Mold Block Quick Return System

Overview

Another outstanding technical feature available on Corma corrugators is the patented Mold Block Quick Return (MQR) System. This feature increases production speed by extending the molding track with mold blocks from the return track. The quick return feature also allows the corrugator to operate with just a partially filled mold track.

The production speed of the corrugator depends on two key factors:

1) Length of time the mold blocks are in contact with the formed plastic
2) Heat exchange ability of the mold blocks

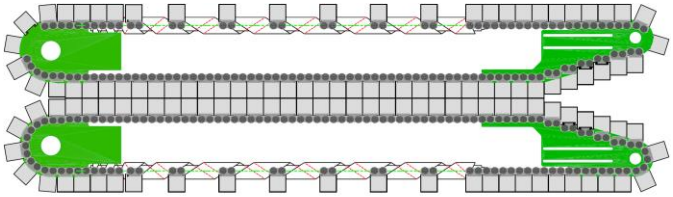
With Corma's MQR System the mold track can be extended by the number of mold blocks saved in the return track and the production speed increases proportionately.

Corma's self-driven MQR System automatically picks up the mold blocks at production speed, accelerates them along the return track, and slows them down again to production speed before entering the mold track. The end result is that mold blocks spend less time in the return track and more time in the molding track.

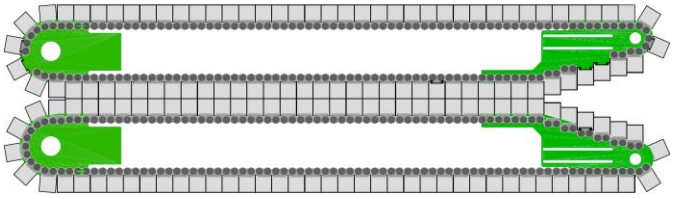
The MQR separates the mold blocks in the return track exposing all surfaces to be air cooled. Working in conjunction with other patented Corma features such as the mold block design, Supercooling™ and the Cooling Enclosure, highly effective cooling is achieved resulting in increased production speeds.

The advantages of the MQR System are greatest with materials that are slow to set up (such as PE & PP) and pipes with thick walls or with couplings, which are also slow to set up. Cooling these pipes too aggressively with overly chilled mold blocks in water cooled systems gives the pipe a bad finish because of the large temperature difference between the skin of the pipe and the interior of the pipe wall.

With these new features, Corma corrugators are even more productive. Even customers who do not require high production speeds can benefit from the MQR System, since it can allow them to reduce their investments in mold blocks by up to 25% (Savings vary depending on corrugator model and mold track length).



*This 1530-7.4 MQR corrugator is equipped with the Mold Block Quick Return System. It only needs **60 mold blocks** to form a **molding track length of 2,667 mm***



*In comparison, this 1530-7.4 corrugator is not equipped with MQR and needs **74 mold blocks** to form a **molding track length of 2,667 mm***

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Technical Data

Corrugator Model Number* Vacuum Forming or Blow Molding	Pipe Range				Maximum Line Speed**		Maximum Output**	
	mm		inches					
	Min. I.D.	Max. O.D.	Min. I.D.	Max. O.D.	M/min	ft/min	Kg/hr	lbs/hr
053	3	20	0.12	0.8	50	165	30	66
130	6	110	0.25	4.5	55	180	360	790
430	6	160	0.25	6.3	35	115	450	990
630***	50	200	2.0	8.0	35	115	1040	2300
830***	50	300	2.0	12.0	35	115	1040	2300
1030	50	365	2.0	14.4	30	100	750	1650
1230	50	400	2.0	16.0	30	100	800	1760
1530	50	700	2.0	27.5	23	75	1000	2200
2030	100	800	4.0	32.0	10	33	1300	2860
3030	100	1200	4.0	48.0	6	20	1300	2860
4030	200	1500	8.0	60.0	5	16.5	1400	3100
6030	450	1800	18.0	72.0	3	10	1500	3300
P 30/60	750	1800	30.0	72.0	1	3.3	1300	2860
P 30/120	750	3000	30.0	120.0	1	3.3	1500	3300
Vertical Corrugator Model Number								
V 053	1	20	0.040	0.8	50	165	30	66
V 130	4	100	0.160	4.0	50	165	215	475
V 630	20	200	0.8	8.0	30	100	600	1320
Rib-Pipe Model Number								
R 2030	100	700	4.0	28.0	10	33	1100	2420
R 3030	100	1000	4.0	40.0	10	33	1300	2860

* Mold blocks are interchangeable within family groupings. Also, molds from smaller corrugators can be used on larger corrugators, using Corma's carrier adaptors.

**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.

***630-12 and 830-12 line speed and output based on high speed corrugator configuration

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