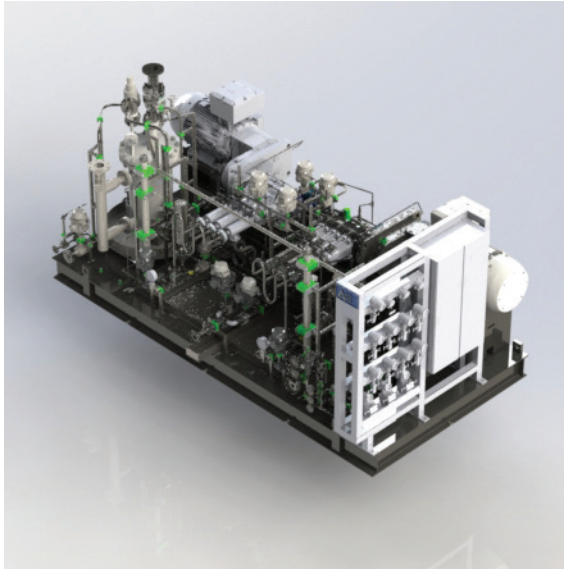


# Model MSP-GU

## Medium Flow/High Pressure Pumps for Marine Applications



### Specifications

<b>Flow Rate</b>	1 – 10 m <sup>3</sup> /h
<b>Pressure</b>	200 – 414 bar
<b>Suction Pressure Req'd</b>	4 bar (above saturation pressure)
<b>Power Required</b>	50 – 150 t

Model	Dimensions (LxWxH)	Weight
DNS-100	4700mm x 2300mm x 2000mm	9000 kg
DNS-150	4700mm x 2300mm x 2000mm	9000 kg
DNX-100	4700mm x 2300mm x 2000mm	11000 kg
DNX-150	4700mm x 2300mm x 2000mm	11000 kg
DVX-100	4700mm x 2300mm x 2200mm	13000 kg
DVX-150	4700mm x 2300mm x 2200mm	13000 kg
SNS-100	3300mm x 2300mm x 2000mm	7000 kg
SNS-150	3300mm x 2300mm x 2000mm	7000 kg
SNX-100	3300mm x 2300mm x 2000mm	9000 kg
SNX-150	3300mm x 2300mm x 2000mm	9000 kg
SVX-100	3300mm x 2300mm x 2200mm	11000 kg
SVX-150	3300mm x 2300mm x 2200mm	11000 kg

Consult Nkkiso ACD engineering to confirm available sizes and ratings.

### Features & Benefits

- Electric drive system for simple and reliable flow control (no HPU required)
- Total system redundancy
  - 100% pump redundancy
  - 100% valve and instrumentation redundancy
  - 100% drive system redundancy (motors and VFDs)
- Up to 10-to-one turndown ratio
- Compact foot print for ease of installation and reduced space claims

### High Pressure Fuel Pump System

- Over 50 LNG fueled ships operate with ACD pumps, more than any other brand
- Class approvals ABS, BV, DNV, LR
  - Designed for all shipboards applications
  - Meets all ME-GI requirements
  - MSP-GU and MSP-SL marine pumps are derived from over 40 years in Enhanced Oil Recovery applications, the most strenuous and demanding of any HP pump application.
  - MSP-GU and MSP-SL pumps are built in the USA and the systems are assembled in either Korea or China, depending on the customer's location and needs

### Typical Scope of Supply

- High pressure pumps, gearbox or beltbox, and electric motors on a common steel skid.
- Forced lubrication system for longer lifetime for pump drive operation
- All necessary valves and instrumentation for proper functionality and classification society compliance.
- Variable Frequency Drives for high pressure pump motors
- Several standard options are available upon request including Control Panels, High Pressure Control Valves, and spare components.