

SHEARLINE

GMS SHEARLINES aims to reduce scrap & labor costs with its efficient advanced systems. Increasing production capacity with GMS MATRIX series are easy...

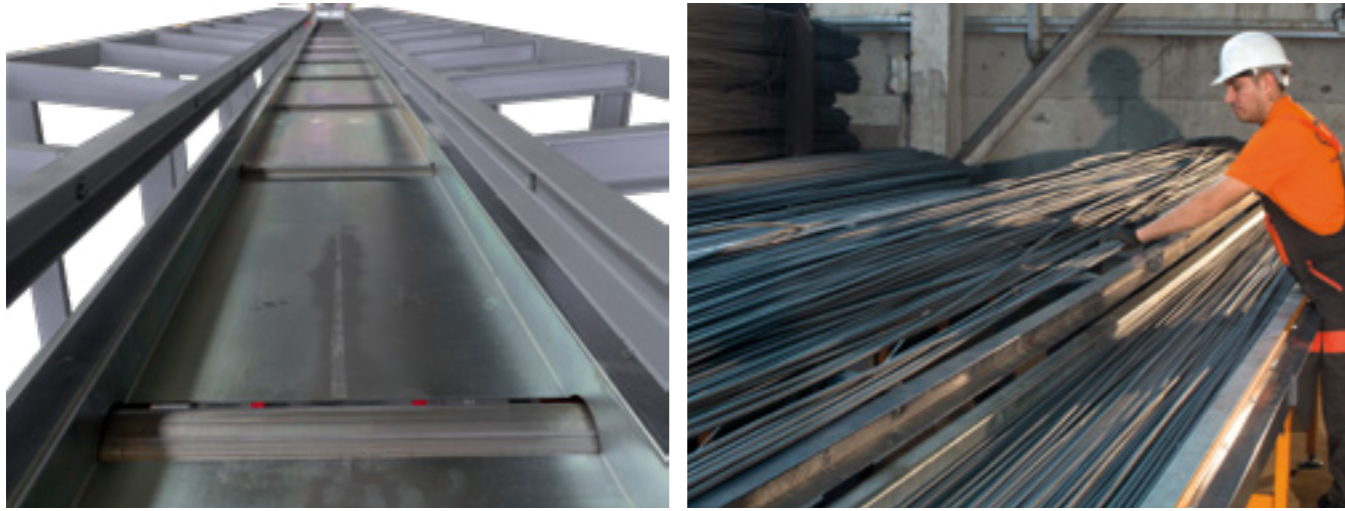
MATRIX⁵⁵
master of
shear line 

MATRIX^{55S}
master of
shear line 

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.

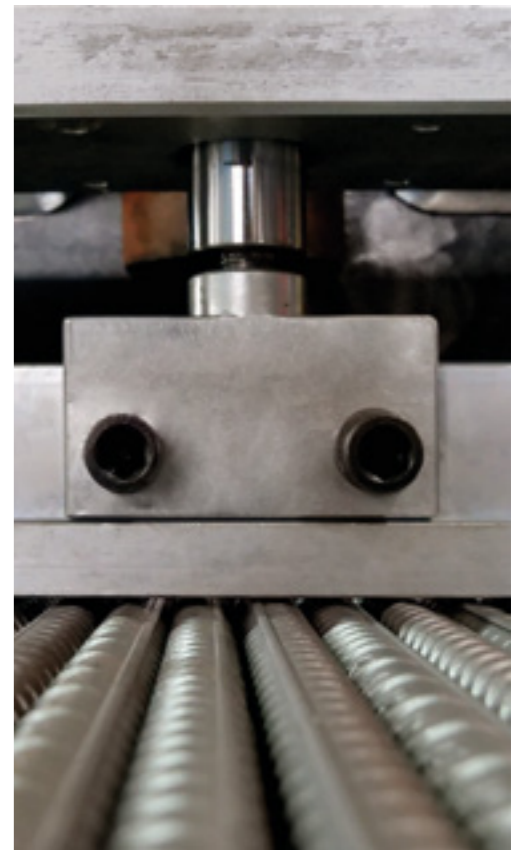
DIGITAL CONTROL PANEL

- 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 6 meters (20ft) outfeed conveyor with automatic sliding rollers



Decoilers

- Consist of 6 meters (20ft) 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 ² / Piece	65 kg/mm ² / Piece	85 kg/mm ² / 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

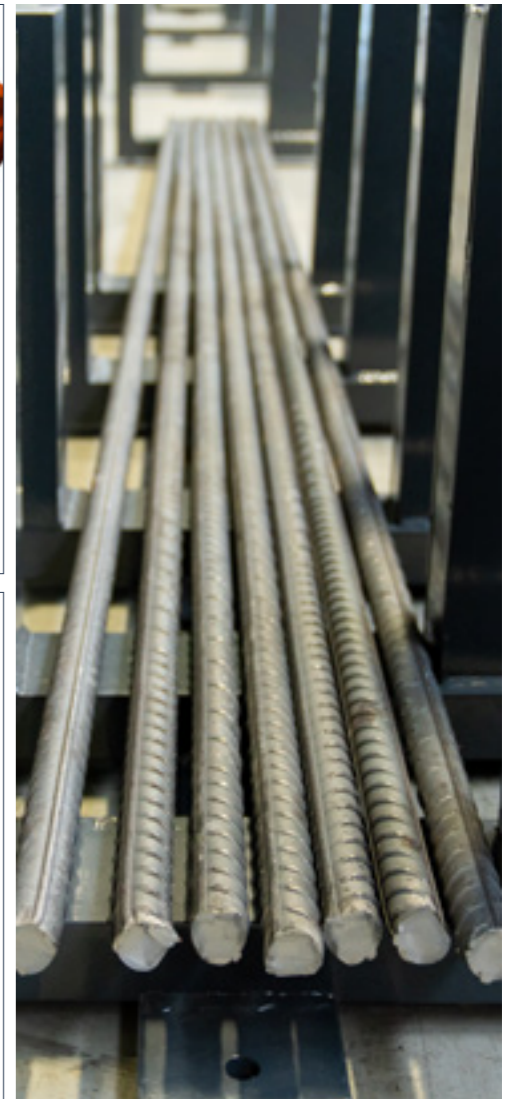


MAIN HYDRAULIC BODY & CUTTING UNIT



OUTFEED CONVEYOR & COLLECTING BINS

- Consist of 6 meters (20 ft) 4 pockets of collecting bins on one side and consist of 6 meters (20 ft) 4 pockets of collecting bins on other side.
- Decoilers can open as automatic with the support of pneumatic system
- Consist of 6 meters (20ft) 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

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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	6 meters / 20 ft	12 meters / 40 ft, 18 meters / 60 ft	6 meters / 20 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	6 meters / 20 ft	12 meters / 40 ft, 18 meters / 60 ft	6 meters / 20 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