

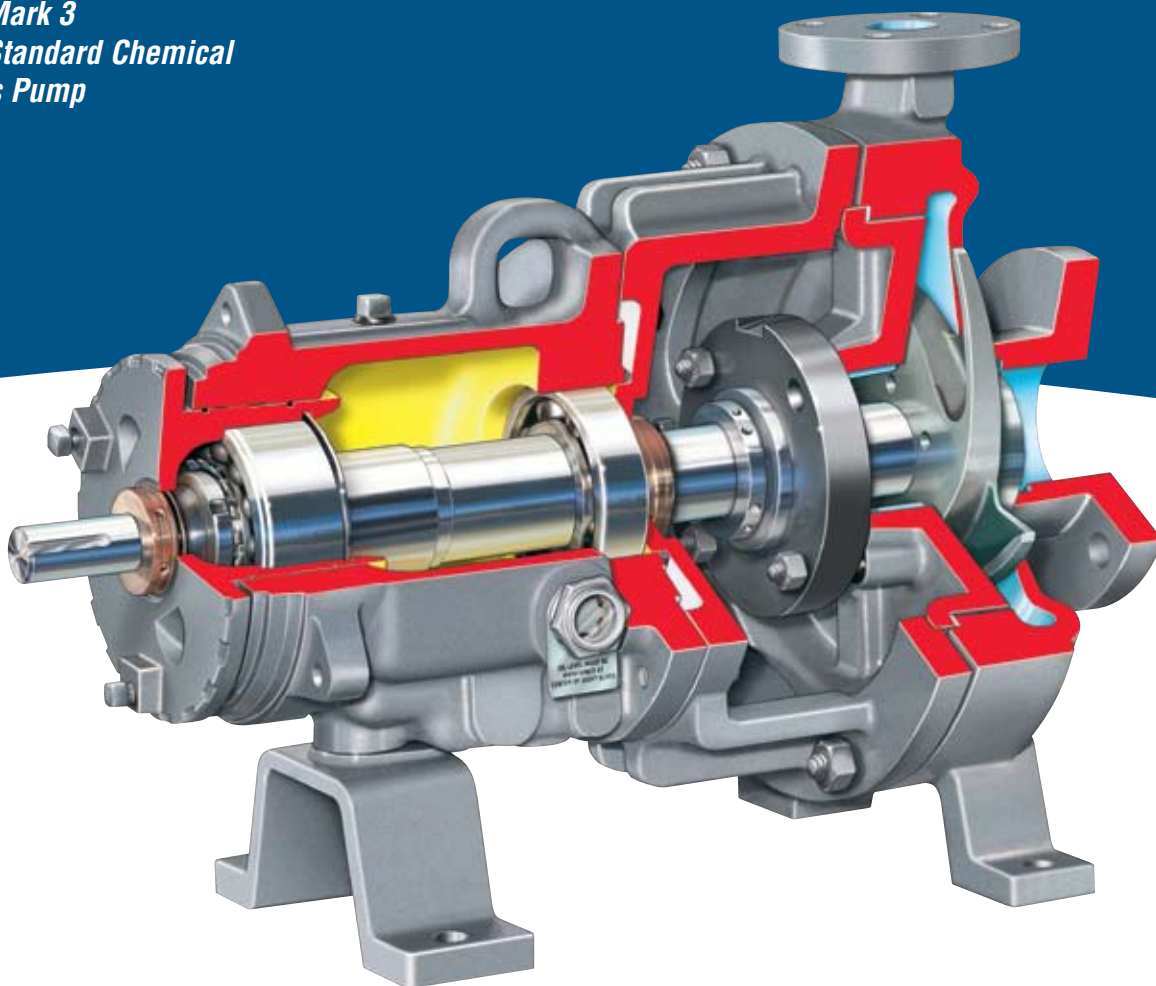


Durco® Mark 3™ ***ASME Chemical Process Pump***

Mark 3 Standard • Sealmatic • Lo-Flo™
Recessed Impeller • Unitized Self-Primer



Durco Mark 3 ASME Standard Chemical Process Pump



The Durco Mark 3 pump is recognized worldwide as the premier name in ASME chemical process pumps. Conforming to ASME B73.1 and incorporating many advanced design features, the rugged Mark 3 pump provides unmatched performance and reliability while minimizing the total cost of ownership. The Durco Mark 3 is CE marked and compliant with applicable directives such as ATEX.

Operating Parameters

- Flows to 4540 m³/h (20 000 US gpm)
- Heads to 215 m (700 ft)
- Pressures to 27 bar (400 psi)
- Temperatures from -73°C (-100°F) to 370°C (700°F)
- Discharge sizes from 25 mm (1 in) to 200 (8 in)

36 Sizes Available

- Seven Group 1
- 16 Group 2
- Seven Group 3
- Six Group 4*

* Group 4 is not an official ASME B73.1 designation

Features and Benefits

Unique Reverse Vane Impeller is the only impeller design that offers repeatable pump performance throughout the life of the pump. Open impellers available.

SealSentry Seal Chambers feature innovative flow modifiers to extend seal life and provide advanced self-flushing capability.

External Micrometer Impeller Adjustment accurately sets impeller clearance in 20 seconds, in the shop or the field.

Largest Shaft and Bearing Components in standard ASME pumps extends bearing life and reduces shaft deflection and vibration.

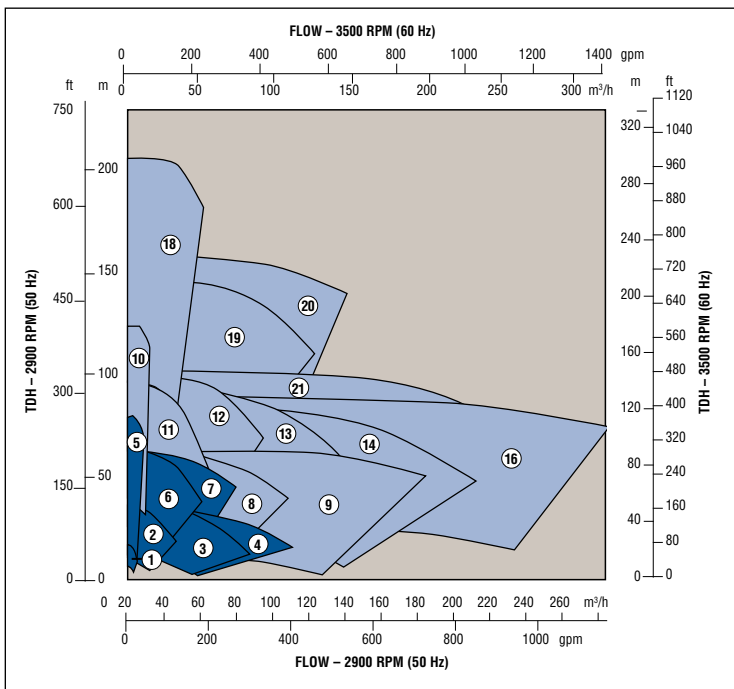
Back Pullout Design allows removal of rotating element without removing casing, piping or motor.

Heavy-Duty Pump End and Drive End Bearings selected for long life and reliability.

**Durco Mark 3
Performance Curves***

FLOWSELEX *FlowSelex™ Pump Selection Application*

FlowSelex is a Web-based interactive pump selection program that allows users to access an extensive database of Flowserve pump sizing information anytime, anywhere. This versatile tool delivers a wide range of information from general pump type descriptions and operating parameters to custom application package specifications with supporting technical documentation. FlowSelex can be accessed at www.Flowserve.com/FlowSelex.



Mark 3 Standard Group 1

- ① 1½x1LF-4
- ② 1½x1-6
- ③ 3x1½-6
- ④ 3x2-6
- ⑤ 1½x1LF-8
- ⑥ 1½x1-8
- ⑦ 3x1½-8

Mark 3 Standard Group 2

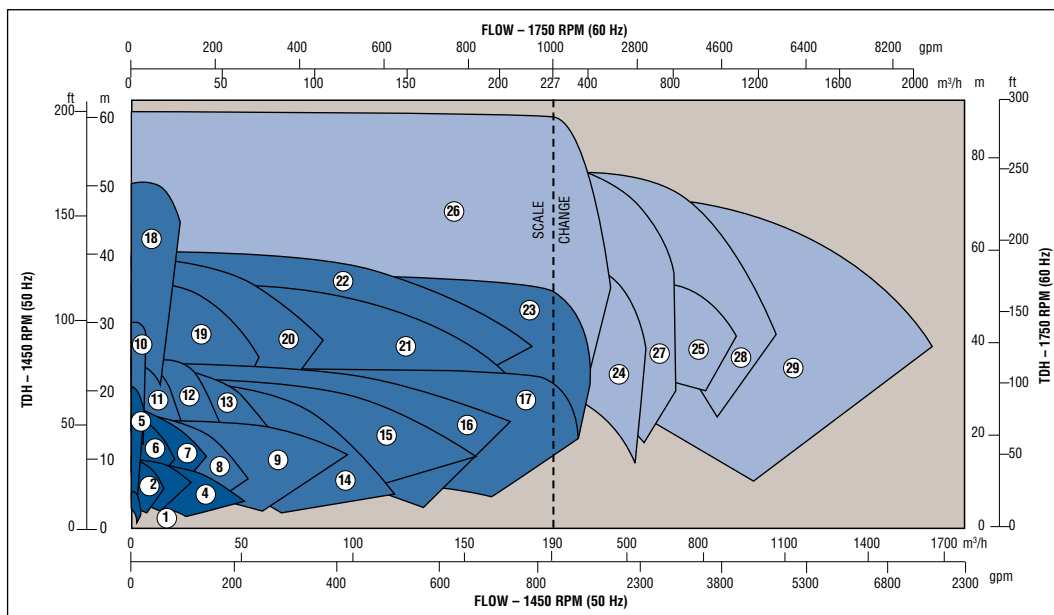
- ⑧ 3x2-8
- ⑨ 4x3-8
- ⑩ 2x1LF-10
- ⑪ 2x1-10A
- ⑫ 3x1½-10A
- ⑬ 3x2-10A
- ⑭ 4x3-10
- ⑮ 4x3-10H
- ⑯ 6x4-10
- ⑰ 6x4-10H
- ⑱ 3x1½LF-13
- ⑲ 3x1½-13
- ⑳ 3x2-13
- ㉑ 4x3-13
- ㉒ 4x3-13HH
- ㉓ 6x4-13A

Mark 3 Standard Group 3

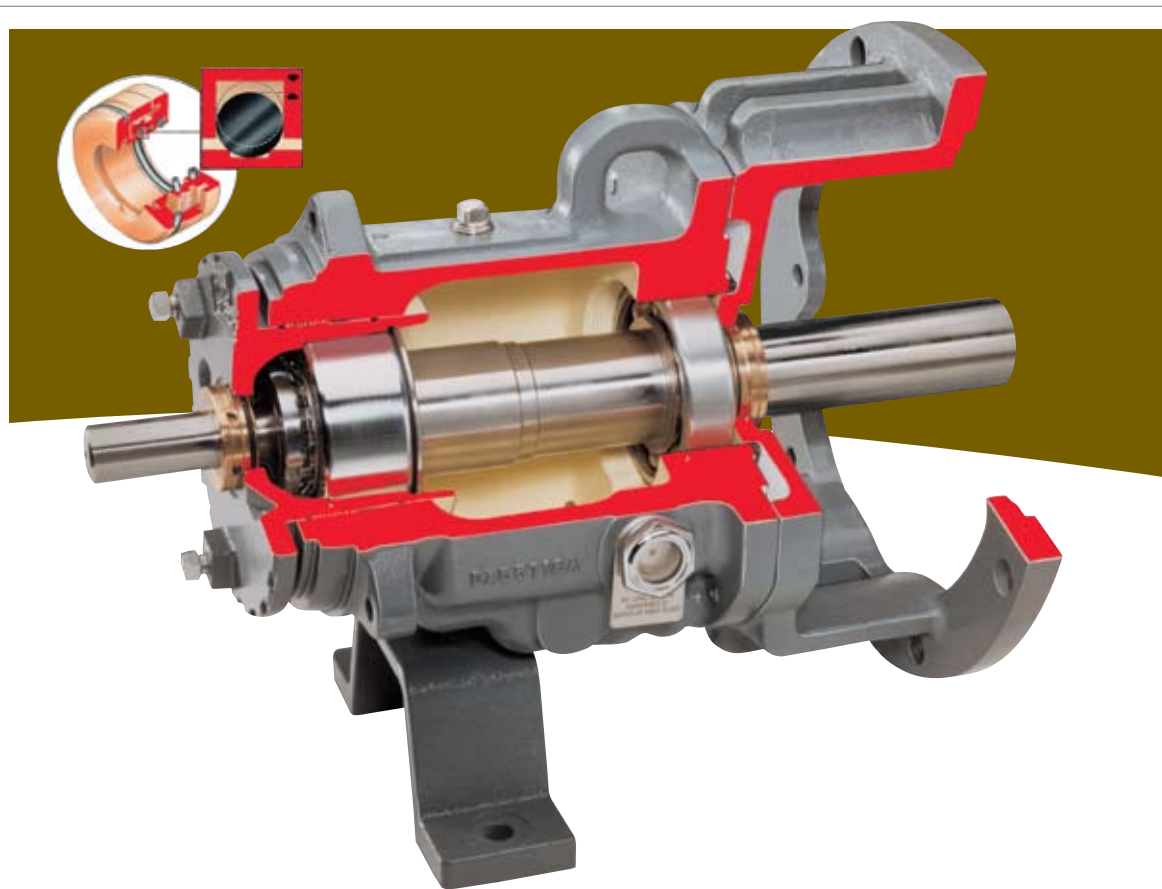
- ⑳ 8x6-14A
- ㉕ 10x8-14
- ㉖ 6x4-16
- ㉗ 8x6-16A
- ㉘ 10x8-16
- ㉙ 10x8-16H
- ㉚ 10x8-17**

* Higher flows available with Mark 3, Group 4 pump. Please see Bulletin PSS-10-13.2 for more information.

**Max. speed 1450 RPM



**Durco Mark 3
Power Ends**



Flowserve offers the Durco Mark 3 pump with a choice of power ends: the standard Mark 3A or the optional ANSI 3A™ (shown).

Standard Mark 3A Power End

The Mark 3A power end features numerous reliability-, maintenance- and performance-enhancing features, including:

- Double row angular contact outboard and single row, deep groove inboard bearings provide excellent axial and radial load support.
- External micrometer enables accurate impeller clearance setting in 20 seconds, restoring pump efficiency.
 - Superior to jackscrews
 - Protected with O-rings
- ASME B73.1 ductile iron frame adapter provides strength and facilitates interchangeability.
- Metal-to-metal construction assures a true running and concentric shaft, extending bearing and mechanical seal life.
- Critical shaft surfaces ground to 0.4 micron (16 μ in) finish to ensure secondary sealing ability of the mechanical seals.
- Double lip oil seals
- Top mounted vent and oil filler
- Trico WATCHDOG® constant level oiler with integral viewpoint
- Optional magnetic drain plug
- Optional oil slinger

Optional ANSI 3A Power End

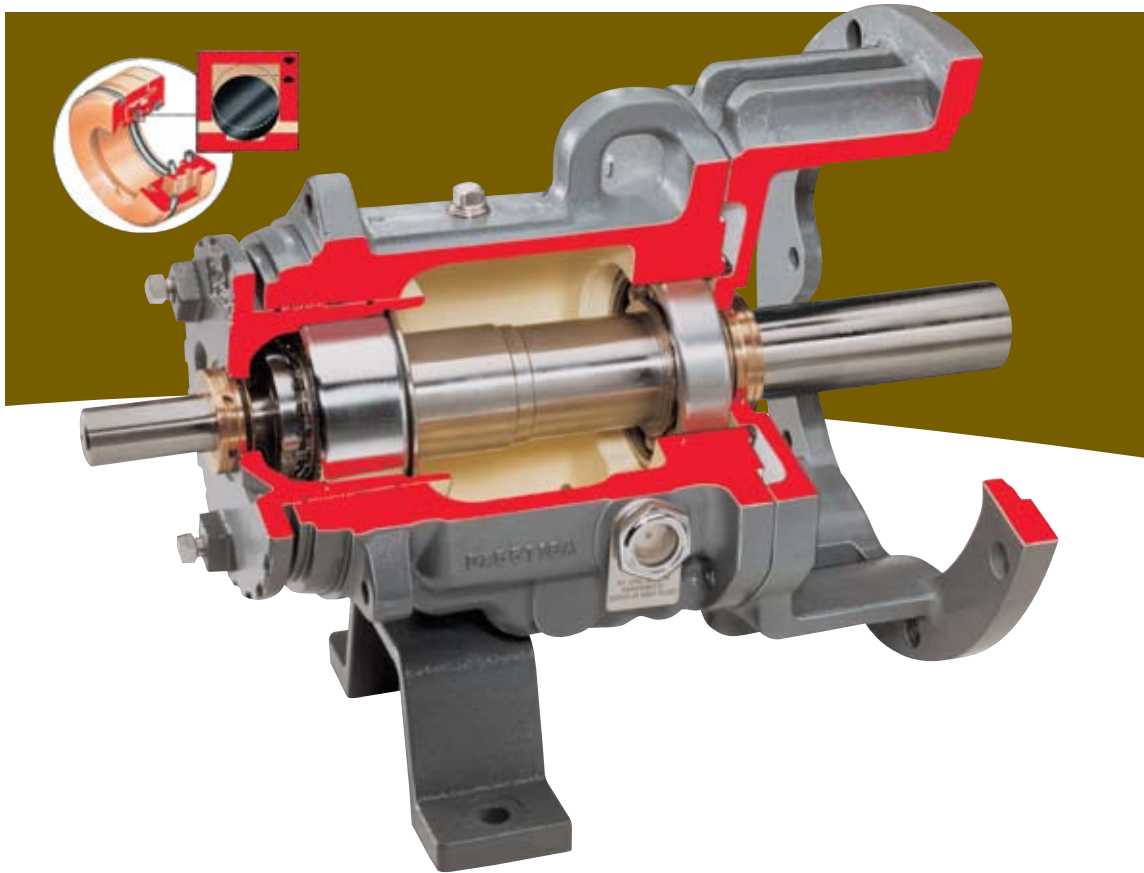
The ANSI 3A power end is so advanced it carries a lifetime warranty*. It offers the same reliability and performance enhancing features as the standard Mark 3A power end but also includes:

- Certified clean room assembly
- Inpro Seal's VBXX non-contact Vapor Block Bearing Isolators keep lubricants in and contaminants out
- Top vent replaced with plug
- Lubrication options
 - Oil mist systems
 - Shielded and grease lubricated bearings (three-year bearing guarantee)
- Rigid foot design

*Note: Adherence to proper installation, operation and maintenance procedures is necessary for lifetime warranty. Contact your Flowserve representative for detailed terms and conditions.

® WATCHDOG is a registered trademark of Trico Corporation.

Durco Mark 3 Power Ends



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Standard Mark 3A Power End

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- Double lip oil seals

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- Rigid foot design



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