



TECHNICAL DATA SHEET



Section 1: Product Specification

1.1. Trade name

# LithoPore® Station (Plant Version)

1.2. Manufacturer

Luca Industries International GmbH  
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The **LithoPore® Station (Plant Version)** is the essential key part of the whole **LithoPore®** plant concept. It contains a three-step mixing system. The whole mixing and dosing tower contains the following components:

1.3 Slurry Mixer

The slurry mixer is preparing as a high-suspension mixer with high shearing forces the pre-mix out of water, cement, filler and other chemical additives before pumping it into the **LithoPore®** Mixer 1200.

1.4 LithoPore® Mixer 1200 with weighing scales

The **LithoPore®** Mixer 1200 is equipped with special mixing devices by Luca Industries International GmbH to avoid any shearing forces while mixing whereas ordinary planetary mixers for mortar can destroy the foam and are mostly resulting in inconsistent wet densities of the end product. Furthermore, weighing scales are also integrated to enable a precise gravimetric dosing control of water, cement, aggregates/fillers, additives and foam. The mixer's size is variable and subject to the plant's overall capacity. The mixing speed and therefore the interferential speed of the mixing devices can be regulated through a frequency inverter.

1.5 Discharge Mixer

The discharge mixer is having a sufficient capacity for minimum 1.5-2 batches of the **LithoPore®** Mixer 1200. A spiral is keeping the **LithoPore®** with its thixotropic characteristics under permanent movement and is therefore keeping its consistency. Through the secondary mixer a continuous dosing process into moulds or pouring tables can be arranged without being affected by the previous batch mixer.

1.6 General Control Panel

The **LithoPore® Station (Plant Version)** is well suitable for high scale production in a fully automatic mode.



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1.7 Foam Generator FG 4 II IND

The Foam Generator FG 4 II IND is a ready to use foaming system with integrated air system. No additional requirements are necessary to run this system.

The machine is working fully automatic, therefore no manual dilution of water and foaming agent is necessary and the foam can be produced continuously. The whole system is running at a low air pressure (100-200 mbar) and is producing a very strong foam bubble membrane. The system is developed by Luca Industries International for the worldwide unique advanced foaming agent and additive brand LithoFoam®.

The Foam Generator FG 4 II IND is equipped with a PLC from Siemens. An automatic cleaning system is also part of the machine. Thus the cleaning of the system is avoiding troublesome manual cleaning. The foam density can be adjusted precisely in accurate steps.

1.8 Networkformer Dosing System

The networkformer LithoFoam® NWF is an essential component of the LithoPore® technology, specifically for lower densities (≤ 400 kg/m³ dry density). It will be dosed through an automatic dosing system. The dosing system can be directly connected to the standard package of LithoFoam® NWF (1000 liter IBC)

1.9 Stabilizer Dosing System

The stabilizer LithoFoam® MRF is an essential component of the LithoPore® technology, specifically for lower densities (≤ 400 kg/m³ dry density). The product has to be diluted with water in a 1000 liter tank (IBC) with integrated agitator. The agitator is frequency controlled. A special high viscosity pump is dosing the stabilizer dilution into the water scale of the LithoPore® Station (Plant Version) automatically in addition to the primary water.

1.10 Water Dosing System

The LithoPore® Station (Plant Version) is equipped also with a water pump for the primary water of the cementitious slurry. It will deliver the water directly into a water scale.

Section 2: Technical Data

2.1 Powerage

LithoPore® Mixer 1200	37.00 kW
Hydraulic pump for discharge	4.00 kW
Slurry Mixer	7.50 kW
Discharge Mixer	2.20 kW
Air compressor	3.30 kW
Additional	1.00 kW
<b>Total</b>	<b>55.00 kW</b>
Voltage of mixing motor:	400 V, 50 Hz
Current	137.5 A

2.2 Slurry Mixer

Type:	High suspension mixer
Dry filling capacity:	Subject to intended mix designs
Storing / operating temperature:	+5°C to +60°C





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**2.3 LithoPore® Mixer 1200 with weighing scales**

Type:	Pan turbine mixer
Dry filling capacity:	1500 l
LithoPore® output per cycle (fresh):	1200 l
Electrical protection class:	IP 55
Capacity per hour:	10 - 20 m <sup>3</sup> /h
Guaranteed LithoPore® capacity:	12-14 m <sup>3</sup> /h
Mixing shafts speed:	21 rpm
Mixing blades:	5-7 pcs
Scraping paddles:	1-2 pcs
Weight / empty mixer	3400 kg
LithoPore® density:	200-1400 kg/m <sup>3</sup>
Storing / operating temperature:	+5°C to +60°C

**Accessories**

- 1 x Cover
- 1 x Maintenance / inspection flap
- LithoPore® mixing devices for low shearing forces
- Framing system (subject to adaptation)
- 1 x weighing scale (subject to adaptation in combination with screw conveyors for dry raw materials)
- 1 x weighing scale (subject to adaptation for water and stabilizer dosing)

**Transport dimensions LithoPore® Mixer 1200**

Diameter:	2.4 m
Height:	2.3 m
Details:	to be transported vertically on a flat rack
Storing / operating temperature:	+5°C to +60°C

**2.4 Discharge Mixer**

Type:	Spiral mixer
Dry filling capacity:	Subject to intended mix designs
Storing / operating temperature:	+5°C to +60°C

**2.5 Foaming System FG4 II IND**

Capacity:	400-500 liters / minute
Pressure:	100-200 mbar
Power:	1.2 kW
Foam density:	electronically/mechanically adjustable
Foam consistency:	electronically adjustable
Dimensions:	835 mm x 400 mm x 1500 mm
Storing / operating temperature:	+5°C to +60°C

**Low pressure air system**

Power:	1.85 kW
Voltage:	400 V
Weight:	24 kg





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**Water pump**

Power: 1.5 kW  
Voltage: 400 V  
Weight: 13.2 kg  
Speed: 2800 rpm

**Foaming agent pump**

Voltage: 24 V  
Amperage: 5 A  
Weight: 1.2 kg

**Foam Pipe**

External diameter/length: 90 mm / 450 mm  
Nominal diameter, outlet: 40 mm  
Hose: 50 mm  
Connection: C-cupling

**Automatic Cleaning System**

Water Pump  
Voltage: 24 V  
Amperage: 5 A  
Weight: 1.2 kg  
Heating System  
Power: 6.5 kW  
Maximum temperature: ≤ 50 °C

**Transport dimensions Foam Generator FG4 II IND**

Length: 1.50 m  
Width: 0.90 m  
Height: 1.70 m  
Weight: 160 kg

**Tempered foaming agent dosing**

For countries with lower temperatures it is recommended to acquire in addition from Luca Industries International GmbH a dosing vessel with integrated temperature control for the foaming agent as the optimum dosing temperature and foaming effect takes place at around 20 °C.

**Pressure compensation for water dosing**

Whenever very precise foam densities are necessary it is recommended to acquire in addition from Luca Industries International GmbH a dosing vessel for water with integrated pressure compensation.

**2.6 Networkformer Dosing System**

Power: 0.65 kW  
Voltage: 230 V  
Speed: 2800 rpm  
Weight: 6.1 kg





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**2.7 Stabilizer Dosing System**

1 x agitator, frequency controlled

1 x high viscosity pump

each:

Power	1.5 kW
Voltage:	400 V
Speed	2800 rpm
Weight:	20 kg

**Transport dimensions Stabilizer Dosing System**

Length:	1.20 m
Width:	1.00 m
Height:	1.60 m
Weight:	125 kg

**2.8 General Control Panel**

Total net weight all:	4720 kg
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**Section 3: Application**

**LithoPore® Station (Plant Version)** is only suitable for intense wet mixtures of agents as cement, fine sand, fly ash, organic and inorganic fibres etc. for densities of up to 1400 kg/m<sup>3</sup> (ready mixed material) with a maximum grain size of the raw materials less than 2 mm.

The information contained in this product specification is based on our current state of knowledge and experience. It does not free the user from making his own tests and trial applications. A legally binding assurance of certain properties cannot be inferred from this information. Any existing patent rights as well as any pertinent legal regulations must be observed by the recipient of our products under his own responsibility.

