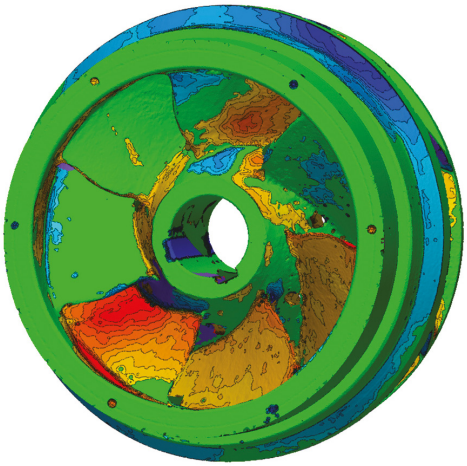
CELEROS™
FLOW TECHNOLOGY



RE-ENGINEERING SOLUTIONS FOR CRITICAL APPLICATIONS

CLYDEUNION® PUMPS

PLENTY®

OPTIMIZE PUMP PERFORMANCE
REDUCE TOTAL COST OF OWNERSHIP
RENEW OBSOLETE EQUIPMENT

Flow control equipment needs to operate reliably for many years, often in harsh environments. As assets mature, maintenance and repair can become more problematic and more expensive – particularly if the original equipment manufacturer is no longer around to provide support.

Celeros Flow Technology is a full lifecycle partner with a difference. By drawing upon more than 100 years experience in pump design and manufacture, we combine OEM engineering expertise with the latest design and analytical techniques to offer customers a comprehensive aftermarket service.

Our Re-Engineering Solutions are specifically tailored to add value to customer's installed assets in several ways, including:

- Optimizing pump performance
- Reducing operational costs
- Increasing MTBF
- Extending service life
- Confirming fitness for purpose*
- Securing spare parts availability

These benefits can apply equally to any pump brand, past or present, for which we continue to hold IP and design information: ClydeUnion and Plenty, Allen Gwynnes, David Brown, Girdlestone, Harland, Mather & Platt, Plenty Mirrlees Pumps, Pompes Guinard, S&N Pump, Union Pump, WH Allen, Weir Pumps. We also apply the same high standards of care and expertise when re-engineering third party pumps and components: enabling customers to use a single trusted partner for all their lifecycle needs.

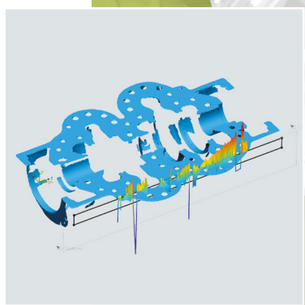
WHAT IS RE-ENGINEERING?

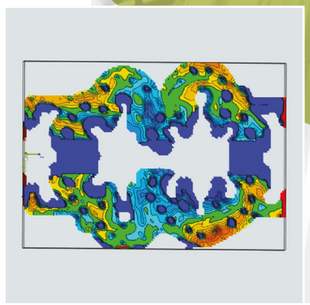
Various companies offer to re-manufacture like-for-like components, a process commonly referred to as reverse engineering.

By contrast, the re-engineering solutions offered by Celeros Flow Technology go far beyond mere parts replication: incorporating engineering input, additional analysis, and component design optimization.

The advantages of re-engineering include:

- Increased efficiency through improved or modified hydraulic design
- Reduced cavitation damage due to improved suction design
- Increased part strength and reduction of stress concentrations
- Improved corrosion resistance
- Responsiveness to changes in production (re-rating)
- Secured source of quality obsolete and spare parts





1

CONSULTATION

We review the equipment details and project requirements together with the customer, determine the scope of the original purpose and application, outline potential solutions, and agree upon the way forward.

2

DATA CAPTURE

We employ laser scanning to obtain accurate, rapid and reliable data from sample components. Scanning can be performed at our service facilities or on site to ensure minimum downtime.

3

MATERIALS ANALYSIS

Materials are analysed to determine fitness for purpose*. Detailed photographs and condition reports identify any current issues (including original manufacturing flaws) or upgrade requirements, highlighting opportunities to improve the specific component or the equipment in general.

4

RE-ENGINEERING, ANALYSIS & SPECIFICATION

All acquired data is reviewed alongside operational history to finalize our recommendations. The material specifications and stringent quality requirements are defined and detailed in the Quality Plans used in the manufacture of the components.

5

3D MODEL & DRAWINGS

From engineer's scanned data we create a full manufacturing model and drawing of the part. These 3D models are used directly in manufacturing to ensure components are exactly as per our design.

6

MANUFACTURE & QUALITY ASPECTS

Engineered replacement parts are manufactured in accordance with our Original Equipment parts and ISO 9001 Quality Assurance system. The manufactured parts are inspected against the Quality Plans throughout the process to ensure compliance, including material analysis, dimensional inspection, laser scanning to validate complex surfaces, material certification, test and balancing.

* *Any 'fitness for purpose' shall be as standard in the industry unless a variation from the normal use is specifically disclosed and agreed by the parties in writing.*

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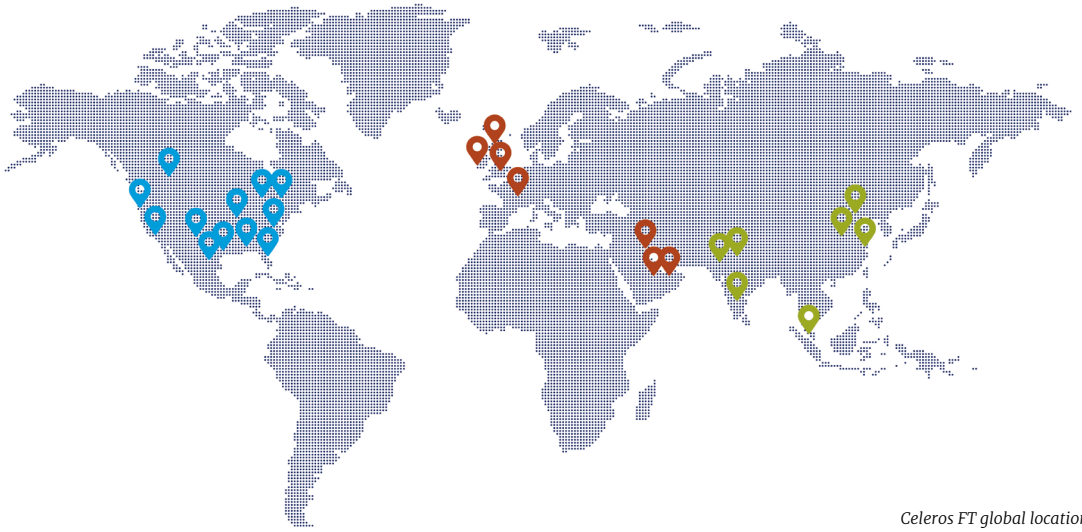
CLYDEUNION® PUMPS

PLENTY®

SPEED
EXCELLENCE
PARTNERSHIP



Celeros FT global locations

CONTACT DETAILS FOR PUMP RE-ENGINEERING LOCATIONS:

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