Meet the Buyer event: Alfa Laval

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Cambridge innovation Center
Stationsplein 45, 4th floor, 3013 AK Rotterdam, The Netherlands

Operating in the areas of heat transfer, separation and fluid handling, Alfa Laval focuses on the development and manufacturing of heat exchangers, separators, pumps and valves. The products play a pivotal role in everything from power production and oil extraction to food manufacturing and wastewater treatment – making Alfa Laval a key player in areas of crucial importance to society, such as energy optimization, environmental protection and safe food production.

For this event, Alfa Laval is primarily looking for commercial SME companies with offerings in the following areas; Heating and cooling technologies, Water treatment, New materials and Internet of Things solutions.

Meet the Buyer events offer **interesting opportunities for your company** to get in touch with the leading enterprises in a variety of business sectors. The event is **invite only** and will give you the chance to have an individual **one-to-one meeting** with **key decision makers**. Join the event, establish valuable collaborations, pitch your products and services, and discuss business partnerships that can fast-forward your company's growth.

Interreg
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Buyer profile

What is their business?

About Alfa Laval Technology Development

At the Meet the Buyer event Alfa Laval is represented by Mats Nilsson, Klas Bertilsson and Anders Nyander at Technology Development. Their team is responsible for the development and evaluation of new concepts to feed into Alfa Laval product development. In the matchmaking events, Alfa Laval is looking for opportunities for joint projects to evaluate or develop new concepts into new products. They are also interested in becoming a customer, integrating new technologies in their product portfolio.

About Alfa Laval

Alfa Laval is a leading, global provider of first-rate products in the areas of heat transfer, separation and fluid handling. With headquarters in Sweden and subsidiary companies in over 35 countries around the world, Alfa Laval had a global workforce of 17,000 employees and revenue of 4,700 MUSD. Alfa Laval is a heavy industry company that focuses on the large-scale operations, such as the Marine, Energy, and Food industries. Read more at www.alfalaval.com

Three key technologies suitable for most industries

Operating in the areas of heat transfer, separation and fluid handling, Alfa Laval focuses on the development and manufacturing of heat exchangers, separators, pumps and valves – products that are required by a large number of industries across the globe. The company's products play a pivotal role in everything from power production and oil extraction to food manufacturing and wastewater treatment – making Alfa Laval a key player in areas of crucial importance to society, such as energy optimization, environmental protection and safe food production.

Heat transfer

Most industrial processes need some form of solution for heat transfer. Alfa Laval's heat exchangers transfer heat or cooling from one liquid to another – for example – and are extremely important to the efficiency of the entire process. The company's compact heat exchangers have the capability to recycle heat, optimize customers' energy consumption, cut costs and reduce the negative impact on the environment.

Separation

Separators have been an important part of Alfa Laval's operations since the company was founded in 1883. The technology is used to separate liquids from other liquids and solid particles from liquids or gases. In addition to separators, the offering includes decanter centrifuges, filters, strainers and membranes.

Fluid handling
Alfa Laval offers pumps, valves, tank cleaning equipment and installation material for industries with stringent hygiene requirements, such as the food and pharmaceutical industries. The portfolio also includes pumping systems designed specifically for the marine industry and offshore market.

Sustainability
In addition to its financial goals, Alfa Laval also has a number of non-financial target parameters. These reflect the company's ambitions in the areas of the environment, health and safety. Among other areas, these key ratios encompass: a reduction in water consumption, increased energy efficiency, a reduction in the use of restricted "grey list" chemicals and a reduction in greenhouse gas emissions from freight transportation and travel.

What are they looking for?

A. Heating and cooling technologies

Alfa Laval's goal is to be the preferred partner for innovative and competitive solutions for cooling & heating components anywhere, at any time by providing energy-saving solutions using compact heat exchangers as core technology. Alfa Laval is interested in evaluating new technologies that can further improve efficiency and environmental impact in customers' processes.

Within the following sectors Alfa Laval is searching for solutions and technologies of different kinds:

The building sector
- Affordable and efficient solutions for heating and cooling
- Compact and integrated solutions (heating, cooling, ventilation, domestic hot water - "climate box")
- Solutions involving heat exchangers for
    - heat recovery (sewage etc)
    - flammable refrigerants – both in refrigeration and heating solutions
- Flexible heat exchangers, high efficiency in a large range
- Silent heat exchangers
- "Frost-free" heat exchangers
- Heat exchangers visually integrated in the surrounding environment

The retail business (supermarkets)
- solutions involving heat exchangers for high pressure (CO_2), flammable refrigerants, indirect cooling

The industrial sector
- solutions involving heat exchangers that can handle dirty/dusty flows – to increase heat recovery

B. Water and wastewater treatment

All human, commercial and industrial activities produce waste products that are harmful to our environment unless treated. Most industrial processes generate waste streams that need to be treated or disposed of, and the ability to treat waste and reduce the amount for disposal is therefore key to keep the license to operate and to extend capacity. Alfa Laval is looking to meet companies with innovative technical applications that are cost effective and has a (already realized or potential) role to play in a sustainable water and wastewater system. Our common strive for a more sustainable community will result in increasingly more stringent legislation and demands on water production, wastewater management and reuse of resources. Applications of interest are not only effective in providing the requested water and wastewater functions but also have digitalization and artificial applications that corresponds well to todays and future ambitions. Innovations of interest are e.g.:

Water Treatment

- Treatment process equipment for managing changing raw water quality (e.g. due to climate change) and increased load of chemical and microbiological contaminants
- Intelligent control of process and equipment
- Quick and smart measurement methods for operation surveillance and control and early detection of both chemical and microbiological contaminants
- Smart mobile solutions for quick response in times of crises
- Treatment equipment with high water recovery efficiency and low energy consumption
- Membrane applications with long life time, high water recovery efficiency and low energy cost
- Smart solutions for production of water from wastewater

Wastewater Treatment and reuse of resources

- Treatment process equipment that reduce:
    - microbiological contaminants, pharmaceuticals and micro plastics in wastewater
    - microbiological contaminants, pharmaceuticals, micro plastics and nutrients in wastewater overflow and storm water
- Climate impact reduction:
    - in general for wastewater treatment plants
    - through more efficient utilization of high value energy such as electricity and biogas, especially in combination with advanced treatment process equipment
    - through efficient energy utilization for smaller treatment plants and pump stations
    - through better control of digester processes and the management of sludge and digester waste-streams
    - through reducing/capturing methane gas or nitrogen gas

- Recirculation of nutrients in wastewater through
    - methods for efficient hygienisation of sludge
    - methods for extracting nutrients from wastewater streams
    - alternative methods for sludge management (to the existing one) so that at least phosphorous is recirculated to farming land

Industrial processes

- Treatment processes for specific contaminants of concern
- Process equipment that improves water efficiency
- Process equipment that improves the reuse of resources (water, energy, raw material, …)

C. New materials and surfaces

Alfa Laval is constantly evaluating both new heat transfer materials and new coatings to enhance efficiency, reduce costs and prolong lifetime for their products. Heat transfer materials include metals, non-metals and polymeric materials. Coatings of interest should reduce fouling, reduce scaling and protect from corrosion while being thin enough to not reduce the thermal performance of the material.

Alfa Laval is actively working with coatings on metals to improve their cleanability, reduce fouling and facilitate the cleaning, and to improve their corrosion resistance towards sea water mainly. The following areas are of specific interest:

- Coating (COATIM)-antifouling of titanium: Coating for titanium to reduce biofouling on sea coolers. The coating has to have thickness between 1-40 µm, be abrasion resistant, temperature cycling resistant and sea water resistant.

- Clean surfaces: Scaling (reducing calcium carbonate accumulation of the plates), biofouling, crude oil fouling (asphaltenes). Material would be stainless steel 316 and titanium.

- Control of biofilms

D. Internet of Things solutions

Offering a wide range of process critical products for Alfa Laval's customers, there are interesting opportunities to add customer value by applying sensor technologies and data center services. Alfa Laval is looking for proven solutions within the Internet of Things domain including deep learning & other machine learning methods (Industrial statistical modelling & analysis for prediction, anomaly detection, diagnosis, etc), as well as solutions in order to generate new services or business models.

If you are interested in this opportunity, please contact **Tara van de Lagemaat** by sending an email to t.vandelagemaat@cleantechdelta.nl and briefly indicate the interest of your company in the Buyer's case. You can also contact your regional SCALE-UP partner.

SCALE-UP PARTNERS

This Meet the Buyer event is an exclusive invitation for companies associated with the partner organisations in the North Sea region. Cleantech member organisations have joined forces in the Interreg SCALE-UP project to enable cross-border business contacts between SMEs with green solutions and established large companies. The overall aim is to facilitate for innovative cleantech companies to scale up your start-up. Consultants at the member organisations help participants prepare the meetings and support them through the business process.

CONTACT

BELGIUM Cleantech Flanders Frans Snijkers frans.snijkers@cleantechflanders.com Tel +32 473 34 12 16	DENMARK CLEAN Maria Skotte mas@cleancluster.dk Tel +45 6142 4400
NETHERLANDS Clean Tech Delta Tara van de Lagemaat t.vandelagemaat@cleantechdelta.nl Tel +31 10 820 88 29	SWEDEN RISE Swedish Research Institute & Cleantech Inn Sweden Richard Englund richard.englund@cleantechinn.com Tel +46 703 791 645
UNITED KINGDOM Cambridge Cleantech Sam Goodall sam.goodall@cambridgecleantech.com Tel +44 01223 750017	SCALE-UP COORDINATION City of Rotterdam Wouter van Rooijen w.vanrooijen@rotterdam.nl Tel +31 6 15 25 1699

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