Pump Features and Selection

**4600CE**

1. Case
2. Impeller
3. Bearing Housing
4. Wear Plate
5. Backplate
6. Bearing Cap
7. Shaft
8. Lockscrew, Impeller
9. Shaft Sleeve
10. Split Gland
11. Lantern Ring*
12. Thrust Bearing
13. Bearing Cap
14. Case Gasket
15. Oil Seal
16. Radial Bearing
17. Oil Seal
18. Snap Ring
19. Slinger
20. Sleeve Gasket (O-Ring)
21. Bearing Cap Gasket
22. Case Gasket (O-Ring)
23. Sleeve Gasket – Slinger (S&M)
24. Case Gasket (O-Ring)
25. Packing Ring*
26. Shaft Key
27. Collet
28. Sleeve Drive Key

* Not shown

**4700E**

2. Case
3. Impeller
4. Backplate and Packing Housing
5. Bearing Housing
6. Bearing Cap
7. Shaft
8. Lockscrew, Impeller
9. Impeller Key
10. Case Gasket
11. Lantern Ring*
12. Packing Ring*
13. Split Gland
14. Shaft Sleeve
15. Sleeve Gasket – Slinger (S&M)
16. Bearing Cap Gasket **
17. Oil Seal
18. Thrust Bearing
19. Radial Bearing
20. Snap Ring
21. P Plug

*Not shown
** Outboard gaskets not shown
History and Development

Fairbanks Nijhuis™ Pump leads the industry in innovative pump engineering and manufacturing with a complete line of solids handling pumps including the 5400, 5700, 2400 and VTSH Series for raw sewage, return activated, waste activated, mixed liquor and other process liquids with solids concentration up to 3%.

The 4500C and 4600 CE Series hard metal vortex pump handles flows from 50 – 3,000 GPM and heads to 200 feet using a fully recessed impeller ideally suited for grit applications with higher concentrations of solids and sludge.

Fairbanks Nijhuis Vortex Pumps

Model 4500C heavy duty, slow speed high chrome iron (nominal 650 Brinell) pump with fully recessed cupped type vortex impeller with two-piece case and removable wear plate.

- Sizes 2", 3", 4", 6", 8" discharge with various optional suction sizes
- Flow rates to 3,000 gallons per minute
- Head to 140 feet

Model 4600CE standard duty pump with high chrome iron liquid end, with fully recessed vortex impeller pump and replaceable high chrome iron wear plate.

- Sizes 2", 3", 4", 6" discharge
- Flow rates to 1,400 gallons per minute
- Head to 160 feet

Model 4700E cast iron fully recessed vortex pump with one-piece casing (other alloys are available).

- Sizes 2", 3", 4", 6" discharge
- Flow rates to 1,800 gallons per minute
- Head to 200 feet

NoseCone™

Our NoseCone kit protects your impeller hardware against erosion, corrosion and abrasion. This makes removal of the impeller far easier, reduces downtime and minimizes the need to replace these components when the pump impeller is removed for service. NoseCone also enhances hydraulic efficiency by providing a smoother passage of pumped fluid at the impeller hub.

Package Options

Fairbanks Nijhuis can supply many different drive configurations with your vortex pump, including motors, V-belt drive or direct coupling drive. Mounting arrangements include overhead, in-line or side-by-side configuration.

Fairbanks Nijhuis Pump

In addition to our vortex pumps, Fairbanks Nijhuis manufactures a broad range of pumps for public works and industrial installations, including dry pit and submersible solids handling, chopper, vertical lineshaft and submersible turbine, mixed-flow and axial-flow propeller pumps, horizontal and vertical splitcase, a complete line of FM-approved and UL Listed fire pumps (both electric motor and diesel engine driven) and domestic jet and submersible well pumps.