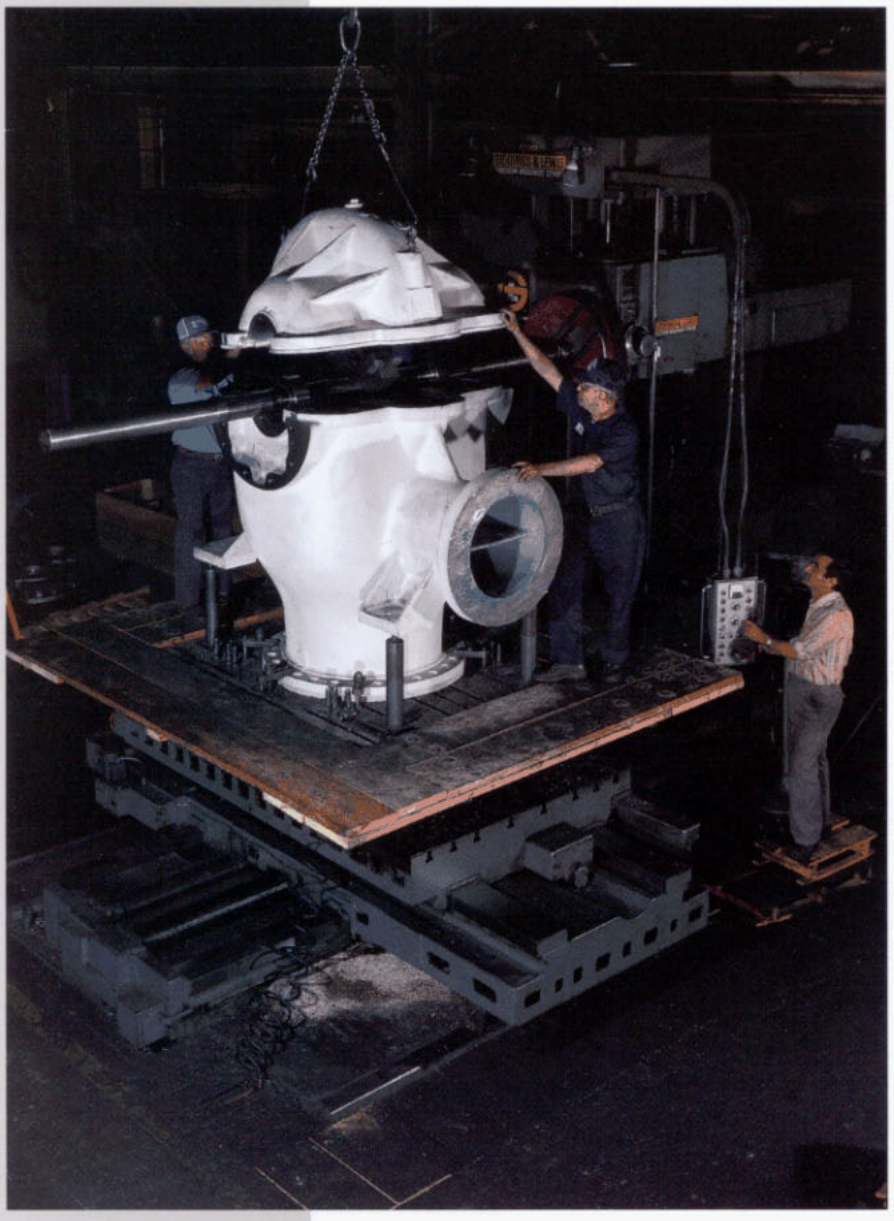
# *HORIZONTAL SPLIT CASE PUMPS*

Fairbanks Morse

Pentair Pump Group

# *HISTORY/ DEVELOPMENT*



Setting the pace for more than a century, Fairbanks Morse Pump Corporation has built a reputation on exceeding industry standards. In engineering, ingenuity and installation, success has been our hallmark.

Our line of horizontal split case single- and two-stage pumps is an integral part of Fairbanks Morse quality products, all designed and manufactured in America.

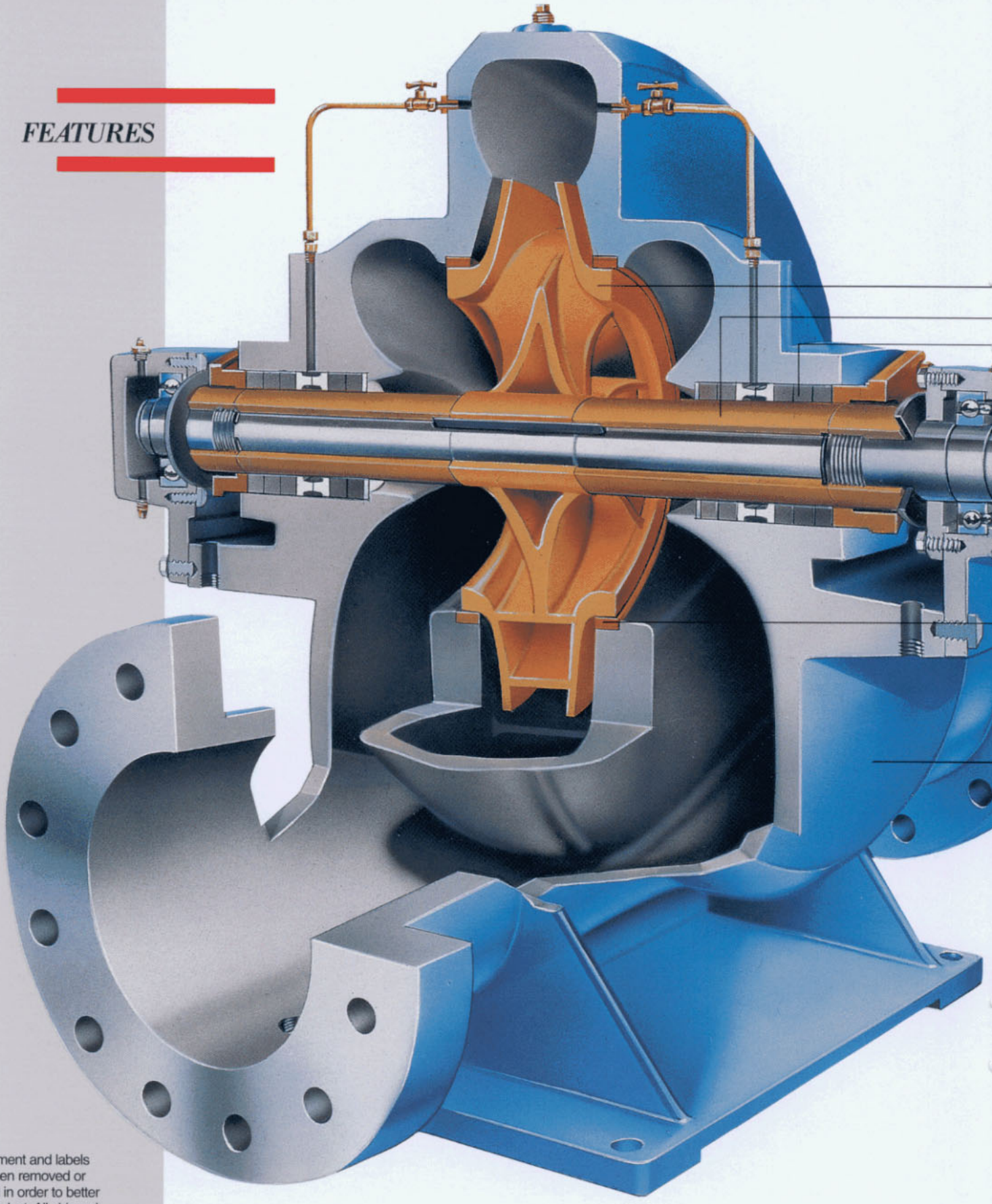
Split case pumps are available in discharge sizes from 2 to 36 inches with capacities to 80,000 GPM and discharge heads to 700 feet for single-stage units and 950 feet for two-stage units. Models feature rugged, heavy duty construction and high efficiency over the full performance curve with superior dependability. Each pump is crafted in a facility dedicated to the research, development, manufacturing and testing of superior-quality pumping equipment. Service and parts are available throughout the world from Fairbanks Morse facilities and authorized distributors.

# *APPLICATIONS*

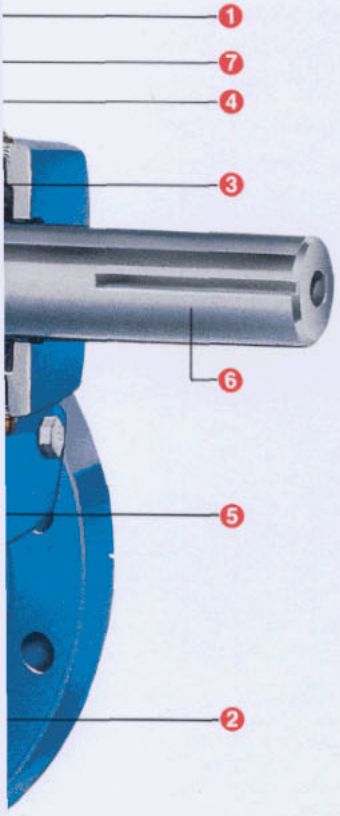
Fairbanks Morse split case pumps are practically maintenance free, and provide years of reliable, trouble-free service. These versatile pumps are available in a wide variety of materials and drivers, including electric motors, combustion engines and steam turbines, to meet your application requirements.

General liquid pumping, power plants, steel mills, chemical plants, paper mills, refineries, cooling and heating systems and water booster service are a few of the applications in which our split-case pumps thrive.

## *FEATURES*

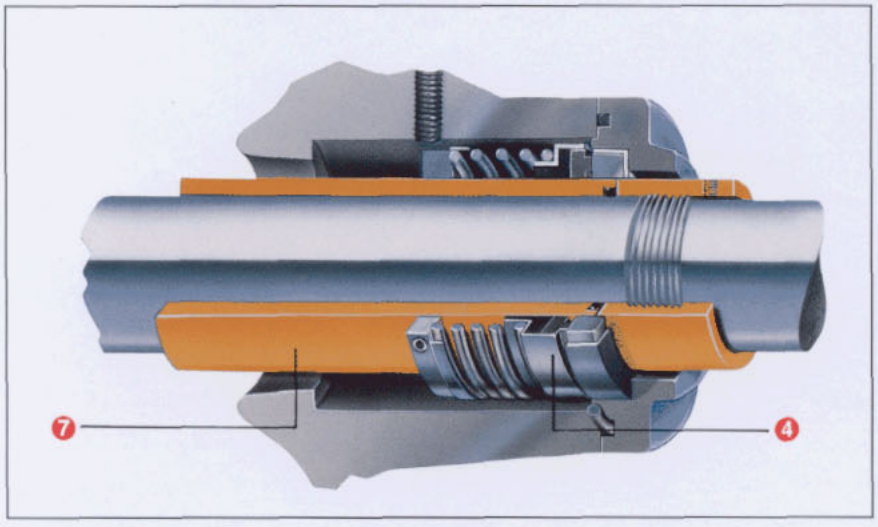


Safety equipment and labels may have been removed or not illustrated in order to better depict the product. All shipped products include appropriate safety labels and guards. The safety labels must be adhered to and the guards must be in place prior to installation and operation.




1. Impellers are double suction, dynamically and hydraulically balanced, one-piece vacuum cast of the Francis vane design to reduce inlet losses, accommodate high suction lifts and virtually eliminate axial thrust loads. Their state-of-the-art contoured passageways are extremely smooth, resulting in high efficiency and quiet operation. Impellers are firmly keyed and locked to an accurately finished, oversized shaft to absorb all shock loads.

2. The rugged, heavy duty, two-piece casing is matched and split horizontally along the centerline of the shaft. This allows for the removal of the rotating assembly without disturbing suction and discharge piping or the driver mounting. The lower half casing includes integrally cast mounting structures and a large volute-type suction area to assure laminar entrance velocities.




3. Grease- or oil-lubricated cartridge-type bearings mounted in a rigid, dust-proof housing support the rotating assembly, assuring smooth operation and extremely long bearing life.

4. Large, deep packing boxes are carefully machined into the casing and are standard with five rings of packing, seal water ring and split interlocking gland. External piping with needle valves directs water from the casing or an independent source to each seal water ring. Most mechanical seals are interchangeable with packing in the packing box.

5. Renewable casing wear rings are locked in place to prevent rotation. Designed to minimize recirculation, wear rings increase and maintain high efficiency over long periods. Optional impeller wear rings are available.

6. High-quality heat-treated steel shafts are accurately machined along their entire length with additional grinding to an even finer tolerance at the bearing locations. The shaft is reversible, providing for a change to opposite rotation in the field, if required.

7. Easily replaceable centrifugally cast sleeves protect the shaft from packing wear, and are sealed to prevent leakage. Sleeves are accurately positioned and locked in place.

Bent form or structural steel bases, designed to be filled with grout to lock the unit in place and provide mass to resist torsional movement, support the combined weight of the pump and driver.

## *FEATURES*

❶ Impellers are dynamically and hydraulically balanced, one-piece vacuum cast of the Francis vane design. This reduces inlet losses and accommodates high suction lifts, which reduces axial thrust loads. Single suction impellers are mounted back-to-back for hydraulic balance, and their state-of-the-art contoured passageways are extremely smooth, which results in high efficiency and quiet operation. Impellers are firmly keyed and locked to an accurately finished oversized shaft to absorb all shock loads.

❷ The rugged, heavy duty two-piece casing is matched and split horizontally along the centerline of the shaft. This allows for removal of the rotating assembly without disturbing suction and discharge piping or the driver mounting. The lower half casing includes integrally cast mounting structures and a large volute-type suction area to assure laminar entrance velocities.

❸ Grease-lubricated cartridge-type bearings mounted in a rigid dust proof housing support the rotating assembly, assuring smooth operation and extremely long bearing life.

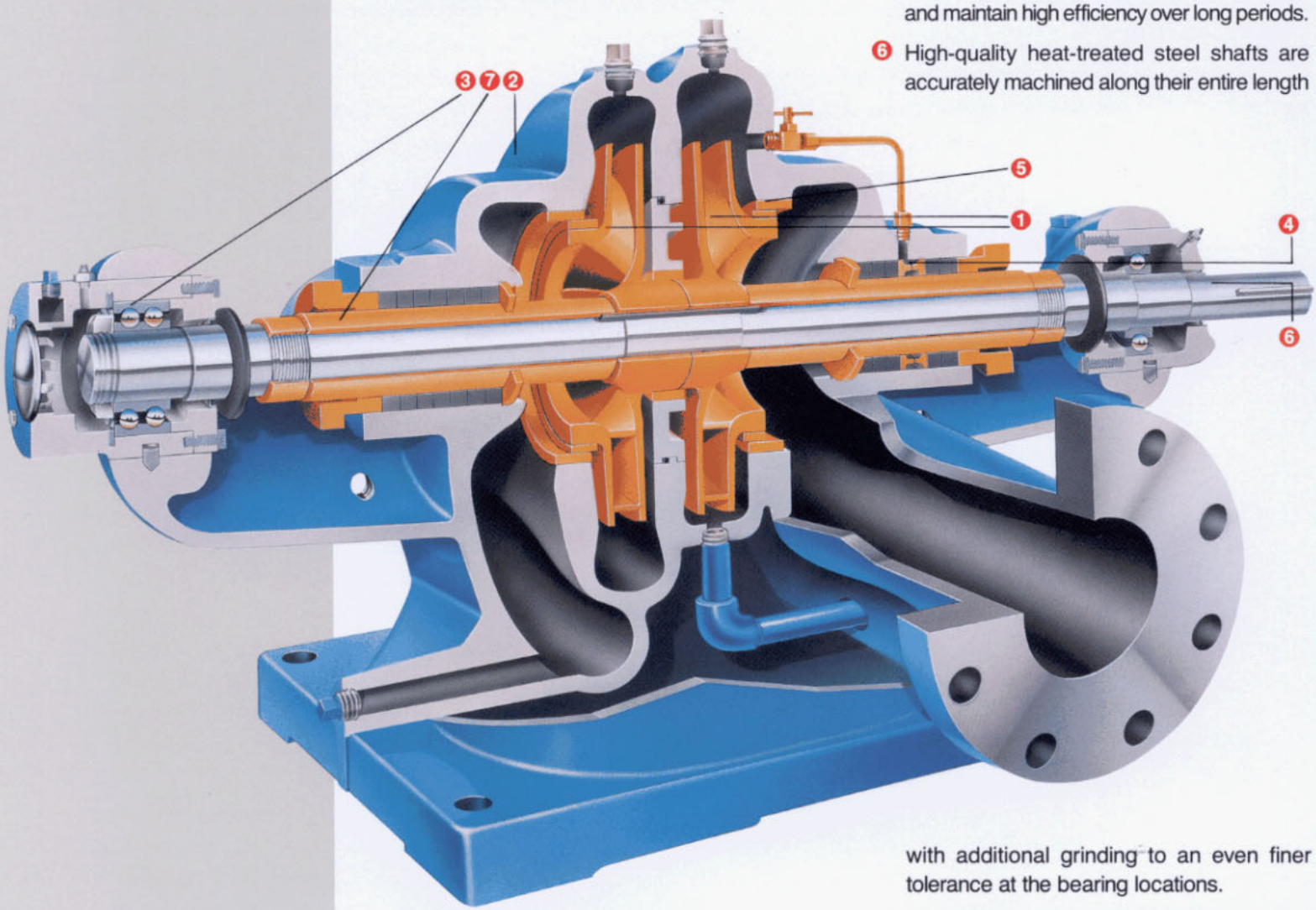
❹ Large, deep packing boxes are carefully machined into the casing and come standard with packing and split interlocking gland. Most mechanical seals are interchangeable with packing in the packing box.

❺ Renewable casing and impeller wear rings are locked in place to prevent rotation. These rings are designed to minimize recirculation and maintain high efficiency over long periods.

❻ High-quality heat-treated steel shafts are accurately machined along their entire length with additional grinding to an even finer tolerance at the bearing locations.

❼ Easily replaceable centrifugally cast sleeves protect the shaft from packing wear, and are sealed to prevent leakage. Sleeves are accurately positioned and locked in place.

Structural steel bases, designed to be filled with grout to lock the unit in place and provide mass to resist torsional movement, support the combined weight of the pump and driver.



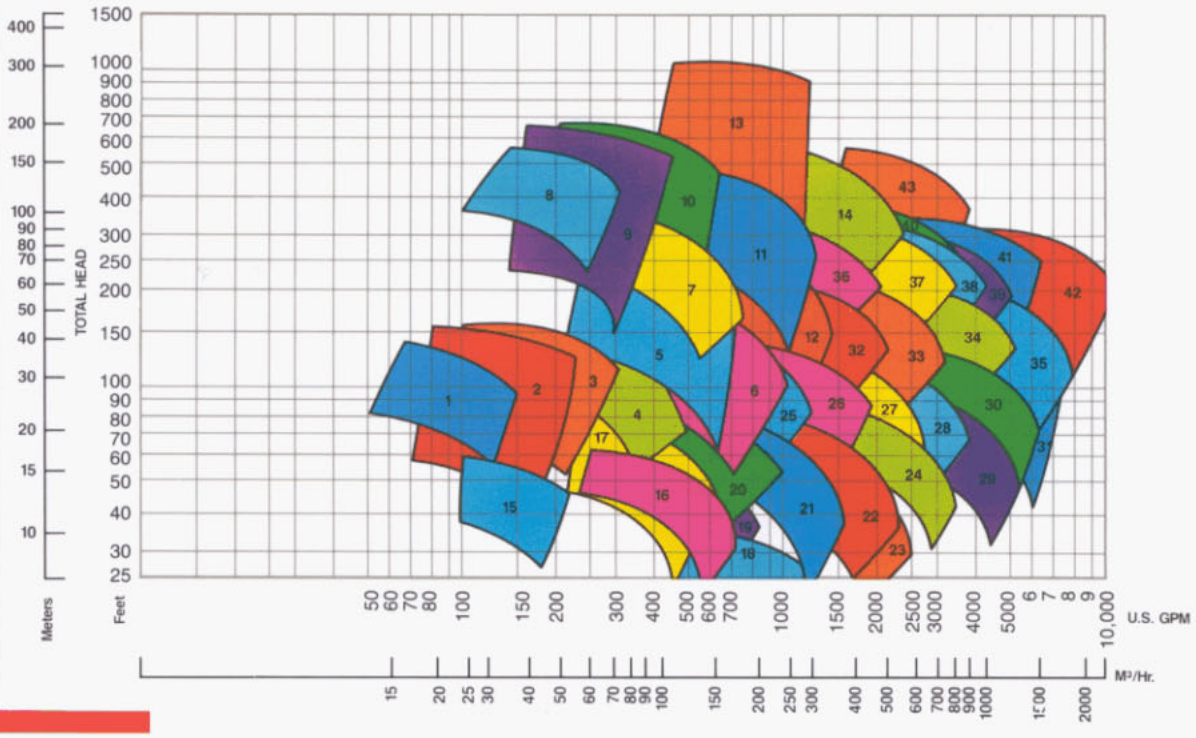
# 2800/5900 PERFORMANCE

**5900 Two-Stage Pumps**

1. 2" - 5972, 1750 RPM
2. 2½" - 5972, 1760 RPM
3. 3" - 5972, 1760 RPM
4. 3" - 5922, 1175 RPM
5. 5" - 5972, 1775 RPM
6. 5" - 5922, 1185 RPM
7. 3" - 5922, 1780 RPM
8. 2" - 5972, 3570 RPM
9. 2½" - 5972, 3570 RPM
10. 3" - 5972, 3570 RPM
11. 5" - 5922, 1785 RPM
12. 6" - 5922, 1185 RPM
13. 5" - 5972, 3570 RPM
14. 6" - 5922, 1785 RPM

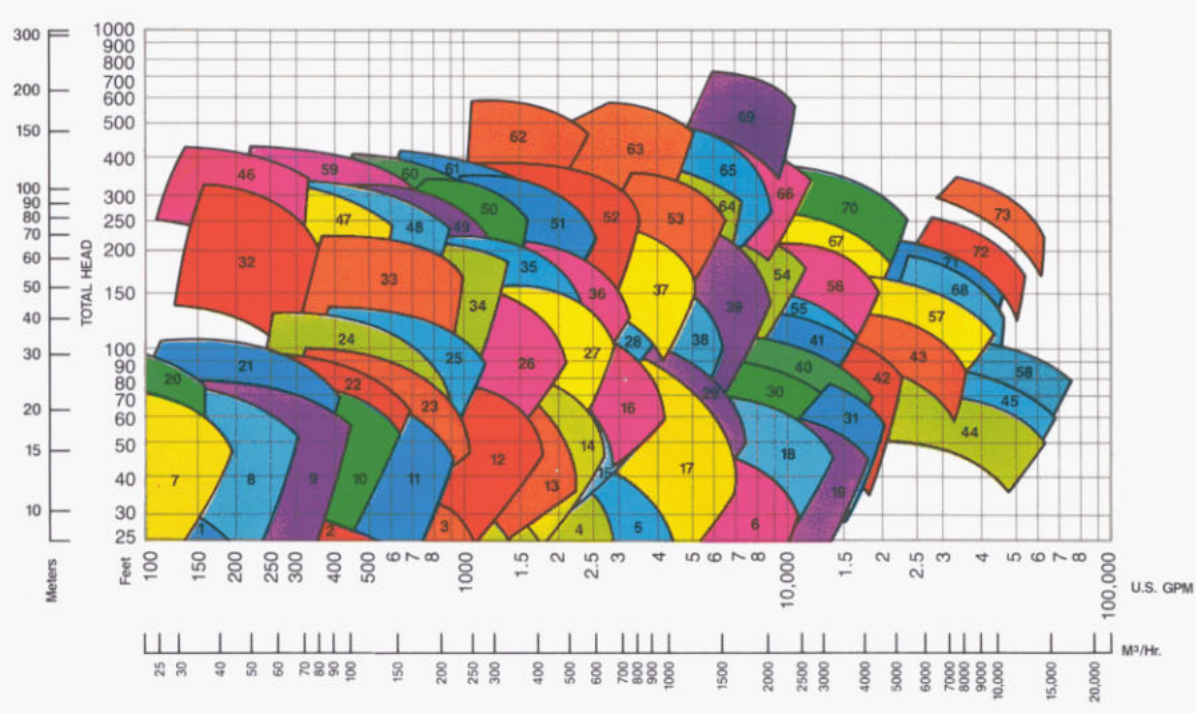
**2800 Single-Stage Pumps**

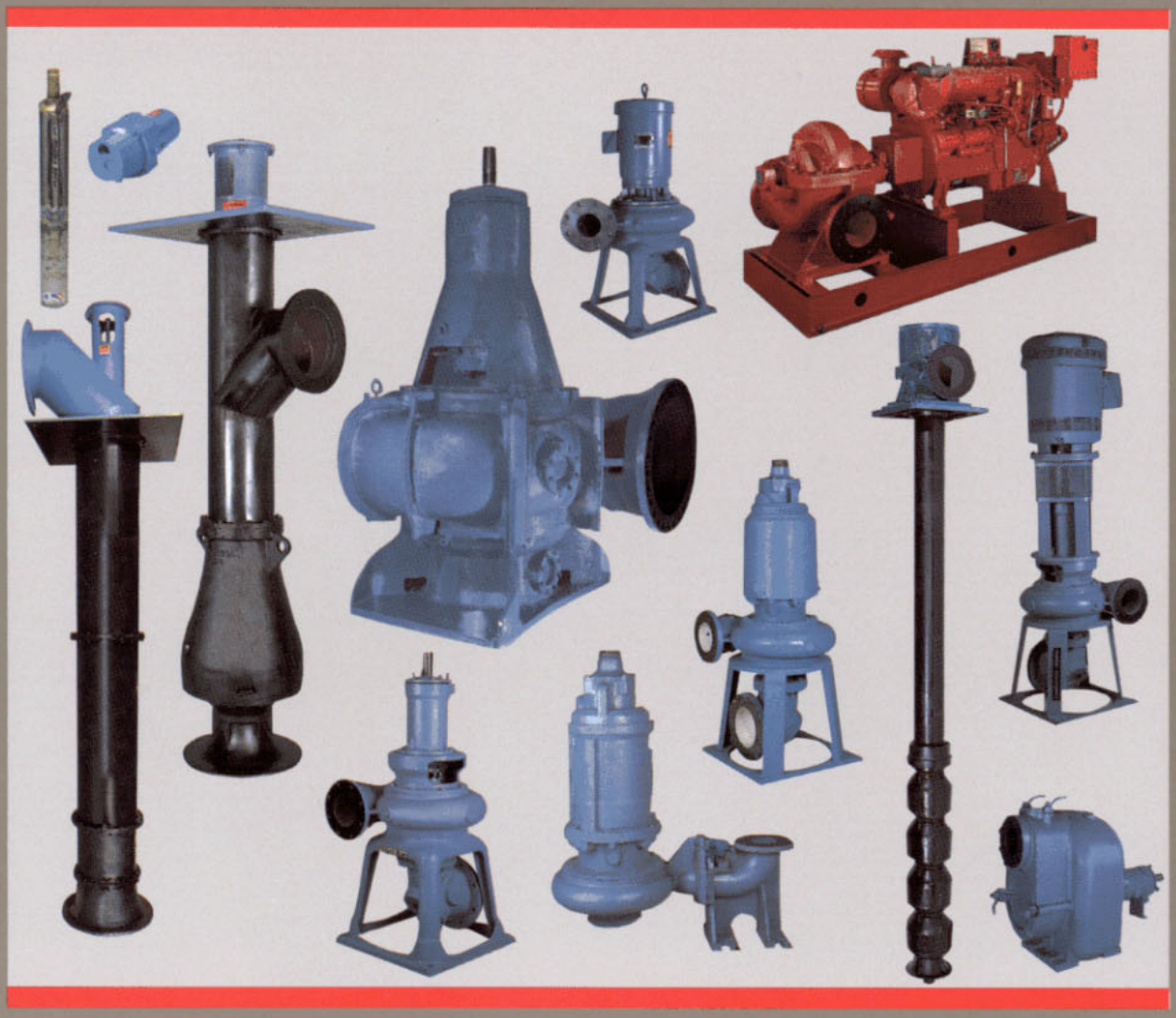
15. 2" - 2873A, 1760 RPM
16. 4" - 2873A, 1760 RPM
17. 3" - 2874A, 1760 RPM
18. 6" - 2821A, 1170 RPM
19. 6" - 2822X, 1180 RPM
20. 4" - 2874C, 1765 RPM
21. 5" - 2874C, 1770 RPM
22. 6" - 2821A, 1775 RPM
23. 8" - 2822A, 1180 RPM
24. 8" - 2821A, 1775 RPM
25. 6" - 2822X, 1775 RPM
26. 5" - 2876A, 1780 RPM
27. 6" - 2822A, 1780 RPM
28. 8" - 2822A, 1780 RPM
29. 10" - 2822A, 1185 RPM
30. 10" - 2822A, 1785 RPM
31. 10" - 2824A, 1185 RPM
32. 5" - 2823A, 1780 RPM
33. 6" - 2823C, 1780 RPM
34. 8" - 2823A, 1785 RPM
35. 10" - 2823A, 1785 RPM
36. 5" - 2824A, 1785 RPM
37. 6" - 2824A, 1785 RPM
38. 6" - 2824A, 1785 RPM
39. 8" - 2824A, 1785 RPM
40. 6" - 2825A, 1785 RPM
41. 10" - 2825C, 1785 RPM
42. 10" - 2824A, 1785 RPM
43. 5" - 2876A, 3565 RPM




# 5800 PERFORMANCE

1. 2" - 5876, 3560 RPM
2. 2" - 5874, 3550 RPM
3. 3" - 5874, 3550 RPM
4. 10" - 5821, 880 RPM
5. 12" - 5821, 885 RPM
6. 20" - 5821, 585 RPM
7. 2" - 5874, 1750 RPM
8. 3" - 5874, 1750 RPM
9. 4" - 5874, 1760 RPM
10. 5" - 5874, 1760 RPM
11. 5" - 5821, 1760 RPM
12. 6" - 5821, 1770 RPM
13. 8" - 5821, 1770 RPM
14. 8" - 5821, 1770 RPM
15. 10" - 5821, 1185 RPM
16. 10" - 5821, 1780 RPM
17. 12" - 5821, 1185 RPM
18. 20" - 5821, 705 RPM
19. 24" - 5822, 440 RPM
20. 2" - 5876, 1750 RPM
21. 3" - 5876, 1760 RPM
22. 4" - 5821, 1760 RPM
23. 5" - 5876, 1760 RPM
24. 4" - 5822, 1765 RPM
25. 5" - 5822, 1775 RPM
26. 6" - 5822, 1780 RPM
27. 8" - 5822, 1780 RPM
28. 12" - 5822, 1185 RPM
29. 14" - 5821, 1185 RPM
30. 20" - 5822, 585 RPM
31. 24" - 5822, 505 RPM
32. 2" - 5874, 3550 RPM
33. 4" - 5823, 1775 RPM
34. 5" - 5823, 1780 RPM
35. 6" - 5823, 1780 RPM
36. 8" - 5823, 1785 RPM
37. 10" - 5823, 1785 RPM
38. 12" - 5823, 1185 RPM
39. 12" - 5823, 1185 RPM
40. 20" - 5821, 890 RPM
41. 20" - 5822, 705 RPM
42. 24" - 5822, 585 RPM
43. 30" - 5823, 440 RPM
44. 36" - 5821, 320 RPM
45. 36" - 5821, 350 RPM
46. 2" - 5876, 3560 RPM
47. 3" - 5874, 3550 RPM
48. 4" - 5874, 3550 RPM
49. 4" - 5824, 1780 RPM
50. 5" - 5824, 1785 RPM
51. 6" - 5824, 1785 RPM
52. 8" - 5824, 1785 RPM
53. 10" - 5824, 1785 RPM
54. 16" - 5823, 890 RPM
55. 20" - 5823, 705 RPM
56. 20" - 5824, 705 RPM
57. 30" - 5823, 505 RPM
58. 36" - 5821, 390 RPM
59. 3" - 5876, 3570 RPM
60. 4" - 5876, 3565 RPM
61. 5" - 5876, 3565 RPM
62. 6" - 5826, 1785 RPM
63. 8" - 5826, 1785 RPM
64. 10" - 5826, 1185 RPM
65. 10" - 5825, 1185 RPM
66. 16" - 5823, 1185 RPM
67. 20" - 2823, 890 RPM
68. 36" - 5824, 440 RPM
69. 10" - 5826, 1785 RPM
70. 20" - 5824, 890 RPM
71. 30" - 5823, 585 RPM
72. 36" - 5824, 505 RPM
73. 36" - 5824, 585 RPM





In addition to our horizontal split case units, Fairbanks Morse Pump Corporation manufactures a broad range of pumps for both public works and industrial markets, including dry pit and submersible solids handling, vertical lineshaft and submersible turbine, mixed-flow and axial-flow propeller pumps (both electric motor and diesel engine driven), domestic jet and submersible pumps, and a new concept in solids and slurry handling, the innovative VTSH® Vertical Turbine Solids Handling pumps.

Our 400,000 square-foot manufacturing facility, located in the heart of the United States, provides advanced engineering and technology, a major testing facility for product performance evaluation and computerized machining centers for high quality manufacturing techniques. Fairbanks Morse sales and service facilities are located across the United States and throughout the world.

At Fairbanks Morse, our longevity, distinct products, market leadership, and customer service are the direct result of the quality and dedication of our personnel. Our skilled personnel, who average over 23 years of experience, machine, build and test our units. Working as a team, our people are continuously exploring new and better ways to serve our customers. Product quality, dependability and innovation are all part of the Fairbanks Morse commitment to excellence.

**Fairbanks Morse**

**Pentair** Pump Group

3601 Fairbanks Avenue
P.O. Box 6999
Kansas City, Kansas 66106-0999
(913) 371-5000
FAX: (913) 371-2272

FM310/0699