td>mm</td>
<td>3.300</td>
</tr>
<tr>
<td>Number of rolls</td>
<td></td>
<td>FOUR</td>
</tr>
<tr>
<td>Upper central roll diameter</td>
<td>mm</td>
<td>530</td>
</tr>
<tr>
<td>Side rolls diameter</td>
<td>mm</td>
<td>430</td>
</tr>
<tr>
<td>Installed power</td>
<td>HP</td>
<td>100</td>
</tr>
<tr>
<td>Rotation speed</td>
<td>m/1'</td>
<td>2-4</td>
</tr>
<tr>
<td>Hydraulic front bearing tilting speed</td>
<td>mm/1'</td>
<td>450</td>
</tr>
<tr>
<td>Hydraulic tilting of top roll</td>
<td></td>
<td>250</td>
</tr>
<tr>
<td>Machine weight</td>
<td>Kg</td>
<td>44.300</td>
</tr>
</tbody>
</table>
**GUARANTEED PERFORMANCES:**

<table>
<thead>
<tr>
<th>Performance Parameter</th>
<th>Value 1</th>
<th>Value 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum bending thickness (full length) mm</td>
<td>48</td>
<td>40</td>
</tr>
<tr>
<td>Maximum prebending thickness (full length) mm</td>
<td>42</td>
<td>36</td>
</tr>
<tr>
<td>Rolling radius mm</td>
<td>1400</td>
<td>500</td>
</tr>
<tr>
<td>Material yield strength N/mm²</td>
<td>280</td>
<td>280</td>
</tr>
<tr>
<td>Maximum bending thickness (half length) mm</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>Maximum prebending thickness (half length) mm</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Rolling radius mm</td>
<td>1400</td>
<td></td>
</tr>
<tr>
<td>Material yield strength N/mm²</td>
<td>280</td>
<td></td>
</tr>
</tbody>
</table>

- Electronic conical bending device from mobile control console
- Rolls normalized, induction hardened, stress relieved and polished
- Top central ferrule support (single axes) with special design to support cones
- Side Support
- Numerical Control series CNC/PGS-

**TOTAL NET PRICE EX WORKS for the machine refurbished** | **EURO** | **171,000.00**

**TOP CENTRAL FERRULE SUPPORT** *(single axes)*

It makes possible to support cylinder ferrules, setting free the workshop main crane for other jobs; it avoids the re-closing of rolled ferrules under their own weight and the two edges overlapping during the second end prebending. For these reasons the central support is particularly needed in bending ferrules with high diameter-thickness ratio.

It includes also the inclination in order to support cones (inclination is manually made).

**SIDE SUPPORT**

The lateral support (moved by means of hydraulic cylinders) has the function of supporting thin plates, bended at large diameters, as soon as they come out from the machine's rolls. The lateral support as the central one makes the control of light plates easier without cranes and avoids the re-opening of the ferrule under its own weight.

*All functions above mentioned can be* *manually* *managed, by means of electric controls (not hydraulic distributors) centralized on the bending rolls machine main console, or, in automatic cycle, by one of our NUMERICAL CONTROL EQUIPMENTS that you can choose according to your specific needs.*

**STANDARD FEATURES ON FACCIIN PLATE ROLLS SERIES 4HEL:**

- **Rectilinear guides** system for rolls translation (no pivoting movement);
- **Electronic parallelism** balancing Control (0.2 mm balancing tolerance);
- "MCS" **Multibearing System** for rolls rotation (4 independent bearings supporting each roll);
KINETIC CUTTING SYSTEMS
Ph.+971 50 1992501
salesuae@kineticuae.ae

- Hydraulic **drop end bearing** (in combination with top roll tilting);
- Hydraulic **tilting of top roll** (for easier ejection of rolled products);
- 2 **motorized rolls** by 2 gearboxes + 2 hydraulic motors;
- **Rolls surface polished** after heat treatment (guarantees no scratches on the rolled products);
- **Hydraulic protection** against overloads (limited maximum working pressure);
- **Permanent lubrication** system (maximum reliability);
- **ISO 9000** certified components;
- **Safety guard cable** all around the machine (with micro switch for safety immediate stop);
- **Low voltage controls** centralized on mobile control console on wheels;
- **Safety system** with immediate stop of all movements.

NUMERICAL CONTROL SERIES CNC PGS
The numerical control unit type CNC-PGS is since more than a year the most advanced numerical control ever applied to bending roll machines. It gives the possibility to bend cylinder, polycylinder, open shape ferrules of different dimensions without any manual search of theoretical rolls positions for each bending step. This system overcomes abundantly all other systems offered by competitors.

The CNC-PGS system consists of a PC IBM or compatible with COLOR MONITOR as operator interface and a post processor to control every machine axis (up to 11 axis can be controlled in standard configuration).

The data input operation for a new program is extremely quick and easy because it is possible to use the unit as a CAD system in 3 steps:

1) Shape Selection (Cylinder, Oval, Polycylinder, Open Shape);
2) Plate data input (Bending radii, Length, Thickness, Yield Point);
3) Automatic cycle start.

All the CNC-PGS functions are of immediate understanding and are summarized on the video screen as soon as the machine is turned on:

- Shape Selection (cylinder, polycylinder, open shape).
- Plate Data (Directly from the dimensioned drawing).
- Steps View (Graphic display of all operations with axes position corrections possibility).
- Data Files (Hard disk data base for different programs storage and recall).
- Utility Disk (Format, Storage, Erase operations on Floppy Disk).
- Input/Output status (for machine diagnosis).
- Offset (Control of Roll inclination for conical bending).
- Manual mode setting.

The CNC-PGS numerical control equipment does not need expert operators in information engineering or in plate bending because as the desired ferrule data are insert, all the calculations for machine rolls, lateral and central supports, loading, feeding and unloading systems movements are made by the computer.

The CNC-PGS unit is particularly suitable for the production of numerous small lots.
SALES CONDITIONS:

- Delivery: READY – unless sold
- Validity of offer: unless sold
- Warranty: 6 months on the machine refurbished
- Payment: 30% with the order
  70% after acceptance in Italy before the shipment