

Bulk emulsion unit 1500 kg

Pictured machine may include options and additional equipment.

## **FEATURES**

Normet Emulsion Charging Module has capability for development and production charging. It is designed for Forcit Kemiitti K810 or Downer DBS AquaMAX 9000 modern site sensitized bulk emulsions. It has capability to deliver decoupled charges in development charging or different densities in production charging. Standard delivery includes development charging hose reel. An optional hose pusher eliminates the physical stress of manual hose handling and makes production charging fast. Graphical user interface is standard enabling ergonomical and fast operation. Different tank capacities cover matrix payloads of 1,5 ton and 3 tons. Payload is optimized for Normet Charmec underground mining carriers.

- Safety. Low and high pumping pressure, high temperature and no flow are used to stop process and reason for it
  is indicated in graphical user interface on man lifting basket. User interface has different access levels enabling
  safe use starting from limited access of base operating to full access of service and maintenance.
- Ergonomy. Graphical user interface with radio control creates ergonomic user environment. Development hose
  reel drives mechanically charging hose in development charging. Hose pusher eliminates heavy work in production charging.
- **Productivity.** Pumping system has capability up to 95 kg/min matrix delivery which allows convenient and fast charging work to production holes up to diameter of 102 mm.
- Accuracy. Charging system can be calibrated to accuracy +/- 5%. Closed loop control system enables fast and accurate process control among other if ambient temperature changes.
- Reporting and data transferring. Development and production charging reports are based on JSON standard.
   USB based data delivery comes with standard and WLAN data transfer is optional.



# Technical specification

#### STANDARD DELIVERY

Emulsion mixing and pumping unit
Face charging reel
Radio control for charging
Frame process lines from charging kit to hose reel
Process control box in basket

## **MATRIX CAPACITY**

1500 kg

# **MATRIX DELIVERY RATE**

10 - 95 kg/min

#### **PRODUCT TYPES**

Forcit Kemiitti K810, DBS AquaMAX 9000

## **CONTROL SYSTEM**

NorSmart CAN bus control. Graphical user interface. Radio control for all functions. Online process and fault diagnostics

# **REPORTING**

JSON based round reporting

# **DATA TRANSFER**

**USB** 

## **OPERATING ENERGY NEED**

Load sense hydraulics max 80 I/min, 130 bar depending on options. Electrical supply 10 A, 24 VDC

## **ELECTRICAL SYSTEM**

Exposed components are min IP 65 standard. Wire harness are self-extinguishing with tinned wires and water tight conduits

# **CARRIERS**

Standard module is suitable for machines where emulsion module is located in the center of the machine:

- Normet Charmec 1605 and 1610 front cabin
- SF 405/505, MF 505/605

# Optional equipment

# **MATRIX CAPACITY**

3000 kg

# Additional equipment

#### **CHARGING SYSTEM**

Hose pusher and reel for production charging Acetic acid additive dosing system Different charging hoses Matrix re-filling pump: 200 kg/min Matrix tank level sensor Electrical operation with power pack

## **EMULSION HOSES**

For production charging

40/32.6, 30 m or 60 m

## **CARRIERS**

**Rear mounting kit** Installation kit for machines where emulsion module is located at the rear end of the machine. Includes:

- hook mounting
- frame for support legs
- bumber and lights
- service/cover hatches

## Ready designed for:

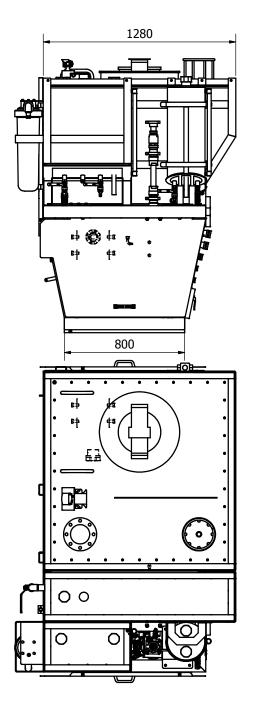
- Normet Charmec 1605 and 1610 center cabin
- MC/LC 605
- RM-carrier
- · Others on request

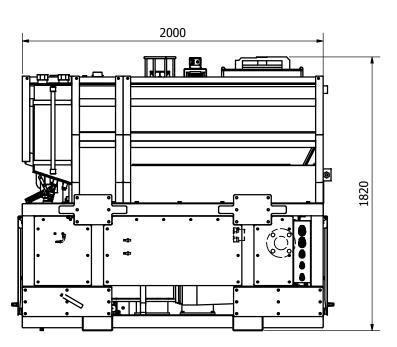
# **DATA TRANSFER**

WLAN



# **Dimensions**





# BULK EMULSION UNIT, 1500 kg matrix capacity

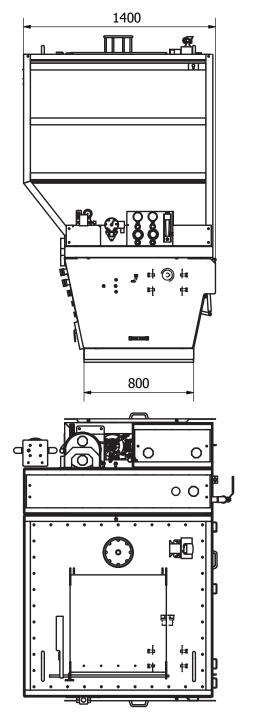
Weight

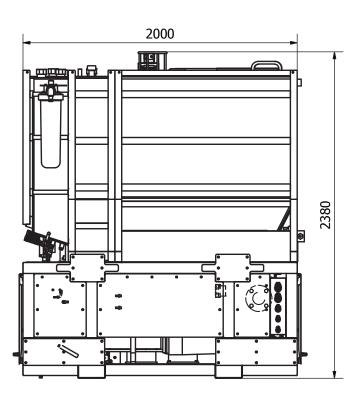
emptyloaded1450 kg3320 kg

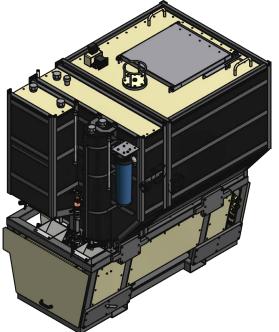


# **Emulsion Charging Module**

# **Dimensions**







# BULK EMULSION UNIT, 3000 kg matrix capacity

Weight

empty 1565 kgloaded 5300 kg





Charmec SF 405 D with 1.5 ton module



Charmec MF 505 D with 1.5 ton module





Charmec MF 605 D with 1.5 ton module



Charmec MC 605 D with 1.5 ton module





Charmec LC 605 D with 3 ton module



Charmec RM 905 VEC with 3 ton module