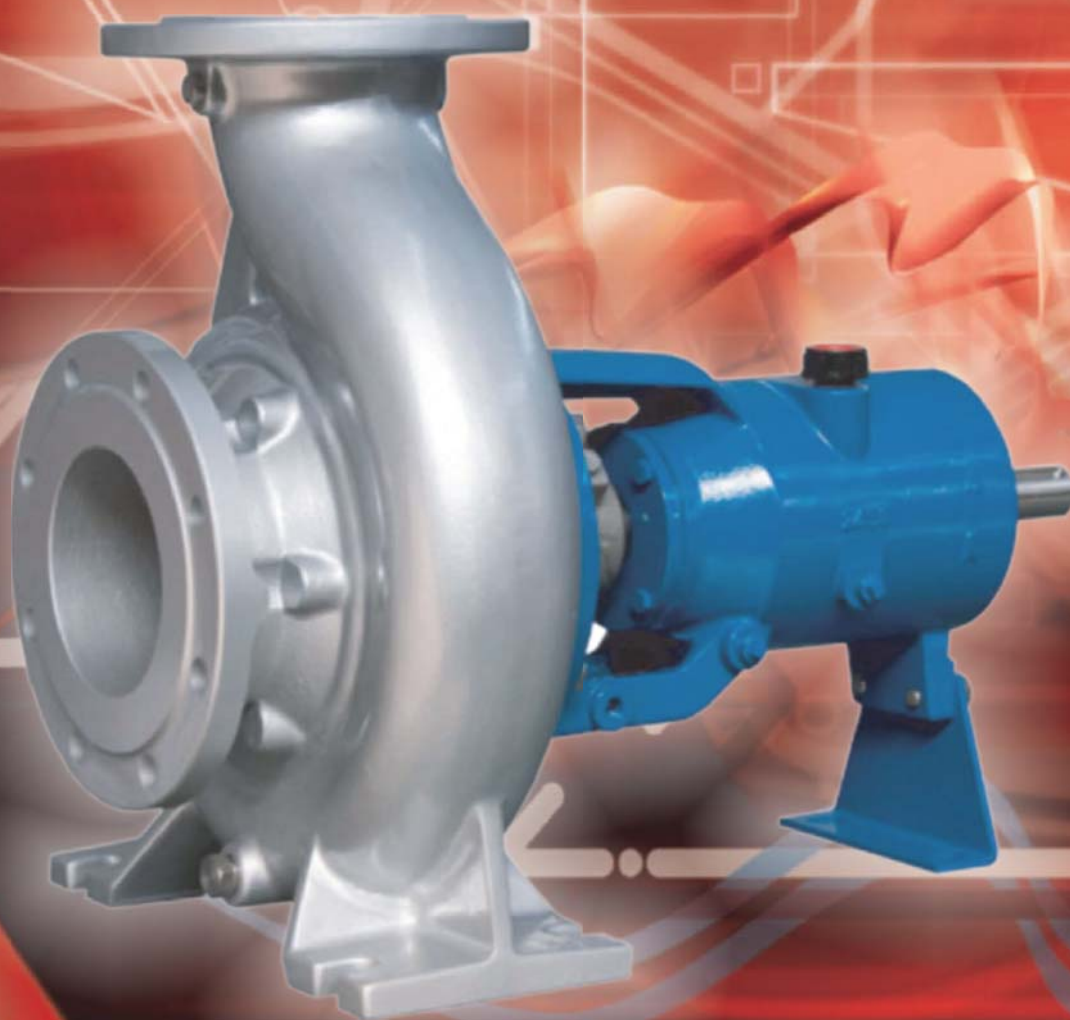


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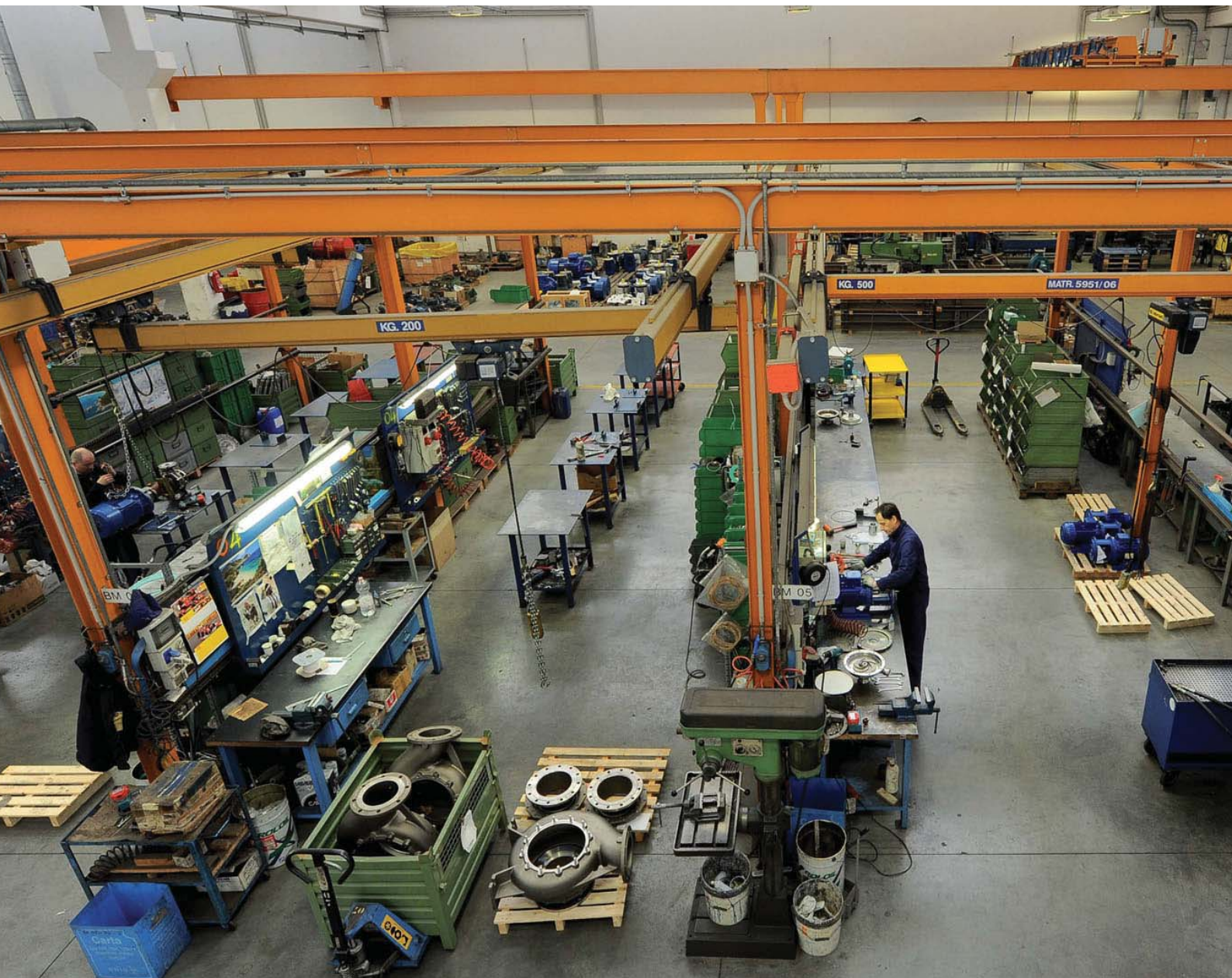
SUPPLEMENT TO N.10 OF ICP - RIVISTA DELL'INDUSTRIA CHIMICA - OCTOBER 2013





# Centrifugal and Cantilever Pumps A Customer Oriented Approach

Despite the general slow-down in the economy, the market continues to reward the products made in Parma by Salvatore Robuschi and the service provided, especially in terms of service and quick delivery times for spare parts.





**K**ey elements of Salvatore Robuschi's success, operating on the market for more than 75 years, are customer-oriented design and the expertise of its technical and sales staff.

The company's primary goal is in fact to become a reference name for process pumps, seeking to design "tailored" solutions for every need. One of the company's prerogatives is also a prompt service, fast deliveries and great flexibility in tackling immediate needs.

The series of centrifugal pumps by Salvatore Robuschi includes models with closed or open impellers complying with DIN 24256 - UNI EN 25199 (ex ISO 5199) - UNI EN 22858 (ex ISO 2858) standards, free flow pumps with recessed impellers, as well as channel and multi-stage impel-

lers. All come in stainless steel and special alloys, except for the latter which is cast iron. The production programme also includes a light and less expensive series in AISI 316 with capacity up to 90 m<sup>3</sup>/h. We asked Michele Robuschi, the company's General Manager, a few questions.

#### **Which are your main fields?**

There is no easy answer to that as we cover so many sectors: chemical and pharmaceutical industry, food processing industry in the form of washing and conveying units, evaporation/concentration processes, distilleries, oenology, wastewater and special waste treatment, pulp and paper, textile industry, butchering and farming, biogas production, desalination, boat factories., etc.

If we exclude the sectors where API pumps are used such as Oil & Gas, marine industry and clean water services, we cover almost all other sectors, clearly where centrifugal pumps are concerned. We also work with some engineering companies.

#### **Which is the engineering philosophy behind your products?**

Our goal from a construction point of view is to make standard those features that other manufacturers consider special. Obviously this implies the use of more complex components, but it brings speedy delivery, great application versatility, the possibility of transforming quickly and economically pumps to adapt them to new plant and production needs, and reduced maintenance costs. This means great operating savings. From a hydraulic standpoint, the range was designed to deliver a great number of models and therefore achieve maximum efficiency in every situation.

Closed microcasted impellers for clean liquids, semi-open impellers for liquids with solids, new concept multi-channel impellers for large capacities (today up to 2000 m<sup>3</sup>/h) of liquids containing also solid parts and free flow pumps with recessed impellers (new models with up to 200 mm spherical passage will be available soon). Great attention has also been placed on research to achieve very low NPSH values.



#### **The company has also recently made important investments. Can you tell us something about them?**

Despite the general slow-down in the economy, the market continues to appreciate our products and the relevant service, especially in terms of assistance and fast delivery times for spare parts.

We have recently built a new factory and installed some new production lines, we have also set up a logistics department. This involves also the expansion of the staff, in fact we engaged new people in the technical, marketing and shipping departments: a sign



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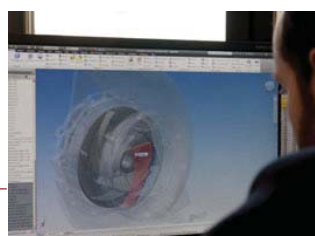
**Web site: [www.salvatorerobuschi.com](http://www.salvatorerobuschi.com)**



## Two significant supplies

Plant	Problem	Solution
<p>Reactor for synthesis fat acid chlorides</p> <ul style="list-style-type: none"> <li>- NPSHa (plant) &lt; 1 m</li> <li>- temperature 170° C</li> <li>- presence of solids in suspension</li> <li>- chemical-aggressive conditions</li> <li>- criticality: the pitch process fall by gravity in the pump and tend to harden</li> </ul>	<p>Continuous blockages in magnetic drive pumps due mainly to the pitch and crystals present in the system.</p> <p>very high costs of management.</p>	<ul style="list-style-type: none"> <li>- Pump with open impeller with removable plate</li> <li>- Heating chambers on both sides</li> <li>- Construction: Hastelloy C®</li> <li>- Engineered double seals</li> </ul>

<p>Circulation of waters containing ceramic powders</p> <ul style="list-style-type: none"> <li>- suction from 2 m</li> <li>- temperature 80 °C</li> <li>- presence of very fine solids in suspension</li> <li>- heavy abrasion</li> </ul>	<p>The vertical pump originally installed had frequent failures as powders creep between the seals</p> <p>Impossibility to have clean water for flushing</p>	<ul style="list-style-type: none"> <li>- Total absence of bushings in immersion immersed</li> <li>- Work in drying condition without suffering any damage.</li> <li>- External bearings above plate</li> <li>- Special material against corrosion</li> </ul>
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Open impeller with heated system - Hastelloy C®



Cantilever (highness 1,700m)

that to grow our company invests first of all in human resources and in the professional capacity of its employees.

### For which application is it suitable your abrasion resistant Cantilevers?

Our Cantilever pumps are designed to work for more than 40,000 hours without mechanical maintenance interventions, and this means working 5 years without costs and continuously, without interruption. The ATEX version, without sliding parts and the consequent friction, makes installation particularly simple in Ex classified areas. Transfer of particularly demanding media, molten salt, molten sulphur, zinc, nickel

baths, paints, cataphoresis, media up to 500°C, glues, water containing salt or metal shavings, recovery tanks with control levels: all these are applications where, if unstable, the cantilever pump becomes an ultimate, long lasting solution.

### Do you also make maintenance of centrifugal pumps?

We believe that after-sale assistance is as fundamental for the customer as it is for us, in fact it enables us to better understand how pumps are used and to introduce improvements, which are often suggested by our customers. An important aspect of after-sale service is the spare parts service,

we guarantee 24-72 hour delivery depending on the type: the most usual pieces such as seals, gaskets, shaft sleeves, shafts are immediately available; it takes a few days more for impellers or parts built according to specifications.

### What is the added value of Salvatore Robuschi products?

It is obvious that reliability increase and the possibility of facing extreme situations without causing machine downtime and maintenance mean also great economic savings. This is exactly our product policy, which has not changed for years: a machine must not only do what it was designed for, but also guarantee a wide safety margin. The market wants energy efficiency and low operating costs: our response is not only the curve with higher efficiency, but also minimum maintenance, be extremely sturdy to optimize the life of the seals, provide versatility in the choice of the latter enabling the user to install any conformation without making any changes, mount microcasted impellers on the whole process range, maintaining the same level of characteristics and efficiency for the entire life of the pump.

