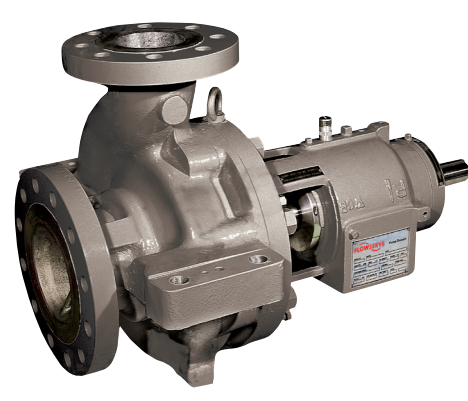


## OVERHUNG



### API PROCESS

HPX, PHL, ERPN, PVXM, HWMA, PVML, MSP, HWX

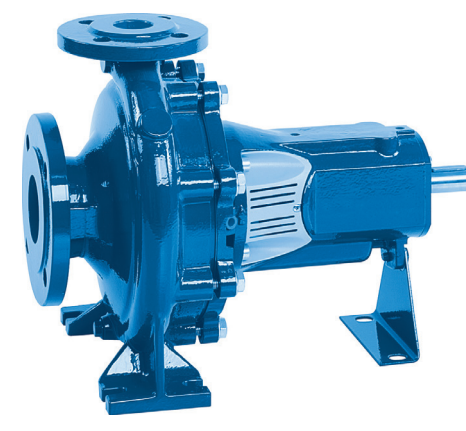
- Flows to 3000 m<sup>3</sup>/h (13 200 gpm)
- Heads to 900 m (2955 ft)
- Pressures to 80 bar (1160 psi)
- Temperatures from -160°C to 450°C (-250°F to 842°F)



### CHEMICAL PROCESS — ASME, ISO

ASME (ANSI): Mark 3™, Mark 3 Group 4, Guardian, TB-MAG™  
ISO: Mark 3 ISO, TB-MAG, CBE, CBM, CBT

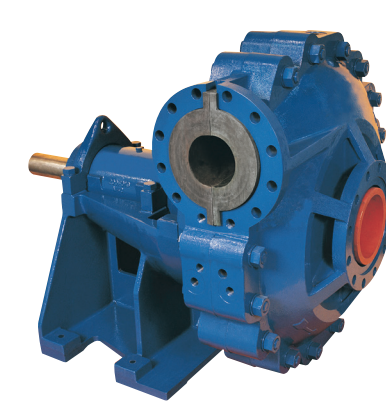
- Flows to 4540 m<sup>3</sup>/h (20 000 gpm)
- Heads to 220 m (720 ft)
- Pressures to 27 bar (400 psi)
- Temperatures to 400°C (750°F)



### INDUSTRIAL PROCESS

D800, ME, MEN, DS, ZLN, ZTN, ZEN, DBS, SMP, F-Line, MVE, FRBH

- Flows to 9085 m<sup>3</sup>/h (40 000 gpm)
- Heads to 250 m (820 ft)
- Pressures to 40 bar (580 psi)
- Temperatures to 230°C (446°F)



### SLURRY

R, M, LC, Titan Slurry™

- Flows to 10 000 m<sup>3</sup>/h (44 000 gpm)
- Heads to 90 m (300 ft)
- Pressures to 40 bar (580 psi)
- Temperatures to 140°C (285°F)



### SOLIDS HANDLING

MN, MNV, MF, MFV, MPT, MSX

- Flows to 45 500 m<sup>3</sup>/h (200 000 gpm)
- Heads to 90 m (300 ft)
- Pressures to 5 bar (72 psi)
- Temperatures to 75°C (165°F)



### AXIAL FLOW

AFH9000

- Flows to 34 065 m<sup>3</sup>/h (150 000 gpm)
- Heads to 11 m (36 ft)
- Pressures to 10.3 bar (150 psi)
- Temperatures to 149°C (300°F)

## BETWEEN BEARINGS



### DOUBLE-CASE — MULTISTAGE

CSB, CHTA, HDB, HSB, WXB, WXBB, BP, WCC, HDO, HSO, WIK, WIKO

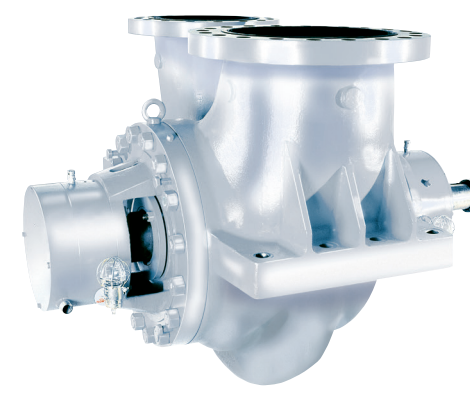
- Flows to 5225 m<sup>3</sup>/h (23 000 gpm)
- Heads to 7000 m (23 000 ft)
- Pressures to 1000 bar (14 500 psi)
- Temperatures to 425°C (800°F)



### SINGLE-CASE — RADIALLY SPLIT — MULTISTAGE

WD, WDX, WX, CSX, WXH, WXM, MSL, MSM, MSC, MSH, HEGA, UEA, TKH

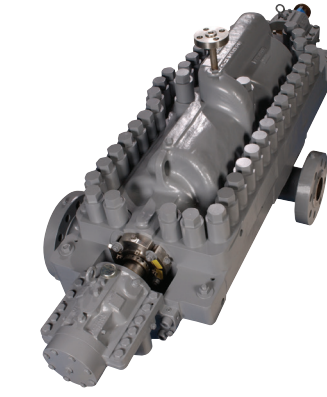
- Flows to 3000 m<sup>3</sup>/h (13 210 gpm)
- Heads to 2650 m (8700 ft)
- Pressures to 310 bar (4500 psi)
- Temperatures to 250°C (480°F)



### SINGLE-CASE — RADIALLY SPLIT

HDX, DVSR, HED, WTB

- Flows to 6585 m<sup>3</sup>/h (29 000 gpm)
- Heads to 1100 m (3610 ft)
- Pressures to 260 bar (3750 psi)
- Temperatures to 450°C (842°F)



### SINGLE-CASE — AXIALLY SPLIT — MULTISTAGE

DMX

- Flows to 5621 m<sup>3</sup>/h (24 750 gpm)
- Heads to 2620 m (8600 ft)
- Pressures to 275 bar (4000 psi)
- Temperatures to 204°C (400°F)



### SINGLE-CASE — AXIALLY SPLIT

LR, LNN, DVSH, LPN, UZDL

- Flows to 30 000 m<sup>3</sup>/h (132 000 gpm)
- Heads to 685 m (2250 ft)
- Pressures to 150 bar (2175 psi)
- Temperatures to 204°C (400°F)

## VERTICAL



### DEEP-WELL SUBMERSIBLE MOTOR

Pleuger® SUBM, Byron Jackson® SUBM, Geothermal SUBM

- Flows to 6000 m<sup>3</sup>/h (26 415 gpm)
- Heads to 800 m (2625 ft)
- Motor sizes to 5000 kW (6700 hp)



### WET-PIT

WUJ, VTP, QL, QLQ, Barge VTP, Molten Salt VTP

- Flows to 25 000 m<sup>3</sup>/h (110 000 gpm)
- Heads to 2000 m (6560 ft)
- Pressures to 200 bar (2900 psi)
- Temperatures to 600°C (1100°F)
- Settings to 365 m (1200 ft)

AFV, VCT

- Flows to 181 700 m<sup>3</sup>/h (800 000 gpm)
- Heads to 110 m (350 ft)



### DOUBLE-CASE

QLC, QLQC, VPC, WUC, APKD

- Flows to 25 000 m<sup>3</sup>/h (110 000 gpm)
- Heads to 2000 m (6560 ft)
- Pressures to 200 bar (2900 psi)
- Temperatures from -200°C to 350°C (-328°F to 660°F)



### SLURRY

MJ, MJC, RJ, RJC, Terra-Titan™

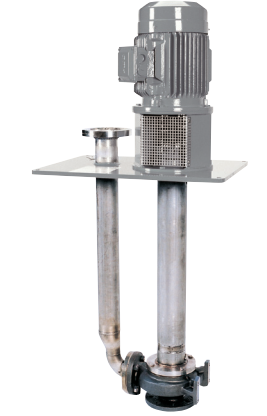
- Flows to 1350 m<sup>3</sup>/h (6000 gpm)
- Heads to 45 m (150 ft)
- Pressures to 10 bar (150 psi)
- Temperatures to 110°C (225°F)



### SOLIDS HANDLING

MVX

- Flows to 17 000 m<sup>3</sup>/h (75 000 gpm)
- Heads to 40 m (130 ft)



### SUMP

CPXV, ESP3, VGRP, ECPJ

- Flows to 1400 m<sup>3</sup>/h (6160 gpm)
- Heads to 250 m (820 ft)
- Pressures to 25 bar (365 psi)
- Temperatures to 400°C (752°F)

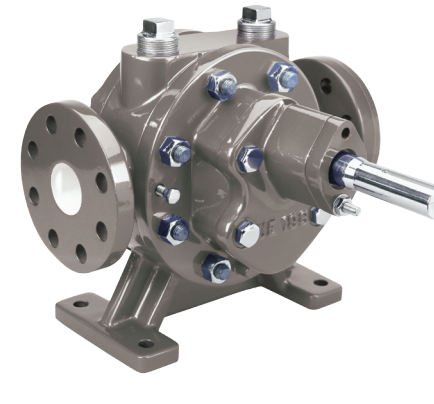
## POSITIVE DISPLACEMENT



### DIAPHRAGM

CT6

- Flows to 4 m<sup>3</sup>/h (18 gpm)



### GEAR

GEAREX, GR, GA

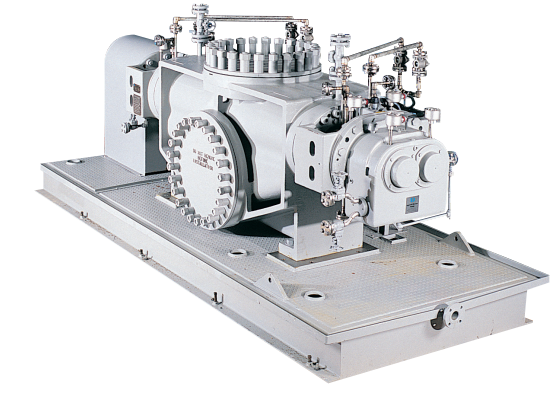
- Flows to 275 m<sup>3</sup>/h (1200 gpm)
- Pressures to 35 bar (500 psi)
- Temperatures from -50°C to 450°C (-60°F to 842°F)
- Viscosities to 20 000 cP



### MULTIPHASE TWIN SCREW

MP1

- Flows to 2255 m<sup>3</sup>/h (9617 gpm)
- Pressures to 50 bar (720 psi)
- Temperatures to 450°C (842°F)
- Viscosities to 8000 cP
- GVF to 100%



### TWIN SCREW

TSP

- Flows to 2550 m<sup>3</sup>/h (11 200 gpm)
- Pressures to 100 bar (1450 psi)
- Temperatures to 450°C (850°F)
- Viscosities to 55 million cP

## VACUUM PUMPS & COMPRESSORS



### LIQUID RING VACUUM

LEM, LEL, LEH, LPH

- Suction capacity to 12 000 m<sup>3</sup>/h (7063 cfm)
- Suction pressure from 33 to 1013 mbar (24.7 to 760 torr)



### LIQUID RING COMPRESSORS

KPH

- Suction capacity to 11 000 m<sup>3</sup>/h (6475 cfm)
- Compression pressure from atmospheric to 12 barg (174 psig)



### DRY VACUUM

Dry, Boost

- Suction capacity to 8000 m<sup>3</sup>/h (4800 cfm)
- Ultimate pressure to <0.001 mbar (<0.0007 torr)



### ENGINEERED SYSTEMS

PL, PM, PK

- Suction capacity to 100 000 m<sup>3</sup>/h (6475 cfm)
- Suction pressure from 10<sup>-3</sup> mbar (7x10<sup>-4</sup> torr) to atmospheric
- Compression pressure from atmospheric to 12 barg (174 psig)

## SIDE CHANNEL



### SIDE CHANNEL

CEH, AEH, AKH, AOH, ASH, ADH, SC, SMX, CEB, DRV, AKL, AKV, PCX

- Flows to 35 m<sup>3</sup>/h (154 gpm)
- Heads to 400 m (1312 ft)
- Pressures to 100 bar (1450 psi)
- Temperatures to 180°C (356°F)

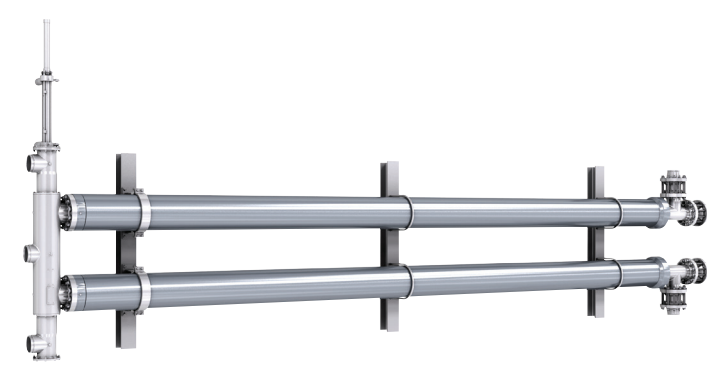
## SPECIALTY



### NUCLEAR

N-Seal, DFSS/DVSS, WDF, CN, CA, RLJ, CAM, EG, EB, MEV, LBSZ, KBSZ, KSCZ

- Primary pumps and seals
- All safety-related services
- Service water
- All BOP — reactor feed, condensate and circulating water



### ENERGY RECOVERY DEVICES

ERT

- Flows to 1200 m<sup>3</sup>/h (5280 gpm)
- Efficiency to 90%

DWEER™

- Brine flows to 350 m<sup>3</sup>/h (1.4 MGD) per unit
- Efficiency to 98%



### CONCRETE VOLUTE PUMP

CVP (BSV and BCV)

- Flows to 200 000 m<sup>3</sup>/h (800 000 gpm)
- Heads to 60 m (197 ft); custom designs to 90 m (295 ft)



### HYDRAULIC DECOKING SYSTEMS

AutoShift™, Rotary Joint, Jet Pump, Decoking Control Valve

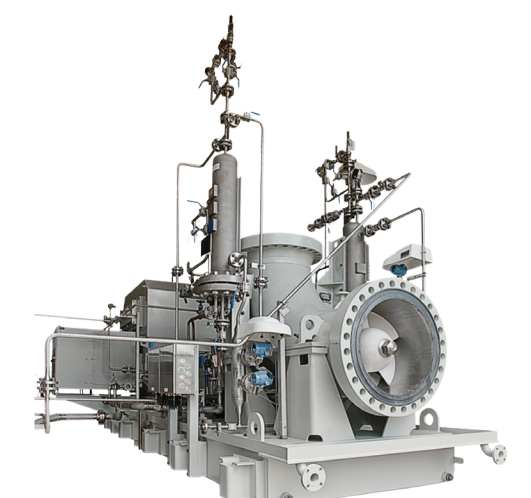
- ISO 13709/API 610 (B85) jet pump train
- Coke cutting system
- Automation, controls and instrumentation



### AZIMUTHING THRUSTER

WFSD

- Custom-engineered propulsion units for:
  - Semi-submersible rigs
  - FPSOs
  - Drill ships
  - Crane and pipelay vessels
  - Research and other offshore ships



### POLYOLEFIN REACTOR

AFH9500

- Flows to 18 180 m<sup>3</sup>/h (80 000 gpm)
- Heads to 40 m (131 ft)
- Pressures to 100 bar (1450 psi)
- Temperatures to 349°C (660°F)