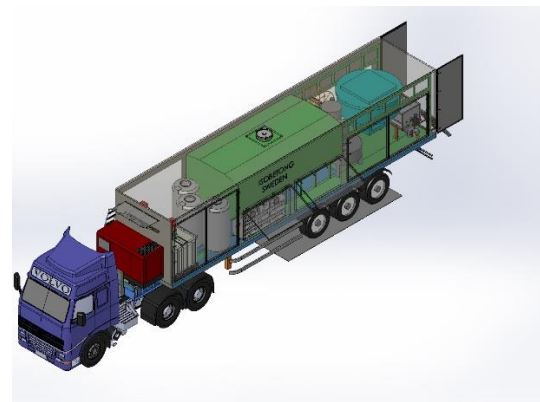
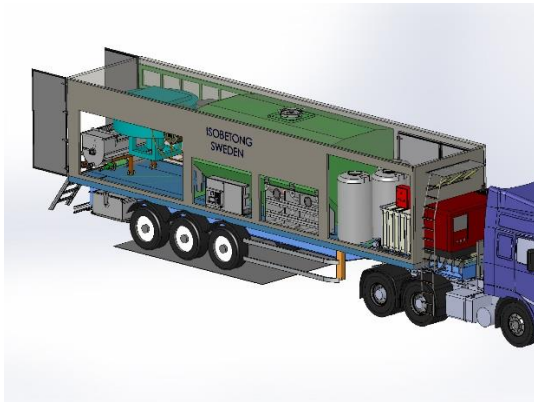




TECHNICAL DATA SHEET

LithoPore® Station (mobile truck- / trailer-based Version)

03/2017



Section 1: Product Specification

1.1. Trade name

LithoPore® Station (mobile truck- / trailer-based Version)

1.2. Manufacturer / Supplier

Luca Industries International GmbH
Phone: +49 30 457989680
Fax: +49 30 457989689
Email: info@luca-industries.com

1.3. Description / Components

The **LithoPore® Station (mobile truck- / trailer-based Version)** is a truck- / trailer-based **LithoPore®** Plant. It contains a three-step mixing system. The whole mixing and dosing tower contains the following components:

1.3.1 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 500.

1.3.2 LithoPore® Mixer 500 with weighing scales

The **LithoPore®** Mixer 500 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 mixing speed and therefore the interferential speed of the mixing devices can be regulated through a frequency inverter.

1.3.3 Discharge Mixer

The discharge mixer is having a sufficient capacity for minimum 1.5-2 batches of the **LithoPore®** Mixer 500. 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 can be arranged without being affected by the previous batch mixer.





TECHNICAL DATA SHEET

LithoPore® Station (mobile truck- / trailer-based Version)

03/2017

1.3.4 General Control Panel

The LithoPore® Station (mobile truck- / trailer-based Version) is well suitable for high scale production in a fully automatic mode.

1.3.5 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.

1.3.6 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.

1.3.7 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 (mobile truck- / trailer-based Version) automatically in addition to the primary water.

1.3.8 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.

1.3.9 Frame and structure

The whole system is mounted on a steel frame, painted with RAL 9006 silver gray:

Section 2: Technical Data

2.1 General Powerage

electrical generator 66 kW

cold starting kit (- 25°C)

Major components

LithoPore® Mixer 500	17.50 kW
Slurry Mixer	7.50 kW
Hydraulic pump for discharge	4.00 kW
Voltage of mixing motor:	400 V, 50 Hz

2.2 Slurry Mixer

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





TECHNICAL DATA SHEET

LithoPore® Station (mobile truck- / trailer-based Version)

03/2017

2.3 LithoPore® Mixer 500 with weighing scales

Type:	Pan turbine mixer
Dry filling capacity:	750 l
LithoPore® output per cycle (fresh):	500 l
Electrical protection class:	IP 55
Capacity per hour:	10 - 15 m ³ /h
Guaranteed LithoPore® capacity:	10 m ³ /h
Mixing blades:	5 pcs
Scraping paddles:	2 pcs
Weight / empty mixer	2670 kg
LithoPore® density:	150-400 kg/m ³
Storing / operating temperature:	+5°C to +60°C
Motor/mixing speed:	inverter controlled
Discharge:	hydraulic discharge gate

Accessories

- 1 x Cover
- 1 x Maintenance / inspection flap
- LithoPore® mixing devices for low shearing forces
- Framing system (subject to adaptation)
- 1 x cylindrical tank on load cells (weighing scale), stainless steel, (subject to adaptation for dry raw materials)
- 1x discharge screw conveyor, inverter controlled into slurry mixer
- 1 x cylindrical tank on load cells (weighing scale), stainless steel, (subject to adaptation for water, networkformer and stabilizer dosing)

Transport dimensions LithoPore® Mixer 500

Diameter:	1.98 m
Height:	1.345 m
Storing / operating temperature:	+5°C to +60°C

2.4 Discharge Mixer

Type:	Spiral mixer, stainless steel
Dry filling capacity:	Subject to intended mix designs (standard 1000 l)
Storing / operating temperature:	+5°C to +60°C

2.5 Pumping system

LithoPore® screw pump stator / rotor principle
Inverter-controlled for adjustable speed range from 0 to max rpm

2.6 Foaming System FG4 II IND

Foaming agent dosing tank

Polyethylene tank for LithoFoam® SL 200-L (volume 700 l), cylindrical shape
Minimum level sensor
Connection to the foam generator
Integrated heater

Foam Generator

Capacity:	350-450 liters / minute
Pressure:	100-200 mbar
Power:	1.2 kW





TECHNICAL DATA SHEET

LithoPore® Station (mobile truck- / trailer-based Version)

03/2017

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

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 doing vessel with integrated temperature control for the foaming agent as the optimum dosing temperature and foaming effect takes place at around 20 °C.

2.7 Networkformer Dosing System

2x polyethylene tank for the additive (volume 700 l each), cylindrical shape
Minimum level sensor





TECHNICAL DATA SHEET

LithoPore® Station (mobile truck- / trailer-based Version)

03/2017

Dosing by flowmeter
With integrated agitator inside the two tanks

2.8 Stabilizer Dosing System

2x dosing tank
1 x agitator, inverter 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

2.9 Water system

1x water tank (volume 600 l) right-hand side, stainless steel
1x water tank (volume 600 l) left-hand side, stainless steel
inlet filter, level sensor
drain faucet
manual hose reel for water supply line complete with 2x20 meters of tubes ¾ “

2.10 Cement feeding

bunker volume: 18 m³
1x manhole ø 500mm for the gravity load
dosing by screw conveyor (diam. 160mm) with inverter into cement scale
integrated vibrators for permanent flow
max. pressure relief valve
pipes for pneumatic loading of the cement with Storz coupling (positioned in right trailer side)
level sensor on the top of cement bunker with alarm siren

2.11 General Control Panel

Stainless steel
Dosing system by weight
LCD color display

2.12 Additional features

2.12.1 radio remote control, coded transmission, for:

start/stop pumping
start/stop cycle
manual activation of vibrator on binder compartment
hose roller in/out





TECHNICAL DATA SHEET

LithoPore® Station (mobile truck- / trailer-based Version)

03/2017

2.12.2 Pressure washer

Capacity: 15 lit/min
Pressure: 150 bar
piping 20 m, high pressure lance, flexible hose and rotating nozzle
hose reel with automatic spring re-winder
2x filter bags for filtering the washing water

2.12.3 Electrical hose reel for the LithoPore® hose

80 m of hose DN 51x68
driven by the radio remote control: in/out
complete of:
4 x 20 m plastic hose DN50
1 x 20 m rubber hose DN50

2.12.4 Polar version (optional)

Insulating box +60 °C / -20 °C
walls and top, thickness 70 mm: polyurethane between two pre-painted fiberglass layers (black color)
bottom, thickness 30 mm: marine plywood
doors to be opened on the back for all the height
doors to be opened on the sides
hatch to be opened on the top (in correspondence of the manhole for the cement)

2.12.5 WEBASTO diesel heating system

Nominal power 7.6 kW
Water version
Diesel tank (transparent)
One heating exchanger inside the foam additive tank
6x air/water exchangers for heating the vans

2.12.6 Videocamera

Videocamera on the back (for reverse driving) with video color 5

2.12.7 Waste water tank

Stainless steel tank (volume 300 l) for waste water

Section 3: Application

LithoPore® Station (mobile truck- / trailer-based 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 400 kg/m³ (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.

