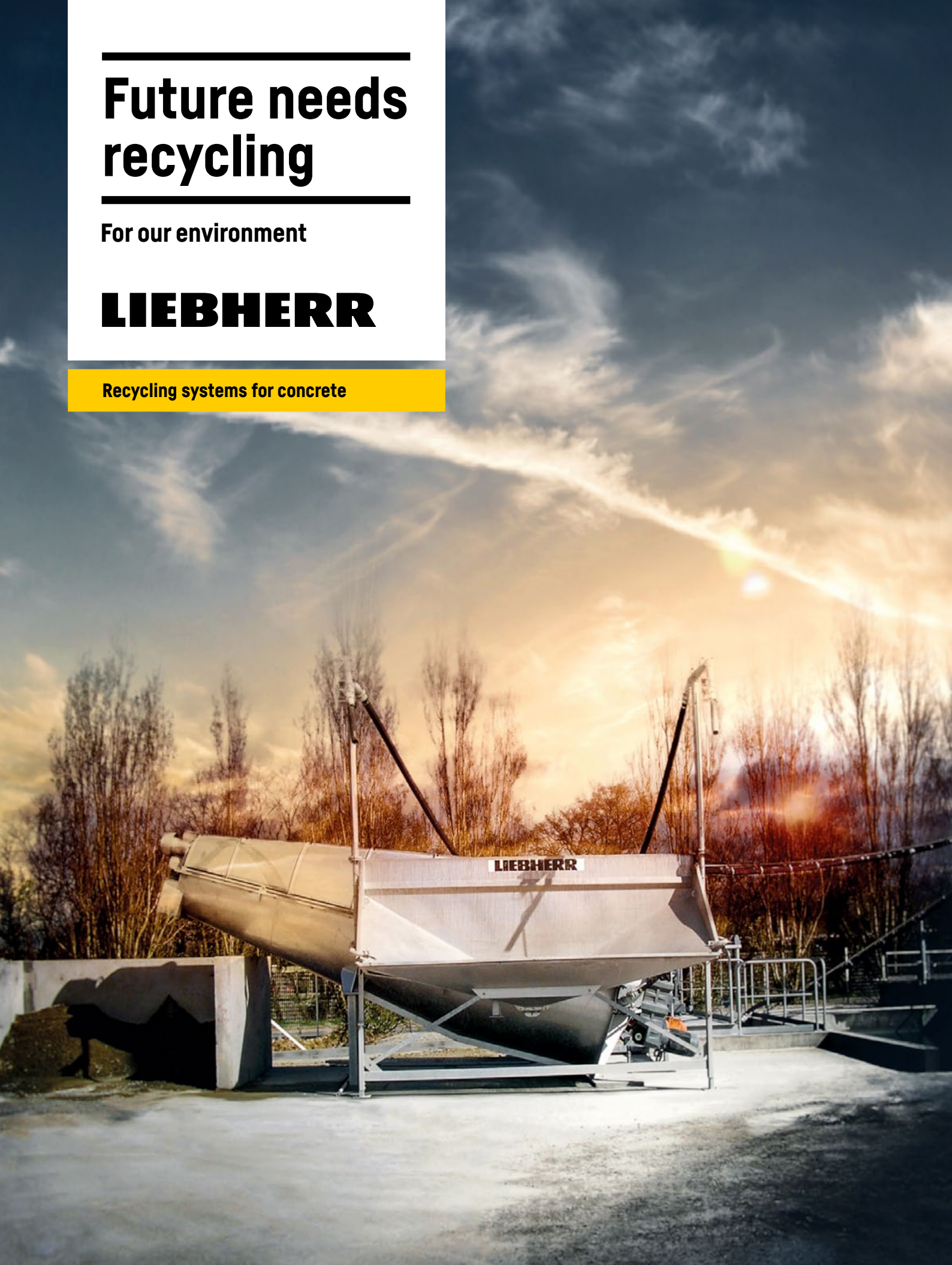

Future needs recycling

For our environment

LIEBHERR

Recycling systems for concrete



Economic efficiency and environmental protection





Highlights

Future needs recycling!

Liebherr concrete recycling systems ensure that residual concrete and cleaning water are recycled in an environmentally friendly manner. Residual concrete is treated in a way so that all the constituents can be re-used. The environment therefore incurs no additional burden at all.

Reduction of environmental impact

Every day, the production of concrete means that quite large amounts of residual concrete and also cleaning water from batching plant and truck mixers must be processed. These residues must not be allowed to impose a burden on the environment. Our innovative washing-out units enable environmentally conscious use of materials on the site. Liebherr recycling plants are suitable for returned concrete from the site, as well as for washing water and residual concrete from cleaning batching plants, truck mixers and concrete pumps.

Material savings

Sand and gravel are washed out cleanly and re-used as production aggregates.

Water savings

Since everything can be re-used, both material and process water are saved when new concrete is produced. The residual water from recycling can easily be returned to the production process. The gantry used to wash out truck mixers can also be supplied with water recovered in this way.

The remaining water containing cement is collected in a vat and maintained in suspension by an agitator. A proportion of this water can be returned to the concrete mixer without any reduction in the quality of the finished product.

LRS screw system - Compact and reliable



Recycling plants type LRS

Flexible concept

The concrete recycling plant type LRS is supplied in five various versions and sizes.

Little space requirement

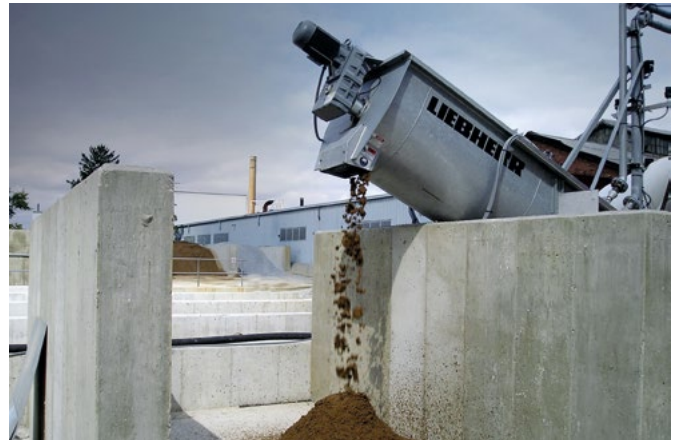
All these units are compact in layout and therefore occupy very little space where they are set up.

Low maintenance and effective wear protection

The screw is located at a predetermined spacing in the housing, so that a bed of material is built up and unnecessary wear is effectively avoided.

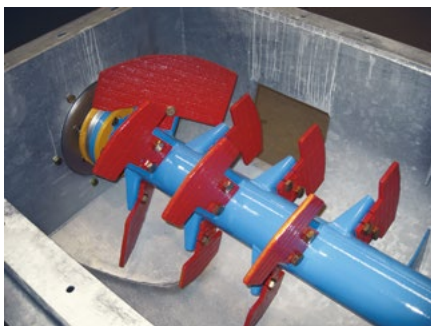
Time and money saving

The loading hopper is specially shaped so that it can be filled from various angles from one or two truck mixers. It is also designed to prevent accidental overfilling. The discharge height permits a generous storage volume. The plant has a screen cut down to 0.25 mm (0.01 inches) or below.



Compact and reliable

The LRS recycling system is particularly compact. A screw is used for discharging the solids of the washed-out residual concrete.



High wear-resistant washing-out paddles

The wear-resistant washing-out paddles ensure a long service life and low maintenance thanks to their high-quality construction.



Central lubrication system and heating (optional)

The automatic standard central lubrication system takes over the job of lubrication and extends the service life.



Chute for wheel loaders (optional)

When residual concrete from batching plant cleaning is collected with the wheel loader, the wheel loader chute is a useful accessory.

LRT trough system - For large intake quantity



Recycling plants type LRT

Concept for a particularly large wash water volume

The concrete recycling plant type LRT is also supplied in two sizes. The trough pattern unit holds a particularly high volume of wash water, so that larger quantities of material can be added at shorter intervals.

Low maintenance and effective wear protection

Here too, the screw is located at a predetermined spacing in the housing, so that a bed of material is built up to prevent wear. In addition, the storage is outside the washout area and thus almost maintenance-free.

Time and money saving

The broad loading hopper can be filled from two truck mixers at the same time. The discharge height permits a generous storage volume. The plant has a screen cut down to 0.25 mm or below.

Full power for every season

Versions for winter operation can be supplied on request.

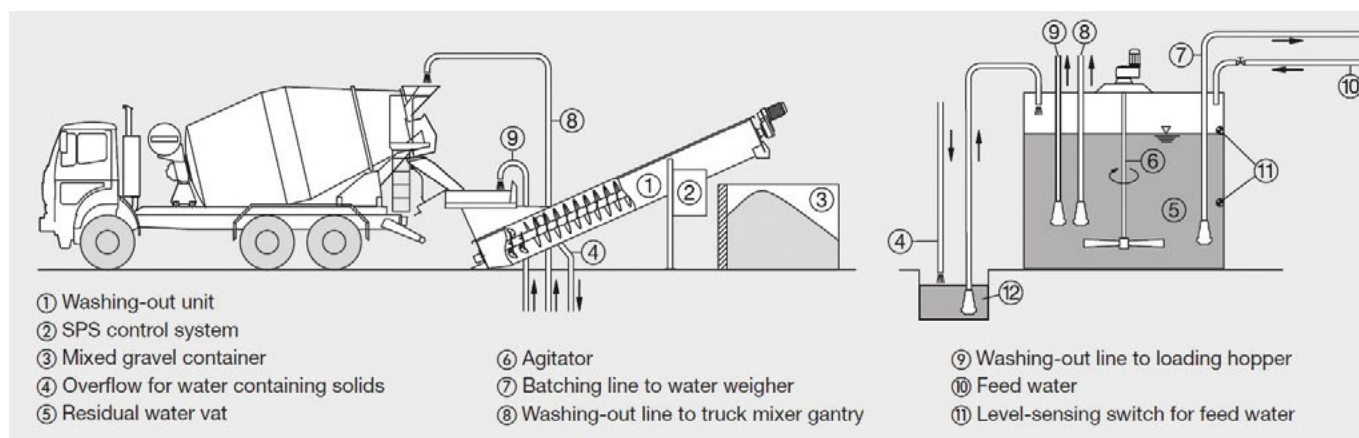


Technical data

LRS screw-system concrete recycling plant

Type	LRS 606 / LRS 606 mobile	LRS 708
Length of screw	6,000 mm (19.75 ft)	6,250 mm (20.5 ft)
Screw diameter	600 mm (23-1/2")	800 mm (31-1/2")
Drive motor rating	5.5 kW (7.38 hp)	11 kW (14.75 hp)
Solids discharge height	2,200 mm (7.25 ft)	2,300 mm (7.5 ft)
Diameter of loading hopper	Ø 1,900 mm (6.25 ft)	Ø 1,900 mm (6.25 ft)
Truck mixer discharge points	1 - 2	1 - 2
Throughput	approx. 12 m ³ /h (15.7 yd ³ /h)	approx. 22 m ³ /h (28.8 yd ³ /h)
Size of residual water vat	Project-related; depends on number of truck mixers and concrete pumps	
Screen cut	0.25 mm (0.01")	0.25 mm (0.01")
Particle size of solids	up to 35 mm (1-3/8")	up to 35 mm (1-3/8")

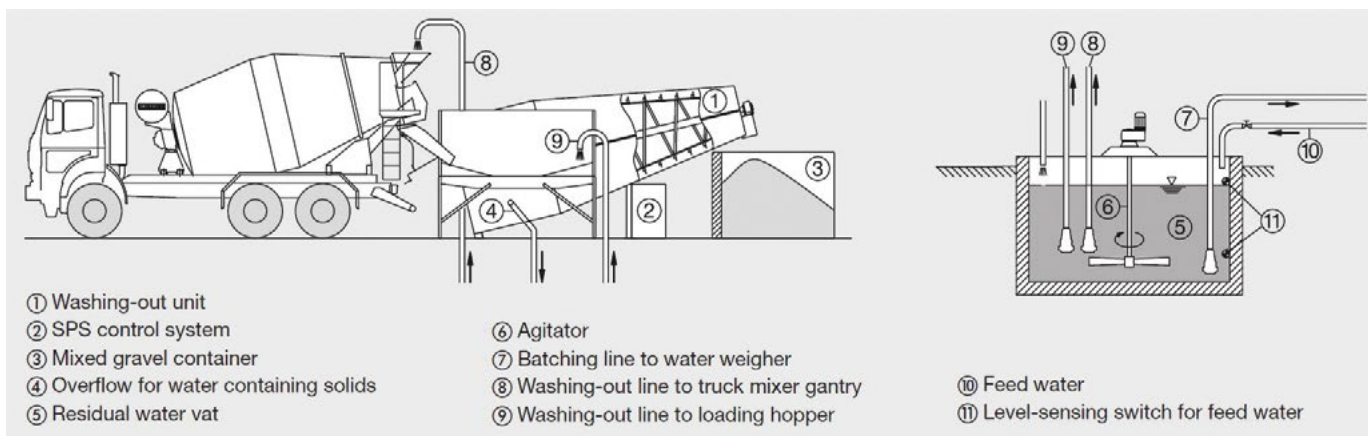
Type	LRS 806	LRS 908
Length of screw	8,500 mm (27.9 ft)	8,700 mm (28.5 ft)
Screw diameter	600 mm (23-1/2")	800 mm (31-1/2")
Drive motor rating	11 kW (14.75 hp)	11 kW (14.75 hp)
Solids discharge height	3,200 mm (10.5 ft)	3,250 mm (10.6 ft)
Diameter of loading hopper	Ø 1,900 mm (6.25 ft)	Ø 1,900 mm (6.25 ft)
Truck mixer discharge points	1 - 2	1 - 2
Throughput	approx. 12 m ³ /h (15.7 yd ³ /h)	approx. 22 m ³ /h (28.8 yd ³ /h)
Size of residual water vat	Project-related; depends on number of truck mixers and concrete pumps	
Screen cut	0.25 mm (0.01")	0.25 mm (0.01")
Particle size of solids	up to 35 mm (1-3/8")	up to 35 mm (1-3/8")



LRS screw-system concrete recycling plant

LRT trough-system concrete recycling plant

Type	LRT 422	LRT 622
Length of trough	4,000 mm (13 ft)	6,000 mm (19.75 ft)
Trough diameter	2,200 mm (7.25 ft)	2,200 mm (7.25 ft)
Drive motor rating	7,5 kW (10 hp)	11 kW (14.75 hp)
Solids discharge height	1,700 mm (5.5 ft)	2,000 mm (6.5 ft)
Diameter of loading hopper	1,100 x 3,000 mm (3.5 x 9.75 ft)	1,100 x 3,000 mm (3.5 x 9.75 ft)
Truck mixer discharge points	1 - 2	1 - 2
Throughput	approx. 10 m ³ /h (13.1 yd ³ /h)	approx. 20 m ³ /h (26.2 yd ³ /h)
Size of residual water vat	Project-related; depends on number of truck mixers and concrete pumps	
Screen cut	0.25 mm (0.01")	0.25 mm (0.01")
Particle size of solids	up to 35 mm (1-3/8")	up to 35 mm (1-3/8")



LRT trough-system concrete recycling plant

Various Options



Options

Buffer loader

The galvanised dosing buffer can be used to take in residual concrete from up to six truck mixers at the same time. This enables large residual concrete quantities to be caught. The dosing buffer guarantees that the material is transferred evenly to the recycling plant, in particular at peak times.

Conveyor

Concrete pumps cannot discharge residual concrete or cleaning water into the regular truck mixer hopper because of the low discharge point on the vehicle. Liebherr therefore supplies a low-level loading hopper with conveyor. Material can then be discharged by the concrete pump and transferred to the recycling plant without difficulty.

Sand and gravel separation

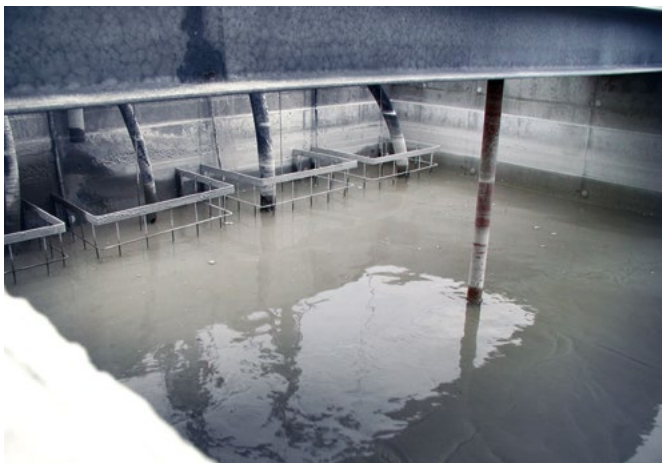
After recovery, the material can be conveyed directly to a downstream screening unit for further separation.

Density measurement

An optional density measuring system can be supplied. It displays density information or, if residual water is used, can carry out the necessary adjustments at the mixing system.

The hydro-cyclone

A further optional accessory is the hydro-cyclone separator. It generates a high centrifugal force that filters the bulk of the suspended particles out of the residual water and lowers its solids content.



Residual water tank with agitator and pumps

Optional: raised tank



Hydro-cyclone

The hydro-cyclone reduces the amount of solids in the residual water.

We are here for you!

Personal. Capable. Reliable.



Concrete pumps



Mixing plants



Truck mixer



Conveyor belts



Measuring technology



Mixing systems



Concrete recycling system

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- Professional maintenance and services

Liebherr USA, Co. · 4800 Chestnut Ave. · Newport News VA, 23607
+1 757 240-4250 · www.liebherr.com · liebherr.usa@liebherr.com

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