### fibo intercon

# Mobile concrete batching plants FP1200, FP1800 and FP2200





Your partner in concrete solutions

## A compact solution providing reliability and great economy



#### Well thought out efficiency and cost effectiveness

The FP-model is a mobile, concrete batching plant without hoppers. Built on a solid frame with legs, the batching plant features different size mixers, very precise dosing, and many options to produce any kind of concrete required. The fact that the FP-model is without hoppers gives it complete flexibility in terms of which silo solutions it is connected to and how you choose to supply it with aggregates for the concrete production.

Being easy to move around, as well as their compact size makes the FP-models ideal for any construction site. A Fibo Intercon mobile batching plant will precisely produce the required amount of concrete, without waste of time or materials.

A Fibo Intercon mobile batching plant will reduce the cost of concrete for most projects. As Fibo Intercon batching plants have an average lifetime expectancy of 15 years, they represent an asset to any company involved in concrete works or construction. Fibo Intercon will be happy to assist with any ROI calculation.

In addition to the financial possibilities, a Fibo Intercon mobile batching plant also provides sustainability benefits. Producing concrete on-site will in most cases reduce the CO<sub>2</sub> generated from transports. To analyze the potential for  $CO_2$  savings, Fibo Intercon have developed a calculation tool.

State-of-the-art automation, connectivity and cloud-based documentation provide customers with a next generation solution today.

An FP-model is built for professional, everyday use and will add flexibility, reliability and increased productivity to any project and construction site.

Please visit our website: www.fibointercon.com to examine your possibilities.

### **Technical specifications of our FP-models**



Model		FP1200	FP1800	FP2200
Volumen (gross/net)	L	1200/800	1800/1000	2200/1400
Capacity	m <sup>3</sup> /hour	10-16	20-30	25-45
Motor	kW	15	30	55
Sound pressure level	dB(A)	77,7	77,7	77,7
Mixing arms/side scrapers	no	6/1	6/1	8/1
Load cells	kg	3 x 2000	3 x 5000	3 x 5000
Weighing accuracy	%	+/- 0.5	+/- 0.5	+/- 0.5
Dosing accuracy	%	+/- 3	+/- 3	+/- 3
Recipes	no	60	60	60
Water tank	L	500	500	500
Dimensions (W x H x L)	m	2.1 x 2.3 x 3.7	2.3 x 2.5 x 4.2	2.55x 2.65 x 4.4
Weight	kg	2500	4500	5500
Power	Voltage	3 x 400V N PE 50Hz	3 x 400V N PE 50Hz	3 x 400V N PE 50Hz
	A/KVA	40 / 28	80 / 55	125 / 86
Generator	KVA	60	100	150



#### 1 Steel frame

A structurally sound and solid high-quality steel frame is the foundation for our FP batching plant.

#### 2 Pan Mixer

Pan mixer made of Hardox (500 and 1200) or steel with Hardox linning (1800 and 2200) wear plates. The pan mixer features a gear motor (various kW), automatic radial openings, inlet for cement augers, and inspection hatches. 3 Mixing arms and side scrapers Adjustable mixing arms and side scrapers in steel and hard PUR. Equipped with safety bolts to prevent large stones from seriously damaging the mixing arms. The adjustability makes sure that any concrete is mixed homogeneous and without lumps.



#### 4 Load cells

The pan mixer is placed on three 2000/5000 kg electronic load cells with an accuracy of +/-0,5 %. The accuracy of the load cells assures the correct dosing of cement, water, and aggregates to attain the required w/c ratio.

#### 5 Beckhoff control System

Beckhoff automation allows for manual, semi-automatic, and automatic batching operations. The system features internet connectivity, 50 recipes, multi-language support, and touch screen programming.

#### 6 Water flowmeter

The electronic flowmeter allows for variable measuring sites down to 1 dl, as well as parallel dosing of water and aggregates for reduced mixing cycle times.



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plant.

#### 7 Discharge Hatches

The hatches can be operated manually, semi-automatic and automatic with variable openings percentages. The hatch features overload protection, position sensors and antiblocking mechanism.

#### High-pressure cleaner The standard FS-model is equipped with a high-pressure cleaner tapping from the connected water supply. The hose has a length suitable for cleaning the entire batching



9 Customized color (optional) You can choose the color for your plant, so it fits your other equipment.

#### 10 Modem (<u>optional)</u>

For remote access to your batching plant to be used for hotline support and Fibo Link. Please note license for Fibo Link is not included.

Note! Required equipment for Fibo Collect.

#### 11 Vibrator (<u>optional)</u>

Vibrator MVE 100/3 for vibrating sand out of the hopper, with cabling and switch. Require placement on the left or right hopper side. Makes sure all aggregates in the hopper will be used.



#### 12 Wattmeter (optional)

Measuring motor load resistance may allow concrete viscosity measuring. Consequential processes can be automated in the control system.

#### 13 Additive pump (optional)

High-quality time-based dosing pump 0,25 kW for liquid additives, with 3/8" suction hose, check valve, and stainless steel filter. Possibility for installation of 1 - 4 additive pumps. Flowmeter for additives (optional) Electromagnetic flowmeter, ½" in stainless steel, max. 16 bar, temperature -10 to + 70 ° C, minimum conductivity 20 μS / cm. The flow measurement guarantees a dosing accuracy of +/- 1 % (repeatedly +/- 0.2 %).



15 Secondary outlet hatch on the mixer (optional)

PLC controlled automatic and electromechanical radial mixer opening with a position switch. The secondary outlet hatch can be used for waste concrete or the washout from the automated washing system (19). 16 Rotation nozzles for dosing and washing (optional)

> The nozzles create a water mist while dosing, alleviating the clumping of thin aggregates or silicates. At the same time, the water spray helps clean mixing arms and mixer surfaces during or after dosing/ mixing.

17 Automatic high-pressure cleaning (optional)

> 50 bar washing system with nozzles distributed on mixer arms and within the mixer. Washing cycles can be automated. The system does not replace the end-of-day cleaning. Best used with secondary hatch and washout recycling station.



18 Wash out recycling station (optional) Recycling water station for separating water from washout. Recycled water can be used for dosing.

#### 19 Payment terminal for Fibo Collect (optional)

Terminal with 21" touch screen including software for your Fibo Collect plant. The terminal is equipped with a barcode reader and a thermal printer. Requires Fibo Link 20 RFID payment for Fibo Collect, Add-on (optional)

> RFID reader and software for RFID Payments at your Fibo Collect payment terminal. Including 50 pcs of RFID chips. Please note that the payment terminal is not included and must be ordered separately (19).



#### 21 Card payment for Fibo Collect, Add-on (optional)

Credit card reader and software for credit card payments at your Fibo Collect payment terminal. Please note terminal is not included and must be ordered separately (19).



Fibo Link is a license-based monitoring and

management software that makes produc-

the Fibo Cloud. The solution also provides

remote maintenance and service access.

See separate document for Fibo Link.

tion and consumption data available in

Fibo Link (optional)

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Insulation/Winter package 1 (optional) Liquid supply lines are equipped with trace heating tape and additional insulation. The cabinet for additive and high-pressure cleaner pumps is fitted with a radiant heater.



Insulation/Winter package 2 (optional) This package includes all items from winter package 1, and, as an extra feature, the tank is insulated with 45 mm insulation material. Note! The water heater is not included and must be ordered separately if water needs to be heated.



25 Water heater (optional) Electric heating in the water tank for frost protection. Complete with thermostat and switch. The heater is usually connected to the control cabinet for automatic operation and frost protection. Power 4 kW. Voltage 3 x 400 volts.



26 Temperature sensor for the water tank (optional)

Sensor for measuring the water temperature in the tank.



27 Moisture sensor for hopper (optional) Sensor for measuring moisture in the dosed sand prior to entering the mixer.

28 Moisture sensor for the mixer (optional) Moisture sensor mounted in the mixer to indicate batch moisture level.

29 Dust filter for the mixer (optional) Filter to reduce cement dust in the environment during the dosing process.

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**Light in the mixer (optional)** For easier visibility of the concrete in the mixer when looking through the inspection hatch or in combination with a mixer camera.



**31** Light in the control cabinet (optional) Light in the control cabinet for a better overview when working late.



Alarm horn (optional) Signal activated when mixer has ended mixing time and concrete is ready for use.



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35 Hose reel (optional) Hose reel for easy reeling and storage of the hose for high-pressure cleaner

33 Alarm light (optional)

Light activated when mixer has ended mixing time and concrete is ready for use.

 Mixer camera (optional)
A camera to allow the operator a visual check of the homogeneity of the mixture.



#### 36 Belt conveyors (optional)

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Belt conveyors with belt widths of 0.8 m or 1.0 m and lengths of 8m - 14 m. Available with height-adjustable legs. All conveyors are equipped-with a drum motors, integrated gearboxes, inlet boxes, dispenser funnels, and lifting hooks for easy transportation.



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37 Hydraulic Belt conveyors (optional) Belt conveyors with belt widths of 0.8 m and lengths of 6 m - 14 m. With hydraulic system for automated operation of adjustusting the heigh. All conveyors are equipped-with a drum motors, integrated gearboxes, inlet boxes, dispenser funnels, and lifting hooks for easy transportation.



#### Round Big bag cement silo with Ø139 or Ø193 auger (optional)

Round Big bag silo in fully welded construction with height-adjustable legs. Complete with cement auger, counterweight, cone with outlet flange, top hatch, a grid for cement inlet, cutter for big bags, butterfly valve, forklift sleeves, lifting hooks and vibrator.

Max height: 3750 mm (transportation 2241mm)





#### Big bag cement silo with Ø139 or Ø193 auger (optional)

Big bag silo in fully welded construction with height-adjustable legs. Complete with cement auger, counterweight, cone with outlet flange, top hatch, a grid for cement inlet, cutter for big bags, forklift sleeves, lifting hooks and vibrator. Max height: 3373 mm(transportation 2576mm)

#### 40 Vertical cement silos (optional)

A vertical cement silo with a capacity of 32  $m^3$  in fully welded construction with legs and aerators. Designed for easy-flowing materials such as Portland cement or lime with a bulk density of up to 1,3 tons/m<sup>3</sup>. Perfect for transport in a 40-foot high cube container or a trailer.  $\emptyset$ =2250mm



 VHorizontal cement silos (optional) Horizontal cement silo with capacities from 23 m<sup>3</sup> to 38 m<sup>3</sup>. The silos include screw conveyors in the bottom of the silo, overpressure and pinch valves, grids for inlet, cutters for big bags, top hatches, self-cleaning dust filters, butterfly valves, and 4" inlet pipes with thread, vibrators and aerators.on a trailer.
Ø=2250mm



42 Cement auger with gearbox (optional) Available in several lengths. All augers are complete with either flange or universal ball joint inlet, flange for butterfly valve, cylindrical outlet, and service hatch under the inlet.



 Frequency converter (optional)
Frequency converter on mixer motor allows for varying speed requirements in mixing sequences.



Buffer hopper (optional)
Expansion hopper with auger for continuous flow pumping application







45 Platform for the control cabinet (optional)

A platform to the control cabinet on a plant with extended legs.  Remote control (<u>optional</u>) Remote control with the basic operating functions. Range approx. 50 m.

 47 Concrete pump (optional)
Hydraulic moveable piston pump for concrete in various sizes. Electric and fuel driven.







Fiber dispenser (optional) Cutter for dosing glas fibers from glas fiber cord.

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- Level sensor for concrete pumps (optional)
  Level sensor for installation in concrete pumps.
- **Concrete bucket (optional)** 2m<sup>3</sup> concrete bucket with forklift sleeves.



51 Generator (optional) High-quality diesel generators for off-grid power supply. 30 - 200 KVA.



**Test-Lab Container (optional)** Mobile concrete test laboratory for construction sites or maritime use. Containers are available with CSC and DNV certifications. Please see our separate Test-Lab Container documentation.



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<sup>53</sup> Moulds (optional) Moulds for interlocking concrete blocks. Reconfigurable design to produce various block shapes and sizes from cast concrete.



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Gliding skids (optional) 54 Gliding skids to facilitate loading and unloading of containers. Package of 4.



Jobsite crew container (optional) 55 The crew container can be insulated and fitted to hold the control system, pumps and additives, as well as working space for crew.



Concrete vibrator (optional) 56 Electrical, handheld concrete vibrator, used to eliminate air bubbles from fresh concrete.







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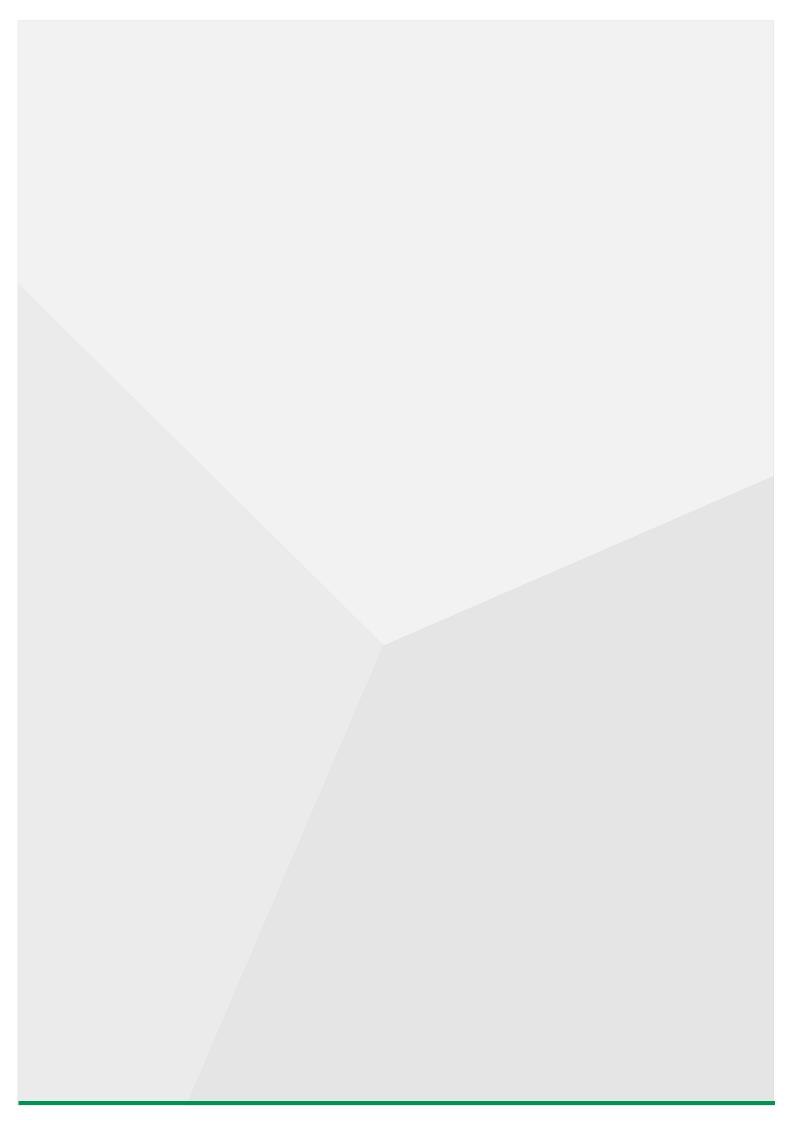
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#### 56 Spare parts (optional)

Spare parts kit for mixers consisting of mixer shovels, mixer arms, finger scrapers, fittings, safety bolts, and side scrapers.

Wear plates for single hatch (optional) 57 Wear plate set for single hatch mixers

Wear plates double hatch (optional) Wear plate set for double hatch mixers



#### **High-quality concrete solutions**

Many years of experience in the industry has made fibo intercon a leading supplier to the global concrete industry. We manufacture and deliver 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 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.

#### Vyborg, Russia

2 x F2200 with two Big bag silos.

The batching plants were used for the construction of the North Stream gas pipe from Vyborg in the Russian Federation to Greifswald in Germany.

The concrete specifications were to a very high documented standard, which is why the civil engineering contractor selected fibo intercon to supply the batching plants because of the high dosing accuracy and the reliability of the plants.

#### Baghdad, Iraq

A B1200 batching plant working on the reconstruction of the Iraqi parliament building. Thanks to its flexibility and mobility, the plant can fit into narrow places.



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#### **Representative:**

#### fibo intercon a/s

Herningvej 4 DK-6920 Videbaek Denmark Phone: +45 97 17 16 66

info@fibointercon.com www.fibointercon.com

