

F13

ни ски аракт ристики

По вопросам продаж и поддержки обращайтесь:

Алматы (7273)495-231
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89
Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Россия (495)268-04-70

Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Липецк (4742)52-20-81
Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Киргизия (996)312-96-26-47

Новокузнецк (3843)20-46-81
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Симферополь (3652)67-13-56
Казахстан (7172)727-132

Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Тверь (4822)63-31-35
Томск (3822)98-41-53
Тула (4872)74-02-29
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Ярославль (4852)69-52-93

F13

A new generation

The F13, introduced in 2014, is an ideal solution in the family of automated off-coil stirrup bending machines for its ease of use and achievable performance.

It is able to work from coils with a wire diameter from 4 to 13 mm.

It allows to produce shapes and stirrups, straight or shaped bars with one or more bends on one side up to a maximum length of 12 m.

High productivity is guaranteed both in the case of series production (same diameter with two wires up to 10 mm) as well as for processing of single elements (single round up to 13 mm).



> Quality is productivity

The F13 allows to obtain, in a simple way, a qualitatively superior product.

The combined action of an exclusive series of patented devices, reduces set-up times deriving from complex adjustments and drastically reduces the quantity of products destined to be discarded.

A state-of-the-art drives and control systems allow for unrivalled hourly productivity levels.



Maximum flexibility

Small or medium-sized stirrups, straightened bars, shaped with one or more bends on one side, circles or spirals, are realized in a completely automatic way, thanks to a complete range of accessories able to satisfy the most varied production requirements.



3D uniqueness and efficiency

The F13 can be supplied on request (optional), with a special device able to archive several 3D shapes effectively, completely eliminating manual intervention by the operator.



> 3D press

This device allows to perform the most traditional 3D shapes, using a single wire up to a maximum diameter of 13 mm.



> Tilting press

The "tilting" version allows to vary the parallelism (variable angle from 0° to 14°) of one of the two main sides.

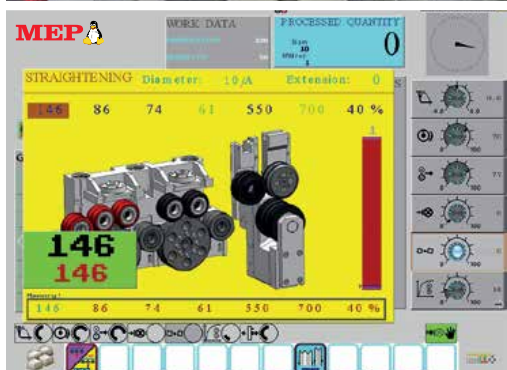
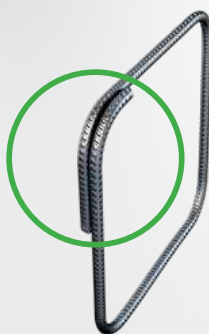


Anti-twisting and straightening system

The **AFS₂** (Advance Feeding System 2) is a patented straightening system established in 2014, which allows to control the rotary effect of the wire on its own axis, which can characteristically happen during wire feeding. As a result closed stirrups and straight bars are obtained.

The innovative configuration of the rollers arranged on a single plane greatly facilitates the control of the straightening of the two wires being processed, with a consequent increase in the hourly productivity of the plant and the drastic reduction of non-compliant products destined to be discarded.

The two feeding units, unique in design, guarantee a high contact surface between the feeding rollers and the two wires. This guarantees correct traction while containing any superficial crushing of the wire ribs typical of traditional feeding systems.



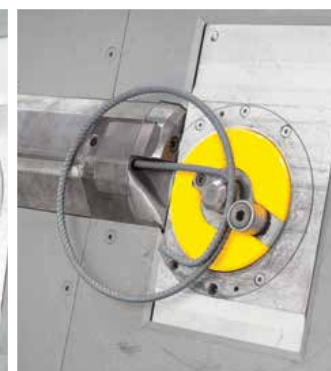
> Straightening under control

The combined action between the **AFS₂** system (Advance Feeding System 2) and the dynamic visual display of the position of the rollers, allows an ease of management of the individual straightening of the two wires. Numerous settings may be stored, to differentiate between the quality/type of the material, diameter or simply of the manufacturer.



> Universal bending pins

The F13 is equipped with a series of universal one-piece bending pins sets, capable of producing shapes, stirrups and circles. They comply with international standards and "can be customized" (optional) to bending radii of different sizes. They are characterized by a quick mounting system that allows an immediate resumption of production at each diameter change.



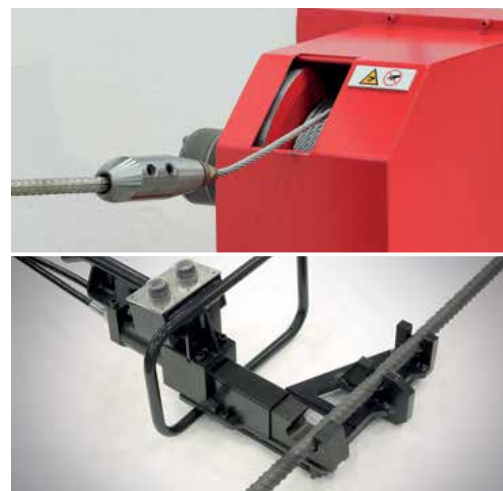
Management of the coils and collection of stirrups and shapes

The entire production process that begins from the loading of the coils up to the collection of the finished product, passes through a series of devices that allow an optimal management. All this translates into efficiency and productivity.

> De-coiler automation

The latest payoff generation are adapted to the use of "wild coil" (wire rod) or "compact coils" (spooled) of different weights (up to 3.2 t) and dimensions, through a series of customizations (spacers) and optional. Available in the "LC" version, it provides a braking system which is automatically controlled according to the shape to be produced.

"CE" protection fences and gates, are also available that allow access to a common area where all the payoffs are positioned, or for independent access to each single coil (optional). In the latter case, the operator can prepare the new coil while the machine is working. This is in compliance with the highest safety standards, and thus increasing the efficiency and safety of the system.



> Inserting the wire has never been easier

The winch (optional) is equipped with a locking device that allows the fixing and control of the start of a new coil and allows it to be dragged and threaded through the various guides up to the machine inlet.

The portable, hand held straightening device (optional) is recommended in case of continuous use of large diameters or in cases where the coils are of poor quality.



> Stirrup collectors: safety and ergonomics

The **AFS₂** allows to obtain closed shapes and stirrups, eliminating any dangerous manual intervention of the operator during the bending phase.

Available in different configurations, both in the versions with oscillating arms and those that include conveyor belts (optional) allow the collection and transfer of the stirrups produced to an area adjacent to the operator, facilitating collection in total safety and efficiency.



MEP World System: total control

The World System, through a "user friendly" interface, allows a total control of all the devices in the system, enhancing their performance.

The programming of the production cycle allows to use the pre-stored parameters related to speed, compensation, etc. related to the shape, size and diameter of each element.

The operator panel P.C. Industrial MEP "World System" is composed of:

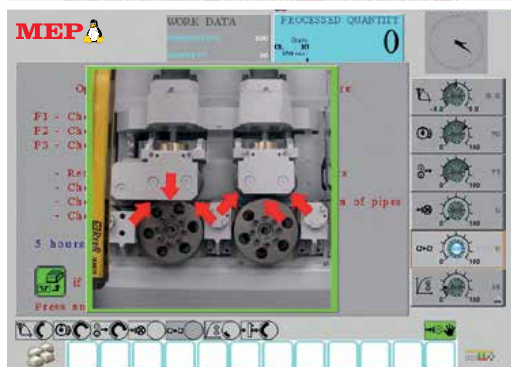
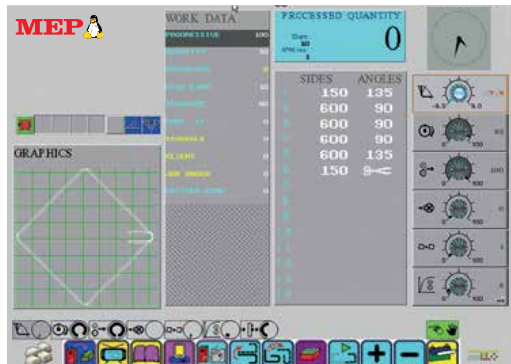
- Touch screen LCD screen.
- Compact microprocessor ("embedded") with low absorption ("fanless") equipped with "compact flash disk" without moving parts ("diskless").
- Linux operating system.



World System software

The software specially developed by MEP allows:

- Programming of "user friendly" 2D or 3D shapes supported by active graphics, or through a library of predefined shapes and dimensional feasibility monitoring through the "dynamic simulation" function.
- Programming of stirrups with large radii of curvature using the "virtual pin" function.
- Advanced features for searching the shapes saved in the archive.
- Import of programming data according to the most common protocols: BVBS, Unitechnik, British Standard, MEP-U2000.
- Creation of lists containing progressive memory in sequence or possibility to import them from the office.
- Storage and archiving of data related to work cycles and generation of daily production statistics (progressive memory, diameters, times, weights, etc.) and possible "remote" display from the office.
- "Active diagnostics" system for a constant monitoring of the functioning of the main groups of the plant and possible single and sequential movement of the same.
- Automatic activation of the programmed maintenance.
- Advanced functions for the calibration of the measurements of the sides and of the bending angles.
- Optical barcode reader (optional) via USB or RS232 serial port.
- USB port connection.
- Possibility of connection to the company network through RJ45 Ethernet port (LAN port) or RS232.
- Ready for remote assistance via Internet (company network for remote diagnosis).
- Can be interfaced with external "ROBOT ready" systems.
- "Industry 4.0 ready" certification.



Technical and production characteristics



F13



SINGLE STRAND PROCESSING WIRE DIAMETER 2D

cold drawn, hot rolled, smooth or ribbed wire

Ø 4* - Ø 13 mm | #2 - #4



DOUBLE STRAND PROCESSING WIRE DIAMETER 2D

cold drawn, hot rolled, smooth or ribbed wire

Ø 4* - Ø 10 mm | #2 - #3



SQUARE STIRRUP DIMENSIONS

minimum with single strand (optional bending pin)

80x80 mm (Ø 6* mm) | 3.14x3.14" (#2*)

maximum if clockwise

900x900 mm | 35.43x35.43"

maximum if counterclockwise (with optional cover extension)

900x900 mm | 35.43x35.43"



BAR LENGTH STRAIGHT AND CUT TO SIZE

minimum

5 mm | 0.19"

maximum (if equipped with optional collecting bench; other sizes on request)

12000* mm | 472.44"



CENTER BENDING PIN DIAMETER

minimum

15* mm | 0.60"

maximum

60* mm | 2.36"



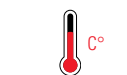
MAXIMUM DISTANCE BETWEEN CENTRAL BENDING PIN AND GROUND

standard

1300 mm | 51.18"

optional upon request

> 1300 mm | > 51.18"



OPERATING TEMPERATURE

standard

-5° C / +40° C | 23° F / 104° F

optional upon request

-15° C / +55° C | 5° F / 131° F



INSTALLED POWER

maximum (other upon request)

34,5 kW

THE PLANT DOES NOT REQUIRE COMPRESSED AIR.

fy = 600 N/mm² : max. unit yield point - ft = 700 N/mm²: max. unit tensile strength (other on request)

* available as an option

Customization

● Standard equipment ● Equipment available as an option ○ Equipment not available

Portable straightening device

●

Winch

●

3D press

●

Pin for circles/spirals

●

Collecting bench length from 6000 to 12000 mm, height 800 mm (other sizes on request)

●

Elevation spacer for compact coils "spooled"

●

Stirrup collector, conveyor belts, robotic solutions

●

Алматы (7273)495-231
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89
Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Россия (495)268-04-70

Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Липецк (4742)52-20-81
Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Киргизия (996)312-96-26-47

Новокузнецк (3843)20-46-81
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Симферополь (3652)67-13-56
Казахстан (7172)727-132

Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Тверь (4822)63-31-35
Томск (3822)98-41-53
Тула (4872)74-02-29
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Ярославль (4852)69-52-93

По вопросам продаж и поддержки обращайтесь: