



Shear Line

LTM 500-300-60

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LTM 500-300

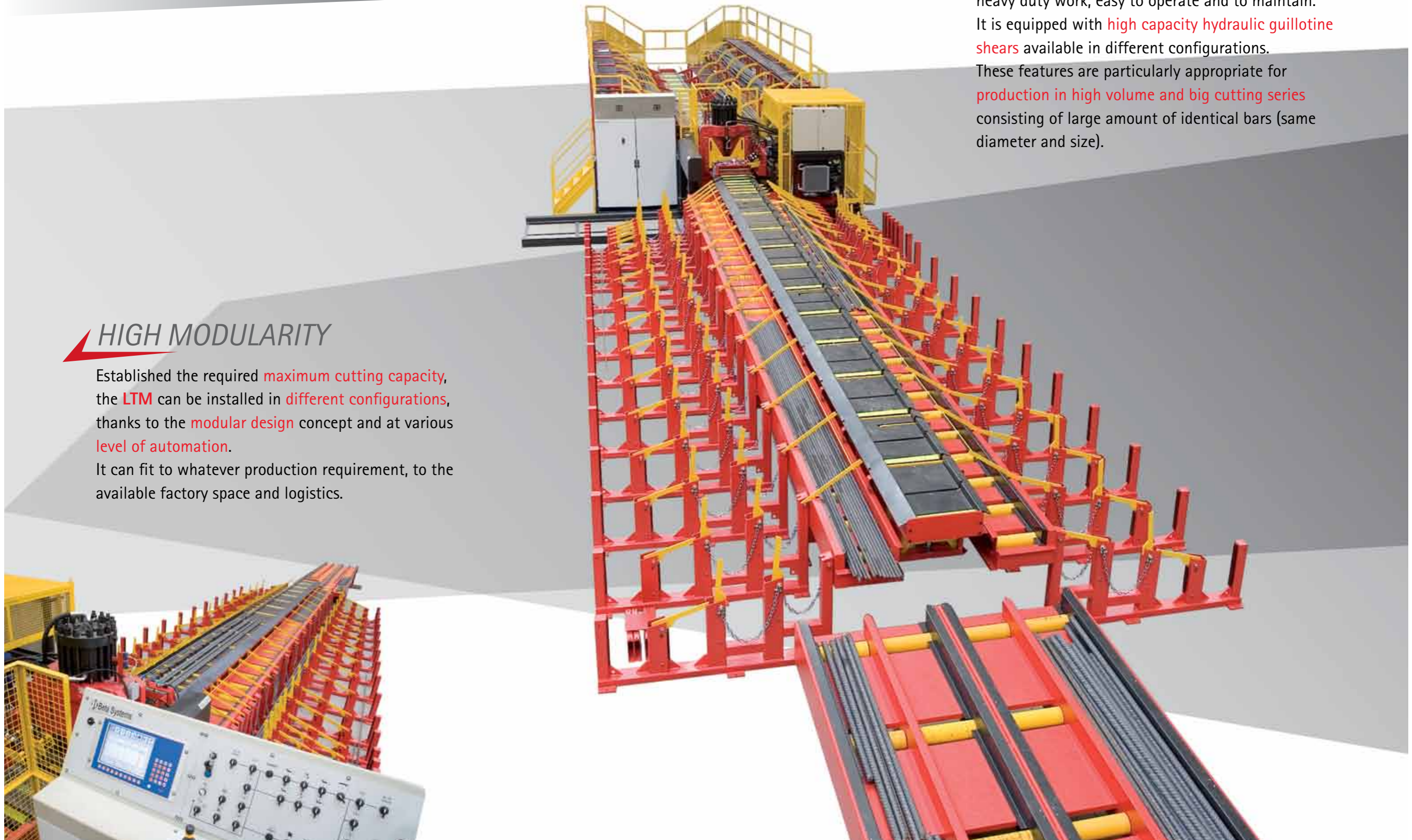
MASS PRODUCTION

The **LTM** is a plant for the rebar cutting, designed for heavy duty work, easy to operate and to maintain. It is equipped with **high capacity hydraulic guillotine shears** available in different configurations. These features are particularly appropriate for **production in high volume and big cutting series** consisting of large amount of identical bars (same diameter and size).

HIGH MODULARITY

Established the required **maximum cutting capacity**, the **LTM** can be installed in **different configurations**, thanks to the **modular design** concept and at various **level of automation**.

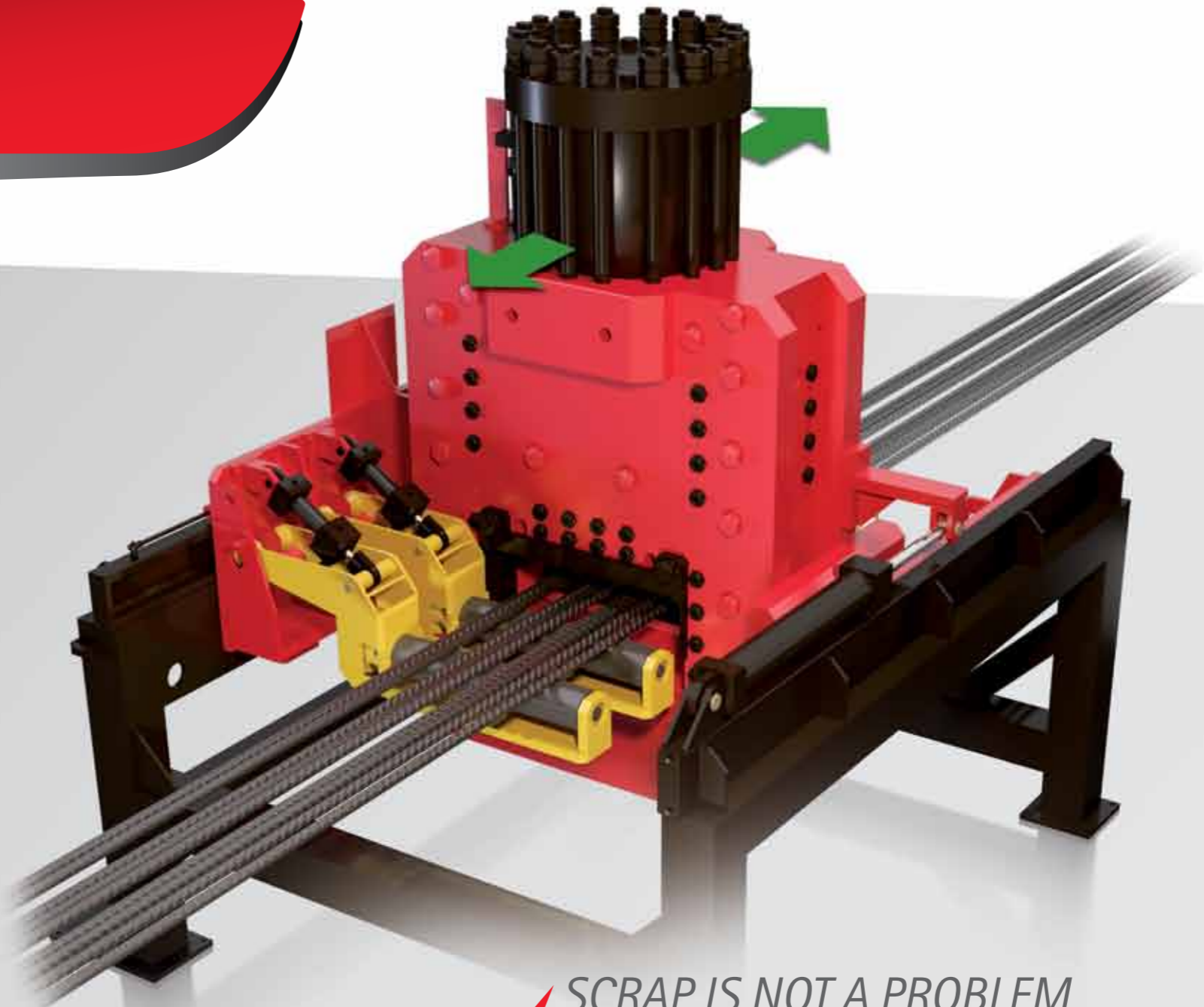
It can fit to whatever production requirement, to the available factory space and logistics.



Simply powerful

On LTM 300 and LTM 500, the **guillotine** shear is mounted on a sturdy base and can travel by 500 mm to exactly fit to the programmed cut length.

The guillotine shear unit includes **two automatic pairs of motorized rollers**, mounted on retractable arms, and positioned respectively at the entrance and the exit of the shearing unit, in order to **support or release the bars** during the cutting operations. In order to **prevent damaging of the blades**, before any cut, the bars are blocked by an hydraulic **"bar holding down system"** positioned after the shear.



SCRAP IS NOT A PROBLEM

The **two pairs of rollers mounted on retractable arms** ①, allow to **automatically handle scraps of any size and length** without manual intervention by the operator.

Before each cut, the rollers retract ①, therefore releasing the bars ② and allowing the scrap, **with length less than 800 mm**, to fall automatically ③ into the **mobile scrap bin**.

Offcuts **with length more than 800 mm** are moved forward to distribution as all the bars cut to length.



MOBILE SCRAP CONTAINER



REBAR FEEDING



The modular **bar-bundle storing racks**, enable the storage of the bars on multiple levels (2 or 3 in standard configuration). The bars slide sideways at a lower level by mean of **retractable arched arms**. All bars are collected in a lateral **pre-feeding channel** which discharge them automatically onto the central feeding conveyor.



All arms on the storage levels and on the pre-feeding channel are pneumatically driven. The feeding conveyor is equipped with two-speed motorized rubber rollers that transfer the bars to a **pre-aligning position**. The last three meters of the roller conveyor are arranged on a **tilting plane** in order to clear distance from bars during cutting and **therefore improving the cutting itself while avoiding any mechanical over load**.

ONE DEVICE FOR MEASURING AND DISCHARGE

The **roller conveyor** positioned after the shear is equipped with two-speed motorized rubber rollers to transport the cut to size bars.

It is also equipped with **special end-stops** that guarantee the **bars' alignment to achieve the correct measurements**, also allow to unloading the bars, to be collected in different positions depending on the lateral longitudinal position scheduled, **fastly, homogeneously** and in a **sequential** way.

WORLD SYSTEM: TOTAL CONTROL



• **Industrial P.C. control panel** with software organized by windows structure that provides the following functions:

- Programming the length of the bars to be cut and their quantity depending on the diameter and stock length.
- Programming of a complete cycle of up to 6 different sizes on each bar.
- Programming the selection of the roller conveyor for the collecting rack.
- Coding of work cycles to allow the operator to place the tag (tagging).
- Programming the optional aligning cut of the bars.
- Automation of multiple stations, automatic tying unit (optional).
- Displaying the cutting capacity of shear depending on the diameter of the bars to be cut.
- Display residual scrap length.
- Possibility of optimizing cutting lists by creating automatic work cycles (optional).
- Ability to upload up to 100 cycles of work in the required sequence, displaying the weight, length and cut quantity for each position.
- Storing data of work cycles (positions, diameters, times, weights, etc..).
- System of "active diagnostics" to check all devices in the machine.
- Verifying the functionality of all the machine devices.
- Outfitted for downloading data from external computer via RS 232 link. (optional)



LTM 60

LTM 60 is an automatic machine for the cutting to size of the rebars characterized by an "Alligator" hydraulic shear robust and reliable. Its limited footprint and modular configuration makes it extremely versatile.

AUTOMATIC MEASUREMENT

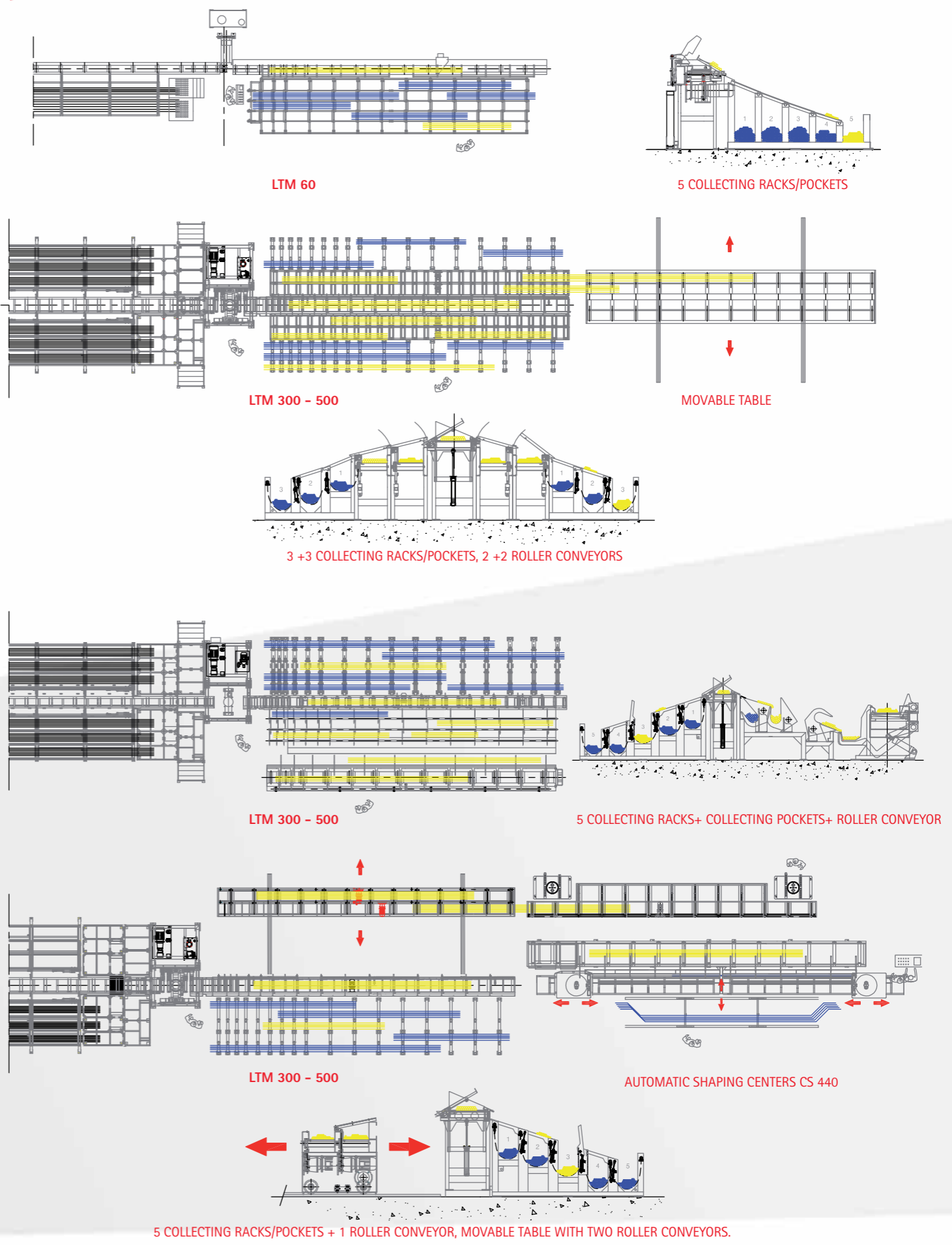


The bar length is obtained automatically through a mobile ledge device operating along the cutting track.



The "Alligator" shear is equipped with an automatic device that aligns and locks the bars before cutting. Is equipped with a sliding bin for collecting the scrap.

VERSATILITY AT YOUR SERVICE: LTM 500-300-60



COLLECTING RACKS



- The **collecting racks** are units that collect automatically the cut to size bars thus creating an efficient storage dock. There are several configurations that include the use of one or more motorized roller conveyors built for the longitudinal transfer of bars. (OPTIONAL)

MOBILE TRANSPORT TABLE



- Mobile transport tables** are available in various configurations (2, 3 or 4-roller tracks). They are moved transversally to the plant in order to create buffer of material and transfer the same to multiple areas equipped with bending tables (automatic or manual) and/or additional storage racks for cut to length material. (OPTIONAL)

CHAIN FEEDER



- The **chain feeder** is a unit that collects, transports and deposits the bars cut to size by creating an efficient intermediate buffer station. (OPTIONAL)

AUTOMATIC TYING UNIT





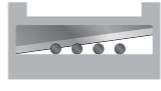

- The **automatic tying unit** aligns and ties the cut to length bars. Integrated within the **LTM** system eliminates the need for manual binding. (OPTIONAL)

SHAPING CENTER CS 440



- Automatic Shaping Centers CS** in different versions bend the bars on both ends either clockwise and counterclockwise. Perfectly Integrated with the layout of the shear lines. (OPTIONAL)

TECHNICAL AND PRODUCTION CHARACTERISTICS

	UK		USA	
	60	300	500	
	MEASURING CONVEYOR			
	maximum width (other sizes on request)	280 mm / 11" inch	310 mm / 12" inch	510 mm / 20" inch
speed	0.5 ÷ 1 m/s		1.65 fps ÷ 3.3 fps	
	TIME FOR A CUT			
	maximum	3/s	4 ÷ 5/s	5 ÷ 7/s
	BLADE WIDTH			
	actual width	300 mm / 11.80 inch	380 mm / 15 inch	530 mm / 20.9 inch
	INSTALLED POWER			
	maximum (other sizes upon request)	6 kW / 5 hp	22 kW / 16 hp	50 kW / 37 hp

THE PLANT REQUIRE COMPRESSED AIR.

$f_y = 600 \text{ N/mm}^2 - f_t = 700 \text{ N/mm}^2$ (other loads upon request)
 f_y : max. unit yield point - f_t : max. tensile strength

REBAR Ø mm	60 #18	50 #16	45 #14	40 #12	35 #11	32 #11	28 #9	25 #8	20 #6	16 #5	12 #4
LTM 60	-	1	2	3	4	4	5	6	9	14	20
LTM 300 - 300 S	-	1	3	3	8	8	9	10	13	16	20
LTM 500	2	3	5	8	12	13	16	17	22	28	37

The maximum number of bars depends on the width of the road roller.

Note: #4 = 1/2" ; #5 = 5/8" ; #6 = 3/4" ; #8 = 1" ; #9 = 1-1/8" ; #11 = 1-3/8" ; #14 = 1-3/4" ; #18 = 2-1/8"

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