

Dispergator in 20 Feet Container

G.Haiden / 02.04.2014
Information (not specified)



1. Container, description

Machinery from IKA for dissolving powder products
build in a 20" sea container
Total weight 12Mto.
controlunit with high level automation
electrical SPS control unit with visualization .
frame of Container build of steel ST 37-2; fully lacquered
high mobility, easy to transport

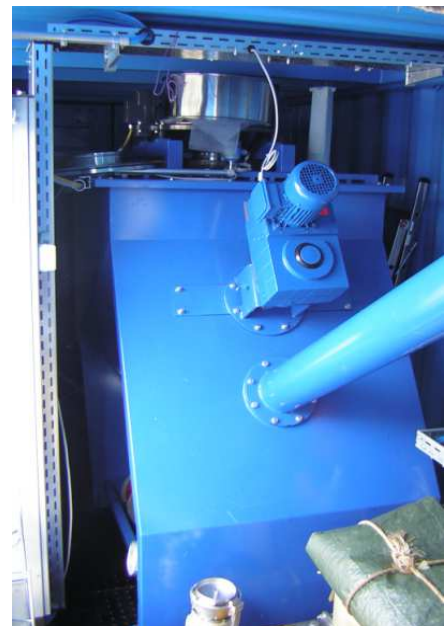
the container has several openings (on the side, on top, ...)
to connect with other equipment (e.g. tanks, mixing vessels, ...)

The machine was build in 2008 and was only working a few days for proofing the capability.

2. Dosing of powder for dissolving

high precision dosing by a screw
powder quantity: 1-5m³/h of flowable powder
1,2m³ powder reservoir of stainless steel
outlet is DN200
"stirring" unit in powder reservoir
engine for the screw
number of revolutions controlled by ac drives

sensor in reservoir for level control
safety sieve made of stainless steel
unbalanced motor for vibrations
tube with DN175 and valve
control unit for humidity



3. dosing of liquids

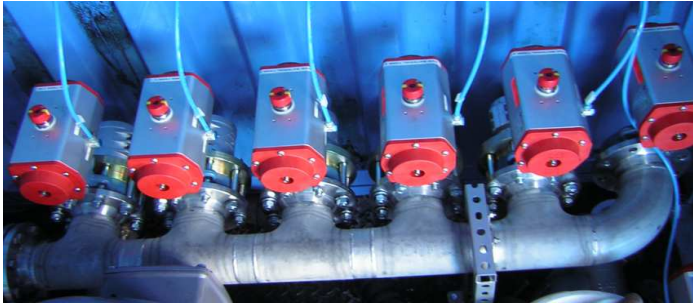
3.1 water:

Monopump; 4000-15000L/h, max. 50Pas Viscosity
5,5kW performance of engine, 230/400V, Schutzart IP65, made of stainless steel
liquid level sensor, tubes DN100
measurement of volumetric flow

tube DN80 to the Dispergator
valves are electrical - pneumatic

3.2 dosing of viscose liquids (e.g. PCE)

monopumpe; 4000-15000L/h, max. 50Pas Viscosity
monopumpe; 4000-15000L/h, max. 50Pas Viscosity
liquid level sensor, tubes DN80
measurement of volumetric flow



5 electrical-pneumatic valves; 5 tubes out,
posibility for rinsing with water

3.2 dosing of liquids in small amounts

possibility of 2 different types
pneumatic pump; max 220L/h
0,18kW performance of engines, 230/400V, made of PVDF, sealing made of
tubes DN20 to the water line, valve
valve electrical pneumatic



4 Dispergator

Dispergator IKA MHD-Plant 2000/30
Inline Mixing and Dispersing
of powder and liquids

20000L/h max. trougput of water
max. 85°C temperature,
max. 50Pas viscosity of finished solution



engine, drive with fan belt
45kW performance of the engine; at 50Hz 1500min⁻¹, Schutzart IP55,

Mixing tool; screw 1SA DN175,
Generator 2PP,
entering liquid DN88, entering powder DN175, leaving tube DN125,

special sealing technology

leaving tube DN125;
2 tubes from dispergator to e.g. mixing vessel

ByPass line to MHD; tube DN80, to waterline or monopump 2,



5 Electrical control unit

cabinet incl. HMI, Software for the control of the unit / visualization
Software (SPS)
Language German / English

Automatic program, manual program
Visualization
control of pumpes and valves,
posibility to specify the end product
alarms



6 overview, scetch

