

# ULTIMATE REINFORCEMENT SOLUTIONS for **CUT & BEND!**



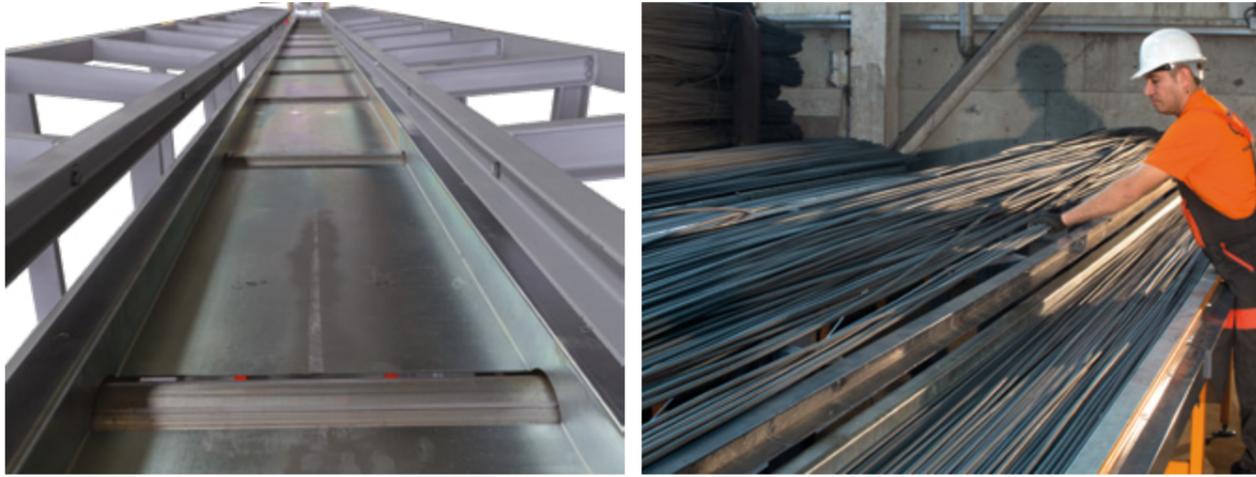
SHEARLINE  
DOUBLEBENDER  
AUTOMATIC STIRRUP  
BENDING MACHINE  
MESH BENDER & CUTTER



## FEATURES

### INFEEED CONVEYOR & FEEDING PLATFORM

Consist of 12 meters ( 40 ft ) standard infeed conveyor.



### Made of galvanized steel

Movement of rebars with the assistance of automatic sliding rollers on conveyors.

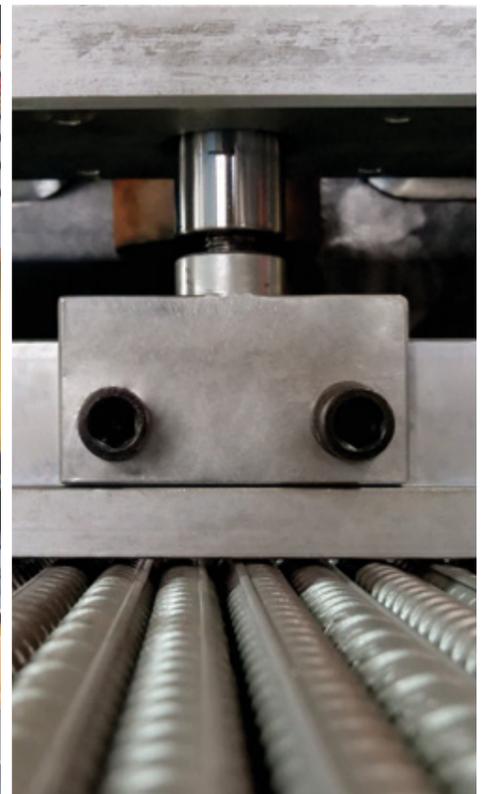
### DIGITAL CONTROL PANEL

- 360 degrees movement ability
- All measurements can be controlled by digital unit and user friendly solutions.
- Sensitive cutting ability with its functions.



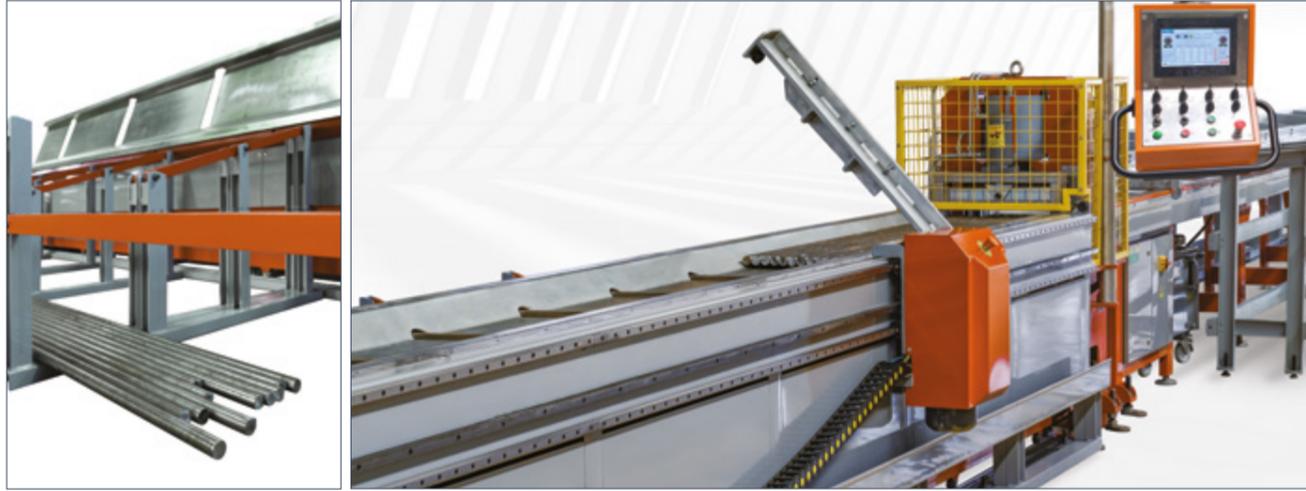
### MAIN HYDRAULIC BODY & CUTTING UNIT

- Produced by heat treated steel.
- Long lasting usage.
- Main hydraulic cutting body is steady and all sensitive measurements and cuttings can be made with this unit.



## OUTFEED CONVEYOR & COLLECTING BINS

Consist of 12 meters ( 40ft ) outfeed conveyor with automatic sliding rollers



### Decoilers

- Consist of 12 meters ( 40ft ) 2 pockets of collecting bins.
- All arms can open and close manual
- Sheared rebars can be unloaded automatic to desired bin
- Modular base pockets, the length can be also arrangeable



### MATRIX 55 TECHNICAL DETAILS

Hydraulic motor (KW / HP)	7.5KW / 9,38 HP
Loading rollers motor	3x1,1KW
Loading rollers motor	1X0.75KW
Discharging roller motor	3X1.1KW
Remote control (Remote connection)	Available
Moving stopper control motor (KW / HP)	0,75 KW Servo control / 2 HP
Cutting system	Hydraulic System
Electrical working system	PLC controlled
Control panel	10.1" inch digital screen
Collecting bins	Available ( Manual )
Discharging	One side only
Discharging system	Hydraulic System
Total power (KW / HP)	15,85 KW / 21,2 HP
Energy consumption (KWh)	14.65 KWh
Total weight (KG / LBS)	5200 KG / 11,46 LBS
Cutting sensivity	± 3 mm
Hydraulic sytem pressure (BAR / PSI)	250 (bar) / 3625 PSI

### CUTTING CAPACITIES OF SHEAR LINE

Machine Model : MATRIX 55  
Machine Name : 55mm ( #14 ) Shear Line

### STRENGTH OF STEEL

DIAMETER / INCH BAR SIZE	STRENGTH OF STEEL		
	45 kg/mm <sup>2</sup> / Piece	65 kg/mm <sup>2</sup> / Piece	85 kg/mm <sup>2</sup> / Piece
Ø 55 / #14	1	1	1
Ø 40 / #14	5	4	4
Ø 36 / #11	6	5	5
Ø 32 / #10	7	6	6
Ø 28 / #9	8	7	7
Ø 26 / #8	11	10	10
Ø 22 / #7	13	12	12
Ø 20 / #6	14	13	13
Ø 16 / #5	18	18	18
Ø 12 / #4	24	24	24
Ø 10 / #3	30	30	30
Ø 8 / #3	35	35	35

MATRIX 55-S, enables to maximize customer productivity and saving time when cutting operations and eliminating 2-3 labor force with the assistance of software programming.



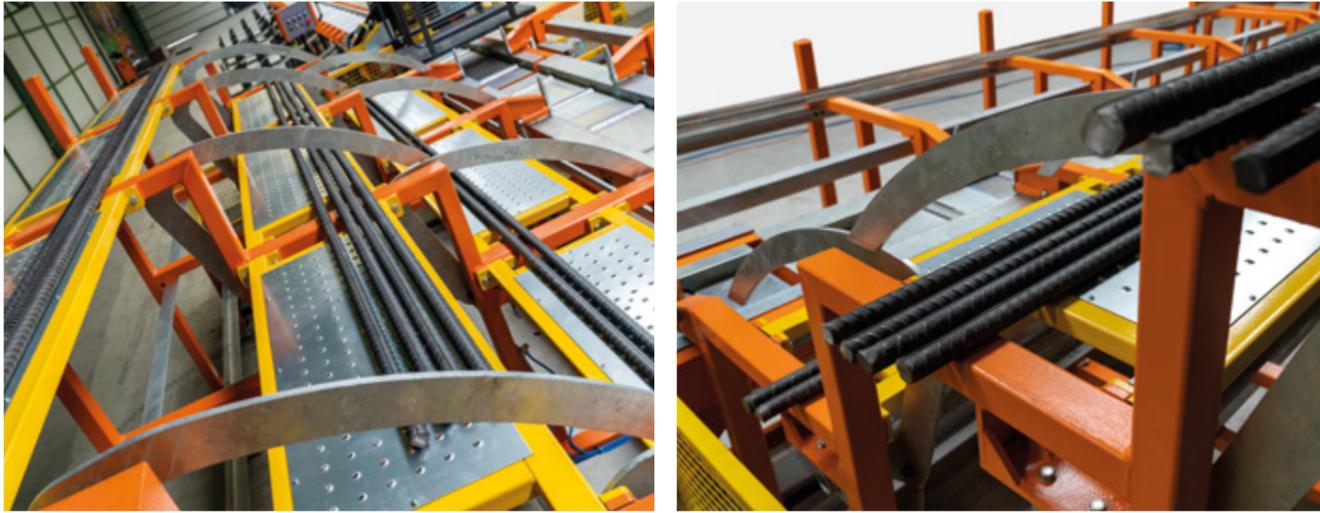
## INFEEED CONVEYOR & FEEDING PLATFORM

### Easy assembly

consist of 12 meters 40ft two sided loading platform. Consist of 3 storey loading platform in one side and 1 storey loading platform in other side

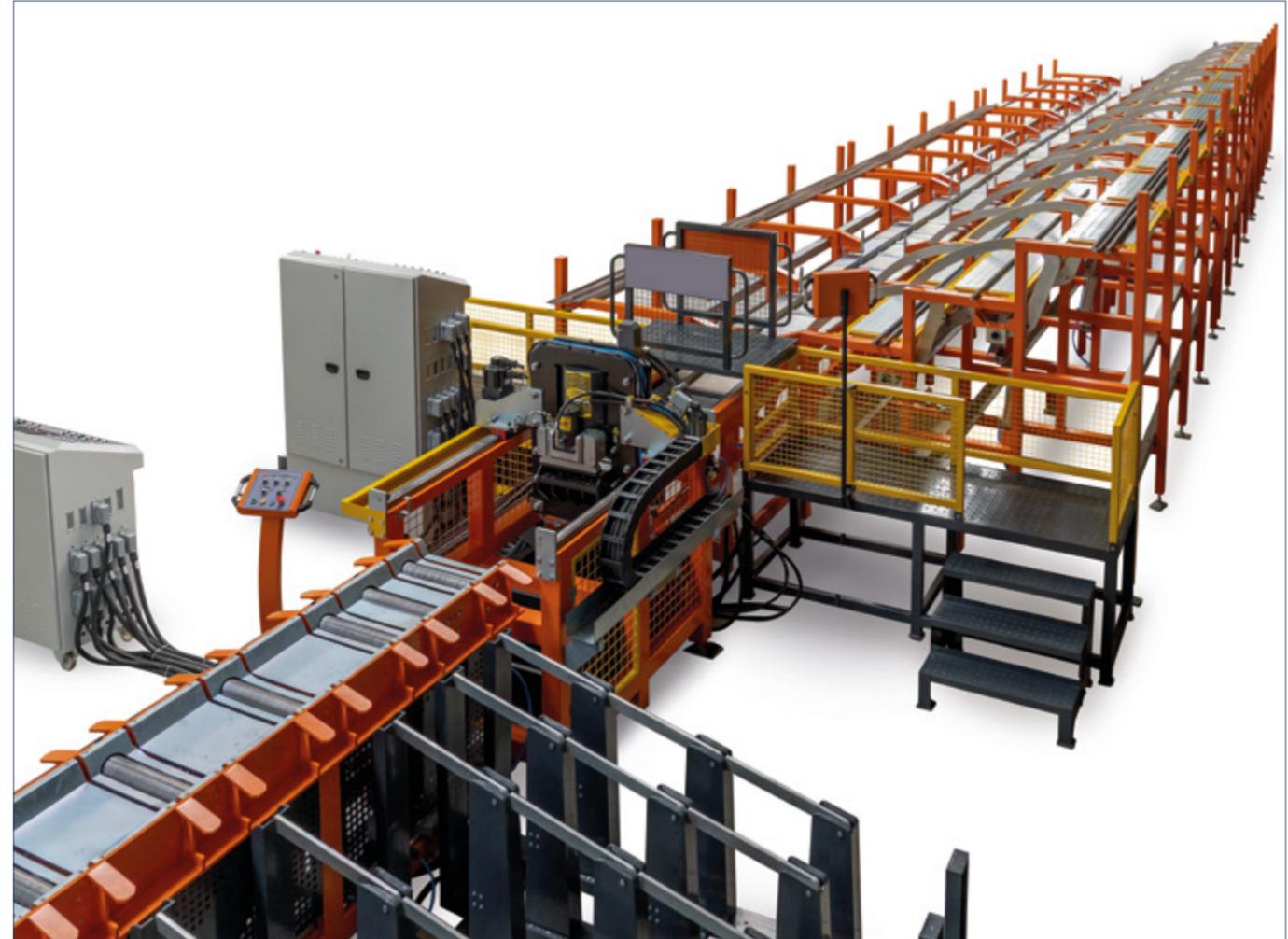
### Made of galvanized steel

Movement of rebars with the assistance of automatic sliding rollers on conveyors.



## OPERATOR PLATFORM EXTENDED ON 2 SIDES WITH BRIDGE

- All electrical panel and units exist in this bridge.
- GMS uses all branded models on electrical components and easy to get from local markets.



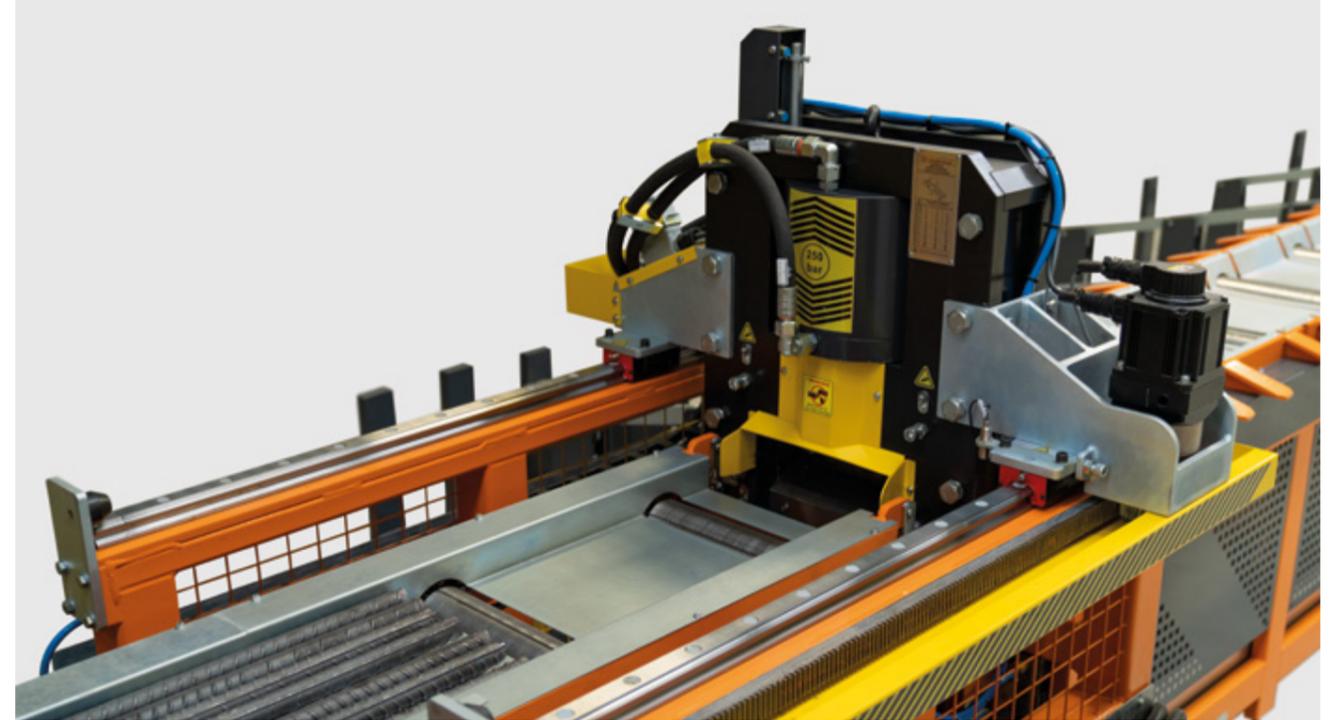
## DIGITAL CONTROL PANEL

- 10.1 Touch Screen will be used in both machines digital panel.
- Machines all functions can be controlled as full automatic as well as also manual. One operator can handle these issues.
- PLC screen Windows base systems is using in digital panel.
- Remote controller is available to connect if something happens on machine
- All required cuttings and amount of rebar requirements can be calculated & measurement as automatic from this digital screen
- Barcode System is also available on Matrix55S Shearline upon request. Instant Scanning is also available in Barcode System.



## MAIN HYDRAULIC BODY & CUTTING UNIT

- All required sizes of cuttings will be organized by hydraulic system and detailed shear requests organized by servo systems. All required small and big sizes are organized with also servo control systems. Movement is hydraulic. Servo system is also using in Matrix55S.
- Sensitive measurement and cutting is enabled with this unit with the support of moveable main cutting body. ( Can move 1 meter forward and backwars. )
- Cutting and pressure system mentality works with the assistance of hydraulic



## MAIN HYDRAULIC BODY & CUTTING UNIT



## OUTFEED CONVEYOR & COLLECTING BINS

- Consist of 12 meters ( 40 ft ) 4 pockets of collecting bins on one side and consist of 12 meters ( 40 ft ) 4 pockets of collecting bins on other side.
- Decoilers can open as automatic with the support of pneumatic system
- Consist of 12 meters ( 40ft ) 4 pockets collecting bins.
- All arms can open as automatic.
- Sheared rebars can be unloaded automatic to desired bin
- Modular base pockets, the length can be also arrangeable



## MATRIX 55S TECHNICAL DETAILS

Hydraulic motor ( KW / HP )	7.5KW / 9,38 HP
Loading rollers motor	3x1,1KW
Loading rollers motor	1X0.75KW
Discharging roller motor	3X1.1KW
Remote Control ( Remote Connection )	Available
Main hydraulic cutting unit movement motor ( KW / HP )	1.5KW Servo motor / 2 HP
Electrical working system	PLC controlled
Cutting system	Hydraulic System
Discharging system	Pneumatic System
Digital control panel	10.1" inch digital screen
Automatic collecting bins	Available
Automatic discharging	Available
Discharging to the two sides of outfeed conveyor	Available
3 Storey Loading Platforms	Available
Total Power ( KW / HP )	18,9 KW / 25,3 HP
Energy Consumption	14.65 KW/h
Total Weight ( KG / LBS )	17.000 KG / 37.460 LBS
Cutting Sensitivity	± 3 mm
Hydraulic System Pressure ( BAR / PSI )	250 BAR / 3625 PSI
Pneumatic System Working Air Pressure ( BAR / PSI )	8-10 BAR / 116-145 PSI
Barcode system	Available ( Optional )

## CUTTING CAPACITIES CAPACITIES OF SHEAR LINE

Machine Model : MATRIX 55S  
Machine Name : 55mm ( #15 ) Shear Line

## STRENGTH OF STEEL

DIAMETER / INCH BAR SIZE	STRENGTH OF STEEL		
	45 kg/mm <sup>2</sup> / Piece	65 kg/mm <sup>2</sup> / Piece	85 kg/mm <sup>2</sup> / Piece
Ø 55 / #14	1	1	1
Ø 40 / #14	5	4	4
Ø 36 / #11	6	5	5
Ø 32 / #10	7	6	6
Ø 28 / #9	8	7	7
Ø 26 / #8	11	10	10
Ø 22 / #7	13	12	12
Ø 20 / #6	14	13	13
Ø 16 / #5	18	18	18
Ø 12 / #4	24	24	24
Ø 10 / #3	30	30	30
Ø 8 / #3	35	35	35

## SHEARLINE COMPARISONS

	MATRIX 55	OPTIONAL	MATRIX 55S	OPTIONAL
INFEED CONVEYOR	12 meters / 40 ft	18 meters / 60 ft	12 meters / 40 ft	18 meters / 60 ft
INFEED PLATFORM	12 meters / 40 ft	18 meters / 60 ft	12 meters / 40 ft	18 meters / 60 ft
	1 storey 1 side	2 storey / 3 storey - 2 sides	3 storey one side / 1 storey other side	2 sided 3 storey
DIGITAL CONTROLLER	360 degree turnable		separately	
CUTTING SYSTEM	hydraulic		hydraulic	
STOPPER / DISCHARGING	pneumatic		pneumatic	
OUTFEED CONVEYOR	12 meters / 40 ft	12 meters / 40 ft, 18 meters / 60 ft	12 meters / 40 ft	12 meters / 40 ft, 18 meters / 60 ft
COLLECTING BINS	2 pockets 1 side	3,4 pockets bins optional	4 pockets one side / 4 pockets other side	
COLLECTING BINS LENGTH	12 meters / 40 ft	12 meters / 40 ft, 18 meters / 60 ft	12 meters / 40 ft	12 meters / 40 ft, 18 meters / 60 ft
REBAR DISCHARGING	1 side		2 side	
REBAR BINS STORAGE	manual		automatic	
OPERATOR PLATFOM	unavailable		available	
BARCODE SYSTEM	unavailable	available	unavailable	available



SYNCLONE 45S is designed for customer requirements and aims to reduce costs & increase productivity in rebar & precast factories. SYNCLONE is servo controller doublebender and able to bend to 42mm ( #14 ) rebars.

SYNCLONE has user friendly software program and enables less labor force which enables to maximize the required number of bendings. It also reduces user failures by the support of software programming. Programming is also very user friendly and operator has quick option for bending angles and tooling choosing.



## FEATURES

- 12 meter ( 40ft ) feeding conveyor unit
- **Servo engines** are using in Synclone45S.
- **Pneumatic kick off system**, automatic
- Feeding to bending is manual
- Easy to operate, user friendly setup & control
- Adjustable speed option of rollers for conveyors is available.
- SYNCLONE can work as doublebender mood as well as manual bender. 1 stationery bender and 1 moving bender is available. If operator desires to bend small shape of bendings, machine allows to work as manual option as well individually.
- **Full automatic digital control panel** enables to work fast and get bending results fast.
- Minimum distance between two bending machine is 1 meter but with the assistance of bending tools it can be also more narrow.
- MANDRELS supplied with machine -  $\varnothing 70$  ,  $\varnothing 80$  ,  $\varnothing 100$  ,  $\varnothing 110$  ,  $\varnothing 125$  ,  $\varnothing 145$  ,  $\varnothing 160$  ,  $\varnothing 180$  ,  $\varnothing 215$



## DIGITAL PANEL

New and Improved digital panel system enables fast solutions for operators.

### 10.1 Digital panel

Saving and recalling many bendings shapes are available as automatic and data utilization is available.

Faster setups for programming required bendings

Barcode System is also available as optional in Synclone 45s DoubleBender. ( Instant scanning is also included )





## SYNCLONE 45S TECHNICAL DETAILS

Stationery bender motor power ( KW / HP )	7.5KW SERVO MOTOR / 9,38 HP
Moving bender motor power ( KW / HP )	7.5KW SERVO MOTOR / 9,38 HP
Moving motor power ( KW / HP )	2 KW SERVO MOTOR / 2,9 HP
Hydraulic motor power ( KW / HP )	4 KW ~ AC MOTOR / 4,02 HP
Roller motor power ( KW / HP )	3 KW ~ AC MOTOR / 5,36 HP
Total Power (KW / HP )	25,2 KW / 33,80 HP
Energy consumption (KWh)	17,3 KWh
Total weight ( KG / LBS )	7000 KG / 15,432 lbs
Bending sensitivity	± 5 mm
Hydraulic system power ( BAR / PSI )	180 BAR / 2610 PSI
Remote Control ( Remote Connection )	Available
Collecting Bins	Available ( 3 piece )
Pneumatic system working air pressure ( BAR / PSI )	8-10 BAR / 116-145 PSI
Barcode system	Avaiable

## BENDING CAPACITIES CAPACITIES OF DOUBLEBENDER

Machine Model : SYNCLONE 45S  
Machine Name : 42MM ( #14 ) DOUBLEBENDER

## DIAMETER / INCH BAR SIZE

## STRENGTH OF STEEL

	45 kg/mm <sup>2</sup> / Piece	65 kg/mm <sup>2</sup> / Piece	85 kg/mm <sup>2</sup> / Piece
Ø 42 / #14	1	1	-
Ø 36 / #11	1	1	1
Ø 30 / #10	2	2	1
Ø 24 / #8	3	3	2
Ø 20 / #6	4	4	3





Multi-production and quick solution to projects

# AUTOMATIC STIRRUP BENDING MACHINE 6-12 mm coil

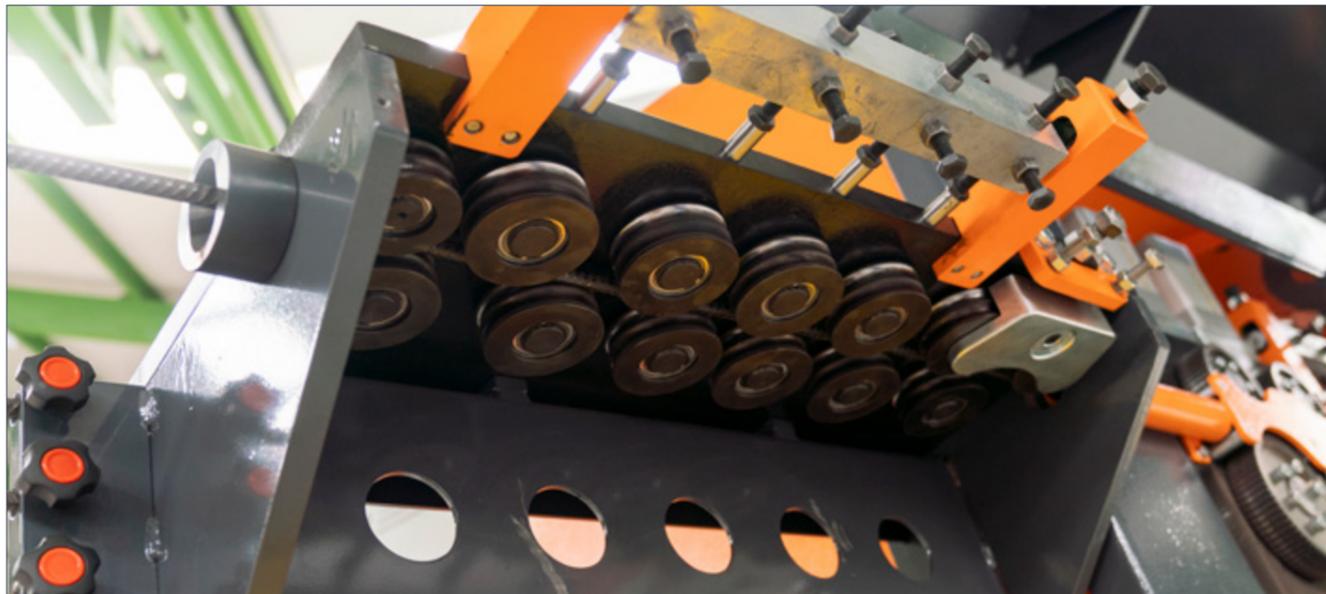


## PROCESS

Decoiler will be supplied with the machine and store the coils easily, decoiler has also break system and swivel arms, coils can process to main shaping unit with the assistance of the system.



Perfect transaction is prepare rebar to best shape

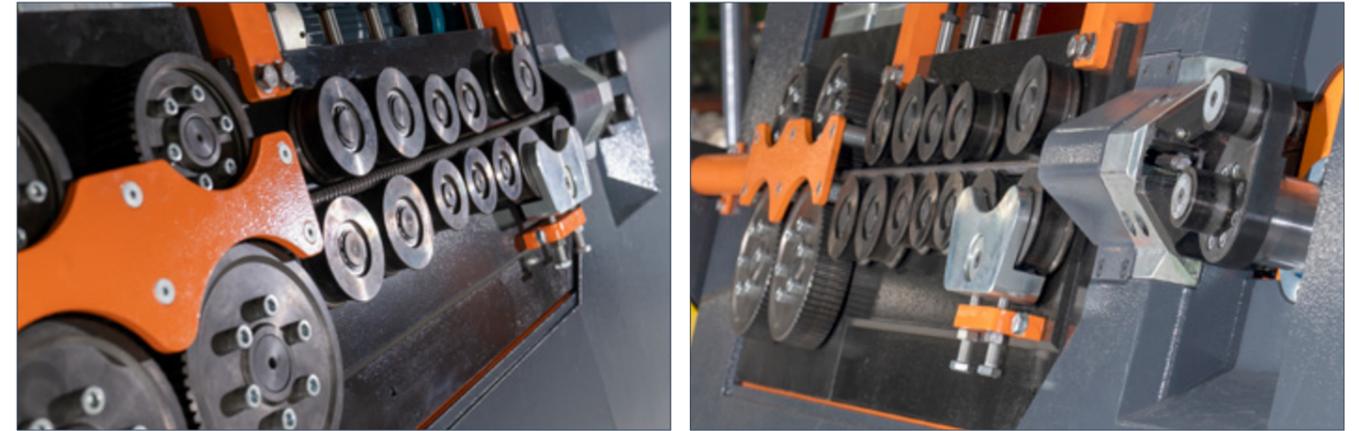


## AUTOMATIC STIRRUP BENDING MACHINE

Fully featured of process



Straightening wheels are produced by most quality material with heat treated. It makes the machine firstly then parts very agile.



Gears are %100 producing by GMS.

Pneumatic door design



## USAGE

User -Friendly touch panel and intelligent software



Touch screen console is easy to operate,



Foot pedal assistance. Very ergonomic design and easy access to machine

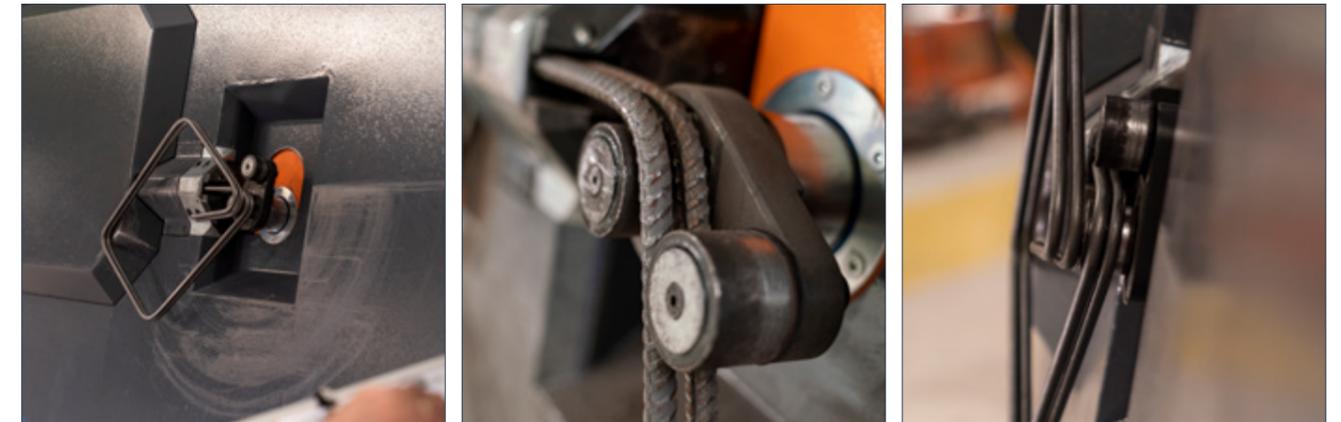
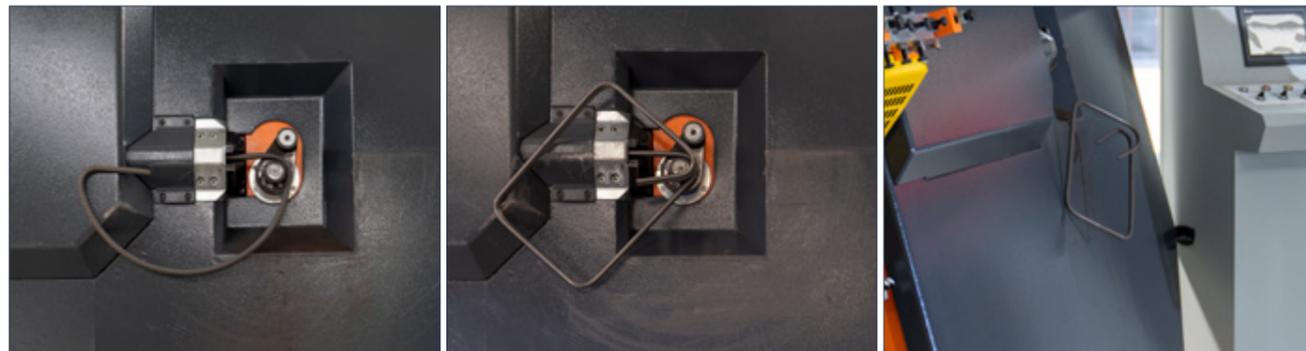


Quick action for safety with 3 emergency stop.

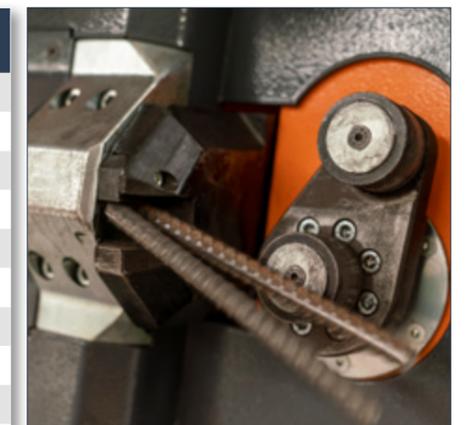


## EXCELLENT FINISHED SHAPE

There are more than 50 figures exist, additionally 100 shapes or graphics can be saved.



SLS 12 TECHNICAL DETAILS	
Single Wire	10-12 ( Metric Size ) / #3 - #4 (Imperial Size)
Double Wire	6-8-10 ( Metric Size ) / #2 - #3 (Imperial Size)
Bending Type	2d
Central Mandrel Diameter	30,40,47
Driving Opportunity	pnömatic
Driving Motor Power	SERVO MOTOR 5,5 kw / 6.80 HP
Driving Speed	100 M/DK 328 ft / Min
Bending Motor Power	SERVO MOTOR 2 kw / 2.68 HP
Bending Speed	480°/sn 1200 sn
Cutting Motor Power	AC- MOTOR 3 kw / 4.02 HP
Length Tolerance	± 2-5 mm / 0.07 - 0.19 inch
Bending Tolerance	± 1°
Compressor Needed	yes
Working Pressure (Bar)	8-10 Bar / 116 -145 PSI
Voltage	380 V 50 hz 3 phaze / 60 hz (optional)
Swtich Sensors	Proximity Switches
Encoder	1024 pulse
Driving Gearbox	Industrial type
Control Panel Type	HMI screen 10,1"
Machine Dimensions	1350x3650x2200mm 53.14 x 144 x 86.6 inch
Coiler	1950x2260x2650mm 76.7 x 88.97 x 104.33 inch
Machine Weight	1800 kg / 3968 lbs
Decoiler Weight	1000 kg / 2200 lbs
Language	English
HS Code	846229900000

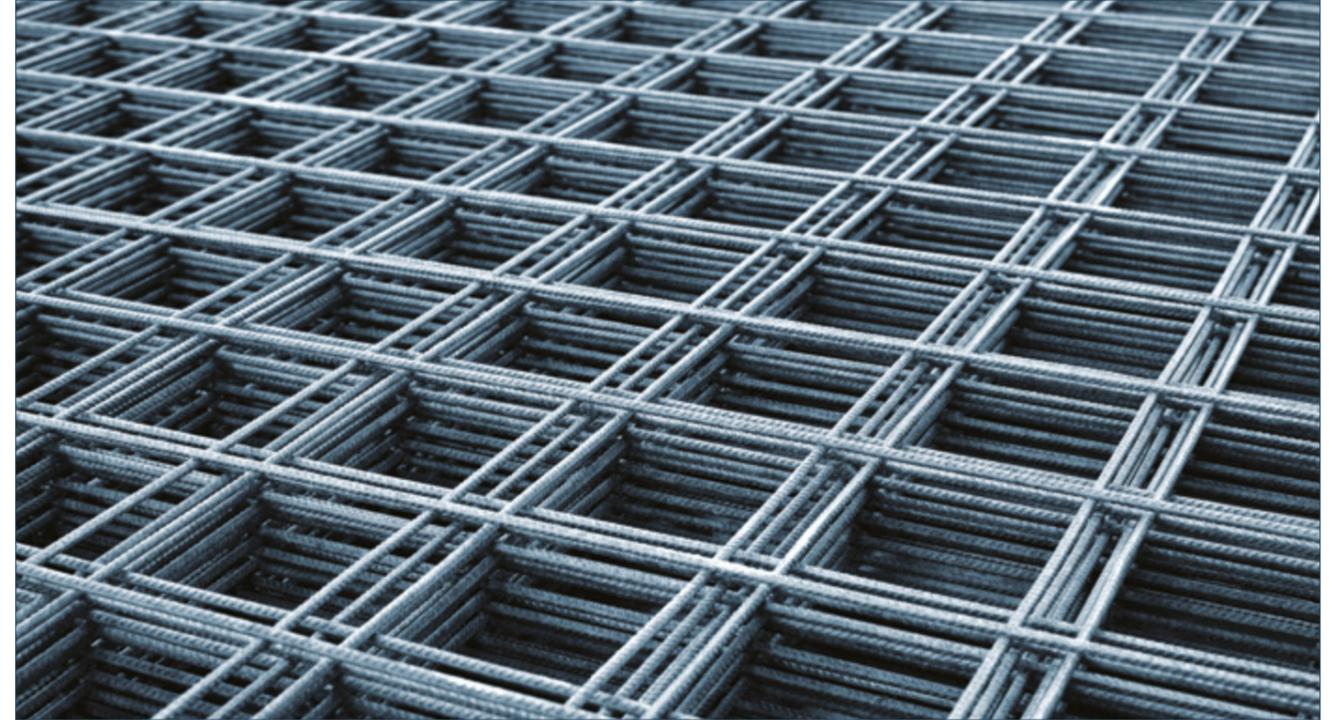


APPARATUS ARE GIVEN WITH MACHINE	
Decoiler	1
Hand tools	1
Tool box	1
Blade	3
Hand scissors (Ø10)	1

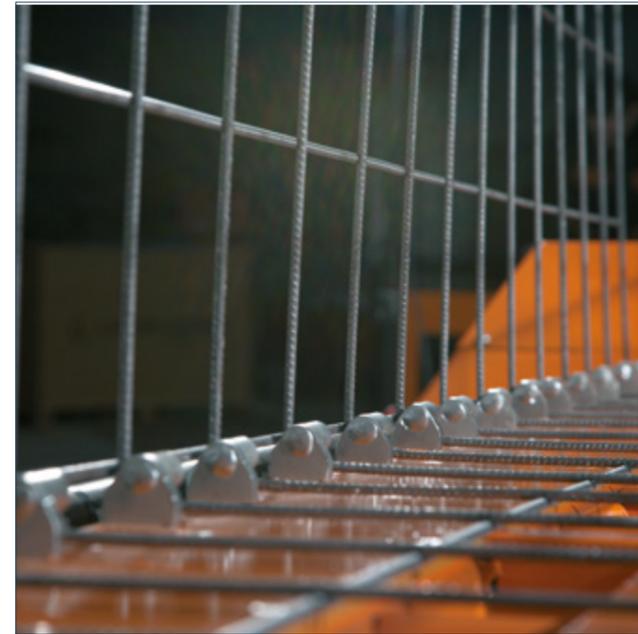
# MESH BENDING & CUTTING MACHINE



**HB 12X3**



**MH 8C**



## TECHNICAL SPECIFICATIONS

Model	W - L - H (cm)	Motor Power (kW)	Voltage (V)	Weight (kg)	Hydraulic Oil Tank Capacity (lt)	BENDING & CUTTING CAPACITY		
						45 kg/mm <sup>2</sup> Diameter (Ø) x Piece	65 kg/mm <sup>2</sup> Diameter (Ø) x Piece	85 kg/mm <sup>2</sup> Diameter (Ø) x Piece
HB 12x3	98 / 340 / 109	5,5	380	710	36	Ø 12 x 1	Ø 10 x 1	Ø 8 x 1
HB 12x6	100 / 640 / 109	7,5	380	1250	36	Ø 12 x 1	Ø 10 x 1	Ø 8 x 1
MH 8C	97 / 405 / 132	1,1	380	530	-	Ø 8 x 1	Ø 8 x 1	Ø 8 x 1