

# **fibo intercon**

## Recycling plant RC1800



Your partner in concrete solutions



# A green solution with reliability and good economy



## Cost-effective recycling of trench materials

This mobile recycling plant is designed to reuse up to 90% of the excavated material from underground utility networks and road works. The integrated separator crushes and sorts the excavated material. All stones and fragments larger than 40mm are separated from the other material. The crushed and screened material is then transported to the mixer, where it is mixed with cement and water before the finished mix is pumped back into the trench or transported to the desired location.

The recycling plant is an extremely flexible solution. It is ideal for working in urban environments and places with

limited space. It is also quick and easy to set up and prepare for production. All you have to do is connect electricity, water, and fill the cement silo with cement.

The recycling plant is a profitable investment that quickly pays for itself and provides a return. It keeps the cost of transport and new materials to a minimum, as the excavated material can be used directly on the construction site.

At the same time, all wear parts are made of robust materials and can be replaced individually using standard tools such as a screwdriver and wrench.

The recycling plant is designed to comply with CE standards and regulations.

To illustrate the savings by using a mobile concrete batching plant instead of buying ready mixed concrete. Fibo Intercon has developed a calculation scheme, where you can enter data like consumptions of concrete, aggregates and costs to calculate your annual savings.

Please visit our web site:  
[www.fibointercon.com](http://www.fibointercon.com)  
To examine your possibilities.

# Technical specifications of RC1800



## Technical specifications

### Agitator pan mixer

Capacity	10-20 m <sup>3</sup> /hour
Volume (brutto/netto)	1800 liters
	1000 liters
Mixer motor	30 kW
Hydraulic pump motors	2 x 55 kW
	1 x 5,5 kW
Mixing arms	6 pcs
Side scrapers	1 pc
Load cells	3 x 5000 kg
Weighing accuracy	+/- 0.5 %
Discharge gates	1-2 pcs
Steel	Hardox

### Other equipment

Separator 30 mm or 40 mm	1 pc.
Hooklift frame	1 pc.
Hydraulic support legs	incl.
Rollers	incl.
Automatic water dosing system	
Conveyor belt under the separator	
Necessary platforms and railings	

### Control system

Batching computer	Beckhoff PLC
Recipes	50 pcs.
Dosing accuracy	+/- 1-2 %
Language version	German
	Danish
	French
	Russian
	English

No previous knowledge is required.

### Power

3 x 400 Volts  
200A 250KVA

### Dimensions

Width	2.5 M
Height excl. railing	2.75 M
Height incl. railing	3.75 M
Length	7.4 M
Total weight	16,000 kg

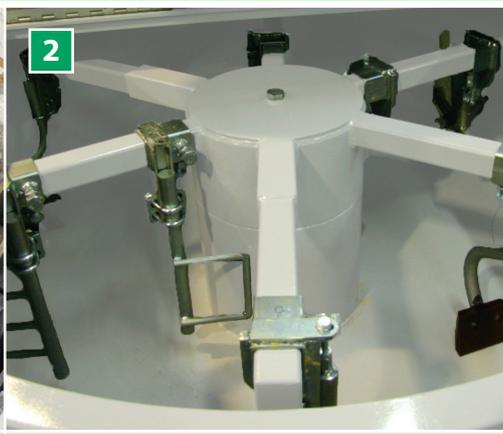
### Options

Concrete silo	2.0 M <sup>3</sup>
Chemistry pump	1 - 4 pcs
High-pressure cleanerr	1 pc
Flowmeter	1 pc
Wattmeter	1 pc
Moisture measurement	1 pc
Water heater	1 pc
Remote control	1 pc
Modem	1 pc
Extra discharge gate	1 pc
Fibo Link cloud system	1 pc
Winter package (insulation)	1 pc
Alarm horn and lamp	1 pc
Automatic delivery notes	1 pc
Concrete pump	1 pc
Capacity of concrete pump	15-23 m <sup>3</sup> /hour
Concrete pump hose	25 m Ø125
Spare parts	Kit for mixer arms
Wear plates	Bottom and sides
Water Tank	1 x 1400 litres
	1 x 900 litres
	1 x 500 litres



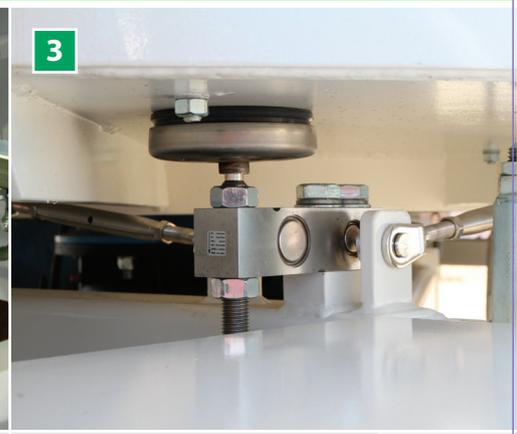
**1 Separator**

The separator crushes and screens the excavated material. Stones and other fragments larger than 30 or 40 mm are discarded.



**2 Pan mixer**

Pan mixer in steel with internal lining of replaceable, sectioned wearing plates and Hardox steel-plate bottom and enclosure. Equipped with adjustable mixing arms and side scrapers in steel and hard POM. Equipped with safety bolts to prevent large stones from seriously damaging the mixing arms.



**3 Load cells**

The pan mixer is placed on three 5000 kg electronic load cells with an accuracy of +/- 0.5 %.



**4**

**4 Operating system**

The control unit and optional devices are housed in a protective cabinet on the side of the plant. Possibility of manual, semi-automatic and automatic operation and PC interface. No previous knowledge is required and can be delivered in the language version desired. Stores 50 recipes. Dosing accuracy: +/- 0,5-2 %.



**5**

**5 Automatic delivery notes**

Prints information about the recipe and the mixing functions directly from the main menu. Enables the entire mixing process to be printed: (date, time, mix number, order number, recipe number and recipe ingredients). Also printed: dosing quantities, recorded deviations of the dosed quantity and the error messages.



**6**

**6 Stone separator**

The separator is equipped with a hydraulic drive and a hydraulic emptying flap for the materials that are no longer used.



**7**

**7 Water flow meter**

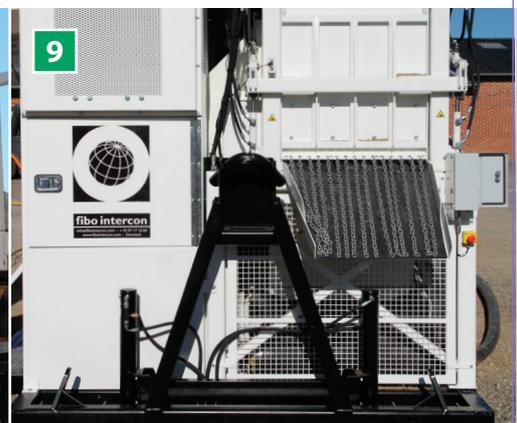
Parallel dosing of water and aggregates for reduced cycle time and pan mixer wear and reduced energy consumption.



**8**

**8 Discharge**

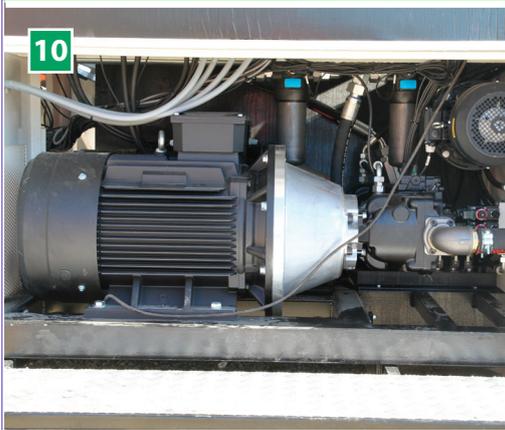
Discharge gate for wet concrete (as shown) or vertical drain for dry concrete. Possibility of manual, semi-automatic and automatic emptying. Complete with overload protection and position detector.



**9**

**9 Hooklift frame**

The hook lift frame makes it easy to pull the recycling plant onto a lorry with a hook hoist. Alternatively, it can be hoisted up onto a truck with a crane. Clarify the hook lift frame according to DIN 30722, EN or another std. with the customer.



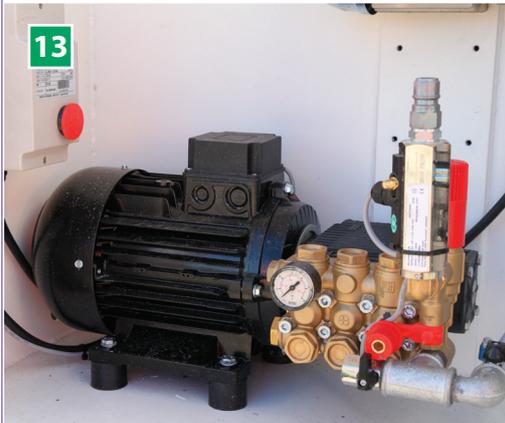
**10 Hydraulic system**  
The hydraulic system consists of a hydraulic pump and a cooling unit (oil cooler).



**11 Concrete pump (option)**  
The concrete pump is a stamp pump that is hydraulically controlled. Storage tank with full indicator, safety cover and a safety switch for cleaning. Storage tank approx 400 litres. Capacity 10 m<sup>3</sup> / hour. Conveyor distance max. 25 m.



**12 Cement container 2.0 m<sup>3</sup> (option)**  
The cement funnel is equipped with full and empty detectors. The opening (1x1m) is intended for big bags. Seals for dust and moisture. A vibrator on the sidewall ensures that the material slips continuously.



**13 High-pressure cleaner (option)**  
Motor/pump with automatic start, stop switch. 15 m high-pressure hose with a quick coupling socket and high-pressure nozzle. The length of the jet pipe is 700 mm. The high-pressure cleaner is installed in a protective box.



**14 Chemistry pump (option)**  
Dosing pump with 0.25 kW for additives. 3/8" suction hose, check valve and stainless steel strainer. Possibility for installation of 1 - 4 additive pumps.



**15 Flow measurement chemistry (option)**  
Electromagnetic flow measurement, 1/2" in stainless steel, max. 16 bar, temperature -10 to +70 °C, minimum conductivity 20 µS / cm. The flow measurement guarantees a dosing accuracy to +/- 2% (repeatedly +/- 0.2%), according to EN 206-1.



**16 Moisture measurement (option)**  
1 x electronic control module for connection of moisture sensor. Connection of the humidity sensors to the control.



**17 Water heater (option)**  
Electric heating in the water tank for frost protection. Complete with thermostat and switch in control cabinet for automatic operation and frost protection. Power 4 kW. Voltage 3 x 400 volts, 50 Hz.



**18 Fibo Link cloud system (option)**  
The software controls the batching process of the fibo concrete batching plant. This means the data is safe; it can be used for automating documentation, improving productivity, delivering live quality control and lots more.  
**See separate document for Fibo Link.**



28



### 28 Belt conveyors

Belt conveyors in belt widths of 0.8 m, 1.0 m, and 1.2 m and lengths of 4 - 14 m. Available mounted on either wheel, height-adjustable legs, or a frame with draw hook. All conveyors are delivered complete with drum motor, integrated gearbox, inlet, and lifting devices for easy transportation.

29



### 29 Vertical cement silos

Vertical cement silos with capacities between 15- 35 m<sup>3</sup>. They are designed for filling with big bags or cement tanker. The vertical cement silos can be delivered with several options. The choice of options will depend on the shape and purpose of the silo.

30



### 30 Big bag cement silo

Big bag silo in fully welded construction with height-adjustable support legs. Complete with cement auger, counterweight for cement auger, cone with outlet flange, top hatch, a grid for cement inlet, cutter for big bags, control unit, a set of electrical wiring and connection and lifting devices.

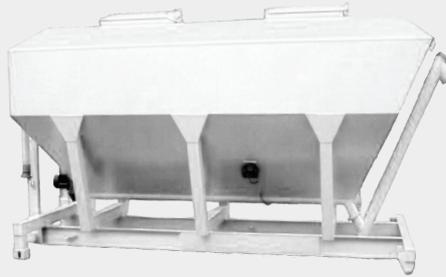
31



### 31 Cement auger with gearbox

Available in several lengths. All augers are delivered complete with either flange or universal ball joint inlet, flange for butterfly valve, cylindrical outlet, inspection hatch under the inlet. Etc.

32



### 32 Horizontal cement silos

Horizontal cement silos with capacities between 18- 38 m<sup>3</sup>. The horizontal cement silos are delivered complete with silo equipment, external motovibrators, air pads, cement augers, self-cleaning filter and control unit, outlet funnel, safety limit switch, and lifting devices for easy transportation.

33



### 33 Generator

High-quality diesel generator for off-grid power supply. 30 - 200 KVA. Possibility of adding emissions filter.

34



### 34 Test laboratory

The fibo intercon test laboratory in container is designed for use on remote sites, enabling the routine testing of soil and concrete to be carried out efficiently. **See separate document for Laboratory Container.**

35



### 35 Control cabin

The Control Cabin is available in various specifications. We offer a number of control cabin options that can be customized to meet your particular requirements.

## High quality concrete solutions

Many years' experience in the industry has made fibo intercon a leading supplier to the global concrete industry. We manufacture and deliver both mobile, semi-mobile and stationary concrete batching plants as well as production equipment and complete concrete systems.

In our production, we only use state-of-the-art technologies and methods to ensure our customers the best quality, efficiency, and reliability.

Over the years, we have been developing and delivering high-quality solutions to customers all over the world. The products delivered have ranged from standard batching plants to unique customized solutions, and our batching plants have been used for both small and large-scale building projects.

fibo intercon strives to provide quick and competent service. We have, therefore, developed our own representative network in several countries, and our service technicians are ready to go to your place and help you with the installation and servicing of your batching plants and with the training of your employees.

### Switzerland

The recycling plant is being used to construct piled foundations and standard foundations. The location of the site is within the city, where space is a premium.

The plant is being used to convert the spoil from the piling operation into concrete for use on the site. The process saves the removal cost of the spoil and the import cost of quarried materials to make the concrete. The solution is not only cost-effective; it also saves CO<sub>2</sub> emissions.



### France

The image shows the recycling plant being used on a construction site in the north of France. Over the years, the recycling plant has been used in connection with several different recycling projects. They include utility pipe projects where the excavated material was converted into a weak concrete for backfill.

The recycling plant is environmentally friendly, as the excavated spoil is used directly on the construction site and therefore does not have to go to a landfill. Less quarried materials are used, which also ensures a good economy and a good return on investment.



2020-08-04. Copyright © fibo intercon. No responsibility can be accepted for printing errors. Construction subject to change without notice. The models displayed may include optional equipment.

#### fibo intercon a/s

Herningvej 4  
DK-6920 Videbæk  
Telefon: +45 97 17 16 66

info@fibointercon.com  
www.fibointercon.com

