

Site Evaluation

Hayward Tyler will carry out an initial site visit. We will then provide a proposal to show what can be achieved in terms of return on investment.

To request an initial site evaluation contact:

Email: service@haywardtyler.com

Tel: +44 (0) 1582 731144.

About Hayward Tyler

Established in 1815 in the UK, the Hayward Tyler Group manufactures a comprehensive range of Fluid Filled Electric Motors and Pumps, custom designed to meet the most demanding of applications and environments. Focused on the power generation (both conventional and nuclear) and oil & gas (sub-sea) markets, the company is a market leader in its chosen niches.

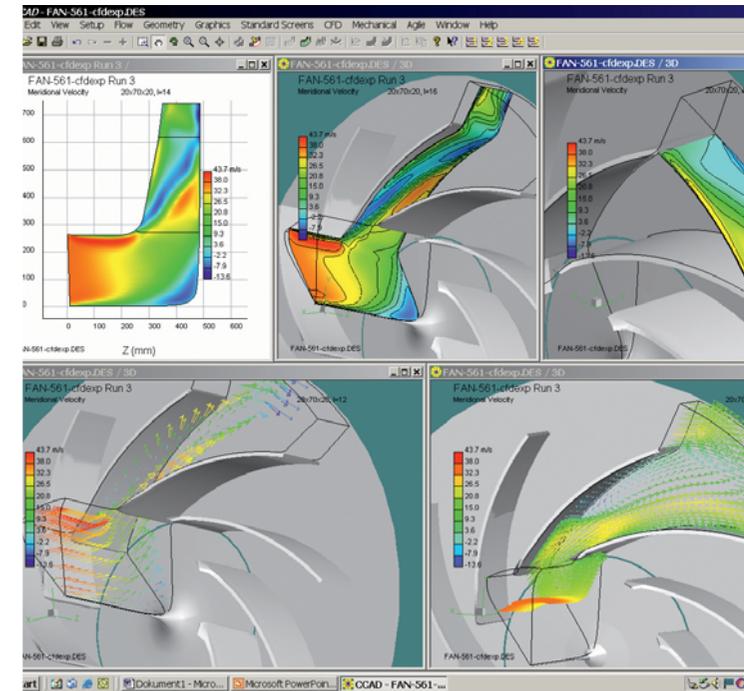
In addition to the head office in Luton, England, Hayward Tyler has manufacturing and service facilities located in China, India and USA, providing cover 24x7 for maintenance, overhaul and repair services.

Hayward Tyler Services

Our services include preventative maintenance, repair and overhaul for pumps, motors and turbines, along with total asset management programmes for existing installations. These services are further complemented by our dedicated spare parts facility, Partsmart™, that provides standard, bespoke and obsolete parts for our own and other OEM rotating equipment.

[More information can be found on our website.](#)

1 KIMPTON ROAD
LUTON
LU1 3LD
ENGLAND
TEL: +44 (0) 1582 731144
FAX: +44 (0) 1582 452198



Plant efficiency & reliability improvements, independent of the manufacturer.

Hayward Tyler Services, a division of **Hayward Tyler Ltd**, is an independent Pump and Motor company with a heritage that can be traced back to 1815. During this time Hayward Tyler has been challenging engineering convention by providing practical and reliable solutions to operational & reliability problems for industrial pumps and motors, all over the world.

We now have an opportunity to improve the reliability and efficiency of pumps of any manufacture using the latest tools available in Computational Fluid Analysis (CFA). We can provide an independent solution to re-rating of centrifugal pumps and can deliver optimum efficiency and reduced cost of ownership.

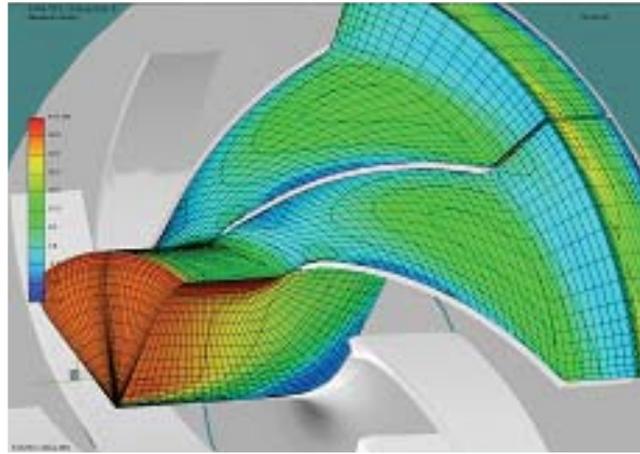
Key Features

- Reduce Energy Consumption
- Raise the meantime between repair
- Minimise project time when buying new pumps
- Increase plant output
- Reduce cost of ownership
- Low cost upgrade of existing pumps

Knowledge is Power

Engineering Design Data is now more freely available to everyone. The quest for knowledge may be due in part to ongoing concerns about the energy consumption of pumping systems, which account for nearly 20% of the world's electrical energy demand. This ranges from 25% to 50% of the energy usage in certain industrial plant operations.

The energy costs of a pump or pumping system, together with the initial investment and subsequent maintenance expenses, are influenced by design and usage specifications.



Centrifugal Pumps & System Efficiency

As a company who are internationally recognised as providing unrivalled pump reliability, Hayward Tyler pump efficiency technology provides the most up to date computational fluid analysis for pumps, regardless of the OEM.

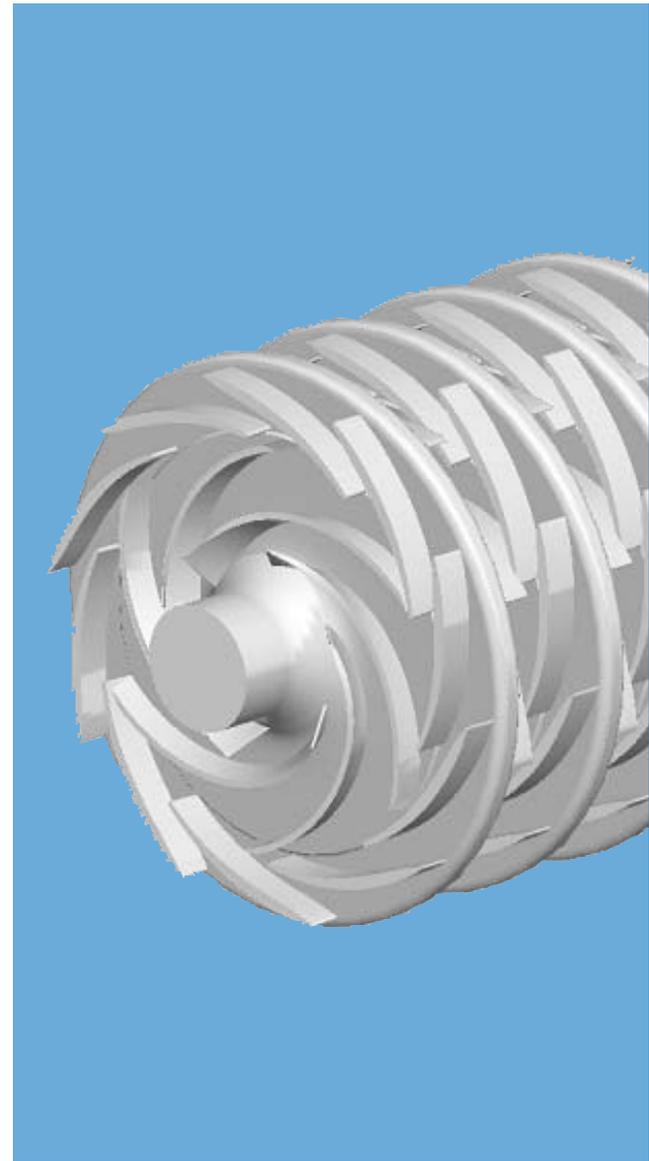
The majority of pumps operating on plants throughout the world have been designed using empirical data. Upgrading existing centrifugal pumps of ANY manufacture may produce outstanding financial returns.

Pumps operating away from best efficiency point (BEP), are known to exhibit symptoms that can lead to premature failure. Indeed in pumps where fluid re-circulation is present improvement in reliability can also be achieved.

Using the latest portable component re-engineering tools it is possible to recreate existing design drawings for use in Computational Fluid Analysis (CFA) verifying existing component dimensions and details.

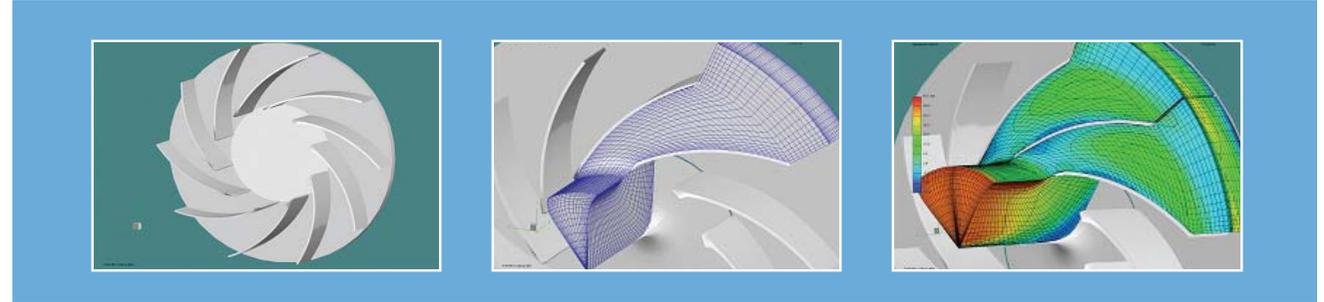
Mechanically and hydraulically tuned components will be manufactured at Hayward Tyler's specialist facility in Luton for delivery to the assembly workshop.

The assembly workshop can be on or local to customer premises providing an opportunity for site technicians to be involved.

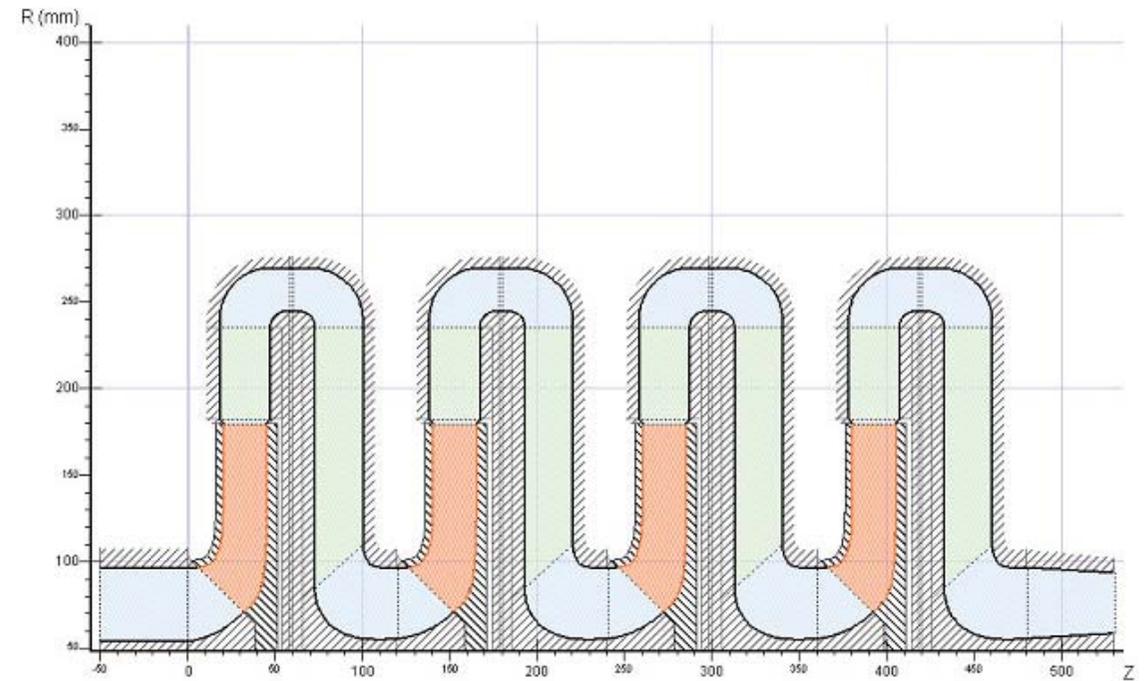


A Design Study of the Boiler Feed Pump Stage

Our design modeling and simulation technology enables improving performance of pump stages in reduced development times. A power station Boiler Feed Pump has been selected to demonstrate the design process that uses integrated 1D-Q3D-3D methods, the latter being demonstrated on a validation case of a single curvature blade impeller, as shown below.



The BFP centrifugal pump stage consists of the impeller, vaned diffuser, crossover and return channel system. Starting with the base-line definition of the pump stage overall configuration, detailed blade design optimisation studies were performed in order to optimise the hydraulic passages. Presentation compares the conventional, empirically based design methods with the enhanced, modeling and simulation based methods which - as flow physics based - are equally applicable to the entire range of pump specific speeds.



Benefits

- Improve power station operational efficiency
- Increase pump output and reliability
- Make a real contribution to a cleaner environment
- Reduce operational costs and overheads