

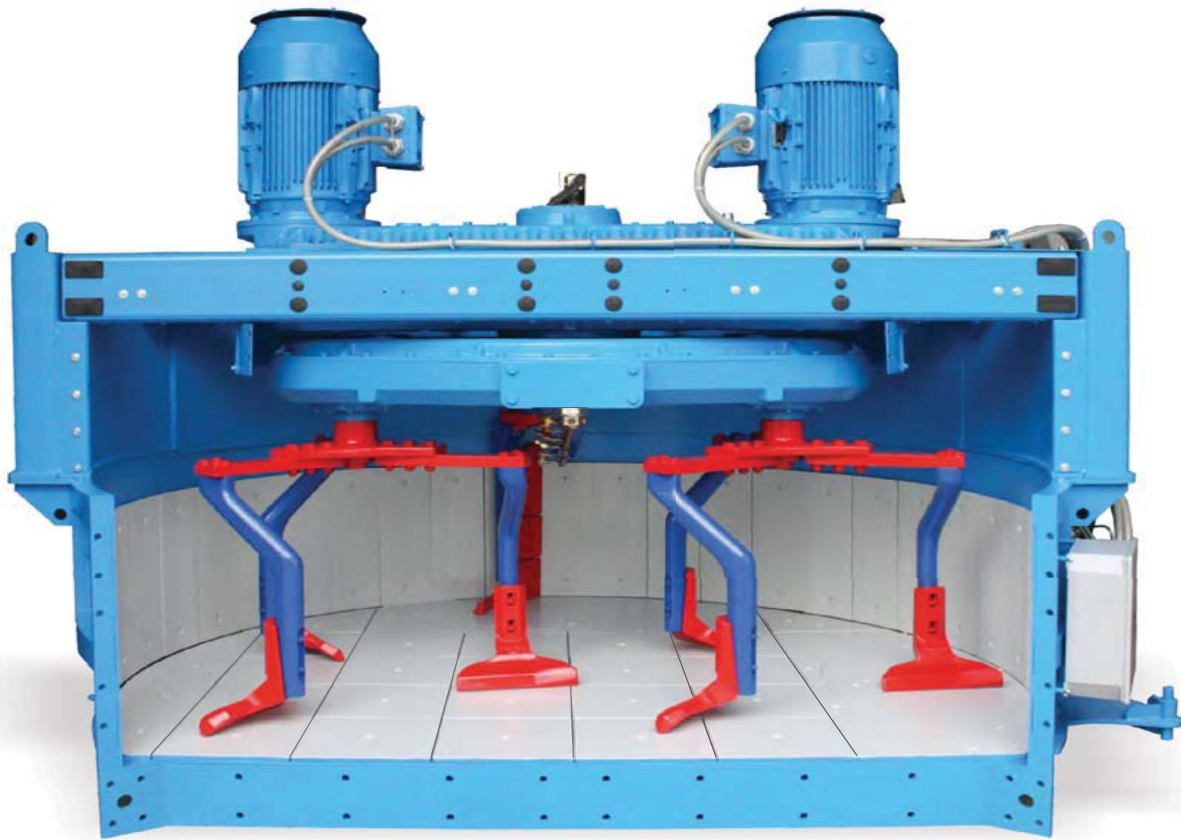
Planetary Mixer MP



CERTIFIED COMPANY
UNI EN ISO 9001



SICOMA



QUALITY SYSTEM:

The Manufacturing Procedures used for all SICOMA Mixers have been compliant with the Quality Requirements of ISO 9001 since 1995 and have been updated and approved by CERMET since 2009 as compliant to ISO 9001:2008.



3-D MODELLING

Since 1999 all Mixers are designed and constantly improved with the use of three-dimensional modeling softwares.



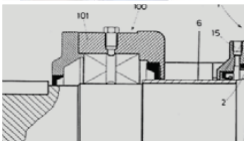
CNC MACHINE CENTER

The steel fabrication of the mixer tank is machined with a CNC boring machine to guarantee the perfect alignment and parallelism of the mixing shafts.



ASSEMBLY LINE

The Mixers are line assembled giving very short lead times due to the high level of standardisation.



PATENTS

The Shafts' Seals as well as other particular features are protected by International Patents.

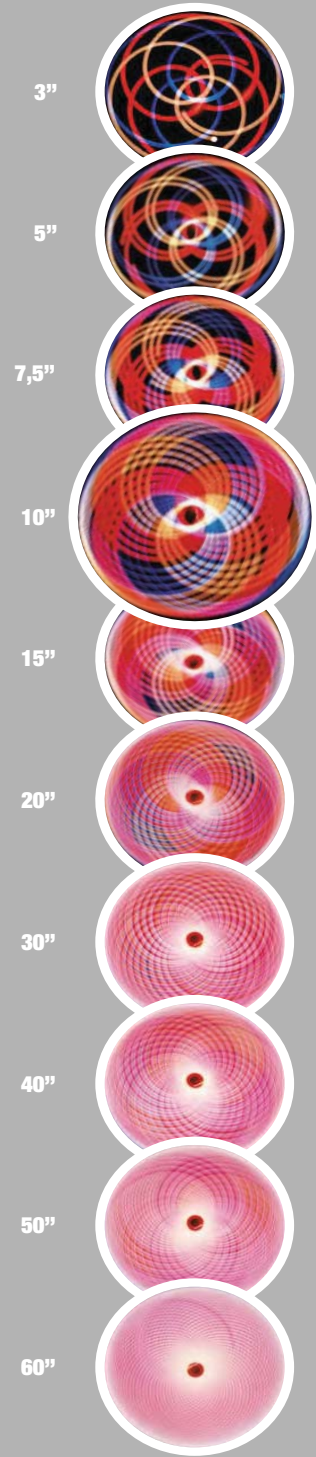
GEAR BOX

With over 60 years of mechanical experience, Sicoma has created a gearbox virtually indestructible. The huge double horizontal design is strong and shock resistant. The wide horizontal oil bath is cool running and gives every gear optimum lubrication. It is good for life and carries a 5 year, 10,000 hour warranty.

Quality Built to Build Quality



The Perfect MIXING





MIXING BLADES

Complete the mixing action and give fast discharge. Cast from Ni-hard iron, 550 HB minimum, for extreme wear resistance. Outer edges are thickened to equalize wear and the angle of attack is optimized to push, not slice, to maximize both mixing and blade life.

MIXING ARMS

SICOMA's mixing action starts with the arms, which are responsible for most of the mixing, from top to bottom. Three cast iron arms per star, two stars starting from MP 1875/1250 and three stars for MP 4500/3000 and MP6000/4000. Together with two hardened steel scraping arms they are the best for toughness plus abrasion resistance. Adjustment slots allow easy blade adjustment to compensate for wear.

LINER PLATES

15 mm Ni-hard cast iron tiles give many times the life of abrasion resistant steel liner plates, reducing lifetime cost. Bolted assembly makes replacement a simple task; in addition, the wall plates are reversible to increase life even further. Additionally, tight fabrication tolerances mean that blades can be adjusted close to walls and floor for perfect cleanout between batches, ensuring the best performance on coloured products.



JUNCTION BOX

All connections, including motor 3-phase power as well as solenoid valves and switches, are available in one easy access junction box.



HYDRAULIC POWER PACK

It has plenty of capacity to operate doors reliably in even the largest mixer. Manual lever allows the door dual use, to be opened during power loss and to be closed right after.



DISCHARGE

Up to four swing-out sector doors running in rubber seals are completely watertight, non-jamming and low in maintenance, further reducing lifetime cost. All models are hydraulically powered, but for small ones is also available a choice between pneumatic or manual operation.



HALF-MOON COVER

Widest opening of any, to give faster cleanup and adjustment of wear parts while making the process safer all round. One, two or three-part depending on mixer size. Single piece cover with hydraulic lift for easiest access is optional in largest models.

WIDE RANGE OF MIXERS

The size of our Planetary Mixers ranges from 10 to 4000 liters of compacted concrete output, covering every possible need from small laboratory mixers to the largest production plants. The excellent performance of SICOMA-OMG Planetary Mixers are recognized in several application fields: readymix concrete, production of prestressed / precast elements, block and pavers, concrete pipes, dry mortar mix, but also in different sectors such as glass, refractory materials for foundries and chemical products.

Depending on the type of application, the mixers can be equipped with several accessories and options to optimize their productivity, mixing quality and life expectancy. Whenever necessary, we work with our customers in the development of new solutions that best suit their specific needs.



OPTIONS AVAILABLE



AGGREGATE FEED BY SKIP

To best meet your needs, the feed side comes with either a closed cover (for you to fit your own chute), open top, optional integrated skip hoist or a built-in aggregate loading hopper.



DISCHARGE DOOR SAFETY GUARD

When the service platform of the mixer is installed under the discharge door, it is necessary to use a protection guard to keep the operators safe during the rotation of the door sector for the opening and closing of the door. This safety guard can also be dust proof when the mixer works with dry mixes, in order to confine and eliminate the dusts.

OPTIONS AVAILABLE



CONTROL PANEL

Mounts on the mixer, allowing major mixer functions to be controlled locally to make cleanout, testing and maintenance easier.



TIPPING SKIP

Rails can be installed vertically to allow installation in the smallest floor area.



HYDRAULIC COUPLING

Gives long service life by reducing the high mechanical stress in conditions such as repeated startup with a full load.



BELT TRANSMISSION

In case the mixer must be installed in a plant with a reduced height dimension, it is possible to install the mixer motor at the side of the pan and to use a belt transmission between the motor and the gearbox.



POWERED PULVERIZER

The unique hollow central shaft allows electrical connection to the motorised blades which improve mixing of clay products by breaking up balls of unmixed material.



PROBE CLEANING BLADE

In case a floor mounted probe is installed, we recommend using a rubber cleaning blade which cleans the surface of the sensor at every rotation of the planetary gearbox, improving the quality of the measurement.



SAMPLING BOX

All Planetary mixers can be equipped with a sampling box to take some samples of material before the discharge, usually used to prepare concrete test cubes. The operator can collect the sample very easily and safely without opening the top cover of the mixer, which would require the main switch of the plant to be turned off.



HIGH PRESSURE WASHING SYSTEM

SICOMA's unique hollow central shaft allows washout jets to be mounted under the rotating arms. Together with the powerful high pressure pump unit, a tornado of water cleans the mixer better than anything before. Your final cleanup time is reduced by 80% or more.



STAINLESS STEEL TANK AND MIXING TOOLS

Whenever the material to be mixed must be contamination free or when the ingredients are chemically aggressive, it is recommended to use special materials (such as Stainless Steel) for the lining of the pan and for the mixing tools.



ROTATING PROBE

SICOMA –OMG Planetary Mixers can be equipped with a probe which is fixed to the scraping arm connection and rotates immersed in the mix for a faster and better measurement. A unique feature of our planetary mixers is the possibility to pass through the main shaft of the gearbox with the cables connecting the probe to the control system.



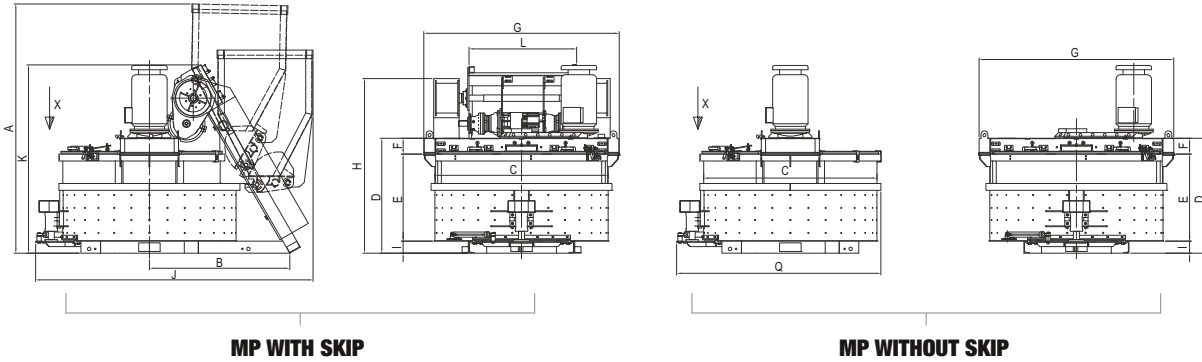
FLOOR MOUNTED MOISTURE PROBE

The production of high quality concrete usually requires a moisture measurement in the mixer, in order to control the water content in the mix. Upon request, all Planetary Mixers can be equipped with moisture probes installed at the floor level.



DUST COLLECTOR AIRBAG

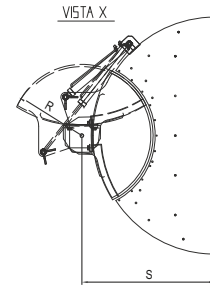
During the discharge of the aggregates into the mixer, either from a skip or from a holding hopper, the Dust Collector Bag must absorb the air shock generated by the fast inrush of the material. The function of the airbag is very important for the Dust Control, even though it does not replace the dust filter.



MP WITH SKIP

MP WITHOUT SKIP

MODELLO TYPE	A	B	C	D	E	F	G	H	I	J	K	L	Q	R	S
MP 150/100	1730	1105	1010	750	505	160	1085	1500	80	1800	1610	750	1320	380	615
MP 375/250	1790	1260	1270	910	460	355	1530	1500	100	2300	1630	900	1575	380	755
MP 565/375	2140	1335	1590	1110	555	430	1870	1610	120	2620	1760	1000	1900	480	910
MP 750/500	2491	1505	1835	1200	500	550	2100	1795	140	2955	1990	1100	2155	560	1050
MP 1125/750	2900	1630	2015	1340	670	520	2270	2050	140	3320	2190	1220	2380	610	1140
MP 1500/1000	3045	1740	2215	1455	750	540	2470	2180	160	3450	2320	1350	2560	640	1225
MP 1875/1250	3045	1740	2400	1455	750	540	2470	2180	160	3500	2320	1350	2800	658	1325
MP 2250/1500	3200	2050	2612	1600	750	670	2740	2330	180	4370	2340	1500	2975	700	1428
MP 3000/2000	4200	2540	3470	1735	1230	685	3710	2450	200	5450	3190	1730	3792	700	1845
MP 3750/2500	4200	2540	3470	1735	1230	685	3710	2450	200	5450	3190	1730	3792	700	1845
MP 4500/3000	-	-	4000	1756	1025	550	-	-	200	-	-	1730	4600	1200	2200
MP 6000/4000	-	-	4000	1756	1025	550	-	-	200	-	-	1730	4600	1200	2200



		TECHNICAL CHARACTERISTICS													
TYPE		MP 75/50	MP 150/100	MP 375/250	MP 565/375	MP 750/500	MP 1125/750	MP 1500/1000	MP 1875/1250	MP 2250/1500	MP 3000/2000	MP 3750/2500	MP 4500/3000	MP 6000/4000	
DRY FILLING CAPACITY (*)	cu.yd	0.1	0.2	0.5	0.7	1	1.5	2	2.5	3	4	5	6	8	
	I	75	150	375	565	750	1125	1500	1875	2250	3000	3750	4500	6000	
CONCRETE OUTPUT PER CYCLE (COMPACTED) (*)	cu.yd	0.07	0.13	0.3	0.5	0.7	1.0	1.3	1.7	2.0	2.6	3.3	4	5.33	
	I	50	100	250	375	500	750	1000	1250	1500	2000	2500	3000	4000	
MAXIMUM LOAD CAPACITY	lb	265	530	1320	1990	2650	3970	5290	6610	7940	10580	13230	15870	21160	
	kg	120	240	600	900	1200	1800	2400	3000	3600	4800	6000	7200	9600	
SKIP VOLUMETRIC CAPACITY	cu.yd	0.1	0.2	0.5	0.8	1.1	1.6	2.2	2.7	3.3	4.4	5.5	5.8	8	
	I	85	165	412	616	825	1237	1650	2060	2475	3300	4125	4390	6000	
MAXIMUM SKIP LOAD CAPACITY	lb	220	440	1100	1650	2200	3300	4400	5500	6600	8800	11000	13300	17700	
	kg	100	200	500	750	1000	1500	2000	2500	3000	4000	5000	6000	8000	
INNER PAN DIAMETER	inch	28	39	50	62	72	79	87	94	102	135	135	157	157	
	mm	700	1000	1260	1580	1820	2000	2200	2400	2600	3420	3420	4000	4000	
MIXING MOTOR(S)	KW	1.5	4	7.5	11	18.5	30	55	55	2 x 30	2 x 45	2 x 45	3 x 45	3 x 55	
	HP	2	5.5	10	15	25	40	60	60	2 x 40	2 x 60	2 x 60	3 x 60	3 x 75	
HYDRAULIC POWER PACK MOTOR	KW	0.75	0.75	1.5	1.5	1.5	2.2	4	4	4	5.5	5.5	7.5	7.5	
	HP	1	1.5	2	2	2	3	5.5	5.5	5.5	7.5	7.5	10	10	
SPEED OF PLANETARY GEARBOX	rpm	20	20	20	20	20	20	20	15	15	15	15	10	10	
SPEED OF MIXING STAR(S)	rpm	50	35	40	40	45	40	45	40+40	30+30	30+30	30+30	30+30+30	30+30+30	
MIXING ARMS	N.	3	3	3	3	3	3	3	6	6	6	6	9	9	
SCRAPING ARM(S)	N.	1	1	1	1	1	1	1	1	1	2	2	3	3	
WEIGHT OF MIXER WITHOUT SKIP	lb	441	1102	1984	3087	4409	5953	8157	10362	13890	18740	18740	35274	35274	
	kg	200	500	900	1400	2000	2700	3700	4700	6300	8500	8500	16000	16000	
WEIGHT OF MIXER WITH SKIP	lb	882	1984	3080	4409	5953	8157	10803	13008	18520	26457	26457	45300	48500	
	kg	400	900	1400	2000	2700	3700	4900	5900	8400	12000	12000	20530	22000	
WEIGHT OF MIXER WITH HOLDING HOPPER	lb	705	1797	2866	4189	5699	7606	10142	11464	117748	25134	25134	41890	44100	
	kg	320	815	1300	1900	2585	3450	4600	5200	8050	11400	11400	19000	20000	

(*) In order to identify the productivity of the mixer, two parameters must be taken into consideration:
 1. Maximum Weight of the Mix, on the basis of the usual specific weight of concrete (150 lb/ft³ or 2400 kg/m³)
 2. Maximum Volume occupied by all batch components charged into the mixer, not exceeding the Dry Filling Capacity.
 For more information about productivity and accessories, please contact our Sales Department.
 All technical data are subject to change without notice due to technical improvement.