

xylem

Modernize legacy pump systems with engineered upgrades from Xylem A-C Custom Pump

Plus, genuine OEM parts for Allis-Chalmers and ITT A-C Pump equipment

Transform aging pump infrastructure

More than 50 after the seminal Clean Water Act of 1972, many pump stations—for clean water, sewage, stormwater, power generation and other industries—are operating beyond their planned lifespan. Replacing this equipment is often costly, and in some cases, may not even be feasible.

Pump operators need to find ways to meet today's requirements with yesterday's equipment, and Xylem A-C Custom Pump can help. Our legacy dates back 150 years to the Edward P. Allis Company and Allis-Chalmers. Throughout the decades, and the evolution of our name, our team has accumulated deep pump design and manufacturing expertise and an extensive library of pump drawings, manuals and curves.

Today, we continue to deliver robust pumps for high-volume water and wastewater applications and provide engineered upgrades, re-rates, and reconditioning to modernize legacy systems.

- Repairs and upgrades regardless of original manufacturer
- Highly qualified engineers and technicians; modern analytical processes
- Dependable partnership from system evaluation, recommendations and design to repair, manufacture, testing and installation
- Redesigns and rerates accompanied by updated pump documentation
- Expertise and shop space to handle your largest pumps

Custom upgrades

Increase efficiency, capacity and reliability—and add years of operation to the life of your pump—with a hydraulic or mechanical upgrade. Our team can provide the professional engineering to redesign or re-rate your pump.

Pump reconditioning

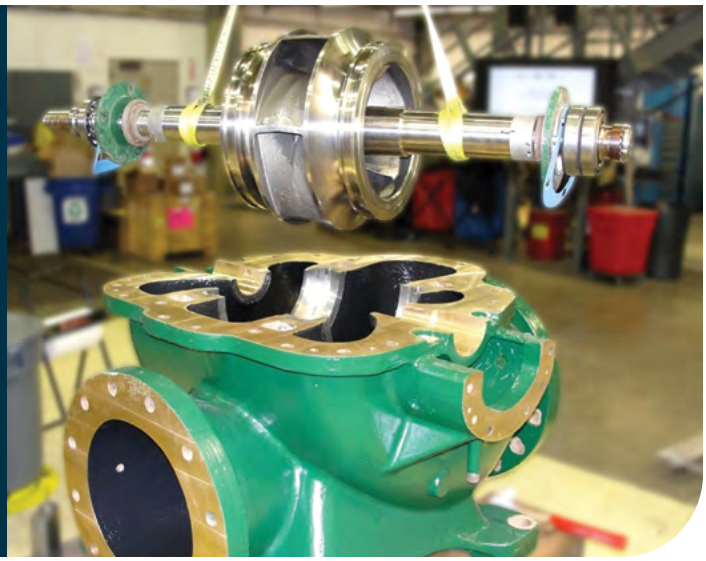
Restore your pump to original specifications for improved performance, extended pump life and lower operating costs. In addition to the inspection, cleaning, part replacement, machining, coating and testing, our team can upgrade component materials to minimize downtime from repeat part failures.

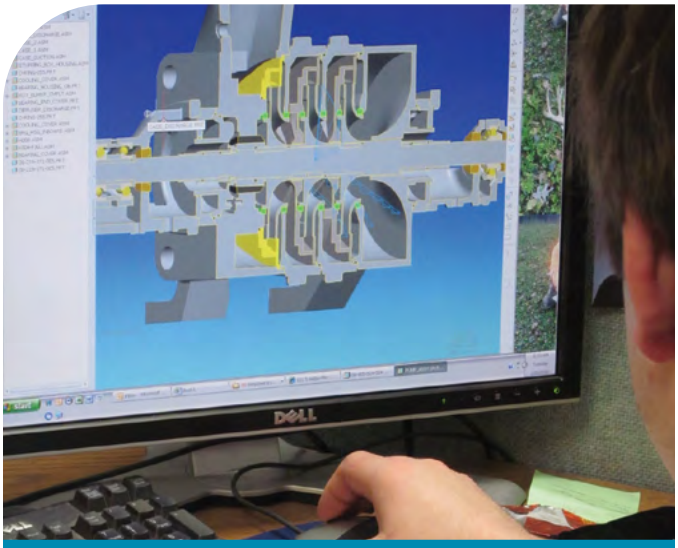
Diagnostic field service and engineering

Bring in our experts for on-site inspection, analysis and diagnostics; installation, removal and repair supervision; and pump overhauls. We can also provide engineering startup assistance, vibration analysis, 3D modeling, finite element analysis (FEA) and computational fluid dynamics (CFD) analysis.

Critical spares

Get ahead of planned outages and unexpected failures by having critical spares on-hand. Our comprehensive library of Allis-Chalmers and A-C Pump drawings, records and patterns means we can provide genuine OEM spares to keep your pumps performing to spec. For pumps from other manufacturers, we can reverse engineer the rotating assembly and other critical parts to ensure proper fit and performance.





Improve pump reliability. Lower maintenance costs.

Reverse-engineering and redesigning legacy centrifugal pumps can restore reliable operation without full equipment replacement. Impeller redesign, new rotating elements, and conversion from constant-speed to variable frequency drive (VFD) motors can all help eliminate chronic issues, extend repair cycles and reduce the maintenance burden of aging equipment. Plus, Xylem A-C Custom Pump validates new designs with engineering analysis and performs in-house testing of the refurbished pump, so you have complete confidence in your upgrade.



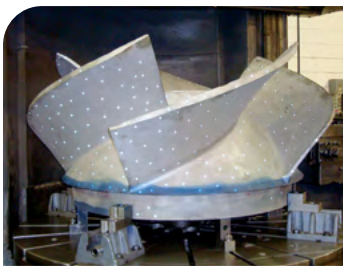
Increase pump efficiency and capacity. Lower NPSH requirements.

Rebowling your circulating water pump with Xylem A-C Custom Pump high-efficiency impellers can lower your pump power requirements and operating costs, improving overall plant efficiency. By upgrading the pump hydraulics to a new rating, you can increase capacity without increasing speed. Rebowling can also lower the NPSH requirement and reduce the potential for cavitation problems.

Xylem A-C Custom Pump capability highlights

Engineering	• 3D solid modeling • Finite element analysis (FEA) • Computational fluid dynamics (CFD) analysis • Critical speed analysis • Sump studies
Large-pump lifting and assembly	• Up to 60-ton crane capacity • Fork truck capacity up to 34,000 lbs. • 10-foot-deep assembly pit
Testing	• One of the largest indoor pump test facilities in North America • Wet pit and dry pit test loops • 440,000-gallon wet pit • 300,000 gpm flow capacity • 15 kV electrical capacity with variable frequency drive (VFD)
Field service	• Field service engineers, pump assembly technicians and contracted field service representatives available • Complete turnkey installation or installation supervision/consulting • Field repair/overhaul or repair/overhaul supervision/consulting • Equipment alignment and start-up • Preventative maintenance agreements (PMAs)

The Xylem A-C Custom Pump facility in Pewaukee, WI, USA, operates under an ISO 9001:2015 certified quality management system (QMS).



Coordinate measuring machine (CMM) dimensional inspection of a vertical column pump impeller



Balancing the rotating element for a 6-stage centrifugal pump



Restoration of the fit, flatness and parallelism of the feet and casing faces of a dry pit pump



Reconditioned 6-stage boiler feed pump assembly

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