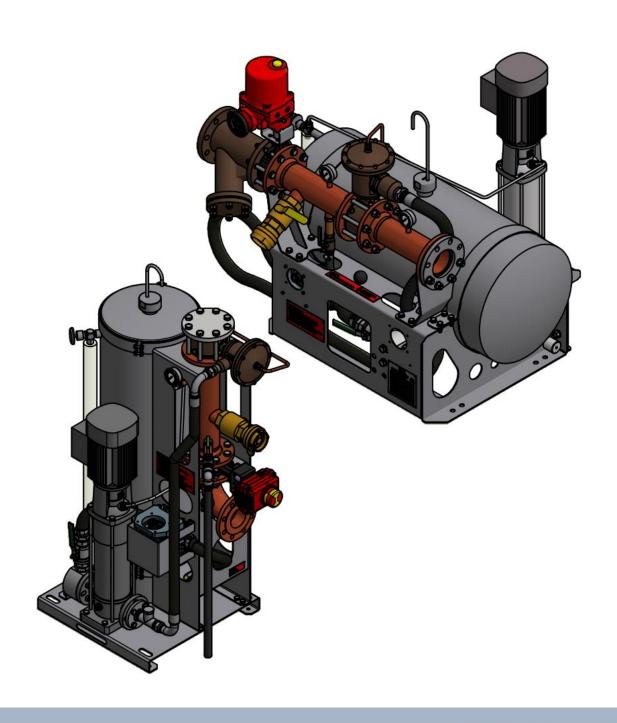


# Datasheet for

# MATRE FOAM SKID FOR POP-UP SYSTEM M-SKD30



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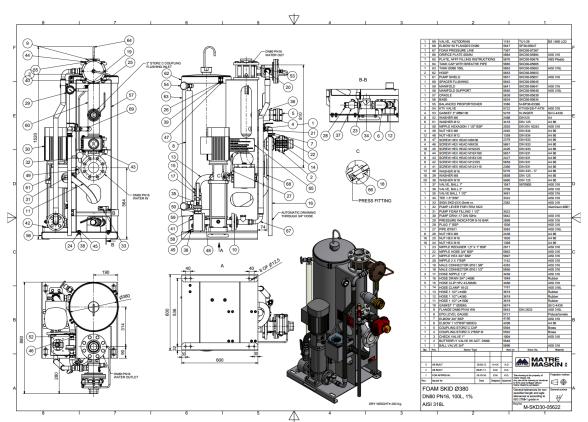


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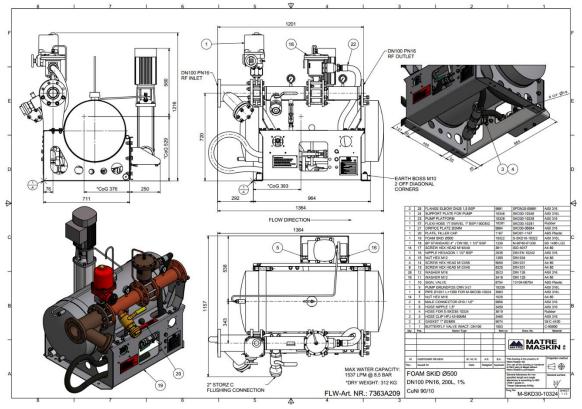
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# 1. Standard designs



Figur 1 - Vertical skid - DN80

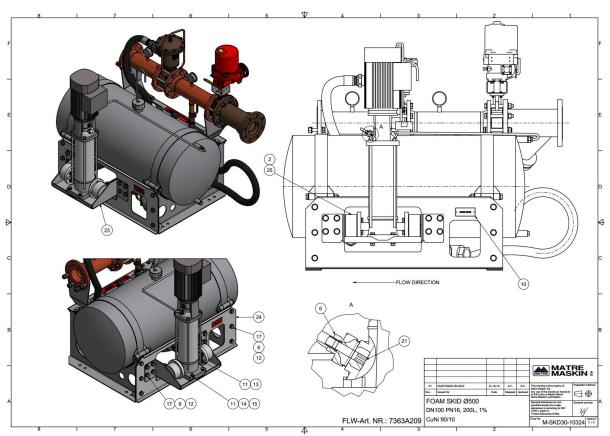


Figur 2 - Horizontal skid – DN100 - Sheet 1of2

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Figur 3 - Horisontal skid – DN100 - Sheet 2of2

#### 1.1 General description

This system is a compact unit designed to insert an exact rate of foam concentrate directly into the firewater. It is using a built in pump for foam supply to the balanced proportioner. System requires only hookup to water piping and power line signal from control panel to the actuator valve on water inlet and the foam pump. This system is mainly designed for Matre Pop-up nozzles, but is also suitable for installing to other applications.

#### 1.2 Design description

The systems can carry either a 100L, 200L or 300L foam tank, depending on skid type and water interface size.

Calibrated to 1% insertion rate.

# 1.3 System description

Main components are the tank for foam concentrate, the foam pump and a Matre balanced foam proportioner. When the water flow and the foam pump is activated the pump insert the foam into the balanced proportioner, which will insert the foam into the water flow at a preset, calibrated rate of 1%. Foam pump is selected to create a min. 1 bar higher pressure than the water pressure.

An actuator valve will activate the system down during continues running of fire pumps. The control panel also operated the foam pump simultaneously with the actuator. Foam insertion can be shut off for test run, by the deactivation of the foam pump.

One operation panel and one or more remote control panels can be placed indoor or outdoor according to applicable rules and requirements.

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# 2. General product features:

Characteristics	Standard	Options	
Material:	AISI 316	CuNi 90/10	
Interface for water supply:	DN80 PN16 (Vertical skid) DN100 PN16 (Horizontal skid)		
Foam tank (atmospheric):	100L (Vertical skid) 200L (Horizontal skid)	300L	
Design pressure (water):	16 bar		
Foam concentrate refilling pump:	0,7L/stroke		
Test pressure:	24 bar		
Insertion rate:	1% (Within 1% - 1,3%) (Tolerance according to NFPA 11)	Tolerances ± 10%	
Skid capacity: DN80: DN100:	600-2900 l/min 1060-3000 l/min		
Flow tolerances:	Nominal value ± 5%		
Design temperature	-20°C - +60°C		
Minimum pressure loss: DN80: DN100:	0,02 – 2,4 bar 0,02 – 0,6 bar (200L foam tank)	(0,02 – 1,6 bar, 300L Foam tank)	
Footprint: Vertical skid: Horizontal skid:	Ca. 600*600 mm Ca. 711*964 mm		
Dry wheight: Vertical skid DN80: Horizontal skid DN100:	Ca. 203 kg (AISI 316) Ca. 312 kg (CuNi 90/10)		
Foam pump power: DN80: DN100:	220 V, 50 Hz 3*230/400 V, 50 Hz	3*230/400 V, 50 Hz	



### 3. Main components

- Skid for installation to the deck carrying all components.
- Ventilated tank with level gauge and drain valve for foam concentrate. Sizes: 100L, 200L or 300L.
- Manual pump for foam concentrate refilling.
- Actuator valve to start or shut down system.
- Foam pump to deliver the foam to the proportioner.
- Pressure indicators at inlet and/or outlet of balanced proportioner to monitor pressure and pressure loss.
- Balanced proportioner size DN80 or DN100 designed and calibrated to any flow- and insertion rate.
- Ball valves to shut of filling pump and foam insertion.

# 4. Testing and certification

- Leakage test (tank)
- Pressure test (water line)
- Performance test.
- Pump performance test.
- Material certificates.
- Welding documentation
- Certificate of conformity

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