



Case | Dura Pump

Increased energy efficiency, reduced maintenance and cost savings for washdown processes in an industrial manufacturing company

DURA PUMP
PERFORMANCE UNDER PRESSURE

GRUNDFOS 

Possibility in every drop

A UK industrial manufacturing customer of Dura Pump, a provider of commercial and industrial solutions in all areas of fluid handling, faced recurring challenges with their washdown system. Dura Pump supplied three high efficiency Grundfos CRNE high-speed pumps to transform their customer's outdated system into a procedurally compliant and energy-efficient operation, while simultaneously reducing running costs.

The situation:

Constant failures plagued the old washdown system, requiring frequent repairs. The system's tank was not mixing hot and cold water to the required temperature, and the water was mostly cold. Compounding the issue, the pipework between pumps and at point-of-use had deteriorated, causing inefficiencies in water delivery. Operating at 70 bar, the system's plunger pumps were showing signs of wear and tear, further exacerbating the situation.

The solution:

Dura Pump proposed a comprehensive solution to address the customer's challenges. They recommended the installation of a Grundfos Booster set, featuring a 40 bar washdown system powered by three CRNE Grundfos high-speed pumps. In addition, Dura Pump designed and installed a new ring main to deliver the required volume of water to each point-of-use efficiently. To ensure optimal performance, a new stainless-steel tank equipped with a steam heater was provided to regulate water temperature effectively.





The outcome:

The Dura Pump solution including Grundfos pumps yielded a reliable system which can provide more than sufficient water at the right temperature for washdown activities. The newly installed system operates reliably, reducing power consumption and running costs for the industrial manufacturing customer. Notable achievements include a significant reduction in power consumption, resulting in savings of 13 kW/hour.

Moreover, the transition from a 70 bar to a 40 bar system demonstrates improved effectiveness and efficiency. Dura Pump reduced time spent on maintenance; an estimated 4-12 hours were being spent on repair and maintenance each week, and this is now an annual inspection with service.

This customer case story showcases how Dura Pump's expertise and innovative solutions not only addressed the customer's immediate challenges but also delivered long-term benefits in terms of efficiency, cost savings, and reliability.

Products:

- 3 x Grundfos CRNE 3-23 11 kW

Procedurally compliant and energy-efficient washdown:

- Sufficient water at the right temperature
- 30% energy savings (13 kW/h)
- 40 bar system increases efficiency
- 6 monthly inspection and service instead of weekly maintenance

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