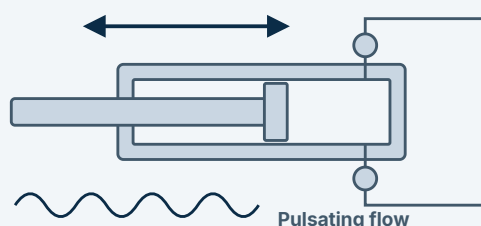


COMPARISON

# Pitot tube pump or plunger pump?

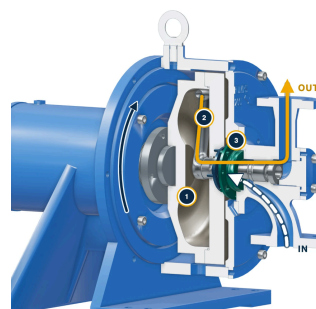
A plunger pump builds pressure with back-and-forth strokes. A pitot tube pump builds head with continuous rotation. The difference shows up in pulsation, wear parts and maintenance.

## Plunger pump



Plungers move back and forth in cylinders. Suction and discharge valves open and close on every stroke, so the liquid arrives in pulses.

## EHIK pitot tube pump



The rotor spins the liquid, and a fixed pickup tube turns its speed into pressure. Delivery is continuous, with no valves or plungers in the liquid path.

|                                 | EHIK PITOT TUBE PUMP                                                        | PLUNGER PUMP                                                           |
|---------------------------------|-----------------------------------------------------------------------------|------------------------------------------------------------------------|
| <b>Delivery</b>                 | Continuous, with very little pulsation                                      | Pulsating; pulsation dampeners are often needed                        |
| <b>Wear parts in the liquid</b> | Pickup tube, rotor and mechanical seal                                      | Plungers, packing or seals, and suction and discharge valves           |
| <b>Piping and supports</b>      | Little pulsation passes into the piping                                     | Pulsation and vibration must be allowed for in the piping and supports |
| <b>Flow control</b>             | Variable speed or the outlet valve                                          | Speed or stroke adjustment; a bypass return is also common             |
| <b>Pressure</b>                 | Up to 1,050 m (3,445 ft) head; up to 1,500 m (4,921 ft) as a special design | Can reach much higher pressures                                        |
| <b>Metering</b>                 | Not a metering pump                                                         | Suitable for accurate metering and dosing                              |
| <b>Viscosity</b>                | Up to 250 cSt (about 1,160 SSU), best below 100 cSt                         | Also handles viscous liquids                                           |

# Plunger pumps EHIK has replaced

EHIK pumps have replaced plunger pumps in customer plants. These are two of them.



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## Hot-water well cleaning

An EHIK pump skid did the work of a plunger-pump hot-washing truck. It cleaned more than 100 wells, with 30 litres (7.9 US gal) less fuel per well and two fewer crew members.



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## Ammonium nitrate wastewater

EHIK replaced a plunger pump in ammonium nitrate wastewater service.

## Why plants replace a plunger pump

### Frequent maintenance

Valves, plungers and packing need regular replacement, and each repair stops the pump.

### Pulsation

Pressure pulses shake the piping and make a steady feed harder to hold.

### Leakage after wear

Worn packing and seals start to leak.

### Falling pressure

As valves and plungers wear, the pump can no longer hold the pressure.

## When a plunger pump is still the better choice

### Higher pressures

If the duty needs more pressure than the pitot tube pump range, a plunger pump is the right type.

### Accurate metering

For exact dosing, choose a metering pump.

### Viscous liquids

Above 250 cSt, the liquid is outside the pitot tube pump range.

**Tell us what keeps failing.**

We reply within 1 business day.

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