

CORNELL PUMP COMPANY

Submersible Pumps



CORNELL SUBM

AT CORNELL, OUR MISSION IS TO EXCEED OUR CUSTOMERS' EXPECTATIONS BY DESIGNING, MANUFACTURING, AND MARKETING PREMIUM QUALITY CENTRIFUGAL PUMPS.

Cornell uses the same high efficiency pump-ends for our submersibles that have been proven time and time again in standard municipal applications. Coupled with the highest quality motors, Cornell's submersible product line provides the best possible value.

Design Condition Fit

Cornell submersible pumps are available in a wide range of head and flow ratings to suit your individual needs. Capacities from 80 GPM to 40,000 GPM and heads from 10 feet to 430 feet give Cornell a clear advantage when it comes to design condition fit.

Pump Construction

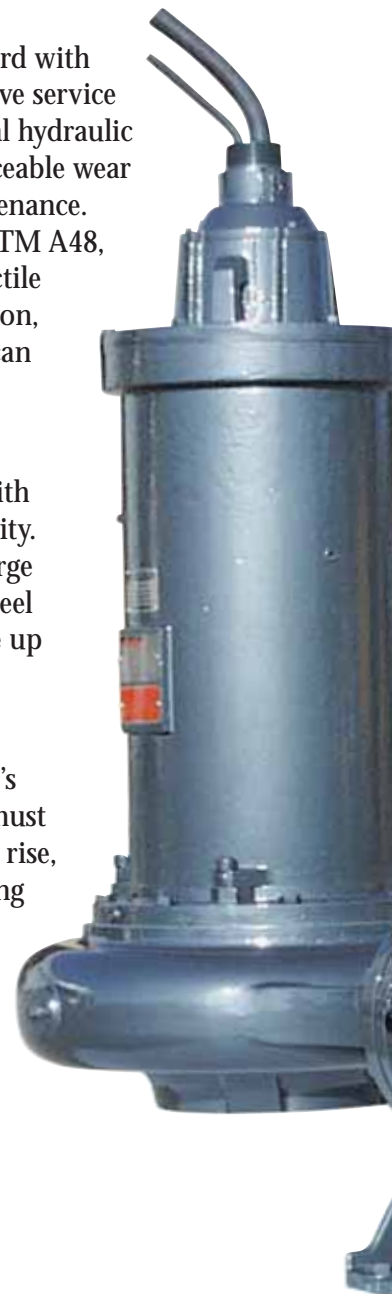
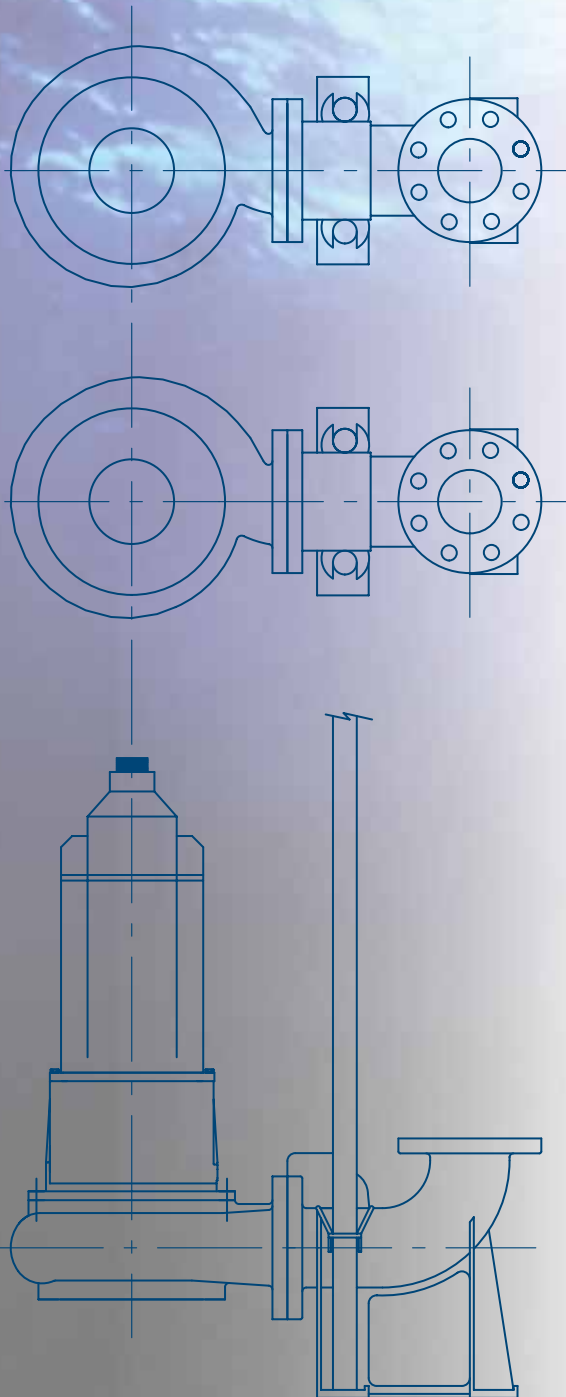
All of Cornell's submersible pumps come standard with heavy-wall volutes for extended life under abrasive service conditions, smooth passage impellers for optimal hydraulic efficiency and reduced operating cost plus replaceable wear rings and back pull-out design for ease of maintenance. Standard casing and impeller construction is ASTM A48, Class 30 Cast Iron. Special materials such as Ductile Iron for pressure, Nodular Ni-Quench for abrasion, and 420 Stainless Steel, heat treated, wear rings can be added to all models.

Auto-Coupling

The Cornell auto-coupling system is designed with safety and serviceability as it's number one priority. The complete system including Cast Iron discharge elbow, Bronze guide claw flange, and Stainless Steel upper and intermediate guide rail brackets make up our high quality, non-sparking package.

Efficiency

In addition to a dependable pump system, today's Municipal, Industrial and Agricultural systems must also be efficient and economical. As energy costs rise, conservation and efficient operation are becoming critical issues for end users striving to minimize expenses associated with energy consumption. Cornell Submersible Pumps maintain superb hydraulic operating efficiencies. The bottom line – Cornell Submersible Pumps cost less to operate.

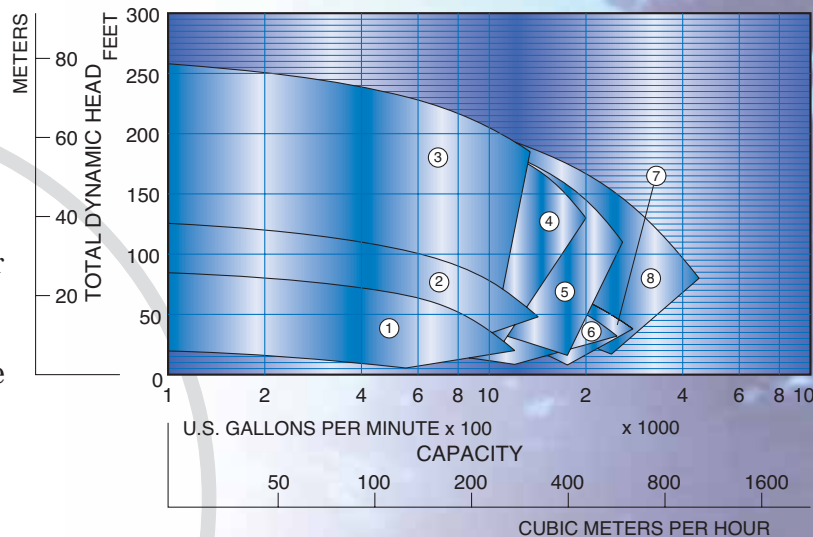


ERSIBLE PUMPS

Motor

At Cornell we understand the need for reliability, durability and efficiency. This is why we have coupled our pumps with the most reliable and durable submersible motors on the market. There are many options including U.L. listed explosion proof, premium efficient, inverter duty, non explosion proof and dry-pit submersible motors. The explosion proof motors are U.L. listed for use in Class I groups C & D hazardous locations. They come standard with tandem mechanical seals utilizing a hard face Tungsten vs. Tungsten lower seal for abrasive applications. Dual moisture probes are installed for the early detection of seal failure. Thermal protection is per U.L. 674 and Class F insulation is utilized. Permanently numbered, non-wicking leads are potted into a separate cable cap assembly, preventing leakage to the stator. Shafts are of 416 Stainless Steel. Motor efficiency is based on IEEE 112 test method B.

Family Map – Submersibles – Various RPM



Popular Models

- | | |
|----------|----------|
| 1. 4NNTL | 5. 6NHTA |
| 2. 4NNT | 6. 6NNT |
| 3. 4414T | 7. 6NHTH |
| 4. 4NHTA | 8. 8NNT |

Non-Clog Wastewater Submersible Impellers

Cornell offers several impeller designs for liquid wastewater applications (shown left and right below). Cornell's delta style impeller is excellent for handling debris, rags and extremely heavy sludge where there are low to medium head requirements. The two- and three-port enclosed impellers are designed to handle large solids and maintain excellent efficiencies. All of Cornell's submersible pumps have a minimum 3" spherical solids capacity and range up to a 5" capacity.

