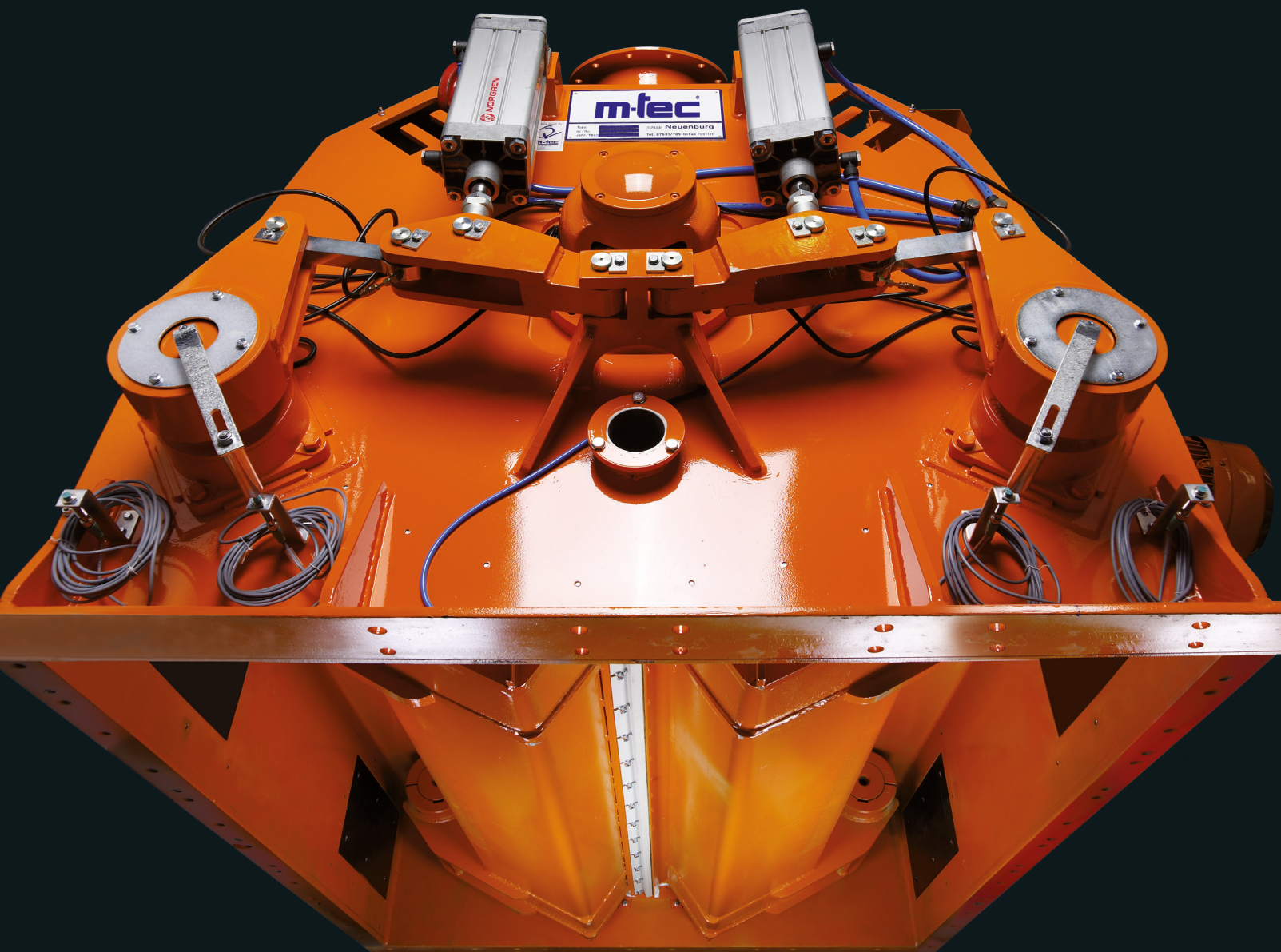
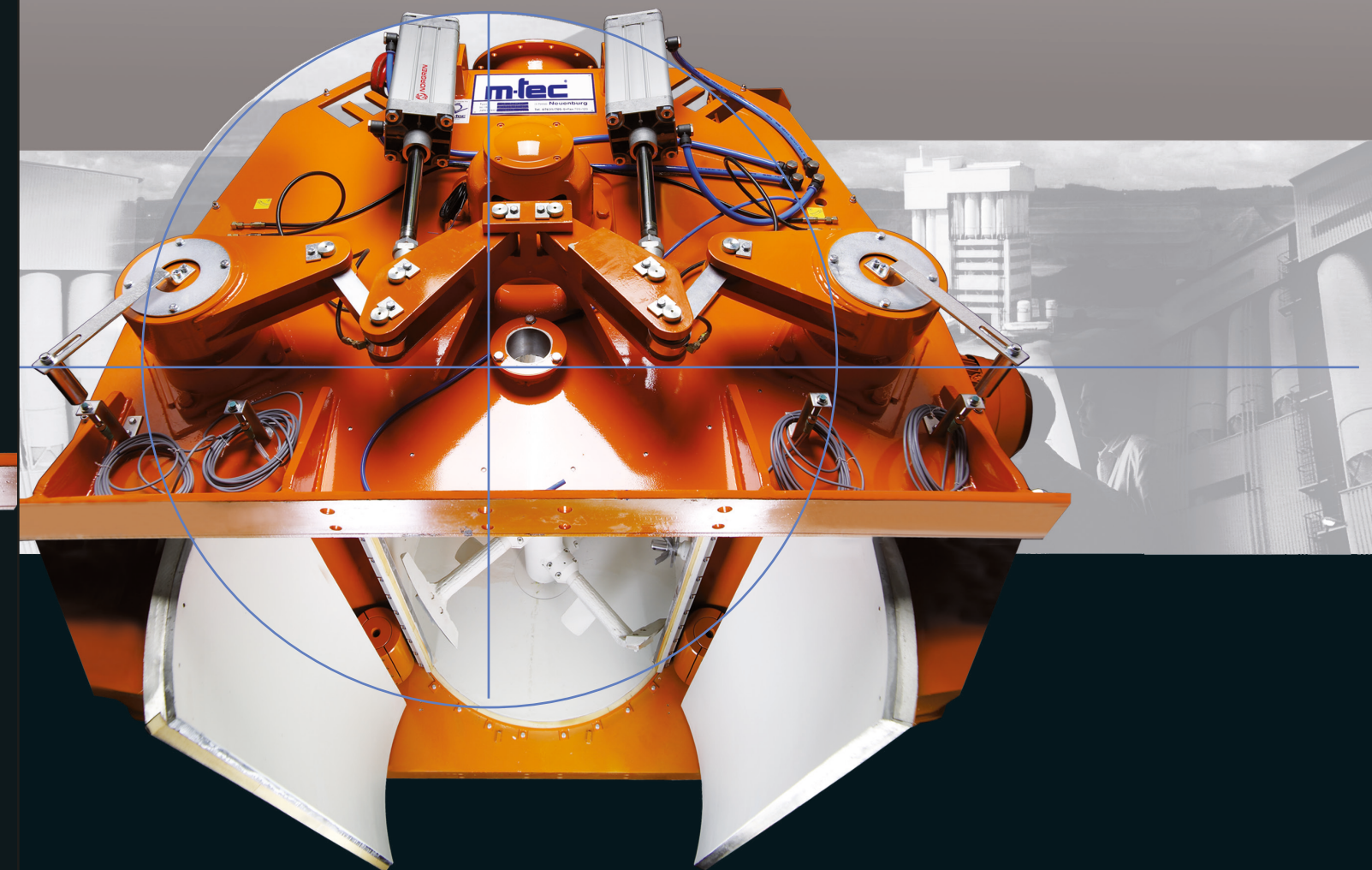


MR



MR

Batch mixers:
the clean solution!



11/2019 m-tec

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Technology for better building

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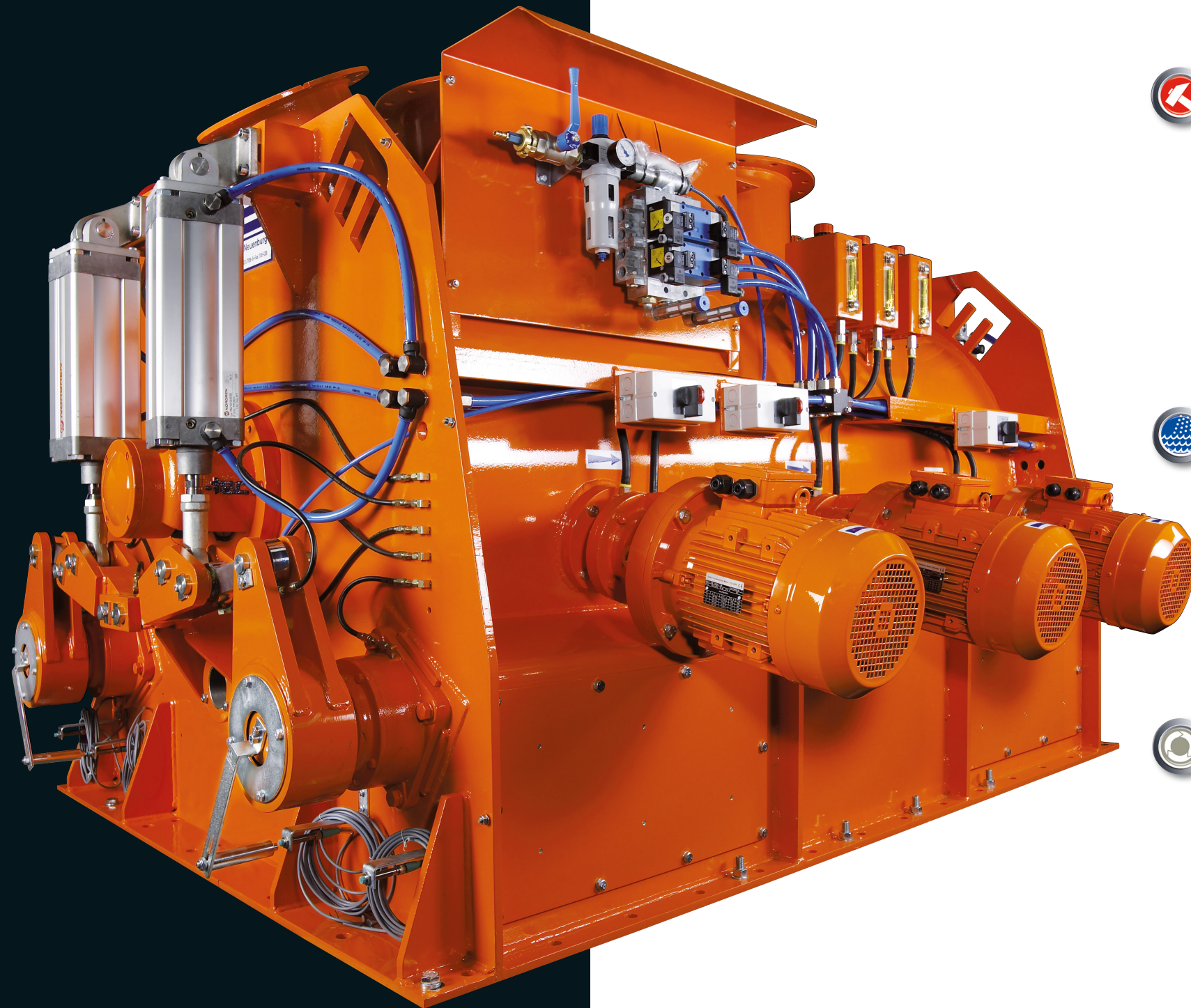
MR batch mixers: the clean solution!

m-tec mixers work according to the centrifugal principle. The special construction of the mixer unit (also available with low-wear fittings as required) creates a three-dimensional movement in the particles in the components to be mixed. By gently mixing the raw materials, this allows high mixing quality within the briefest of times. The use of optionally available shaft whirlers, which are fitted with specialised tools, allows the successful, trouble-free processing of agglomerates, colour pigments as well as fibres.

One of the most noticeable features of this type of mixer is its almost residue-free, rapid emptying. In the MR model, the contents of the mixing container is emptied through two hydraulically or pneumatically operated emptying flaps, which extend along the entire length of the mixer and open to an angle of 100°, into an end-container. After emptying, the residue remaining in the mixer can be measured in fractions of a percent (this may vary according to the product). m-tec's patented sealing system with mechanical self-cleaning ensures a 100% seal thanks to a double-locking flap together with a toggle-lever locking system... even with cohesive mixing products with relatively high levels of residual humidity.

While the end-product is continuously removed from the end-container, the mixing of a new batch can already be started, thus significantly optimising processing time in comparison to a mixer with no end-container. The rapid emptying of the mixer saves additional time and thus considerably increases the throughput of the mixer – although this will vary according to the product-dependent mixing time. Running these over a common power source means that they both generate considerable power and thus cost savings.

Whether you want to reduce the time you spend or produce more in the same amount of time – MR type mixers are ideally suited for customers who must be able to switch production quickly and frequently for operational reasons, and who also value flexibility combined with high production output. In other words: The MR is the ideal model for the most demanding of requirements.



MR

> MR: Plus points



EasyClean

- Almost residue-free emptying (< 1 ‰) thanks to dual-flap system
- High storage times and reliability thanks to the patented sealing-system with self cleaning effect



EasyWork

- More or less continuous production thanks to a downstream buffer container
- Long mixing shaft seal lifespan thanks to a specially developed sealing system
- Long mixing body lifespan thanks to individual tuning
- Simple, rapid replacement of consumer parts
- High levels of safety thanks to mechanical flap locking (using m-tec's toggle-lever locking system)



EasyMix

- Gentle product handling thanks 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 thanks to optionally integrable mixing whirler
- Simple sampling
- Shortest possible emptying time thanks to dual-flap system



EasyLife

- Universal application for almost any mixing task
- Excellent price-performance ratio
- High efficiency thanks to low energy consumption
- High availability thanks to long maintenance intervals and ease of maintenance Design
- High reliability and long lifespan thanks to manufacture according to recognised m-tec quality standards



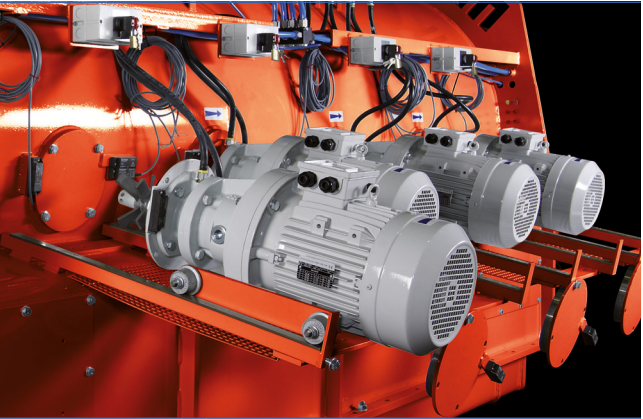
MR

> MR: Technical data

Type	MR 11	MR 22	MR 45	MR 65	MR 90	MR 150	MR 220	MR 310	MR 460	MR 610	MR 840	MR 1100
Drive output (kW)												
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	-	-
Mixing blade rpm												
n (1/min)	170	155	135	135	135	120	120	113	100	100	90	90
Weight (kg)												
Mixer	750	950	1500	2100	2700	3900	5050	7400	11150	12750	22000	26000
End container	75	120	250	350	450	680	1200	1550	1900	3400	3000	4000
Drive a.	-	220	250	420	570	680	930	1400	1600	1800	2600	3000
Drive b.	220	250	420	570	840	930	1210	1600	2300	3000	3100	-
Drive c.	-	-	570	850	930	1250	1550	2200	3000	3100	-	-
Whirler												
Number	1	1	1	2	3	3	4	4	4	6	6	8

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

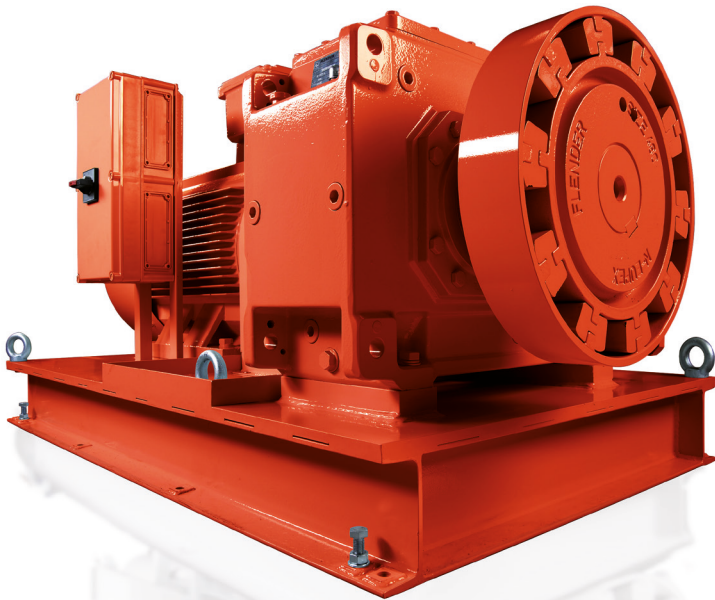
Other fittings are available upon request.
Subject to technical alterations



Option: agitator quick change system

> MR: Facts

MR



Picture shows drive unit



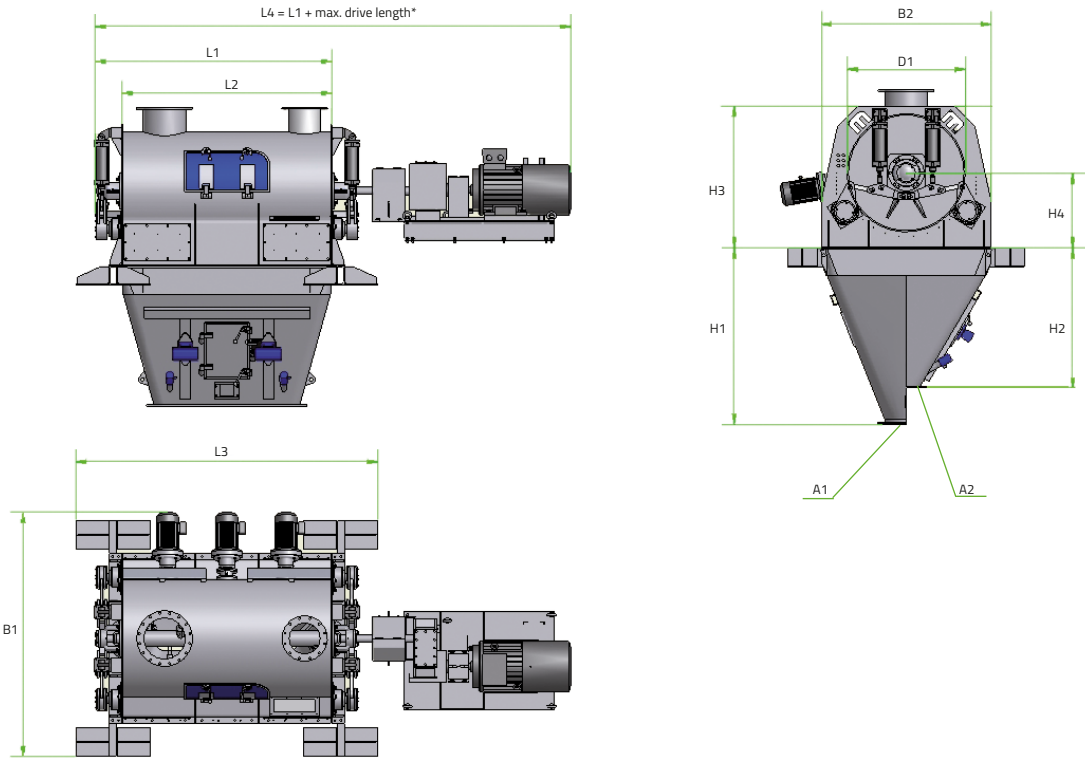
Picture shows agitator tools



Picture shows mixing tools



Picture shows discharge flap



* dependent on unit layout

Schematic drawing, shown without inlet nozzles

Type	L1	L2	L3	L4	D1	H1	H2	H3	H4	B1	B2	A1	A2
MR 11	1030	665	1065	2598	ø 540	480	-	1100	800	1400	900	ø 250	-
MR 22	1360	1000	1400	2928	ø 650	670	-	1280	930	1550	1000	ø 250	-
MR 45	1460	1100	1370	3268	ø 880	1200	-	1200	700	1650	1330	ø 300	-
MR 65	1860	1500	1770	3961	ø 880	1300	-	1200	700	1650	1330	ø 400	-
MR 90	2360	2000	2270	4452	ø 880	1600	1050	1200	700	1650	1330	ø 400	□ 250 x 1400
MR 150	2360	2000	2280	4585	ø 1110	1700	1350	1370	725	1950	1640	ø 400	□ 250 x 1400
MR 220	3360	3000	3280	5811	ø 1110	2500	1750	1450	725	1950	1640	ø 400	□ 250 x 1400
MR 310	3760	3400	3800	6763	ø 1250	3000	1950	1570	870	2060	1760	ø 500	□ 250 x 2000
MR 460	3360	3000	3500	6309	ø 1635	2600	2300	2100	1100	2520	2220	ø 500	□ 250 x 2000
MR 610	4360	4000	4500	7349	ø 1635	3500	2600	2100	1100	2520	2220	ø 500	□ 250 x 2000
MR 840	4200	3840	4340	7204	ø 1930	3500	2600	2500	1400	3040	2740	ø 500	□ 250 x 2000
MR 1100	5400	5040	5540	8523	ø 1930	4000	-	2500	1400	3400	2740	ø 500	□ 250 x 2000

Subject to technical alterations, all measurements in mm

Type	Mixing volume (dm³)		Mixing output (m³/h)	
	max	min	90 s loading time	150 s loading time
MR 11	110	25	4,4	2,6
MR 22	220	50	8,8	5,3
MR 45	450	100	18	11
MR 65	650	150	26	16
MR 90	900	200	36	22
MR 150	1500	350	60	36
MR 220	2200	500	88	53
MR 310	3100	700	124	75
MR 460	4600	1000	184	110
MR 610	6400	1350	244	146
MR 840	8400	1850	336	200
MR 1100	11000	2400	440	264

The provided output values are for reference only