

## *CIRCOR Wuxi Factory Begins Direct Supply of Pumps For Alfa Laval China*

### **Challenge:**

In 2006, long-time CIRCOR client, Alfa Laval, approached CIRCOR's Imo AB division in Stockholm, Sweden with a challenge. To maintain their competitiveness in China, the fluids-handling giant needed to reduce their manufacturing lead time and reduce their investment in inventory. Alfa Laval needed to serve their Asian customers from Asia. However, Alfa Laval was determined to stay with CIRCOR, due to our product quality and unrivalled client service, and we did not let them down.

### **Solution:**

CIRCOR, in consultation with Alfa Laval, designed and built a new Imo pump assembly line and testing unit in Wuxi to supply their plant directly. Our solution addressed all of Alfa Laval's concerns by localizing the production of pump components, while expanding CIRCOR's production capacity in the process.

### **Results:**

The pump production time has been reduced from 14 weeks to 6 weeks and our system solution is saving Alfa Laval an estimated half a million Euros annually on unit price, transportation and import duties. Moreover, the new facility has expanded CIRCOR's production capacity in China, increasing the availability of local services in accordance with CIRCOR's Asia Pacific strategy.



## The Product

CIRCOR-manufactured Imo ACE three-screw pumps are supplied to diesel engine manufacturers and ship builders for use in the lubrication of heavy machinery and delivery of fuel to diesel engines. Incorporating three screw spindles, an adjustable pressure relief valve and Silicon Carbide shaft seal in a nodular cast iron body, the Imo pump is universally recognized as the best pump in its class. CIRCOR Wuxi follows Imo's original design, material, assembly and testing specifications exactly to ensure that the Stockholm and Wuxi products are identical.



Imo ACE three-screw pump

Alfa Laval employs our ACE pumps in fuel conditioning modules which convert heavy fuel oil into diesel by heating to reduce its viscosity for large marine engines. ACE pumps supply both low pressure and high pressure sections of the fuel conditioning process. Alfa Laval relies on CIRCOR-made ACE pumps to perform well at high temperatures and pressure.



Alfa Laval fuel conditioning module equipped with Imo ACE three-screw pump

The Chinese demand for these high-precision machines continues to grow. When the existing systems caused a bottleneck in the company's growth, Alfa Laval turned to CIRCOR for help. CIRCOR's well-considered response highlights our corporate philosophy of business partnership and reciprocal growth.

## Quality Control

To accommodate Alfa Laval's request, extra capacity was built into the CIRCOR Wuxi plant over a twelve month period at a cost of over 1 million RMB. A brand new Imo pump assembly line was installed at the plant, alongside test units for in-house pump testing of ACE pumps.



CIRCOR manufacturing and service centre in Wuxi, China

The new assembly line consists of two bare shaft pump assembly benches, one completed pump unit assembly bench, two test benches and storage shelving. The facility currently produces 20 pieces ACE pumps per shift and can be switched to the production of the ACG series as required.

The test benches allow the testing of hydrostatics, performance, valve settings and other features through detection of temperature, inlet and outlet pressure, rotary speed and flow rate. All measurements are automated and diagnostic report generation is computerized. Test conditions can simulate up to 200 liters/minute, while only one additional technician is required for monitoring.

CIRCOR ensures the continuity of quality through the implementation of rigorous testing and central approval of locally sourced parts and by sourcing key components including screw spindles and mechanical seals from Sweden. As always, every element of the new production

line, along with the technical standards, testing procedures, and even floor plans, are identical to CIRCOR's Swedish operations. Periodic mutual visits are also allowed for monitoring and study.

### A Win-Win Situation

The Alfa Laval case demonstrates another, equally important aspect of CIRCOR's corporate approach - our understanding and treatment of clients as true business partners. When this long-time client explained their situation to CIRCOR, we immediately grasped the importance of their request as well as the opportunities it provided. At the same time, Alfa Laval's request enabled CIRCOR to expand its Chinese operations and Asia Pacific presence with minimal risk. Both companies have benefitted greatly from this arrangement.

CIRCOR developed a solution which resolved Alfa Laval's latency issues while building capacity on our side, demonstrating yet again that CIRCOR is more than just manufacturer and supplier of world class fluid-handling equipment; CIRCOR is an amenable business partner with the very best interests of its clients at heart.



Test benches for Imo three-screw pumps



## About CIRCOR International

CIRCOR International is a global leader in critical fluid-handling solutions, including the manufacture of positive displacement industrial pumps and valves used in global oil and gas, power generation, marine, naval and a variety of other industrial applications. Key product brands include Allweiler, Fairmount Automation, Houttuin, Imo, LSC, Portland Valve, Tushaco, Warren and Zenith. Additional information about CIRCOR's products, businesses and practices is available at [www.circorpt.com](http://www.circorpt.com).

## About CIRCOR Asia Pacific

CIRCOR Asia Pacific serves the unique fluid-handling needs of customers in the region, with a broad product portfolio, deep application expertise and strong local presence. The network of CIRCOR offices, engineering support centers, production facilities, and authorized distributors and agents in Hong Kong, China and India helps ensure responsive delivery of and service for CIRCOR pumping systems and replacement parts.

*"The advantages of the Wuxi expansion were clear. CIRCOR welcomed this opportunity to help out our old friend, Alfa Laval, and expand our Chinese operations. We have a very real stake in the success of our clients and this venture has been very good for all parties."*

—Mr. Michael K. Dwyer, Senior Vice President & General Manager Asia Pacific

## About Imo AB

Imo AB was founded by Carl Monelius, inventor of the three-spindle pump. Headquartered in Stockholm, Sweden, Imo AB is a global provider of three-spindle screw pumps suitable for pumping all non-corrosive fluids with lubricating properties in marine and offshore, defense, power generation, tooling-machinery, and pulp and paper applications. Imo AB is a business unit within the CIRCOR International. For more information, please visit: [www.imo.se](http://www.imo.se).



**CIRCOR Asia Pacific**  
Regional Head Office  
Unit 7, 31/Floor  
Laws Commercial Plaza  
788 Cheung Sha Wan Road  
Lai Chi Kok, Kowloon  
Hong Kong  
Tel: +852.2136.8023  
Fax: +852.2136.8026  
[www.circorasia.com](http://www.circorasia.com)

**CIRCOR Asia Pacific**  
Shanghai Office  
Suite 1701, Universal Mansion  
168 Yuyuan Road  
Shanghai 200040  
China  
Tel: +86 21 6248 6087  
Fax: +86 21 6386 8183

**CIRCOR Asia Pacific**  
CIRCOR (Wuxi) Pump Co. Ltd.  
Wuxi National Hi-Tech Development Zone  
No. 83-C, Building No. 3  
11# Xi Kun Road  
Xu Feng Industry Park  
Wuxi, Jiangsu 214028  
China  
Tel: +86 510 8295 9588  
Fax: +86 510 8520 1126

**Tushaco Pumps Pvt. Ltd.**  
A CIRCOR Business Unit  
601, 6th Floor, Raheja Plaza-1, 'A' Wing  
L.B.S. Marg, Ghatkopar (West)  
Mumbai 400 086  
India  
Tel: +91 22 25197300  
Fax: +91 22 25197360  
[www.tushacopumps.com](http://www.tushacopumps.com)