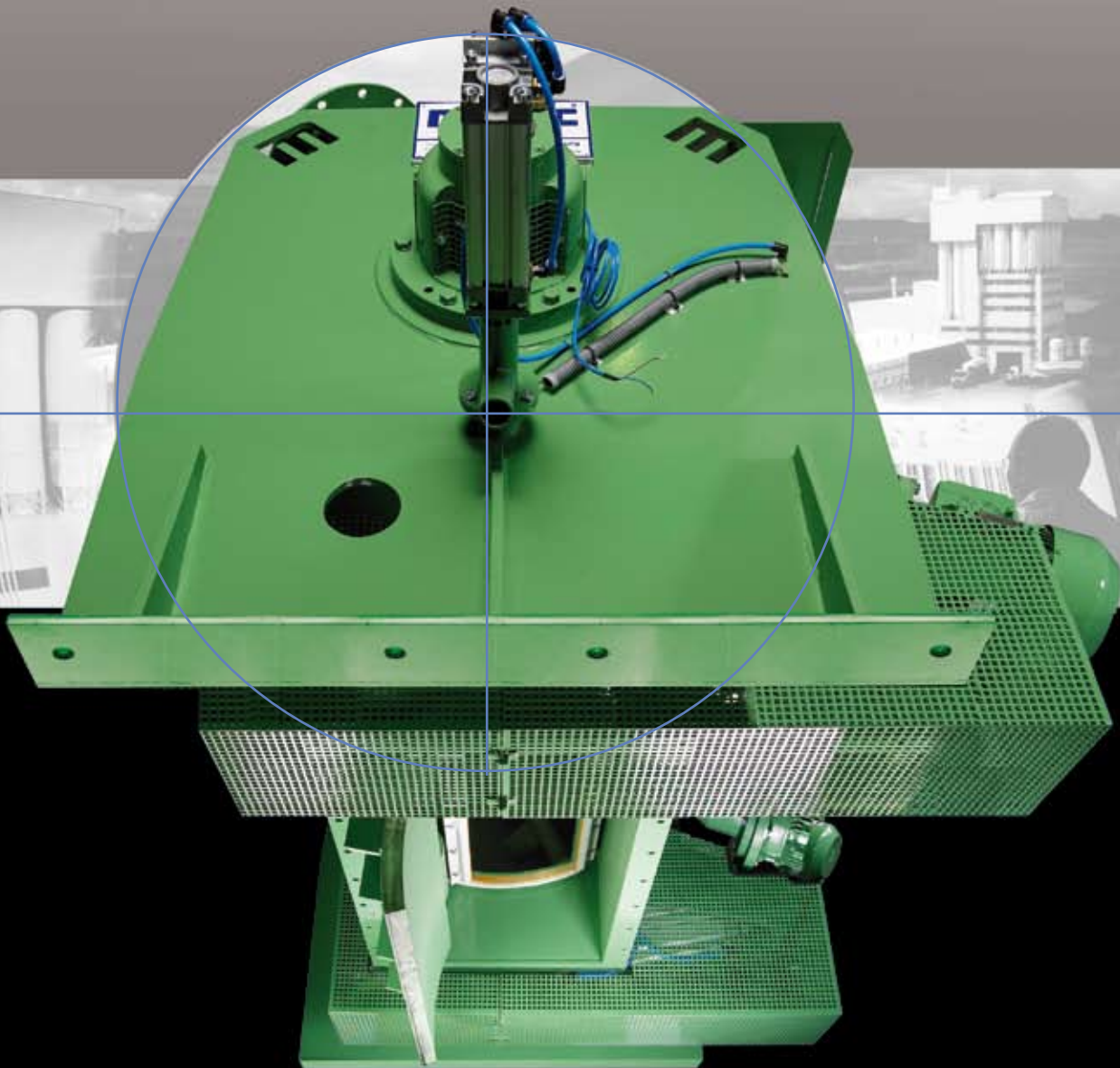


# MS

MS batch mixers:  
high mixing quality  
at a low price!



**m-tec**<sup>®</sup>  
Technology for better building

# MS batch mixers: high mixing quality at a low price!

m-tec mixers work according to the centrifugal principle. The specific construction of the mixer unit (also available with low-wear fittings as required) creates a three-dimensional movement of the particles in the components to be mixed. Temperate mixing of raw materials results in a high mixing quality within a short space of time. The optional use of available agitators, fitted with specialised tools, allows for the successful, trouble-free processing of agglomerates, colour pigments and fibres.

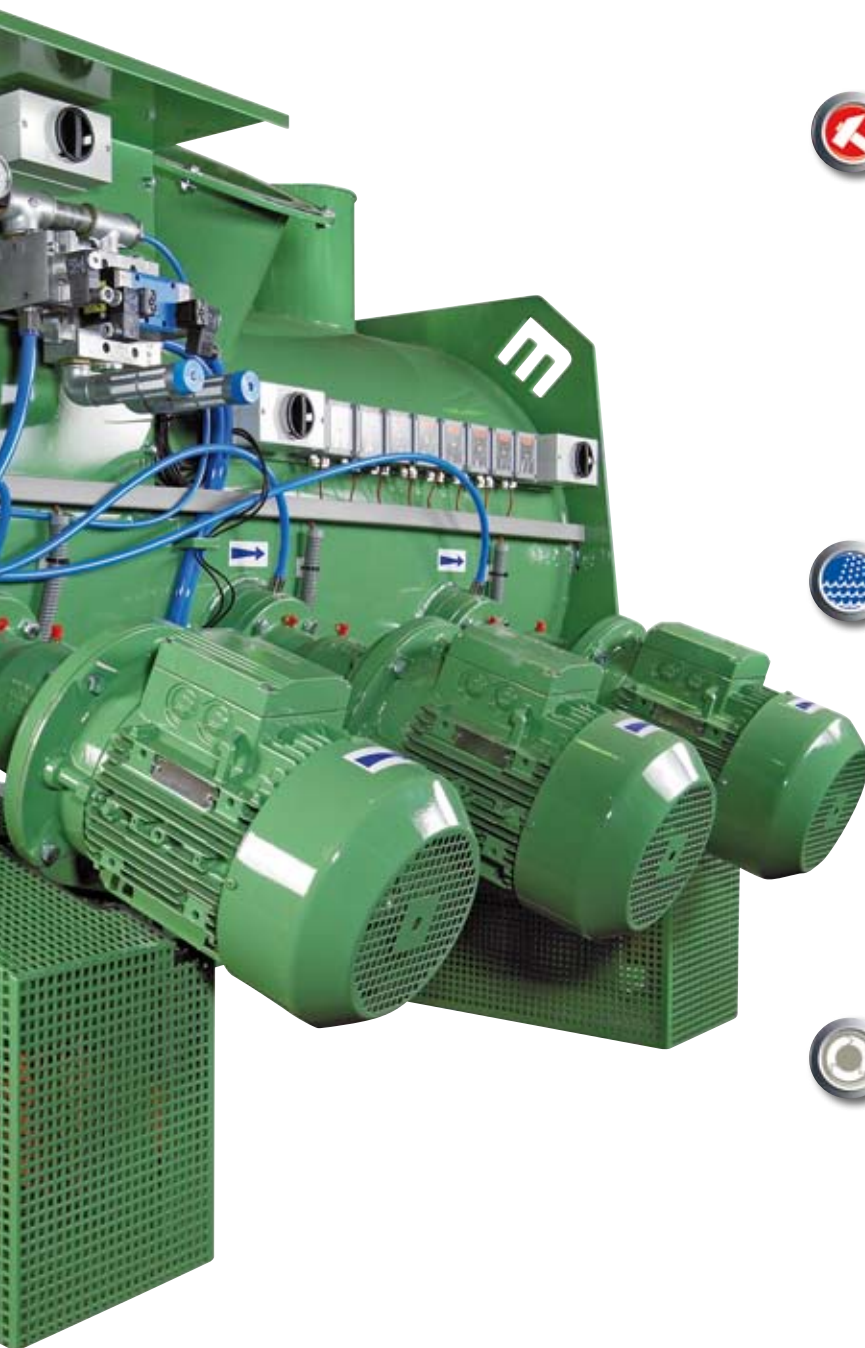
A distinct advantage of this type of mixer is the simple integration into existing units and designs, through outlet nozzles which can be individually customised and positioned as well as the mixer's actual construction. In MS type mixers, the contents of the mixing container are emptied through pneumatically actuated discharge flaps which are integrated into the discharge nozzles, either directly or through a downstream rotary feeder in the subsequent process. This enables a quick and convenient emptying process of the mixing container, whilst providing the option for a measured emptying process in stages through the use of a frequency-controlled rotary feeder. m-tec's patented sealing system with mechanical self-cleaning attribute ensures a 100% seal by virtue of the double-locking flaps mechanism... even with cohesive mixing products.

An under hopper is also optionally available for this type of mixer. The pros: While the end-product is continuously removed from the under hopper, the mixing of a new batch can already be started, thus significantly optimising processing time in comparison to a mixer with no under hopper.

High mix quality at a low price - MS type mixers are ideal solutions for customers who either rarely switch products or who, in order to save on capital investment, accept manual cleaning or cleaning batches before any formulation change. The actual mixing result is indistinguishable from that of our top MR model!



# MS



## > MS: Plus points



### EasyClean

- Low-residual emptying (< 1 %)
- Simple cleaning for product switchovers
- Durability and reliability due to the patented sealing-system with self cleaning effect



### EasyWork

- Virtually continuous production due to optional downstream buffer container
- Long mixing shaft seal lifespan due to a specifically developed sealing system
- Long mixing body lifespan due to individual tuning
- Simple, quick replacement of consumer parts
- Low construction height (in comparison with mixers with an end container)



### EasyMix

- Temperate product handling owing to specialised mixer blade geometry
- High mixing quality with the shortest mixing times
- High reproducibility of individual loads
- Improved processing of agglomerates, colour pigments and fibres due to optional integration capable agitators
- Simple sampling
- Short emptying time due to optimised geometry



### EasyLife

- Universal application for almost any mixing task
- Excellent price-performance relationship
- High operational availability owing to long maintenance intervals and its user friendly conceptual design
- Strong reliability and longevity due to established m-tec quality standards in its manufacture



# MS

> MS: Technical data

Type	MS 11	MS 22	MS 45	MS 65	MS 90	MS 150	MS 220	MS 310	MS 460	MS 610	MS 840	MS 1100
<b>Drive output (kW)</b>												
Drive a.	-	5,5	7,5	11	15	22	37	45	75	90	132	160
Drive b.	5,5	7,5	11	18,5	30	37	55	75	110	160	200	-
Drive c.	-	-	18,5	30	37	55	75	110	160	200	-	-
<b>Mixer speed (rpm)</b>												
n (rpm)	170	155	135	135	135	120	120	113	100	100	90	90
<b>Weight (kg)</b>												
Mixer	460	680	1250	1480	1650	2160	3450	4500	5950	7400	11000	14500
Drive a.	-	250	250	450	600	700	950	1350	1600	1800	2600	3000
Drive b.	250	250	450	600	850	950	1250	1600	2250	2950	3100	-
Drive c.	-	-	600	850	950	1250	1550	2150	3000	3500	-	-
<b>Agitator</b>												
Number	1	1	1	2	3	3	4	4	4	6	6	8

Agitator for all mixers	
P (kW)	7,5
n (rpm)	3000

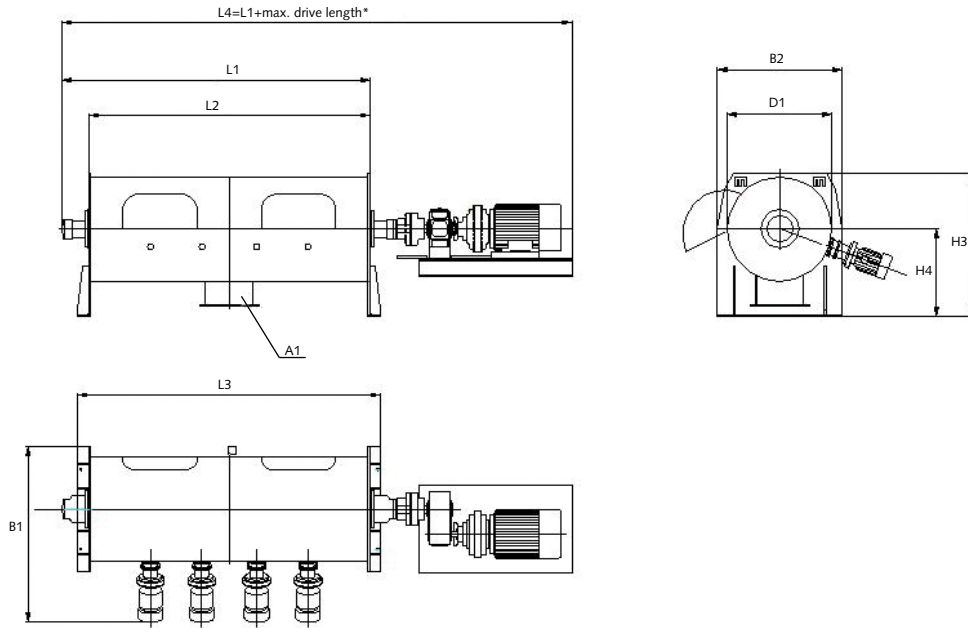
Other fittings are available upon request.  
Subject to technical modifications.



Option: agitator quick change system

# MS

## > MS: Facts



\*dependent on unit layout

*Schematic drawing, shown without inlet nozzles.*

Type	L1	L2	L3	L4	D1	H4	H3	B1	B2		A1
MS 11	850	665	825	1977	ø 540	760	440	1050	650	□ 300 x 300	-
MS 22	1290	1000	1160	2387	ø 650	870	490	1160	760	□ 400 x 400	-
MS 45	1400	1100	1370	2893	ø 880	1290	790	1500	1100	□ 400 x 400	-
MS 65	1790	1500	1770	3155	ø 880	1290	790	1500	1100	□ 400 x 400	-
MS 90	2290	2000	2270	4245	ø 880	1290	790	1500	1100	□ 400 x 400	□ 500 x 500
MS 150	2290	2000	2280	4245	ø 1110	1550	950	1750	1350	□ 400 x 400	□ 500 x 500
MS 220	3290	3000	3280	5495	ø 1110	1550	950	1750	1350	□ 400 x 400	□ 500 x 500
MS 310	3740	3450	3800	5960	ø 1250	1725	1025	1900	1500	-	□ 500 x 500
MS 460	3290	3000	3500	6241	ø 1635	2130	1250	2200	1800	-	□ 500 x 500
MS 610	4290	4000	4500	7031	ø 1635	2130	1250	2200	1800	-	□ 500 x 500
MS 840	4130	3840	4340	6871	ø 1930	2350	1315	2500	2100	-	□ 500 x 500
MS 1100	5330	5040	5540	8317	ø 1930	2350	1315	2500	2100	-	□ 500 x 500

*Subject to technical modifications, all measurements in mm*



Picture showing drive unit



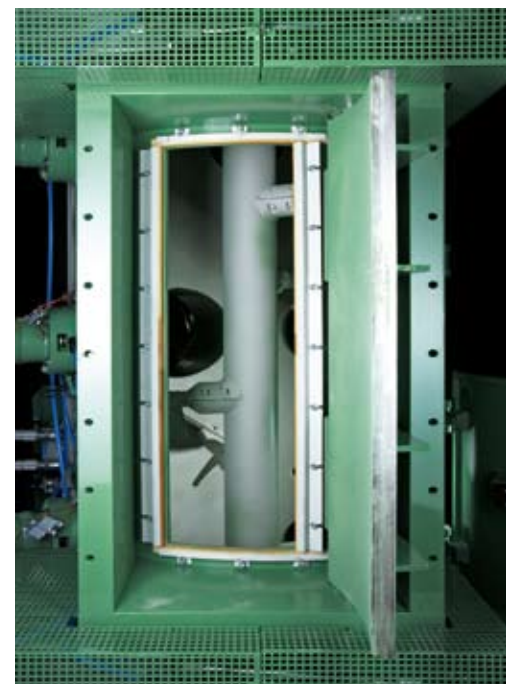
Picture showing agitator tools



Picture showing mixing tools

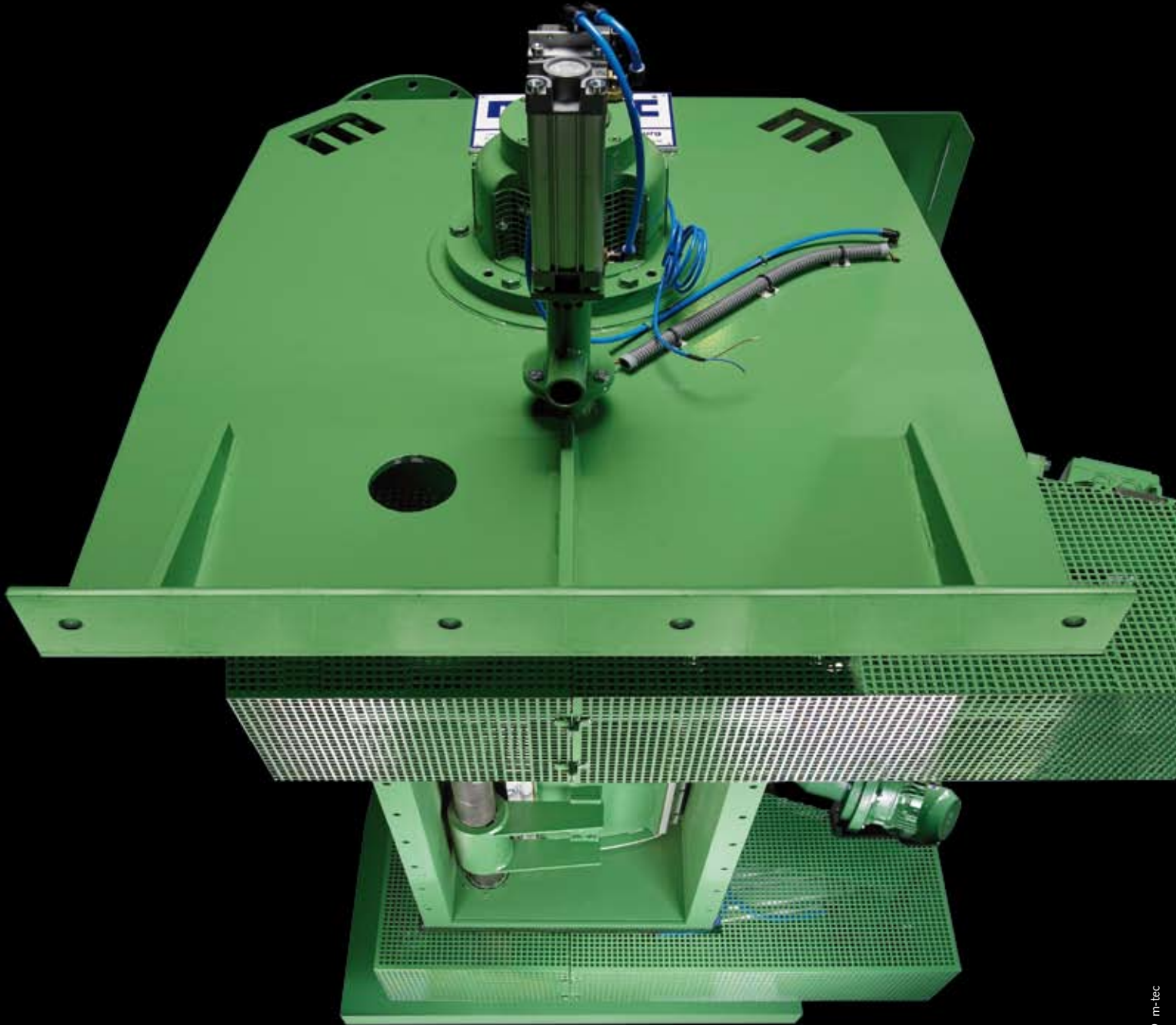
Typ	Mixing volume (dm <sup>3</sup> )		Mixing output (m <sup>3</sup> /h)	
	max	min	150 s loading time	240 s loading time
MS 11	110	35	2,6	1,6
MS 22	220	65	5,3	3,3
MS 45	450	135	10,8	6,7
MS 65	650	195	15,6	9,7
MS 90	900	270	21,5	13,5
MS 150	1500	450	36	22
MS 220	2200	660	53	33
MS 310	3100	930	74	46
MS 460	4600	1380	110	69
MS 610	6100	1830	146	91
MS 840	8400	2500	200	126
MS 1100	11000	3300	260	165

These output values are for reference only



Picture showing discharge flap

# MS



**m-tec**<sup>®</sup>  
Technology for better building

m-tec mathis technik gmbh  
Otto-Hahn-Straße 6  
D-79395 Neuenburg  
phone +49 7631 709-0  
fax +49 7631 709-120  
sales.pe@m-tec.com · www.m-tec.com