



# Mine Dewatering Pumps

For Mine-shaft Applications

**Boost mine uptime while reducing maintenance costs**

Flowserve offers a range of high-pressure, ring section pumps capable of handling the head and flow requirements of mine shaft dewatering. These pumps are engineered to increase mean time between failures (MTBF) with reduced maintenance and repair costs.

### NMDW dewatering pump

Designed specifically for mine-shaft dewatering, the NMDW pump is equipped to handle amounts and types of solids that regularly damage lesser rivals. With sustainable solids-handling capabilities up to 100 microns ( $\mu\text{m}$ ) in a Class 1 slurry application, the NMDW pump is capable of withstanding occasional settling upsets for solids handling up to 200  $\mu\text{m}$ .

The site will operate longer with reduced cost of maintenance. This durable multistage pump has been engineered to increase MTBF. It features a robust design with hardened surface materials and larger clearances to reduce wear and minimize NPSH requirements. All components are designed for easy disassembly and reassembly to dramatically reduce downtime.

Type	Class 1: Fine silica sand
Concentration	25–100 g/L (25 000–100 000 ppm)
Solid Size	50–200 $\mu\text{m}$ (0.002–0.0079 in)
pH	7 $\pm$ 1
Max. Pressure	45 bar (650 psi)
Max. Head	455 m (1500 ft)



### Superior performance for light slurry applications

- Up to 6 percent slurries (by volume)
- Suspended solids (silica) specific gravity to 2.65
- Nominal particulate sizes up to 100  $\mu\text{m}$
- Occasional upsets to 200  $\mu\text{m}$  particles

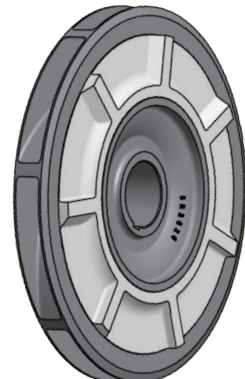
### Rotor hydraulic balancing — less wear, longer life

The NMDW features integrated counter vane expeller technology for:

- Self-balancing impellers
- Minimized axial forces

It eliminates:

- Balance drum system
- Pressure-equalizing holes



## Other dewatering solutions from Flowserve

While the NMDW pump manages the widest range of solids at the lowest lifecycle cost, Flowserve offers a family of solutions to address specific dewatering challenges. Contact your representative to determine which option is right for your application.

### MS Series

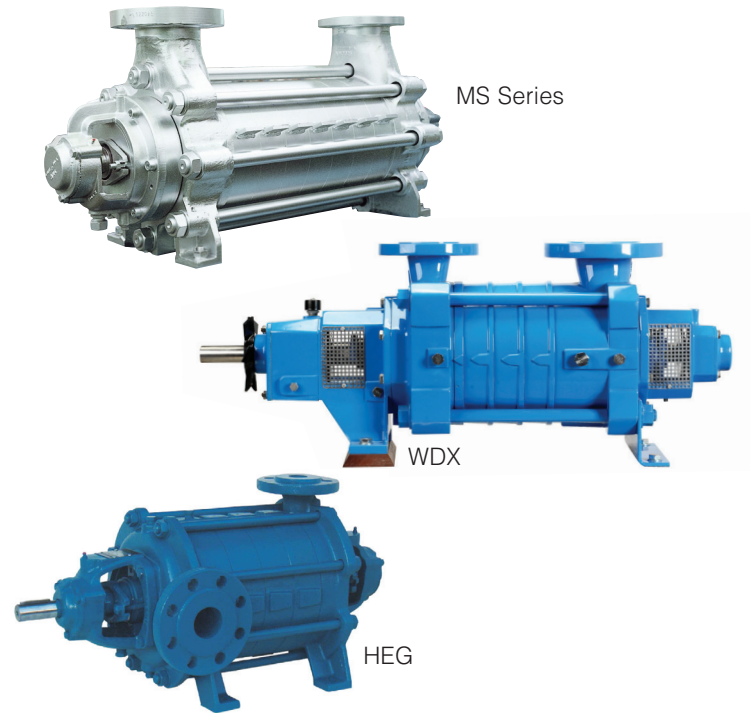
For applications requiring higher pressure ratings and flow capabilities.

### WDX

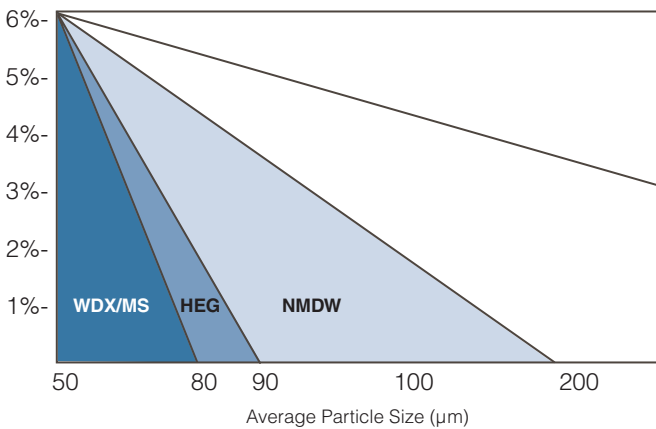
A tough, durable pump for applications with lower flow rates.

### HEG

A cost-effective alternative for lower-pressure applications.



## Class 1 Slurry Concentration by Volume %



## Typical Operating Parameters

	NMDW	HEG	WDX	MS Series
Max. Flow	700 m <sup>3</sup> /h (3080 gpm)	145 m <sup>3</sup> /h (638 gpm)	190 m <sup>3</sup> /h (800 gpm)	450 m <sup>3</sup> /h (1981 gpm)
Max. Head	455 m (1500 ft)	390 m (1280 ft)	760 m (2500 ft)	1600 m (5250 ft)
Max. Pressure	45 bar (650 psi)	40 bar (580 psi)	75 bar (1090 psi)	160 bar (2320 psi)
Max. Temperature	140°C (285°F)	194°C (380°F)	210°C (410°F)	180°C (356°F)

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