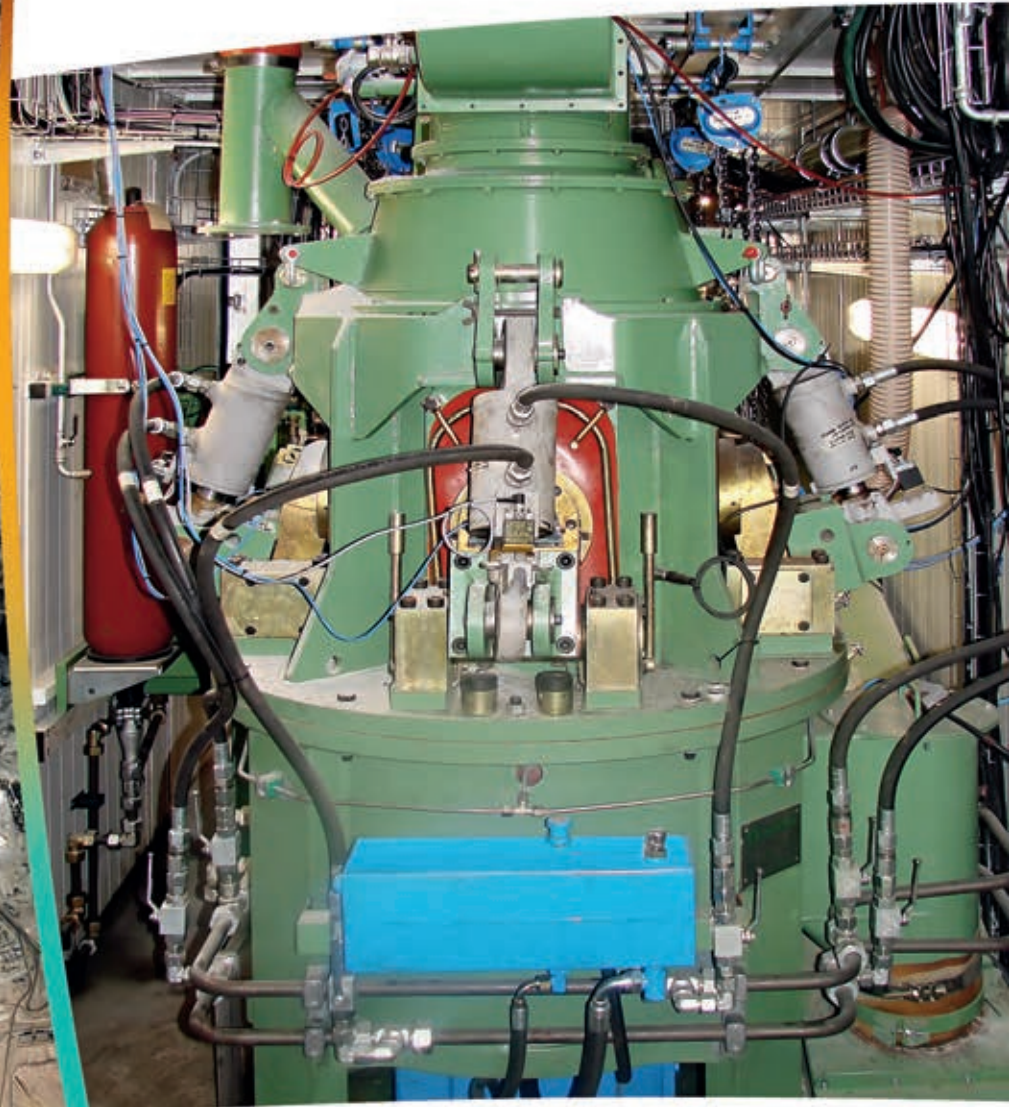


OGP MOBILE

Mobile grinding mill
for ore



Loesche – mobile grinding mill for dry milling of ores

Loesche has developed a mobile ore grinding plant, the OGPmobile, to demonstrate the benefits of Loesche grinding technology. The OGPmobile offers potential customers and their experts a convincing way of becoming acquainted with Loesche grinding technology on site.

Loesche grinding technology offers the following primary benefits compared to conventional grinding technologies:

- Higher degree of dissociation of the valuable minerals
- Steep product grain curve
- Reduced specific energy consumption
- Reduced specific wear
- Rapid adaptation to changes in ore characteristics
- Self-regulating grinding classification circuit with online monitoring system

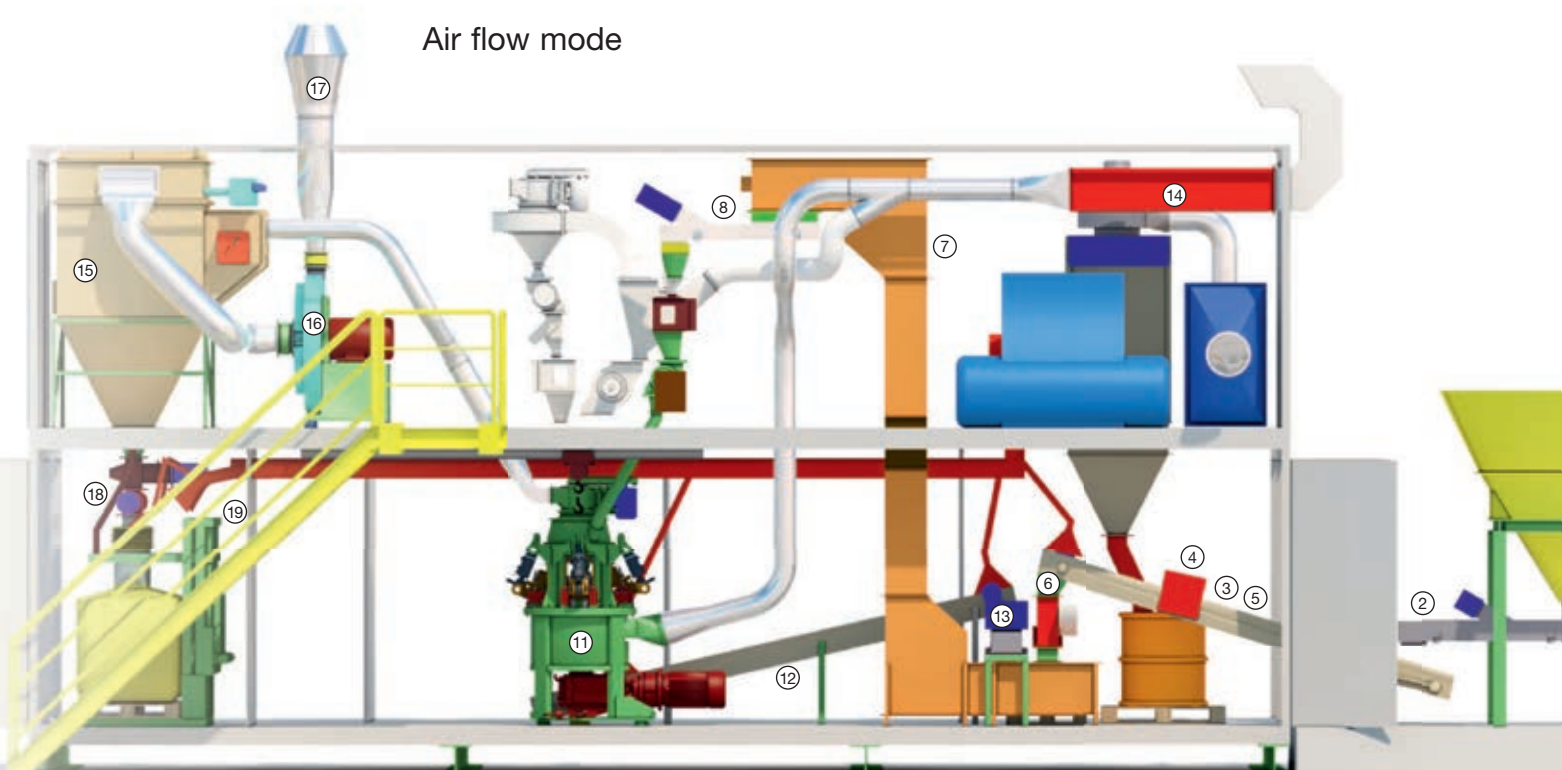
Loesche grinding technology allows adaptation for a variety of process parameters to significantly influence the quality of the ground product and thereby enhance the efficiency of the downstream sorting process. Depending on the ore characteristics, it is possible to optimize the mineral dissociation, grain distribution and throughput for each deposit.

The versatile concept behind OGPmobile enables operation both in air-swept and overflow modes. Furthermore, the grinding plant provides the option for testing shear-free grinding, grinding with shear components and their effects on the grinding product. It is also possible to isolate intermediate products from the grinding process and forward these to a separate analysis process. Basic analysis is performed in the integrated laboratory to verify the quality of the grinding products; any further analysis should be performed in a laboratory at the customer's site. The results of the analysis can be used to optimize the product quality by adapting the grinding parameters.

The OGPmobile can be used to produce up to 300 tons of grinding product for direct treatment in subsequent processing stages. Grinding tests are performed to determine the specific grindability factor and the optimum process parameters, such as grinding pressure, grinding energy, wear values and flow rate of process gas. These provide the basis for scale-up in industrial grinding plants.

The OGPmobile provides the user with a means of calculating the effect of Loesche grinding technology on the overall material flow in his processing plant and is a convincing way to demonstrate its benefits.

Air flow mode



The OGPmobile consists of three 40 ft high Cube Sea containers. The machinery for grinding, classifying, product separation and material transport is installed in two of the containers. The third container contains the process control system and the central control room. This container can also be used as a laboratory and for spare parts and equipment storage. The concept behind the OGPmobile also enables it to be used in hostile geographic and climatic conditions, and allows the individual containers to be assembled and dismantled easily. A power supply and a good foundation is all that is required for operation. Loesche logistics experts are at hand to coordinate transport of the plant.

To ensure optimal customer support, Loesche provides a specialist plant operator to handle OGPmobile operation and look after the plant, document the test results, monitor setup and dismantling and act as an interface between Loesche and the customer. A Loesche ore team can take care of planning, execution and evaluation of the tests.

Technical data of container plant

Basic data of container:

Number:	3
Type:	40 ft High Cube Sea Container
Dimensions:	approx. 18,1 x 6,5 x 8,6 m [LxBxH] (operational condition)
Total Weight:	approx. 65 t (operational condition)
Ambient conditions:	
Site elevation:	0 to 3.500 m a.s.l.
Ambient temperature:	- 20 to + 50°C
Climate:	arid to humid
Input supply voltage:	380 – 520 Volt
Mains frequency:	50 or 60 Hz
Installed capacity:	approx. 420 kW (of which 300 kW heating capacity, if necessary)

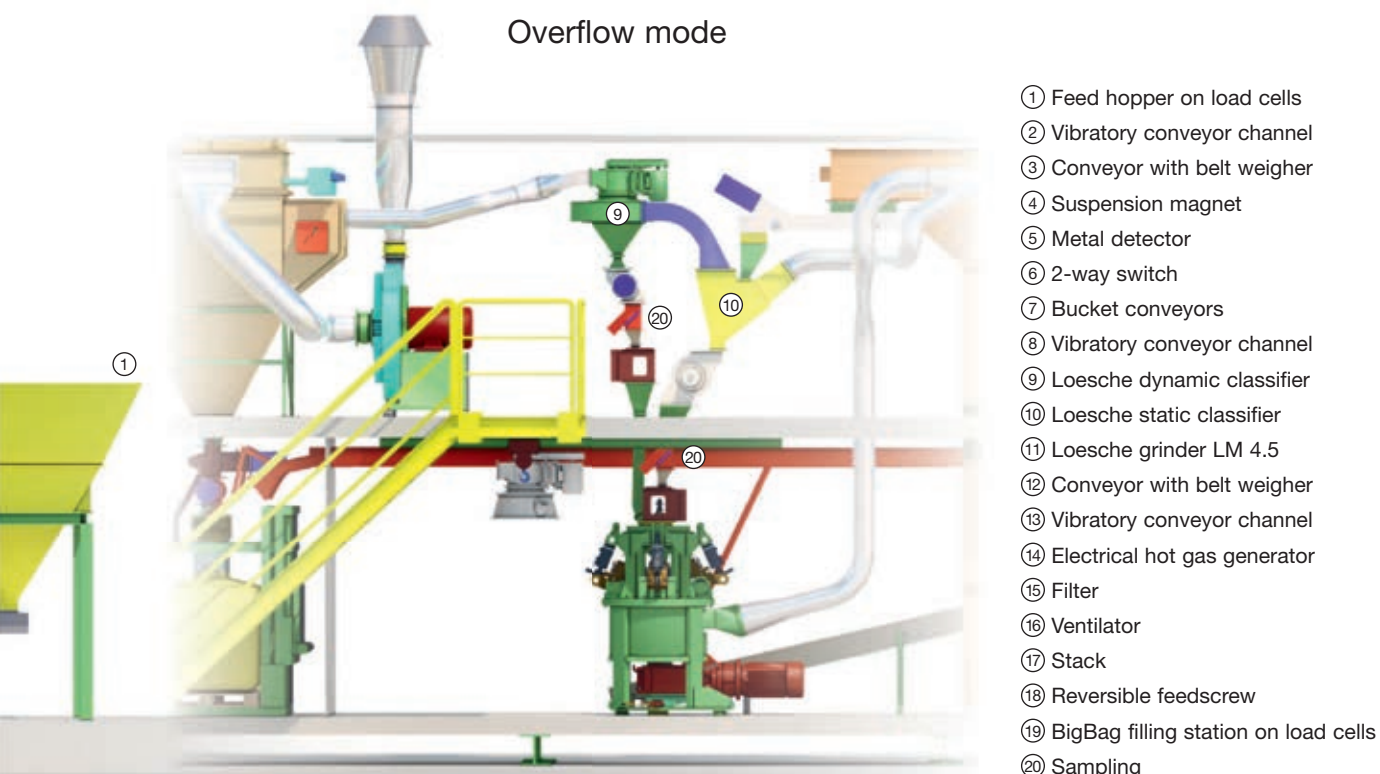
Basic data of plant:

Throughput:	nominal:	approx. 1 t/h*
	maximum:	approx. 3 t/h*
Air volume flow:	nominal:	2.500 m ³ /h*
	maximum:	5.000 m ³ /h*
Dust emissions:	< 20 mg/m ³ in discharged air	

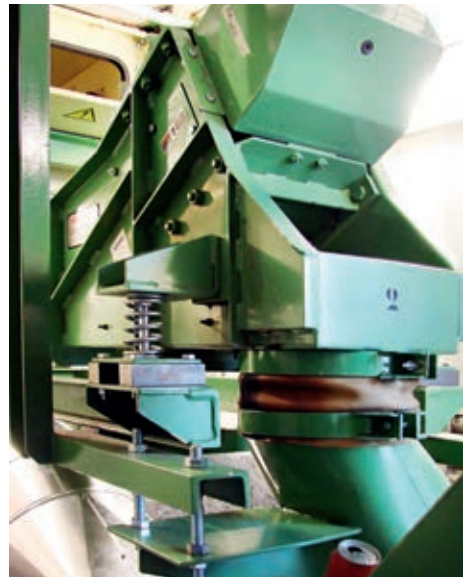
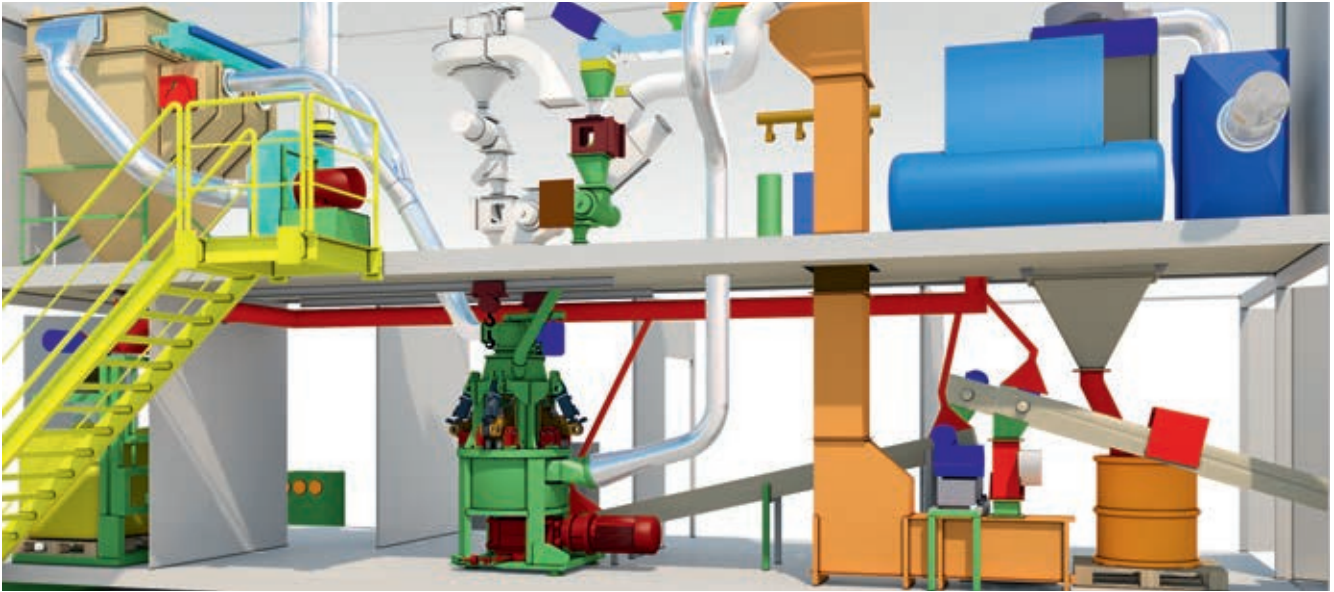
* depending on material properties and product requirements

The plant is certified in accordance with Machinery Directive 2006/42/EC.

Overflow mode



- ① Feed hopper on load cells
- ② Vibratory conveyor channel
- ③ Conveyor with belt weigher
- ④ Suspension magnet
- ⑤ Metal detector
- ⑥ 2-way switch
- ⑦ Bucket conveyors
- ⑧ Vibratory conveyor channel
- ⑨ Loesche dynamic classifier
- ⑩ Loesche static classifier
- ⑪ Loesche grinder LM 4.5
- ⑫ Conveyor with belt weigher
- ⑬ Vibratory conveyor channel
- ⑭ Electrical hot gas generator
- ⑮ Filter
- ⑯ Ventilator
- ⑰ Stack
- ⑱ Reversible feedscrew
- ⑲ BigBag filling station on load cells
- ⑳ Sampling



Loesche GmbH
Hansaallee 243
40549 Düsseldorf
Tel. +49 - 211 - 53 53 - 777
Fax +49 - 211 - 53 53 - 500
E-Mail: ores@loesche.de
www.loesche.com/ores

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INNOVATIVE ENGINEERING