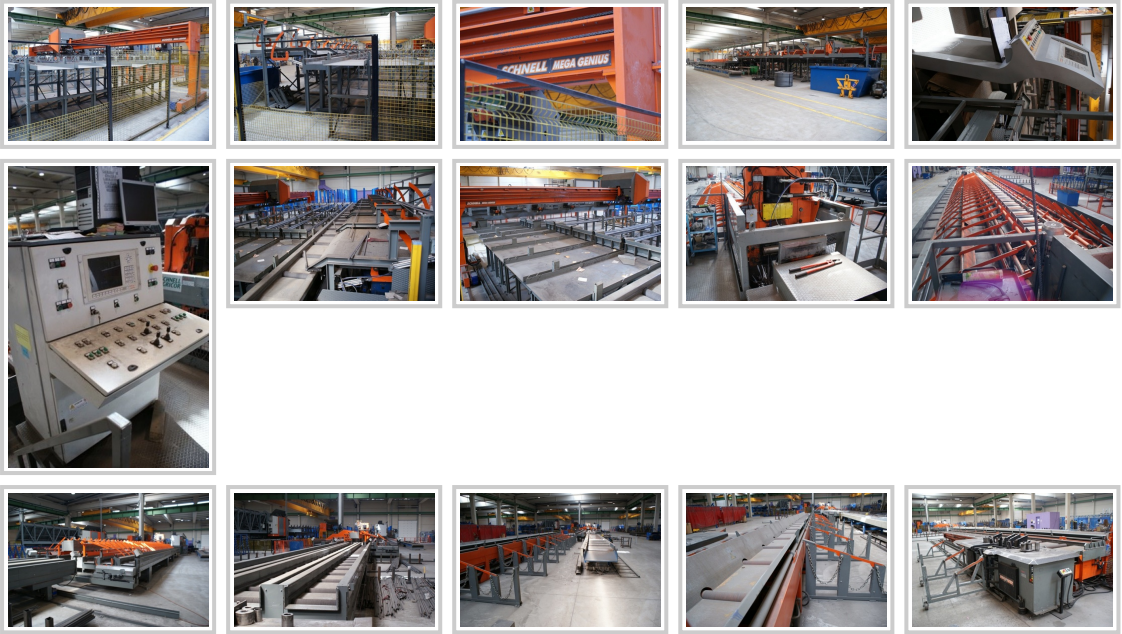
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# SL SHEAR-LINE 500 PLANT BY SCHNELL Rebar processing line for Civil constructions' concrete steel reinforcement cages, and meshes manufacturing.

## General Specifications:

- **Type:** Steel rebar processing machinery
- **Manufacturer:** SCHNELL
- **Model:** SL SHEAR-LINE 500
- **Manufacturing date:** 2008

## Images:




## Specifications:

SL SHEAR-LINE 500 PLANT

Manufacturer:  SCHNELL, SPA -  ITALIA

Rebar processing line for Civil constructions' concrete steel reinforcement cages, and meshes manufacturing.
The line is composed  of:

Automatic feeder Megagenius 16, MegaGenius automatic feeder counts and moves the bars for shear-line feeding in a completely automatic way
Hydraulic guillotine shear CGS 500
Measuring and Cutting Tracks VMT 500 with a +- 1 cm  tolerance.

4. ROBOMASTER 60 -12 Servo

The Robomaster shaping centers allow fully automatic 4- directions bending and the production of any type of shapes.

1.-Automatic feeder MEGAGENIUS 16

MegaGenius automatic feeder is an absolute, internationally patented novelty.
Thanks to its innovating system, MegaGeniustakes, counts and moves the bars for shear-line feeding in a completely automatic way. With MegaGenius you save money and enhance productivity due to its flexibility.
Advantages:

1. 'MegaGenius' is extremely fast so it can feed more bars compared with manual feeding. The result is higher productivity per hour for any kind of shear line.
2. No need of hard and dangerous bar handling so no need of people for such operation resulting in great money saving.
3. The elimination of manual bar feeding enhances security at job site.
4. "MegaGenius" special structure makes it possible to feed shear-lines with higher a number of bars of different diameter and length resulting in:
   a. drastic reduction in machine set-up;
   b. plant overall dimensions determined by clients' room available;
   c. higher flexibility of the plant.
5. The possibility to optimize cutting procedures means reducing scraps.

MegaGenius is equipped with an independent control unit so that it can work automatically, semi-automatically or manually according to the level of automation of the shear line it is used with

In the automatic version (only with Schnell shear lines) shear line control unit can send MegaGenius programming data in a completely automatic way.

In the semi-automatic version you have to ensure synchrony between Shear Line and MegaGenius by managing bar unloading on the feeding track manually.

In the manual version you have to confirm every operation step by step: from bar preparation to their delivery to cutting

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2.-HYDRAULIC GUILLOTINE CGS 500
Hydraulic guillotine shear with 510mm-wide blades and rebar hold down cylinder.
No. of cuts: 12-15/min; blade opening: 70mm;
Hydraulic power: 300 metric tons.
> Minimum cut: 500mm
> Minimum transferable cut: 700mm

Further technical features:
>Hydraulic power pack with 500l capacity tank (oil not included);
> The Shear is assembled on a heavy duty mobile platform; its movement is provided by a self braking motor and by a screw-system with winding spheres, ensuring the finest precision of the movement;
> Inclined blades for a progressive and noiseless cut;
> Shear entrance roller: motorized and tiltable roller connected to the shear and therefore movable with it. During bars transfer operations, the roller automatically places itself horizontally, supports and moves the bars towards the shear and automatically flips down during the cutting process in order to avoid any interference.

>Cutting capacity:
n. 1 bars #18 n. 2 bars Ø 50mm
n. 4 bars #14 n. 6 bars Ø 40mm
n. 8 bars #11 n.11 bars Ø 32mm
n. 12 bars #10 n.15 bars Ø 25mm
n. 14 bars #9 n.18 bars Ø 20mm
n. 16 bars #8 n.23 bars Ø 16mm

n. 18 bars #7

n. 22 bars #6
n. 30 bars #5
n. 50 bars #4
n. 80 bars #3

3.- Measuring and Cutting Tracks VMT 500

The function of the measuring and cutting tracks is to measure the bars to the set cutting length, convey them to the desired unloading point and unload them onto the storage racks or conveyor roller units positioned to the right and left of the transfer tracks. The measuring track model VMT is a 500 mm wide roller track. It is equipped with fixed blades positioned downstream of the shear every 500 mm to cut the bars to size and unload them on the right or left. Complete with 2 unloading arms to unload the cut bars on both, right and left side, pneumatically operated.

4.-ROBOMASTER 60 -12 Servo

The Robomaster shaping centres allow fully automatic 4- directions bending and the production of any type of shapes, including those with positive and negative bends. Moreover, the bar holding clamps allow independent operations of the two bending units assuring save of time during the production of shapes. It is equipped with wide feeding track consisting of motorised and rubber-coated rollers, bar loaders and unloaders, 2 bending units, one fixed and one mobile2 bending units, one fixed and one mobile, one stop plate for zeroing the bars for each bending unit, ejection cylinder to remove the tools from the toothed part, operation by means of servomotors.Capacity with split formers:

n° 1 bar Ø 40mm;
n° 2 bars Ø 32mm.
Capacity with mandrel (optional):
n° 1 bar Ø 50mm;
n° 3 bars Ø 32mm.

All Schnell bending robots are equipped with an industrial PC model “KS 104”, with graphic display, which manages all the functions performed by the machine including the following:

a. Programming via keyboard and immediate display in scale
b. Setting the diameters of bars, mandrels and of number of pieces to produce and produced
c. Storage of up to 500 different shapes
d. Programming special shapes – e.g. truss-bars, 3D shapes (optional)
e. “Virtual mandrel” function – Schnell patent - (optional)
f. Adjusting the bending angle and piece dimension without interrupting the working cycle
g. Possibility of working independently and manually with the bending machines
h. Two standard RS 232/RS 422 outputs for connection of a bar code reader
or office serial line for remote data downloading
i Auto-diagnostics program for identification of any machine failures.