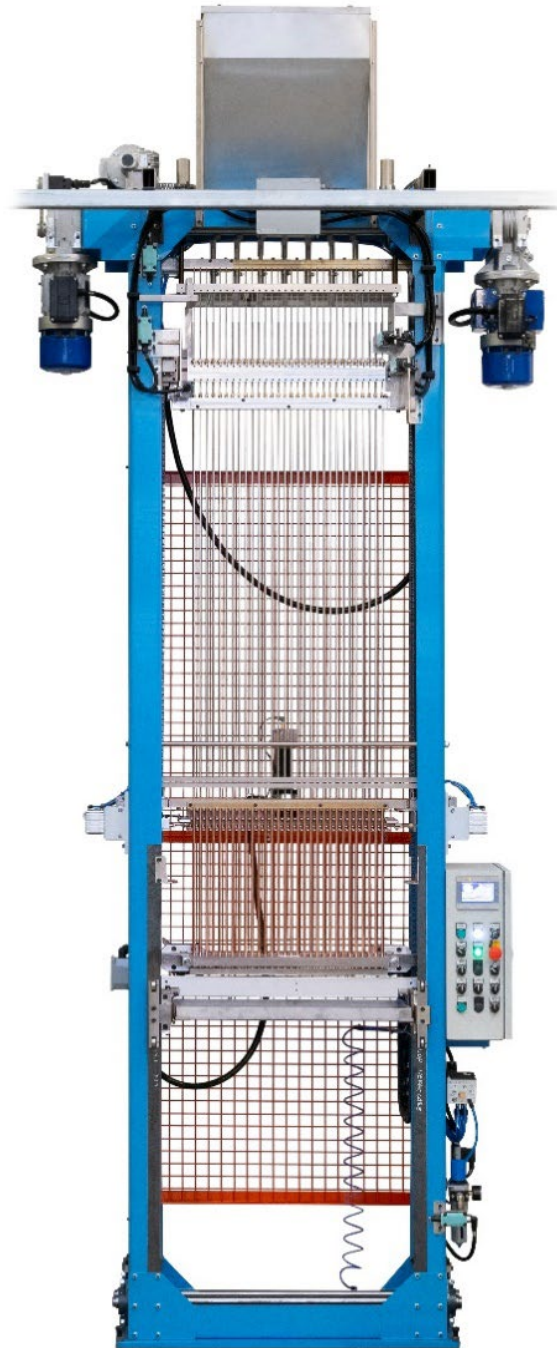




HIGH SPEED FILLING MACHINE



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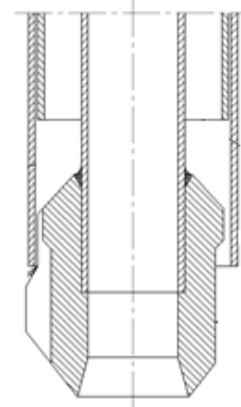


ADVANTAGES

HIGH FILLING SPEED

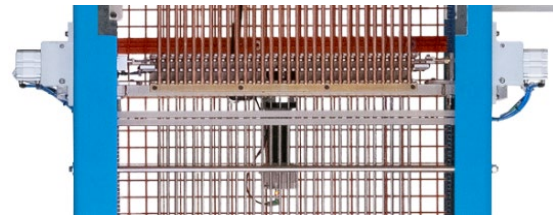
New-patented 3-tube system for MgO flow control, which allows for greater filling speeds. The system is fitted with a mechanical closing/opening device that not only allows higher MgO flow rates, but keeps MgO from flowing once closed.

- Higher filling speed and improved uniformity
- Reduced wear of components in contact with the oxide.
- Effective closure of the conduit with no material leakage.
- Large oxide flow passages without compromising shut-off capability.



UNIFORM MGO COMPACTION

Electromechanical vibration system, driven by a d.c. motor. The system is stable and characterized by symmetrical oscillations even when varying the vibration frequency. By changing the rotational speed of the motor, it is possible to obtain different vibration frequencies.



Travelling vibrator which moves from the bottom to the top of the tube during the filling process.

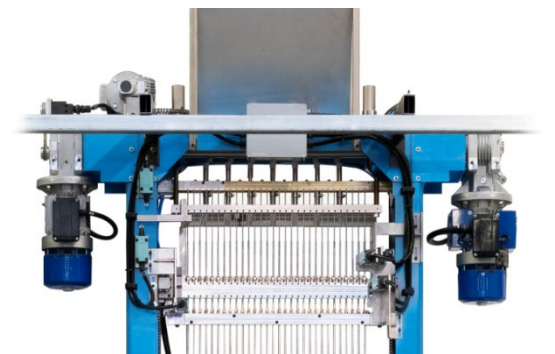
The electromechanical vibration system replaces the traditional electromagnetic vibration system, which is unstable and difficult to adjust.

The machine has the possibility to keep the upper part of the heating element under vibration for an adjustable time once the filling has ended, to increase the powder compaction in that area.

EASY SET-UP

Motorised set up when changing the length of the tubes to be filled

Motorized adjustment of the top terminal pin protrusion from the tubes after being filled

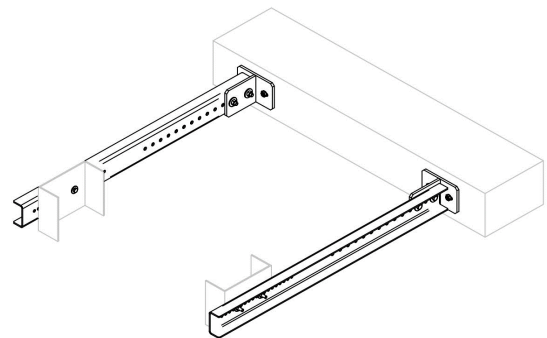




BRACKETS FOR MOUNTING FILLING MACHINE

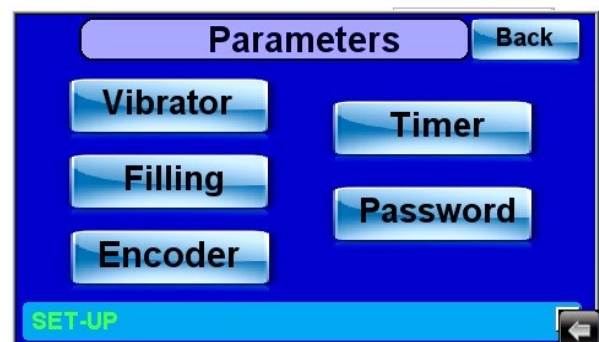
Brackets are supplied with the machine to facilitate fixing it in vertical support position (wall, frame, carpentry).

The quantity of brackets supplied depends on the length of the filling machine.



EASE OF USE

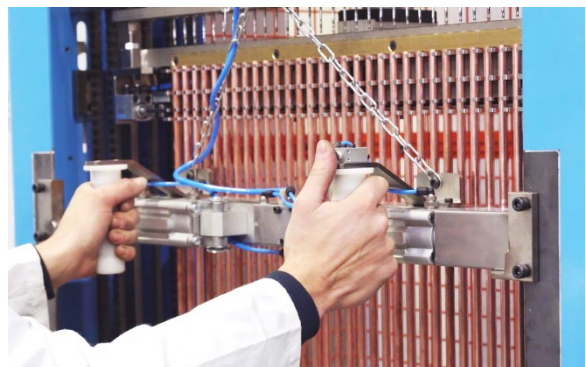
A simple and intuitive operator interface facilitates more intuitive operation and allows for quick setting and control of the main machine functions.



AUTOMATION

A number of options are available to automate the process and increase the productivity.

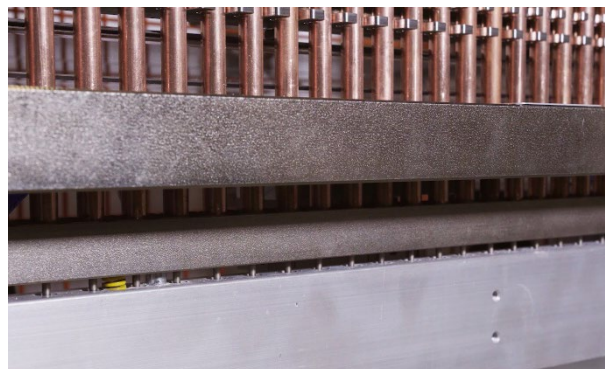
The machine is pre-arranged for the use of a pneumatic clamp, which gives the possibility to load and unload simultaneously up to 30 tubes in one go.

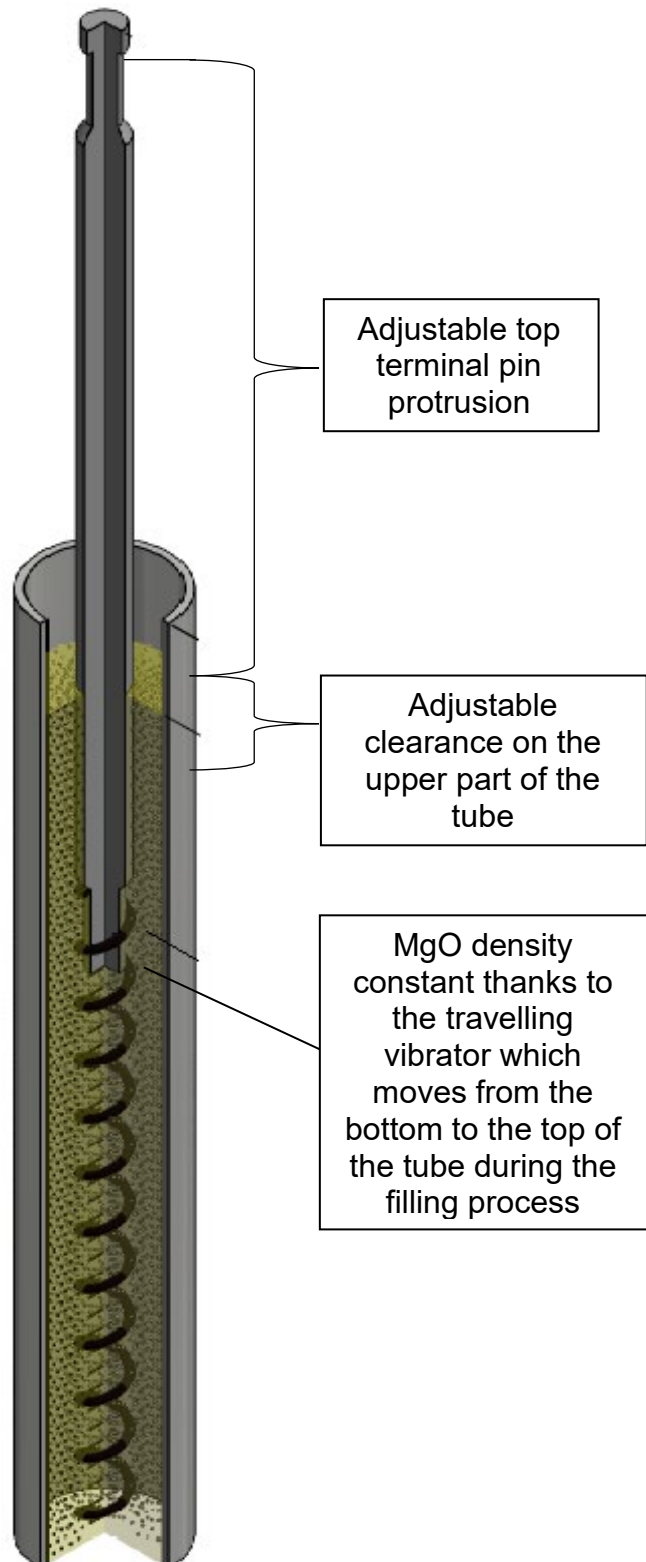


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SCRAP REDUCTION

The machine control through an encoder the position of the vibrator group, so that when the tubes to be filled reach the lowest position, the carriage is stopped at a certain position. This is meant to allow the use of special plugs (such as plugs to be pulled) and avoid the collision of the pins with the lower bar.







PATENTED THREE-TUBE FILLING SYSTEM

The patented three-tube magnesium oxide filling system is designed to achieve high filling speeds, improve filling quality, and prevent material leakage at the end of the cycle. The concentric tube configuration also helps reduce wear on components in contact with the magnesium oxide, increasing the system's reliability and service life.

Components and Operation

1. First Tube (Inner Tube)

The first tube, positioned at the center of the system, is equipped with a tungsten-carbide centering head welded to its end, which guides the heating element coil throughout the entire filling phase.

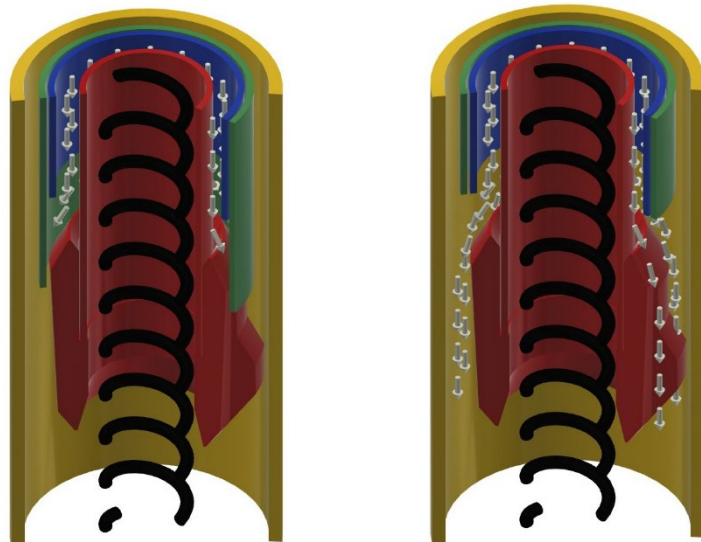
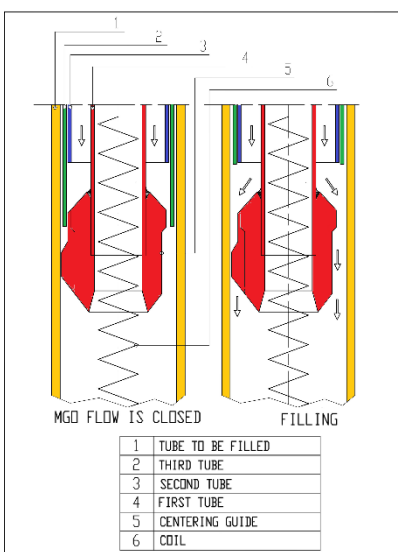
The centering head, fitted with support fins, keeps the coil perfectly aligned with respect to the tube being filled, while also ensuring sufficient clearance for the magnesium oxide to flow outward.

2. Second Tube (Intermediate Conveying Tube)

The second tube is the channel through which the magnesium oxide actually flows. It directs the material into the tube being filled, ensuring a steady and consistent flow.

3. Third Tube (Shut-off Tube)

The third tube acts as an opening and closing valve for the magnesium oxide flow. Separating the shut-off tube from the conveying tube helps limit wear on the component exposed to the magnesium oxide, while ensuring complete closure of the channel at the end of the cycle. This design eliminates leaks and accidental discharge of material.





TECHNICAL CHARACTERISTICS

Adjustment of top terminal pin protrusion	mm	15-35
Diameter of tubes to be filled		See available versions
Max. length of tubes to be filled		See available versions
Min. length of tubes to be filled (filling length up to 3000mm)	mm.	300
Min. length of tubes to be filled (filling length > 3500mm)	mm.	350
Number of tubes to be filled	No	30-24-15
Filling speed for up to*	mm/min.	600
Vibration intensity (frequency)	Hz	adjustable from 0 to 60
Installed electric power	KW	3
Power supply	V	to be defined
Pneumatic supply	Ate	6
Set up time when changing the length of the tube to be filled	min.	From 2 to 4
Set up time when changing the extension of the terminal pins	min.	1-2

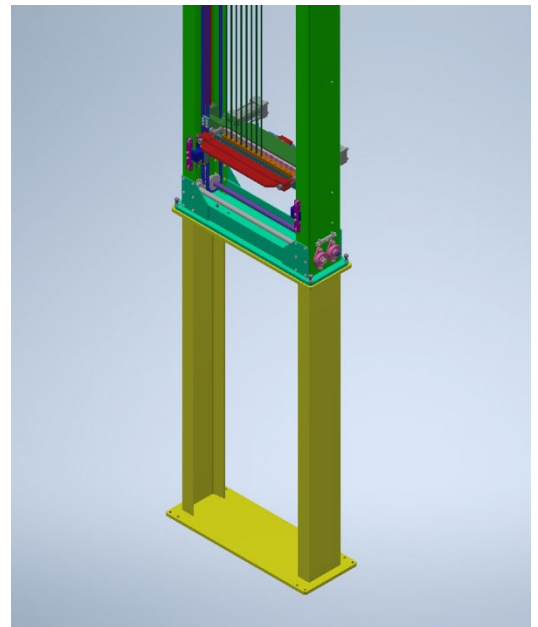
* The speed may be lower depending on the materials and the geometry of the element to be filled.

OPTIONAL

SPACER ELEMENT FOR FILLING MACHINES

Dedicated spacer, designed to raise the filling machine to a predefined height level.

- **Mod. 135/00.000010:** max spacer length 2000 mm
- **Mod. 135/00.000020:** max spacer length 4000 mm
- **Mod. 135/00.000030:** max spacer length 6000 mm



**AVAILABLE VERSIONS**

The filling machines are available in two versions:

- **non-programmable** filling machine for simultaneous filling of tubes
- **programmable** filling machine with the possibility to set the number of tubes to be filled.
The setting of the number of tubes to be filled is done by means of electrical switches

The filling machines can be designed to fill one diameter, or to fill more than one diameter.

Set up time when changing the diameter to be filled: 5 min.

30-TUBE FILLING MACHINES FOR TUBE DIAMETER 7,5 TO 10 MM

	1 diameter non-programmable	1 diameter programmable	2 diameters programmable	3 diameters programmable
Maximum tube length mm	1000	135/30.100000	138/30.100000	138/31.100000
	1500	135/30.150000	138/30.150000	138/31.150000
	2000	135/30.200000	138/30.200000	138/31.200000
	2500	135/30.250000	138/30.250000	138/31.250000
	3000	135/30.300000	138/30.300000	138/31.300000
	3500	135/30.350000	138/30.350000	138/31.350000
	4000	135/30.400000	138/30.400000	138/31.400000
	4500	135/30.450000	138/30.450000	138/31.450000
	5000	135/30.500000	138/30.500000	138/31.500000
	6000	135/30.600000	138/30.600000	138/31.600000

24-TUBE FILLING MACHINES FOR TUBE DIAMETER 10,1 TO 14 MM

	1 diameter non-programmable	1 diameter programmable	2 diameters programmable	3 diameters programmable
Maximum tube length mm	1000	134/24.100000	133/24.100000	134/31.100000
	1500	134/24.150000	133/24.150000	134/31.150000
	2000	134/24.200000	133/24.200000	134/31.200000
	2500	134/24.250000	133/24.250000	134/31.250000
	3000	134/24.300000	133/24.300000	134/31.300000
	3500	134/24.350000	133/24.350000	134/31.350000
	4000	134/24.400000	133/24.400000	134/31.400000
	4500	134/24.450000	133/24.450000	134/31.450000
	5000	134/24.500000	133/24.500000	134/31.500000
	6000	134/24.600000	133/24.600000	134/31.600000



15-TUBE FILLING MACHINES FOR TUBE DIAMETER 14,1 TO 19 MM

		1 diameter non-programmable	1 diameter programmable	2 diameters programmable	3 diameters programmable
Maximum tube length mm	1000	135/15.100000	138/15.100000	135/32.100000	135/33.100000
	1500	135/15.150000	138/15.150000	135/32.150000	135/33.150000
	2000	135/15.200000	138/15.200000	135/32.200000	135/33.200000
	2500	135/15.250000	138/15.250000	135/32.250000	135/33.250000
	3000	135/15.300000	138/15.300000	135/32.300000	135/33.300000
	3500	135/15.350000	138/15.350000	135/32.350000	135/33.350000
	4000	135/15.400000	138/15.400000	135/32.400000	135/33.400000
	4500	135/15.450000	138/15.450000	135/32.450000	135/33.450000
	5000	135/15.500000	138/15.500000	135/32.500000	135/33.500000
	6000	135/15.600000	138/15.600000	135/32.600000	135/33.600000

Custom solutions: Need larger diameters or lengths? Our filling machines can be adapted to your specific needs.

Contact our sales team to discuss your specific needs and get a quote.

SPECIAL 30-TUBE FILLING MACHINE FOR MICROTUBE - DIAMETER 5,1 TO 7,2 MM

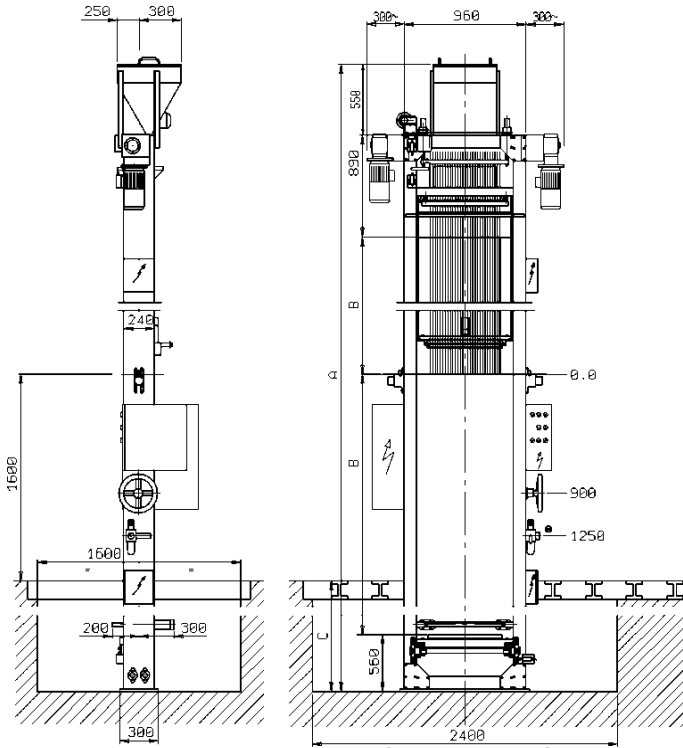
Unlike the standard filling machines (for diameters starting from 7,5 mm), the microtube filling machine system is fitted with a mechanical opening/closing device to open and then close the flow of MgO after a certain time from the start of fill. Because of the size of the tube to be filled is too small to fit three filling tubes in it, it is necessary to use only two tubes with a device that closes the flow of MgO.

This system guarantees to achieve the same filling speed rates (600mm/min) as the CSM filling system with three tubes.

		1 diameter non-programmable	1 diameter programmable	2 diameters programmable
Maximum tube length mm	1000	035/30.100000	038/30.100000	036/31.100000
	1500	035/30.150000	038/30.150000	036/31.150000
	2000	035/30.200000	038/30.200000	036/31.200000
	2500	035/30.250000	038/30.250000	036/31.250000
	3000	035/30.300000	038/30.300000	036/31.300000



DIMENSIONS



6000	14000	6000	4960
5000	12000	5000	3960
4500	11000	4500	3460
4000	10000	4000	2960
3500	9000	3500	2460
3000	8000	3000	1960
2500	7000	2500	1460
2000	6000	2000	960
1500	5000	1500	460
1000	4000	1000	---
Lunghezza tubo da riempire Length of the tube to be filled Länge su füllender Rohre Longueur du tube a remplir Longitud tubo de llenar	A	B	C

NOTES: We recommend an additional 500 mm (20") above the primary hopper for loading the MGO powder in the primary hopper.



FILLING MACHINE WITH VERTICAL MOTORIZATION

(MAXIMUM WIDTH 1100 MM)

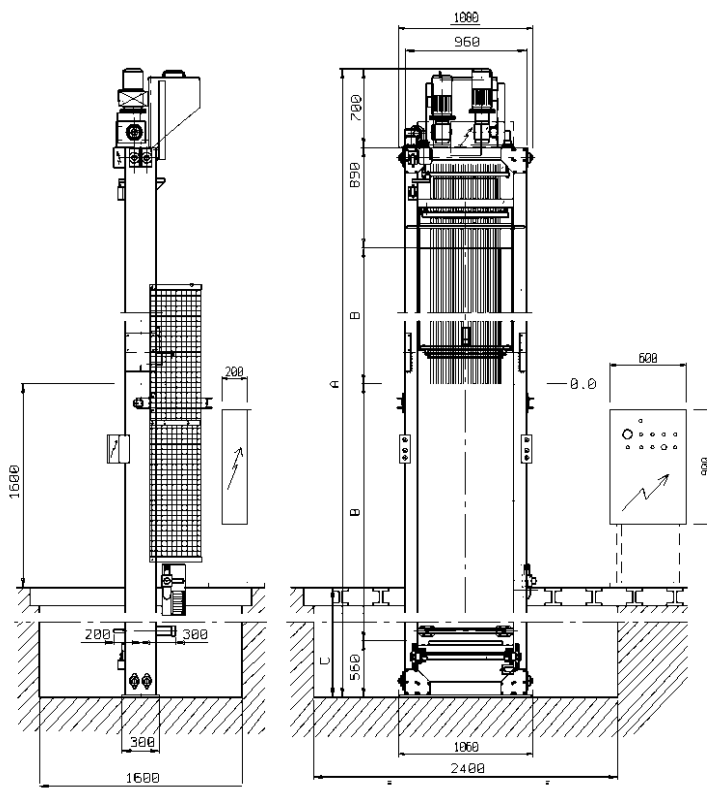
The setting of the number of tubes to be filled is done by means of appropriate electric drives and the assembly of protection tubes onto the non-working stations is required.

Set up time when changing the diameter to be filled: 5 min.

AVAILABLE VERSIONS

30 tubes diameter 7,5 – 10 mm	24 tubes diameter 10,1 – 14 mm	15 tubes diameter 14,1 – 19 mm
Programmable 1 diameter	Programmable 1 diameter	Programmable 1 diameter
138/38.XX0000	134/35.XX0000	135/34.XX0000

DIMENSIONS



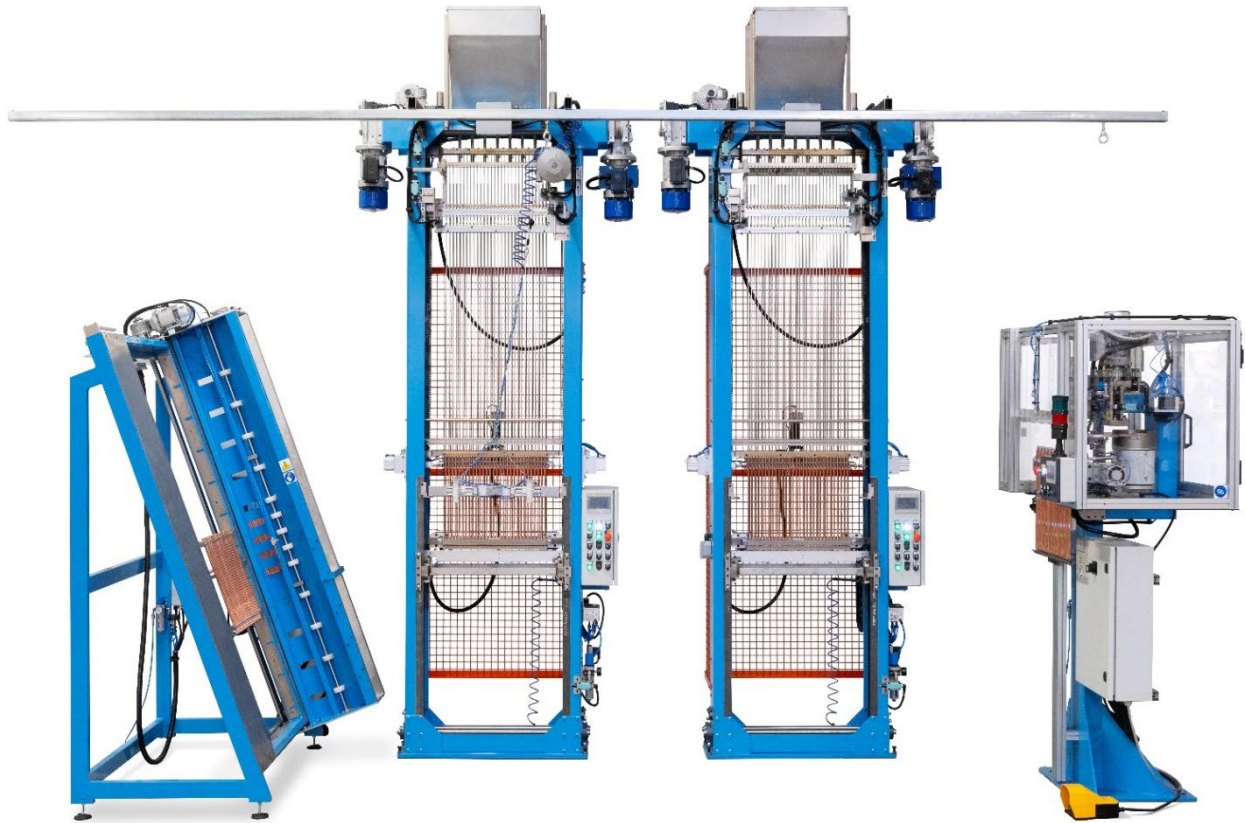
6000	14150	6000	4960
5000	12150	5000	3960
4500	11150	4500	3460
4000	10150	4000	2960
3500	9150	3500	2460
3000	8150	3000	1960
2500	7150	2500	1460
2000	6150	2000	960
1500	5150	1500	460
1000	4150	1000	---
Lunghezza tubo da riempire Length of the tube to be filled Länge su füllender Rohre Longueur du tube a remplir Longitud tubo de llenar	A	B	C

NOTES: We recommend an additional 500 mm (20") above the primary hopper for loading the MGO powder in the primary hopper.



OPTIONS

FILLING AUTOMATION



[Product page](#)