



Corma Vacuum Forming Corrugator

MODEL
630
SERIES



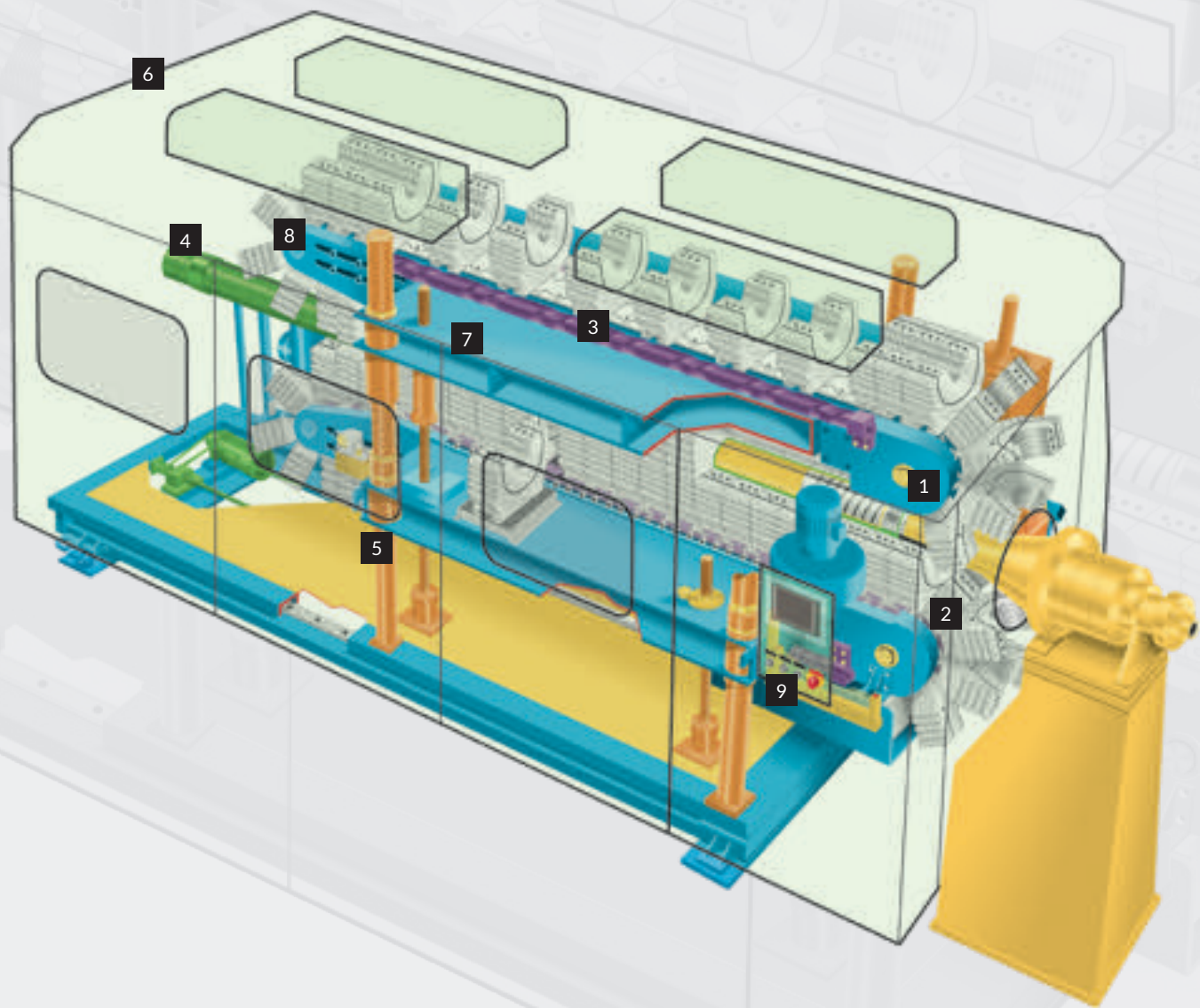
MODEL 630
FOR PIPE SIZES:
2 inches I.D. to
8 inches O.D.
(50 mm I.D. to
200 mm O.D.)

Some of the advantages of Corma Corrugators that have made the Model 630 series a best seller, the world over:

Corma offers standard systems capable of producing pipes of virtually all sizes, from extremely small pipes with inside diameter measuring as little as 1 mm (0.040 in.) to enormous pipes with outside diameters measuring as much as 3000 mm (120 in.).

Corma supplies Single Wall, Double Wall, Triple Wall, Rib Pipe, Ultra Rib, and Corma Solid Wall Pipe production systems as complete turnkey installations or as individual components.

- Corma corrugators feature very strong and precise construction, able to withstand the rigorous demands of day to day production. All Corma corrugators are backed by a three year mechanical warranty.
- Corma corrugators are of vertical construction. This design is extremely user friendly and has been proven for over 45 years. The top and bottom housings are held in place by four columns which keep the machine in perfect alignment. With the centre height adjustment, each Corma corrugator can make a very large range of pipe sizes; providing production flexibility at lower capital investment.
- Corma corrugators accept almost all blow and vacuum formable materials including PVC, PE, PP, Nylon, TPR, Teflon and others. Modifiers such as flame retardants, EVA etc. can be added.
- Corma corrugators are available in either blow molding or vacuum forming design.
- Corma corrugators are manufactured under strict ISO 9001-2015 procedures to meet customers' requirements and bear the CE stamp of conformity to the European technical and safety standard.



Applications

The 630 corrugator uses Corma's vacuum forming technology and accepts vacuum formable materials including PVC, PE, and PP. This model produces single wall corrugated pipe, double wall pipe with corrugated outer walls and smooth inner walls and triple wall pipe, produced as a corrugated middle layer between a smooth inner and outer wall. These systems are available for a wide range of applications:

- Underground service ducts
- Industrial waste pipes
- Cooling/ventilation ducts
- Leachbed drainage pipes
- Transporting aggressive fluids
- Sanitary drains
- Highway drainage pipes
- Electrical cable conduits
- Land drainage pipes
- Landfill gas extraction
- Stormwater drains

Features

1. Unified mold block system (patented)



Mold blocks from smaller corrugators can be run on larger corrugators by using Corma's innovative carrier adaptors. Standard mold blocks are 1", 2", 4" and 8" wide.

2. Supercooling™ (patented)



This revolutionary cooling method cools both the pipe and mold blocks using chilled air. The benefits are higher output rates, virtually no maintenance, and quick mold block change overs.

3. Mold block quick return system (MQR) (patented)



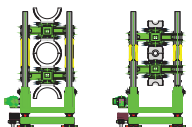
As a mold block enters the system, it is automatically separated from the mold block train, accelerated along the return track, decelerated back down to production speed, and finally joined back to the mold block train. By separating and accelerating the mold blocks, their entire surface is exposed for more efficient and consistent cooling from the mold block air-cooling system. The quick return feature, by the nature of its design, reduces customer cost since fewer mold blocks are required to run the same model corrugator with a conventional set-up.

4. In-line coupling (patented)



Corma's pressure forming coupling technology is used to form the two layer in-line coupling on the corrugator. The technology also incorporates a specialized die design. This coupling system can be manufactured from PVC, PP and PE, etc. One of the main advantages of this coupling system is the elimination of the downstream belling machine. As a result, it is no longer necessary to slow down production to match the cycle time of the belling equipment.

5. Electric centre height adjustment



All Corma corrugators are equipped with a centre height adjustment for the raising of the top housing and lowering of the bottom housing of the corrugator relative to the centre height of the extruder. The centre height adjustment also makes it easy to use mold blocks of different overall dimensions in the corrugator. If, for example one changes from a small mold block size to a larger one, operators can make the change by raising the top housing and lowering the bottom housing, maintaining the centre height of the corrugator.

6. Cooling Enclosure (patented)



Corma has developed a new cooling method to further enhance the cooling capacity of the corrugator. The new system incorporates an enclosure, temperature control system, high pressure blowers and mold block design to optimize cooling and productivity.

7. Upper housing lifting device



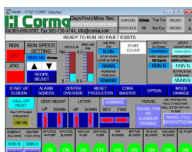
Corma corrugators feature an electric or manually operating lifting device that raises the upper housing of the corrugator, separating the upper from the lower track. This simplifies maintenance and reduces downtime by allowing rapid and accurate aligning of the mold blocks to the die tooling.

8. Adjustable length corrugators



All Corma Corrugators can be equipped with adjustable mold track length. This allows the manufacturing of pipe or tubing of specific length with couplings molded on each end. The mold track length can be adjusted in one mold block increments.

9. Controls



All corrugator functions are operated from a central control station. Emergency shut-off buttons are provided around the machine and terminals for an interlock feature between the extruder and the corrugator are provided in the corrugator panel. Push button controls or PLCs can also be supplied to facilitate the automation of certain aspects of the production process. All corrugators are built to the applicable electric code of the country where they are to be used.

Technical Data

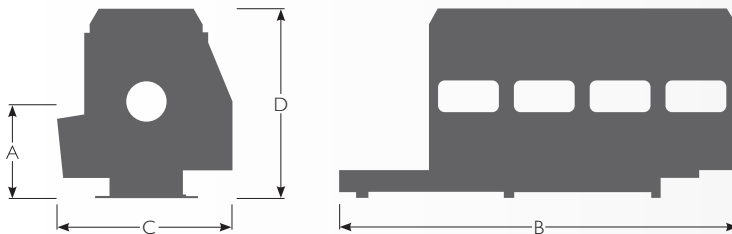
Specifications	Model 630-6		Model 630-7.4 MQR		Model 630-12 HSL	
Pipe Range Min ID	50 mm	2.00 in.	50 mm	2.00 in.	50 mm	2.00 in.
Pipe Range Max OD	200 mm	8.00 in.	200 mm	8.00 in.	200 mm	8.00 in.
Max line speed*	20 m/mi	65 ft/min	25 m/min	80 ft/min	35 m/min	115 ft/min
Max output 830*	500 kg/hr	1100 lbs/hr	600 kg/hr	1320 lbs/hr	1040 kg/hr	2300 lbs/hr
Set of moldblocks	60 pairs	60 pairs	60 pairs	60 pairs	120 pairs	120 pairs
Moldblock length	101.6 mm	4.00 in.	101.6 mm	4.00 in.	101.6 mm	4.00 in.
Moldblock chain length	6096 mm	240 in.	6096 mm	240 in.	12192 mm	480 in.
Forming section length	2125 mm	84 in.	2946 mm	116 in.	5520 mm	217 in.
Corrugator drive motor	3.75 kw (x2)	5 hp (x2)	3.75 kw (X2)	5 hp (X2)	3.75 kw (x2)	5 hp (x2)
Mold cooling fan (6)	4.5 kw	6 hp	4.5 kw	6 hp	4.5 kw	6.3 hp
Cooling Unit (12 fans)	2.28 kw	3 hp	2.28 kw	3 hp	4.6 kw	6 hp
Corrugator lifter motor	0.56 kw	0.75 hp	0.56 kw	0.75 hp	0.75 kw	1 hp
Corrugator travel motor	0.56 kw	0.75 hp	0.56 kw	0.75 hp	0.75 kw	1 hp
Corrugator hook-up	17.5 kw	24 hp	17.5 kw	24 hp	20.5 kw	27 hp
Water cooling required	87 l/min	23 gl/min	93 l/min	24.5 gl/min	125 l/min.	33 gl/min
Air pressure hook-up	6 bar	100 psi	6 bar	100 psi	6 bar	100 psi

*Line speeds and outputs are theoretical and depend on: pipe diameter; type of plastic; machine model; cooling options; mold track length; temperature and quantity of cooling water; profile configuration; extruder capacity, etc.

Note: Corma reserves the right to change specifications in the interest of progress without prior notice.

Dimensions

Specifications	Model 630-6		Model 630-7.4 MQR		Model 630-12	
A) Centre Height	1162 mm	46 in.	1162 mm	46 in.	1162 mm	46 in.
B) Length	4337 mm	171 in.	4893 mm	193 in.	7515 mm	296 in.
C) Width	1890 mm	75 in.	1890 mm	75 in.	1890 mm	75 in.
D) Overall Height	2432 mm	96 in.	2432 mm	96 in.	2432 mm	96 in.
* Weight Approx.	5727 kg	12600 lbs.	6886 kg	15150 lbs.	7718 kg	16980 lbs.



*Picture not exactly as shown and may include, among other things, attached guards and safety devices, as set out in manufacturer's specifications.

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