



GÖÇMAKSAN®



A COMBINED SOLUTION FOR STEEL FACTORIES SHEARLINE & DOUBLE BENDER



WHY MATRIX 45S ?



ECONOMICAL GAIN

- %95 of the total production of this machine realizes in GMS factories and decreases the costs.
- All extra costs such compressor and air systems decreases because of the usage of hydraulic power units in the machine
- Decreases the labor costs with the cutting speed, rebar cutting quantity and number and ergonomic design
- Makes more economical gains with the 8 faces unbundled blade system which consists of different 10 blades only exist in MATRIX 45 S.
- MATRIX 45 S designed for long life expectancy and gives smart solutions to user



LONG LIFE EXPECTANCY

- MATRIX 45 S provides long life expectancy with the high quality equipments and production
- One piece heat treated steel monoblock cutting body provides high endurance and protect the machine against attrition
- Electrostatic powder coat used in machine and it protects the machine against corrosion
- Galvanized steel used in carrying lines in order to prevent corrosion,
- The chained drum system provides steel movement on the line and enables more long life expectancy rather than strapped system.



ERGONOMIC STYLE

- Electrical and Hydraulic Power units are hidden below the machine in order to make space for operators.
- MATRIX 45 S has modular type and easy to assembly & disassembly
- Easy adjustable sizes, machine length can be adjustable, shorter or longer
- Blade changes are so fast & easy with the feature of 8 faces unbundled blade system
- Digital Control Panel with 360 degrees movement ability
- High level of security provides high level of protection.



HIGH EFFICIENCY

- With its digital control panel, MATRIX 45 S provide sensitive measurement advantage
- With its hydraulic system, machine performance and power reaches high levels, MATRIX 45 S can cut 25 tones in 1 hour.
- Hydraulic Pressure Pistons provides flawless cut and prevents rebar stretchings
- The Chained Drum System enables fast movement and prevent energy losses.
- Time savings with its modular type and reduces the maintenance time.
- User friendly different sized collecting decoilers



SMART SOLUTIONS

- MARRIX 45S;**
- 8 faces unbundled blade system
 - Hydraulic Power Unit
 - One piece heat treated steel cutting body
 - Disassembled Modular Type
 - Hidden hydraulic & electrical systems differs from the competitors.

COLLECTING POCKETS DECOILER

- Electrostatic powder coat, produced high strength of steel
- User friendly, easy to assemble, modular base
- Consist of 2 pieces, 3 meters long
- Two Decoilers
- Different sizes of rebars can be stackable with the support of product separators
- The number of decoilers and length of separators are optional, can be produced upon demand



MEASUREMENT UNLOADING LINE MEASUREMENT LINE

- Consist of one piece, 6 meters long
- Measurement Line produced by galvanized steel
- The chained drum system provides movement balanced
- Measurement line can move horizontal in order to cut the short rebars
- Cutted rebars with the support of lifting the hydraulic pistons of the conveyor systems forward to decoiler within 3 seconds.
- Production on different lengths can be optional.
- Height adjusted balance foot is used In order to be steady on the ground.

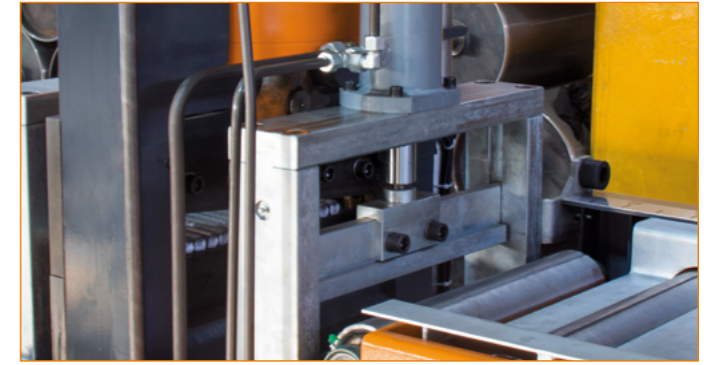


HYDRAULIC STOP

- All sensitive measurements can be controlled by digital control panel either automatic or manual.
- Feeding from hydraulic power unit with 30 cm / seconds and moves with the support of linear lines.
- Realizes on hold located with its mechanical stop system
- EMERGENCY / STOP button exist in order to provide the protection.

CUTTING BODY

- Produced by heat treated steel
- Because of not using sheet metal, welding, nuts endurance level of the machine is high and enables long lasting usage



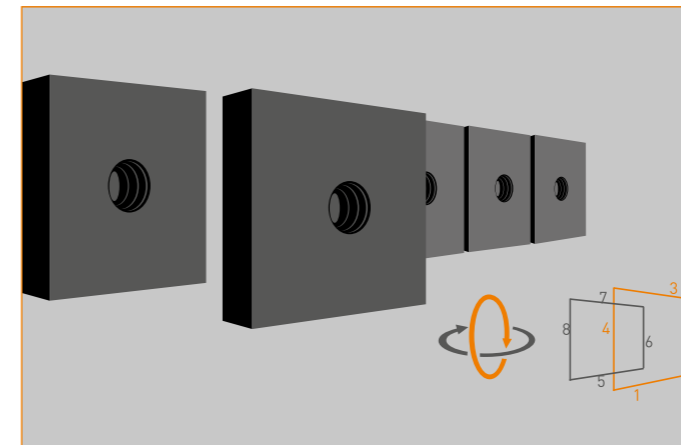
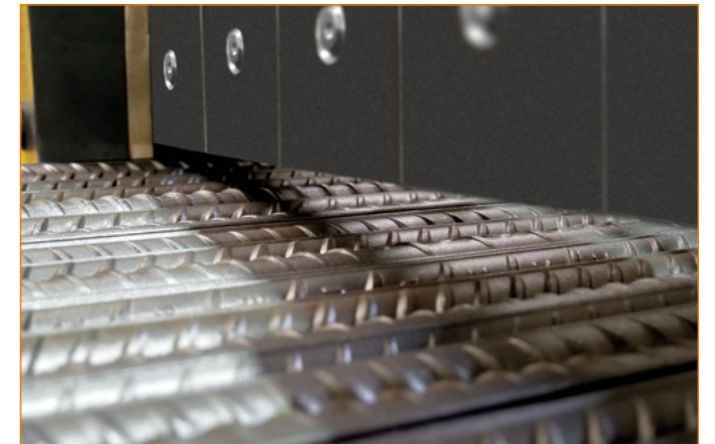
DIGITAL CONTROL PANEL

- 360 degrees movement ability
- User friendly
- Measurement, cutting and pistons can give movement orders with manual or automatic.
- Sensitive cutting is available with entering the desired range & angles on digital panel
- EMERGENCY / STOP button exist in order to provide the protection.



8 FACES UNBUNDLED BLADE SYSTEM

- 10 different blades, 85mm X 25mm X 85mm
- 8 different faces blades, each of them is independent to put out from eachother
- Unbundled blade system provides more long lasting usage, easily adjustable & convertible the other faces of the blades for minor errors

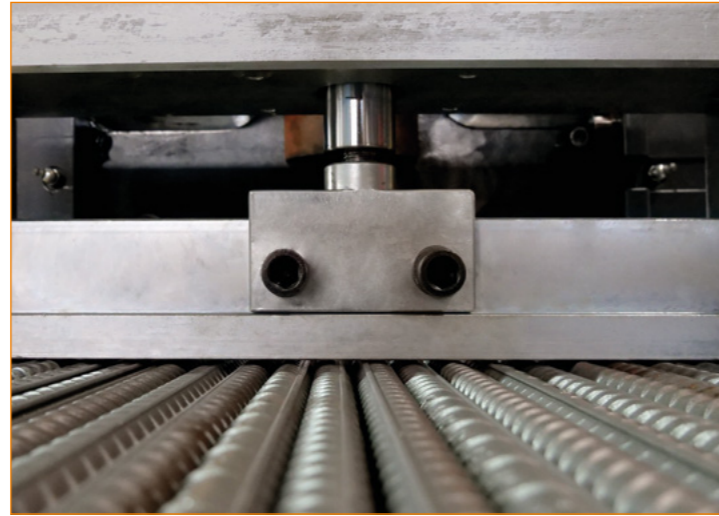


**CUTTING BODY
PRESSURE PISTONS**

- 2 pieces / located on the front and rear side of the cutting body
- 2 different piston moves common in lines with high endurance
- Prevent stretching while cutting, provides sensitive cutting and protects rebar splashes while cutting

CUTTING PISTON

- Provides the cutting from the energy takes from hydraulic power unit.
- Machine is durable because of the bronze system that works in.
- All cutting piston mechanism applied heat thretment process
- 220 bar pressure



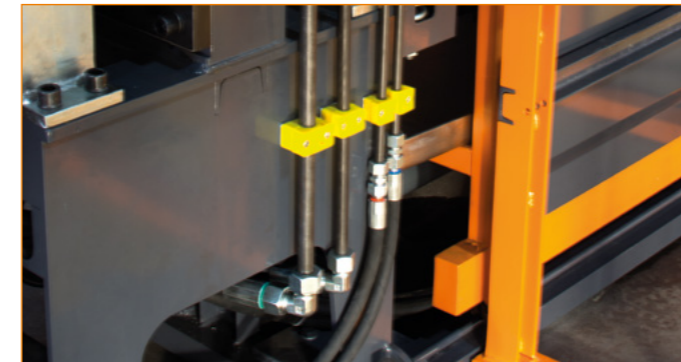
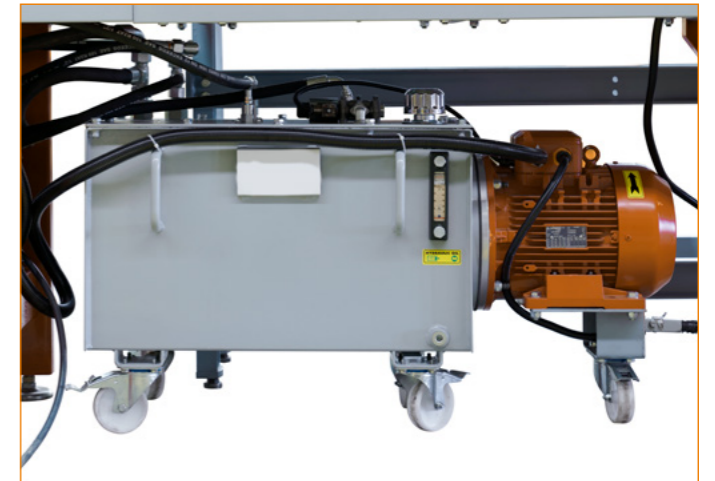
SECURITY BARRIER AND CUTTING SENSOR

- All blades are covered by barrier in order to protect the user security
- Cutting sensor prevent the high pressure of the pistons while cutting. It enables long life expectancy to cutting pistons.



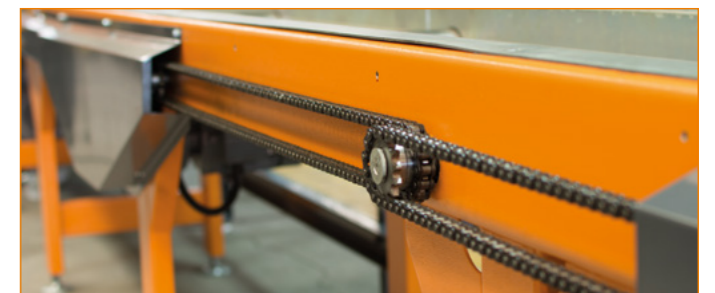
HYDRAULIC POWER UNIT – ELECTRICAL UNIT AND CONNECTION EQUIPMENTS

- Hydraulic engine provide the full power of MATRIX 45 S
- No need for compressor or air system, with this feature it provides power savings to user
- Hydraulic power unit and electrical unit are hidden below the machine, with this feature MATRIX 45 S enables ergonomic work space to the operator
- Power units has high movement capacity with its locked wheels and enables easy maintenance.
- Long lasting hydraulic connections supplied via metal pipes
- Electrical unit connections supplied by sockets, it enables easy assembly – disassembly and maintenance.



**IN FEED CONVEYOR
LOADING PLATFORM AND LOADING LINE**

- 3m long 4 pieces loading platform
- Easy assembly with its nut systems
- Loading Platform has the most convenient angle in order to unloading the steels for operators
- Loading platform produced by galvanized steel 3m long 4 piece.
- The chained drum system provides steel movement on the line
- Production on different lengths and different platform angles are optional.



MATRIX 45S

Cutting Capacity & Technical Specifications

Diameter	Strength of Steel			Total Weight	3731 kg
	45 kg/mm ² Piece	65 kg/mm ² Piece	85 kg/mm ² Piece		
Ø 45	1	-	-	Cutting Part	668 kg
Ø 42	2	1	1	Loading Platform	600 kg
Ø 36	4	3	3	Loading Line	837 kg
Ø 32	6	5	4	Cutting Line	1193 kg
Ø 28	10	8	7	Hydraulic Unit	195 kg 220 bar - 80 lt oil
Ø 26	14	13	12	Decoiler	238 kg
Ø 20	19	17	16	Hydraulic Unit Engine	7,5Kw
Ø 16	23	21	20	Loading Line Engine	1,1Kw
Ø 12	40	35	30	Cutting Line Engine	0,75Kw
Ø 10	45	40	35	Main Reducer Engine	1,5Kw
Ø 8	50	45	40	Set Up Sizes	Min. 1870 x 240 cm

MATRIX 45S

AT ONE TIME

Ø 8 45 kg/mm ² x 50 piece	Ø 12 45 kg/mm ² x 40 piece	Ø 20 45 kg/mm ² x 19 piece	Ø 26 45 kg/mm ² x 14 piece
--	---	---	---



**ROBO
BENDER 45S**

WHY ROBOBENDER 45S ?



ECONOMICAL GAIN

- %95 of the whole production is in GMS factories, Turkey and this enables to decrease the costs.
- Servo engine controlled system is using in ROBONDER 45 S and enables maximum power to the machine and minimum energy consumption.
- Labor costs decreased to the minimum levels with the design of the machine & efficient bending speed.
- PLC screen usage, PLC enables remote connection to the machine and less costs of software.



LONG LIFE EXPECTANCY

- High quality spare parts and production technics makes more life expectancy in ROBONDER 45S
- Processed with electrostatic powder coating and enables maximum protection to corrosion resistant.
- Galvanized materials used in infeed conveyer in order to corrosion protection.
- Rebars movement : Chain drum system, long life expectancy .



ERGONOMIC STYLE

- Hydraulic Unit, hidden on the below part of the machine and enables movement ability,
- Easy to use, user friendly setup and machine diagnostics, easy to assemble & disassemble
- Modular system on the machine, machine length can be adjusted & vary due to different spacing requirements in factories and other facilities.
- 360° convertible digital control panel enables easy usage to operator.
- PLC panel is also very easy to use
- Security systems of the machine protects worker health and makes higher protection.



HIGH EFFICIENCY

- Sensitive measurement with SERVO Engine system and failure rate is almost 2 per thousand.
- 90° angle bending is possible in 1 second.
- Chain drum system makes more movement ability and faster bends, avoid energy losses.
- Both hydraulic and pneumatic system is using in the machine and servo controlled system uses these powers from these modes.
- Less maintenance cost, easy setup & assembly
- Loading rebars also easy to machine, while 1 operator controls the digital panel, also loading can be possible.
- With the exact dimension range, the desired bending angle is possible without failure.



SMART SOLUTIONS

ROBOBENDER 45 S ;

- PLC system
- SERVO engine controlled systems
- Hydraulic and pneumatic supportive systems
- Gearbox system is efficient

INFEED CONVEYOR

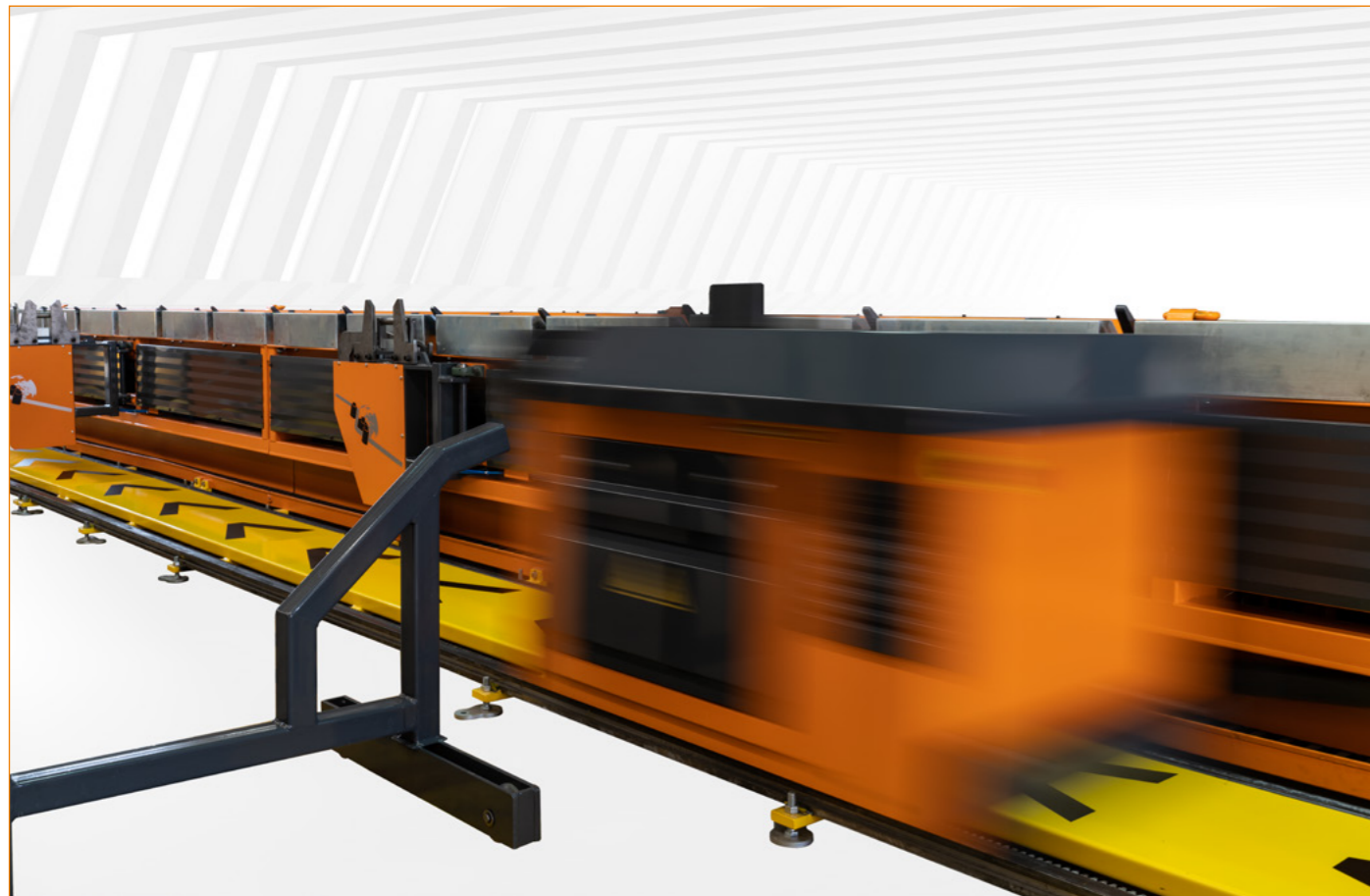
- Infeed Conveyor, 14 meters long and 65 cm width has made up with galvanized and consist of two pieces
- Easy assembly & disassembly with nuts system,
- Rebars can be placed easily to bending location with the assistance of hydraulic robotics system for unloading.
- The movement of the rebars on the conveyor can be assisted by chained drum system



Infeed conveyors can be produced upon different length & width demands

MOVEMENT LINE

- 12 meters length line of the moveable bending machine
- Movement can be supplied by gear system
- Security barriers are used for staff security
- If there is an interfere to the movement line while the machine is working, ROBOBENDER 45S turn off itself automatically & immediately.



CONTROL PANEL

- 360° convertible digital control panel enables easy usage to operator.
- Software is designed for decreasing the user failures to minimum and operate the machine easier.
- Due to its PLC panel, ROBOBENDER 45S enables less operating cost and user friendly solutions against its competitors.
- Apart from standard bending schemes & shapes, it enables to draw different type of bending requirements, it also enables to save these schemes to control panel. All desired bending angle which drawing to the scheme on control screen enables quick solutions. Also invalid drawings rejected by machine automatically
- EMERGENCY STOP button exists for safety & security reasons

PLC PANEL & CONTROL SYSTEM

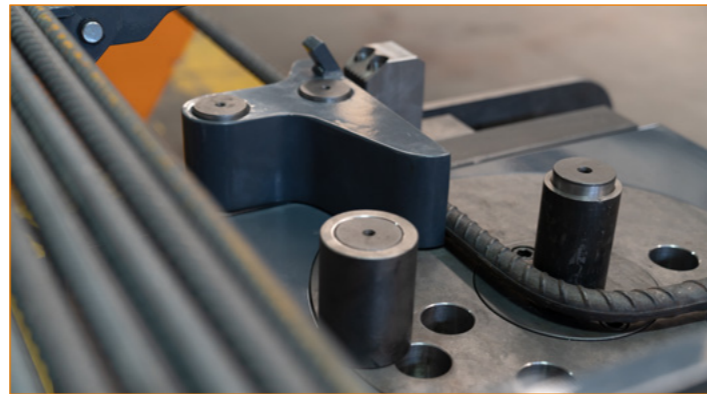
- Report all bending sizes & quantities.
- Measures working efficiency
- To be assisted for located of bending machines
- Automatic & Manual usage
- Less failures with graphical drawings
- Faster bendings with its ready bending schemes.
- Clarify the desired length of rebar before bending process
- Remote controlled by all over the long distances(with internet) to check the machine software, loading the software, obtain errors and less maintenance costs.



DOUBLE BENDERS

Consist of two different bending machines, 1 steady bending machine and 1 moveable bending machine. ROBOBENDER 45 S standard type : Can bend up to Ø42 rebars till 1 meter to 12 meters.

One of the most important feature of the ROBOBENDER 45 S is that moveable bending machine can come up to steady bending machine as bend 1 meters of rebar.



SERVO CONTROLLED ENGINE UNIT

- High efficiency working rate without power loss.
- Silent work
- Stopping without engine brake
- Sensitive bending ability & failure rate is almost 2 per thousand.
- Special reducers use in ROBOBENDER 45 S.



KICK OFF UNITS & COLLECTING POCKETS

- 3 different kick off unit exists in 14 meters movement line, these units are enable not to stretching of rebars while bending.
- These units which are opened by software automatically, can use according to bending length & the position of the bending machine.
- The bended rebars will be put to collecting pockets by these units.
- 3 legged collecting pocket use in ROBOBENDER 45 S as standard type, the number of collecting pockets can vary upon on demand.



ROBOBENDER 45S

Bending Capacity & Technical Specifications

Diameter	Strength of Steel		
	45 kg/mm ² Piece	65 kg/mm ² Piece	85 kg/mm ² Piece
Ø 42	1	-	-
Ø 36	1	1	-
Ø 32	1	1	1
Ø 28	2	2	1
Ø 26	2	2	1
Ø 22	3	2	2
Ø 18	4	4	3
Ø 16	4	4	4
Ø 14	5	5	4
Ø 12	6	6	5
Ø 10	7	6	6

Hydraulic Engine	4 KW
Movement Engines	2,2 KW (Servo Engines)
Bending Engines	2 x 3 KW (Servo Engines)
Setup Location	14 M x 3 M
Hydraulic Unit	180 Bar / 50 Lt Oil
Total Weight	4700 kg
Largest Distance Centre	12,8 meters
Smallest Distance Centre	1 meter
Largest Possible diameter of bending roller on bending plate	Ø280
Length of Infeed Roller Conveyor	13,8 meters
Width of Infeed Roller Conveyor	64 cm
Bending Speed	90 angle°/second
Diameter of Bending Plate	Ø 480
Infeed Conveyor lengths between bending wings	70,5cm

ROBOBENDER 45S

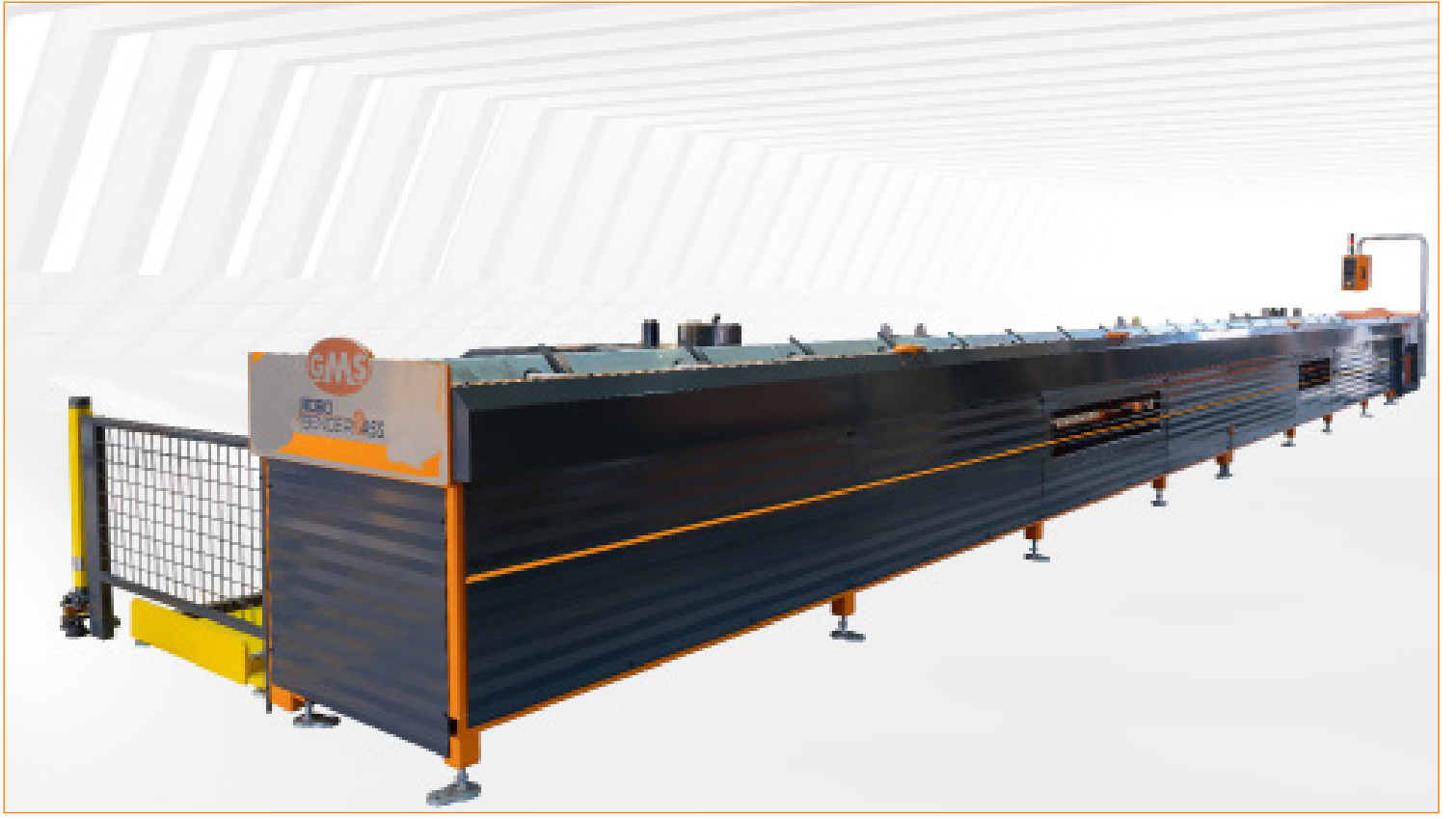
AT ONE TIME

Ø 10
45 kg/mm²
x 7 piece

Ø 18
45 kg/mm²
x 4 piece

Ø 18
65 kg/mm²
x 4 piece

Ø 42
45 kg/mm²
x 1 piece



GÖÇMAKSAN Makina San. ve Tic. A.Ş.
HEADQUARTER
Alınteri Bulvarı No: 216 Ostim / Ankara / Türkiye
T: +90 312 354 26 18 (Pbx) F: +90 312 354 40 14
info@gocmaksan.com

www.gocmaksan.com

İSTANBUL
SALES-AFTER SALES-SHOWROOM
İkitelli Org. San. Bölğ. Sefaköy Sanayi 1. Blok No:17-20
Küçükçekmece İkitelli İstanbul / TÜRKİYE
T: +90 212 671 52 89 F: +90 212 671 41 95