

**Mixing systems
for every task.**



LIEBHERR

Mixing systems from Liebherr.

If you produce concrete, there is a Liebherr mixing system to suit your exact requirements. Almost fifty years of experience in mixing technology are an excellent guarantee of well-proven technical design and construction. At Liebherr's own Experimental Technical Centre, its mixers are subjected to unceasing tests and ongoing development work. The results are leading-edge mixing technology, maximum user benefit and long, trouble-free operating life. Whatever the requirement, we can offer you an effective mixing system.

1

Ring pan mixers.

Liebherr supplies ring pan mixers with capacities from 0.5 to 3 cubic metres, capable of producing the very highest-quality concrete, and with various agitator systems according to type.

2

Twin-shaft mixers.

With a Liebherr twin-shaft mixer, available in sizes from 2.25 to 6.0 cubic metres, you can be sure of achieving maximum output rates and high quality mix.

3

Equipment, options and loading.

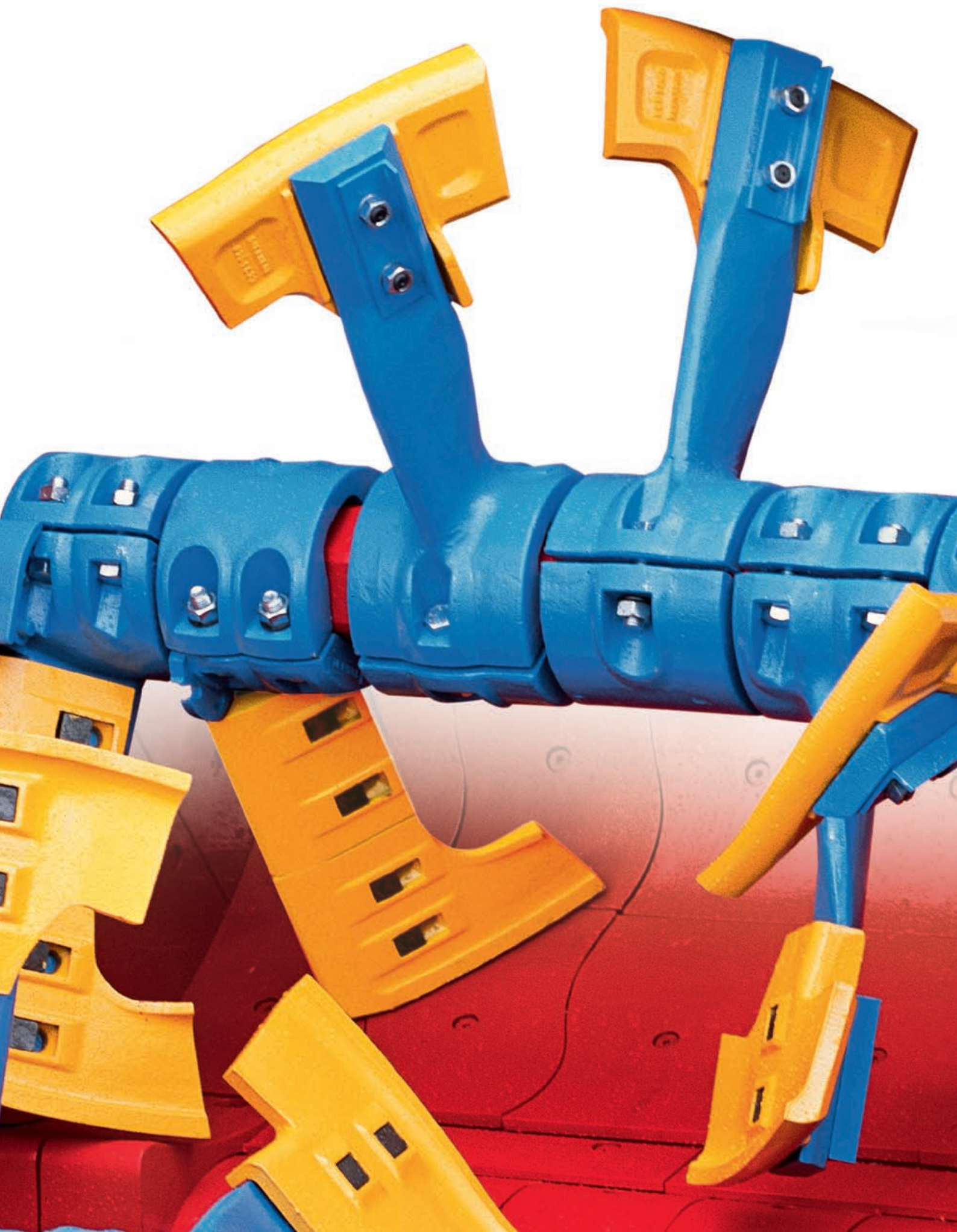
Liebherr offers the concrete user or supplier a practical range of options and accessories to make day-to-day work easier and increase the practical benefits of the mixing plant.

4

Data and dimensions.

An at-a-glance list of all types with performance data and dimensions.





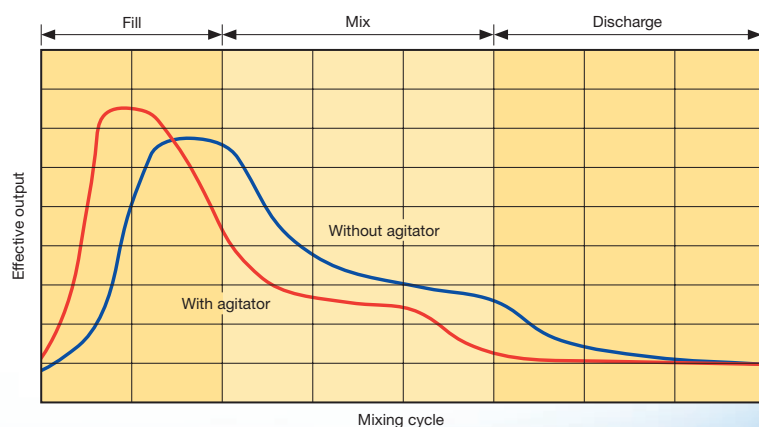
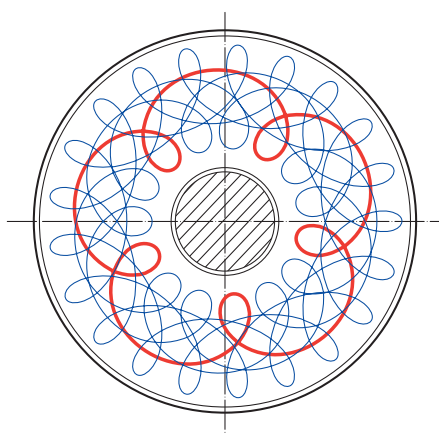
1 Ring pan mixers.

Intensive ring pan mixers from Liebherr have been in use for many years all over the world for a wide variety of practical applications. "Top concrete quality, even for special purposes, is achieved by the high mixing energy of the agitator systems. The cement is opened up so efficiently that actual cement consumption is reduced. Liebherr ring pan mixers are operated at precast concrete element and other concrete product factories, and also by suppliers of pre-mixed concrete. Even the smallest Liebherr ring pan mixer, the RIM-M 0.5 (Fig. 1) can be supplied with a mechanically driven agitator as an optional extra and is an ideal, high-performance unit for the production of top-quality concrete articles or for the smaller-capacity mixing plant.

There are single- and double-agitator types (Fig. 2) with planetary gear drives, but also hydraulic agitator as an optional extra systems that can be continuously varied in speed from 60 to 230 (450) revolutions per minute (Fig. 3).

The mixer gate is operated hydraulically and therefore closed cleanly with ample power in hand; up to three gates can be provided on each mixer.

All Liebherr mixer drives are of ample capacity, with a long operating life.



Mixer blade



Fig. 1

Fig. 2

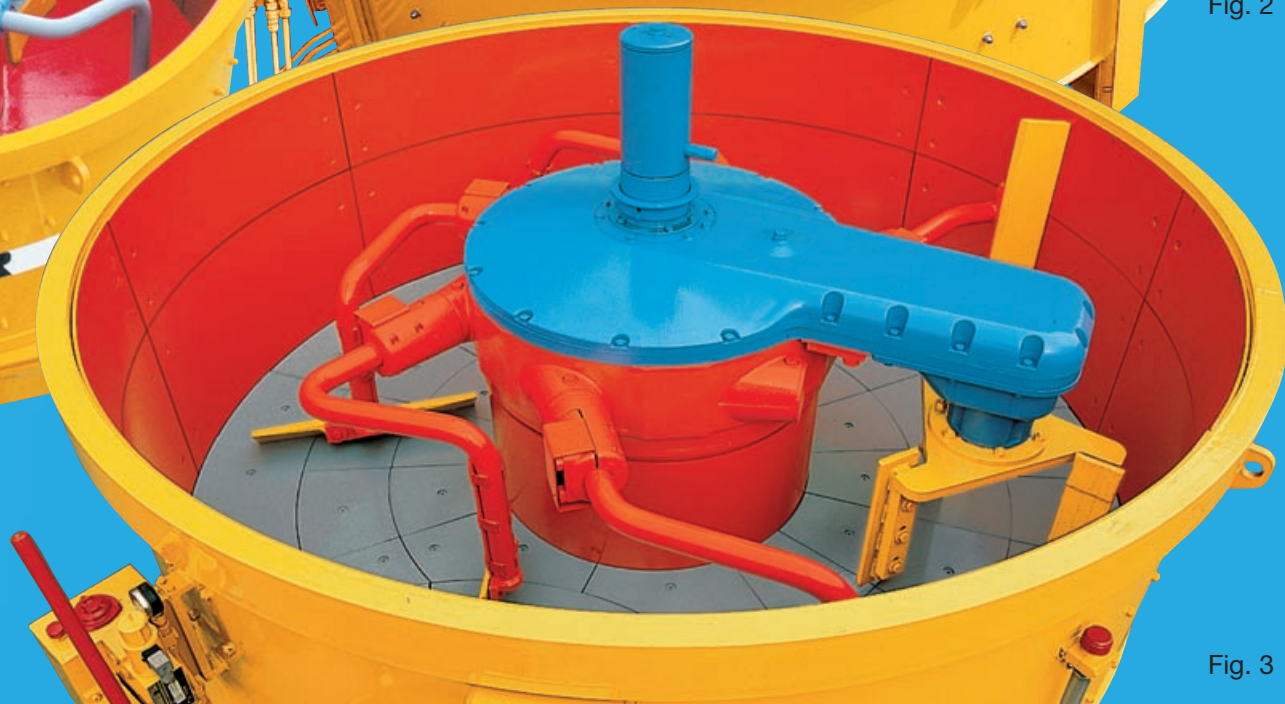


Fig. 3



Agitator



Hydraulic mixer gate



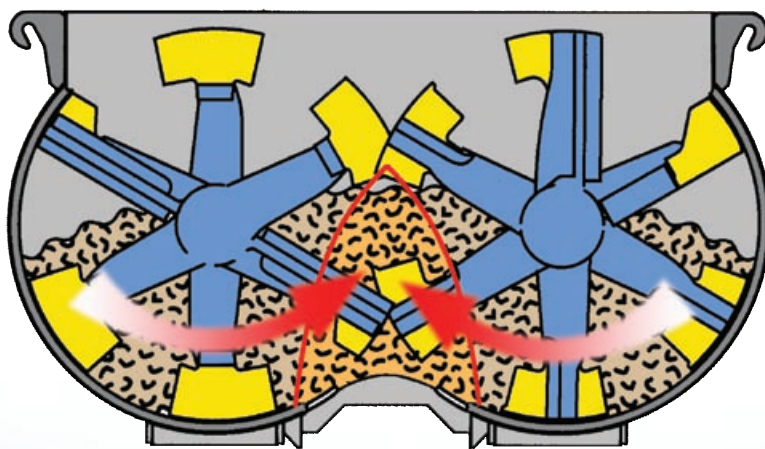
Drive

2 Twin-shaft mixers.

Liebherr twin-shaft mixers are particularly suitable for high outputs of pre-mixed concrete for delivery by truck mixer, and are supplied in 2.25 to 6.0 cubic-metre sizes. Their compact design is a particular advantage and they are therefore also used in mobile mixing plant and for construction-site mixers.

The sturdily built mixing equipment can, depending on the version chosen, process stone or material sizes up to 180 mm without difficulty, important at large-scale projects for example dams. The smaller DW 2.25 model has one, the larger models two electric motors. The synchronised gear drives are of generous capacity, for long, reliable operation. The two shafts with their mixing arms are contra-rotating, for a high degree of turbulence in the mixing zone. The replaceable mixing arms and blades are made from high wear-resistant material, and specially shaped to provide maximum wear capacity. The hydraulic mixer gate opens to a wide angle, in order to keep discharge times to a minimum.

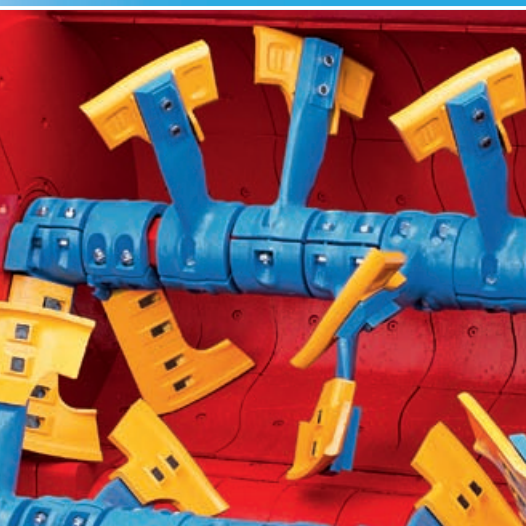
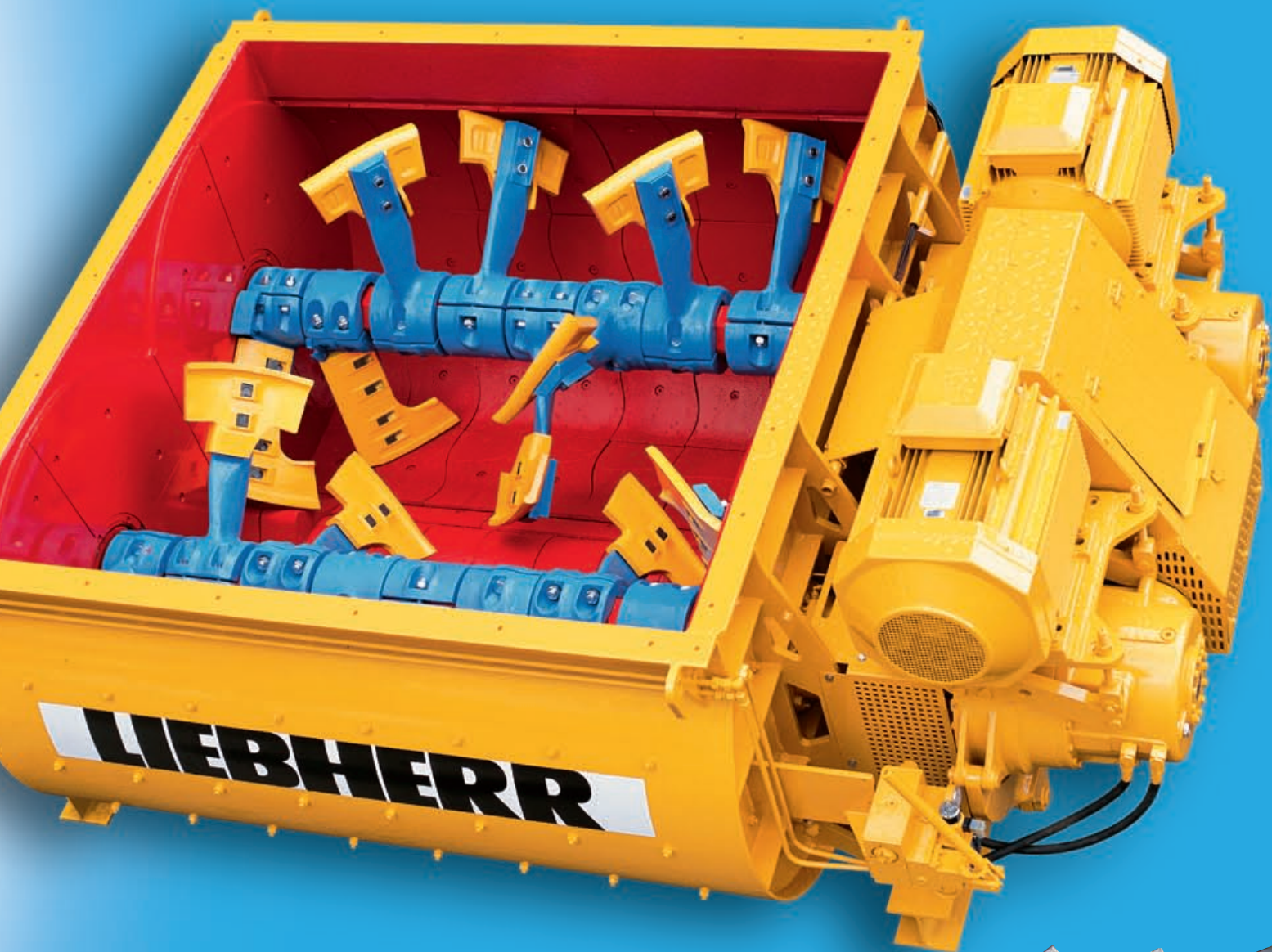
A special corrugated pattern of wear tiles is used, to minimise the risk of trapped stones and wash-out of the joint lines between them. This considerably reduces the rate of wear, especially at critical points.



Highly turbulent mixing zone



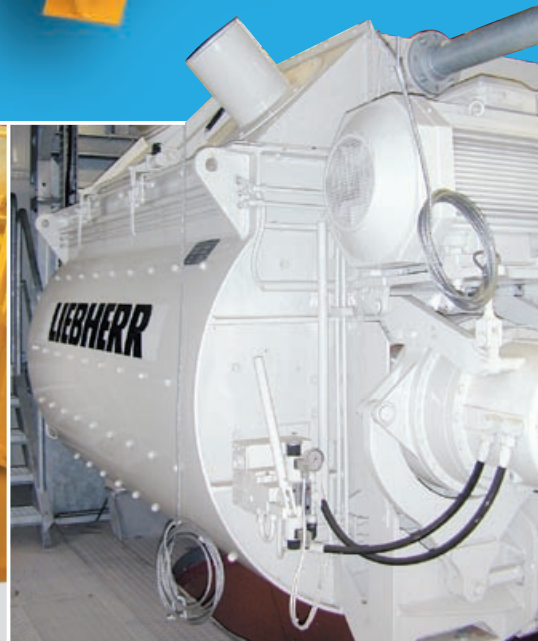
Mixer gate



Mixing shaft and blade



Drive



DW 4.5 twin-shaft mixer

3 Equipment, options and loading.

The Liebherr high-pressure mixer cleaning system, which is an optional extra, makes day-to-day work much easier. At the touch of a button the mixer, including the gate, can be rapidly cleaned each evening or during a break in the work; the tedious task of hosing down by hand is reduced to a minimum.

For wear-free temperature measuring of the material in the mixer, Liebherr supplies its patented Litronic TMS system as an option.

The central lubricating system supplies grease regularly and reliably to all the lubricating points. It is an option with a ring pan mixer and standard equipment with a twin-shaft mixer.

Other items of special equipment are:

The rapid discharge system (for Type RIH only), with automatic lowering as discharge is in progress.

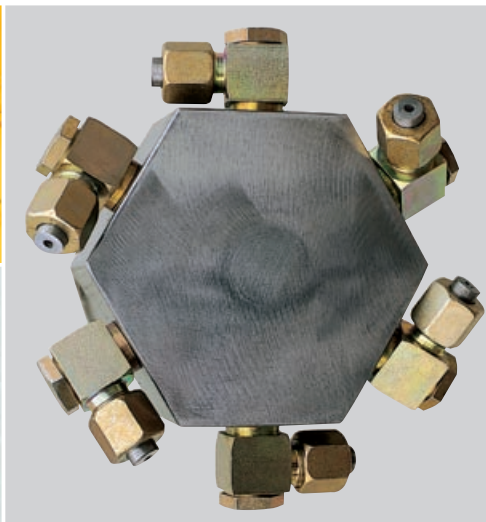
Steam supply lance to speed up concrete setting, or heat the concrete at low outside temperatures.

All Liebherr intensive mixers are equipped with replaceable wear tiles and blades. The base tiles and blades are of chill cast CrNi alloy; the mixer can also be lined with ceramic tiles as a special feature for an extremely arduous operation.

Liebherr also has suitable loaders for all types of mixer.



Central lubricating system (above)
Litronic-TMS temperature measurement



High-pressure cleaning nozzle



Before and after cleaning



Rapid discharge system

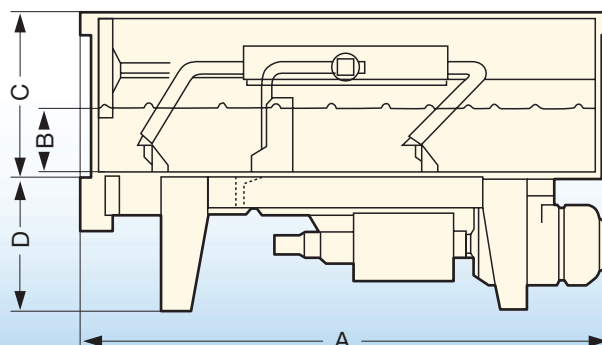


Steam lance



Ceramic lining

4 Data and dimensions.



Ring pan mixers – hydraulic/mechanical

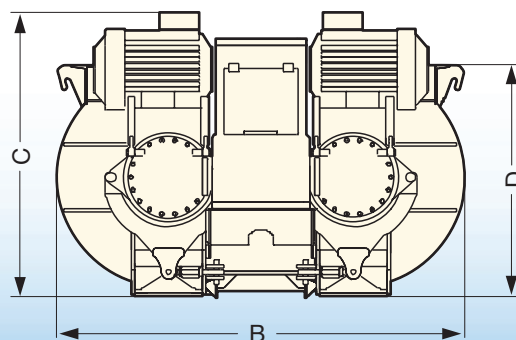
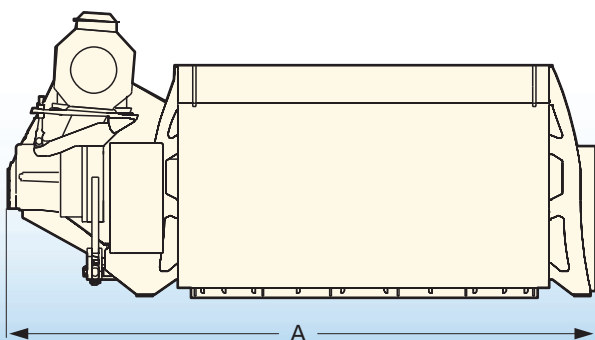
Type			0.5	1.0	1.5	2.0	2.25	3.0
Nominal capacity acc. to DIN 459, Part 1		m³	0.5	1	1.5	2	2.25	3
Filling capacity		l	750	1500	2250	3000	3375	4500
Dimensions (standard version) mm		A	2126	2425	3242	3242	3242	3922
		B	275	375	345	460	518	462
		C	845	952	973	973	1043	1013
		D	560	585	750	750	750	750
Three-phase-Motor*	Type R	kW	22	37				
	Type RIH/RIM	kW	30	48	55	75	90	132
Voltage/frequency**		V/Hz	400/50	400/50	400/50	400/50	400/50	400/50
Number of gates per mixer			1 - 3	1 - 3	1 - 3	1 - 3	1 - 3	1 - 3
Mixer rotating speed		1/min	26.2	26.4	20.7	20.7	20.7	20.7
Peripheral speed		m/s	2.7	3.25	3.3	3.3	3.3	4.1
Weight of standard version		t	2.9/3.7	3.4/4.3	7.4	8.1	9.6	12.6

Ring pan mixer versions

Type	0.5	1.0	1.5	2.0	2.25	3.0
Type R (without agitator)	•	•				
Type RIM-M (with single mechanical agitator)	•	•	•	•	•	
Type RIM-D (with double mechanical agitator)			•	•	•	•
Type RIH-M (with single hydraulic agitator)	•	•	•	•	•	•
Type RIH-D (with double hydraulic agitator)			•	•	•	

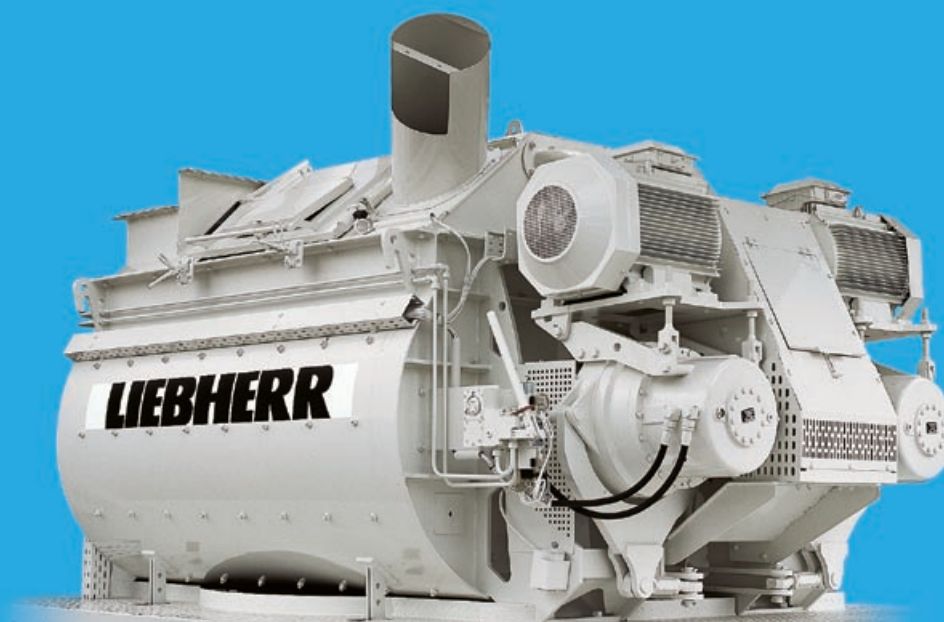
* Motor ratings quoted here are our standard versions. For longer mixing times and multiple-shift working, more powerful motors may be required.

** Non-standard voltages available on request



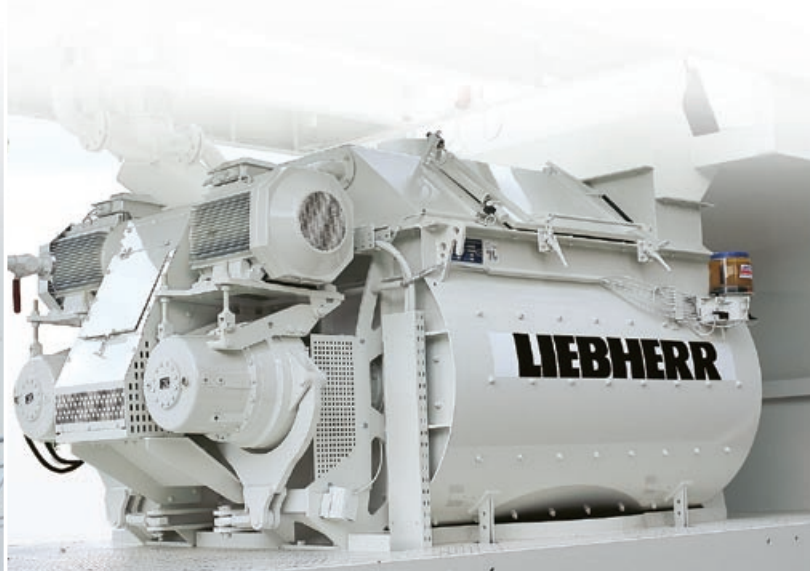
Twin-shaft mixers

Type		2.25	3.0	3.5	4.5	6.0
Nominal capacity acc. to DIN 459, Part 1	m ³	2.25	3.0	3.5	4.5	6.0
Filling capacity	l	3375	4500	5250	6750	9000
Dimensions (standard version) mm	A	3058	3568	4080	3635	4300
	B	2470	2470	2390	2850	3180
	C	1804	1804	1804	1850	2085
	D	1400	1400	1400	1650	1950
Three-phase-Motor*	kW	75	2 x 55	2 x 55	2 x 75	2 x 110
Voltage/frequency**	V/Hz	400/50	400/50	400/50	400/50	400/50
Mixer rotating speed	1/min	20.7	20.7	20.7	20.7	20.7
Peripheral speed	m/s	1.4	1.4	1.4	1.6	1.8
Weight of standard version	t	8.0	9.5	10.2	11.5	19.0



DW 3.0 twin-shaft mixer

The ideal mixer for every task.



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Subject to technical modifications.

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