

# Pre-cage assembling machine



# the history of innovation





# Preform

# UNIVERSAL ASSEMBLY MACHINE

PREFORM is the universal pre-cage machine able to weld automatically stirrups with two or three longitudinal wires. Pre-cages of many different configurations and dimensions are produced reducing the final assembly times and improving the quality of the finished product installed at construction site.











PREFORM allows to automate the production process saving the costs connected to the use of more than one operator. Its compact configuration allows to optimize production areas in relation to the length of the pre-cage to be produced.

# At the cutting edge of solutions

# ALL ROUND MOBILITY



The lateral positioning of the stirrups on the welding heads allows a simple, fast and safe loading. The three welding heads allow the maximum freedom in positioning the electrodes, between stirrups and longitudinal wires. It is possible to use stirrups of different diameter wire, arranged automatically with fix or variable pitch.

# AN INGENIOUS SOLUTION



The "V" shape of the longitudinal wires (patented system) allow to keep them inside the stirrup structure. The obtained pre-cage therefore complies with the designed standards and is much more rigid, then the following handling will not deform the structure.

## WELDING UNDER CONTROL

The usage of this welding technology, applied on equipment for electrowelded mesh (controlled current profiles) prevents alterations of the mechanical characteristics of steel, guaranteeing a reduced power consumption.

Each single welding head can be independently set up in relation to diameters, hook position and welding sequence.



## **✓** CUT THE WASTE



The cutting units (patented system) allow cut to length the longitudinal wires, eliminating manual operations and the relative waste.

## REDUCED SET UP TIMES



The sustaining longitudinal wires are straightened and driven by groups of independent rollers, guaranteeing a continuous cycle and eliminating downtime between a cage and the other.

#### **WORLD SYSTEM: TOTAL CONTROL**



#### • MEP Industrial P.L.C. operator control panel is comprised of:

- LCD Touch Screen for the user friendly graphical visualization of all data.
- Compact ("embedded") microcontroller with low power consumption.
- Input /Output and control axes electronic card with protection against short circuit and overload.

#### • The custom software developed by MEP allows:

- Data input with graphic visualization of programmed and pre-memorized cages.
- Memorization of 200 positions.
- Control of all parameters of the machinery with the possibility of selecting two different welding programs for each head.
- Possibility of excluding one or more heads during the process.
- Saving and archiving of data relative to work cycles and generation of daily production statistics (number of welded brackets and metres of cages produced).
- "Active diagnostic" system for a constant efficiency check of all machine devices.

#### **ACCESSORIES**



 Clamps: the "V" shape device is available on the Preform C model. (OPTIONAL)



• Set up for the connection of an **optical reader** (e.g. for a bi-dimensional bar code) through RS 232.

Adjustable modular support table, in order to facilitate the production of all the cages, allowing a higher production

flexibility.



• Triple decoiler. (OPTIONAL)

TECHNICAL AND PRODUCTION CHARACTERISTICS				
d   1	WORKABLE DIAMETRES		PREFORM C	PREFORM C 8
	stirrups		from Ø 4 to Ø 16 mm	
			from # 2 to # 5	
	longitudinal wire		from Ø 4 to Ø 6 mm	from Ø 4 to Ø 8 mm
			from # 2 to # 2	from # 2 to # 2
	fy = 600 N/mm <sup>2</sup> - ft = 700 N/mm <sup>2</sup> (other loads upon request)			
	PRE-CAGE DIMENSIONS (internal)			
	rectangular stirrups	minimum side	150 x 150 mm - 6"x 6" (other measures upon request)	
	triangular stirrups	minimum side	200 mm - 8" (with 3 longitudinal wires)	
			150 mm - 6" (with 2 longitudinal wires)	
	circular stirrups	minimum diameter	200 mm - 8" (with 3 longitudinal wires)	
			150 mm - 6" (with 2 longitudinal wires)	
		maximum diameter	1300 mm - 4-3"	
	PROGRAMMABLE PITCH BETWEEN TWO PITCHES			
	minimum		50 mm - 2"	
	maximum		500 mm - 20"	
<u> </u>	LENGTH OF THE LIFTER			
	standard (other dimensions upon request)		4000 mm - 13'1"	
	INSTALLED POWER			
	absorbed peak power		35 kVA - 46.9 hp	
	medium consumption		5,5 kVA - 6 hp	
THE PLANT DOES NOT REQUIRE COMPRESSED AIR.				
fy: max. unit yield point - ft: max. tensile strength				
Note: #2 = 1/4" = w4; #5 = 5/8"				

### MEP

#### **MEP Macchine Elettroniche Piegatrici**

via Leonardo Da Vinci, 20 I - 33010 Reana del Roiale (UD) - ITALY Tel. +39 0432 851455 Fax +39 0432 880140



#### **MEP Brasil**

Rua Bom Jesus da Cachoeira, nº 100 Parque Edu Chaves CEP 02236-020 - Sao Paulo - BRASIL Tel. +55 11 2240.4610 - 2240.4553 Fax +55 11 2240.4610 - 2240.4553



#### MEP France S.A.

8 bis, rue des Oziers BP 40796 Zone d'Activités du Vert Galant 95004 St. Ouen L'Aumône FRANCE Tel. +33 1 34300676 Fax+33 1 34300672



#### **MEP Nord-Europe GmbH**

Brienner Strasse 55 D-80333 München GERMANY Tel. +49 089 41610829



#### MEP Polska Sp. z o.o.

ul. Józefowska 13/A 93-338 Łódź POLAND Tel. +48 42 645 7225 Fax +48 42 645 7058



#### **MEP Vostok OOO**

Ул.Новаторов, 36 корп.3 Офис XXIV 119421 Москва Россия Tel./Fax: +7 495 745 04 90



#### MEP Asia Co., Ltd.

1303 Ho, 301-Dong, Bucheon Techno Park 345 Sukcheon Ro, Ojung-Gu Bucheon, Gyunggi-Do - SOUTH KOREA Tel. +82 32 329 1956 Fax +82 32 329 1957

www.mepgroup.com sales@mepgroup.com