

# True support from start to finish

Alfa Laval's commitment goes well beyond the equipment we supply. It begins before you have even begun your conceptual design, and it extends long past the start of your customer's production.

We help you select the optimal equipment to win the bid, making sure your customers get the best possible efficiency for their specific processes. And then we work with you to save time, money and stress with expert project managers who ensure dependable and timely execution.

2 Front-end Engineering

Design FFD'

EPC Bidding 3

– Final

EPC Award

Engineering

4 EPC Award - Order Execution

EPC Award - Start-up and Commissioning

5

6

and

Operation

Maintenance

# 123456Front-end<br/>Engineering<br/>Design<br/>(FEED)EPC<br/>BiddingEPC Award<br/>- Final<br/>EngineeringEPC Award<br/>- Order<br/>ExecutionEPC Award<br/>- Start-up and<br/>And<br/>CommissioningOperation<br/>and<br/>Maintenance

# Front-end engineering design (FEED) and EPC bidding

Ensuring a smooth project starts in the very earliest stages. Thanks to a wide product offering and range of commercial agreements, combined with our unmatched process and thermal experience, Alfa Laval can be at your side from day one. Our specialists are at your disposal to ensure you can present your customer with the optimal design and cost proposal to win the bid.

#### An open dialogue

Alfa Laval can be a valuable sounding board as you begin looking for information on key technologies for your conceptual design and planning the cost projections in your FEED process. Our experts are in easy reach, whether for a quick discussion by phone or an in-depth consultation in person. They are there to help you get it right from the start, asking relevant questions that will save you and your customers on both time and money in the long run.

#### Unrivalled offering with insight to match

Thanks to the market's widest portfolio of plate heat exchangers and a truly global supply network, Alfa Laval can make sure your customers always get exactly the optimal technology for their needs – no matter where in the world they are. Our specialists have extensive knowledge of your customer's processes and the end-user experience, making it easy to translate their specific requirements into the right equipment for the job. We can support you not only in making your equipment choices, but also in justifying those choices to your customer and licensors. With decades of insight into this equipment and the applications in which they are used, we can advise you on the right design to maximize CAPEX savings. As a strong global supplier of this type of equipment, we can also assist you and your customers with options such as trade financing.

#### Getting it right from the start

As the initial design process turns to bidding, Alfa Laval continues to be active. We know your customers, because your customers are our customers. From oil & gas, to petrochemicals, refining and more, we have spent years working closely with players in the heavy industries to optimize their processes and help them get the most energy efficient and reliable thermal transfer performance.

We bring this experience from similar projects, so you get all the details right from the start. With real-world knowledge from your customers' processes, our experts can support you in finalizing specifications and material selection to ensure the user experience matches expectations.

Our quotations are based on a thorough specification review and end-customer experience. Our goal is to help you achieve correct budgeting and smooth execution. We know that conditions and specifications change as solutions are negotiated, which is why we work flexibly and always respond quickly.



3 EPC Award – Final Engineering

EPC Award – Order Execution

# Final engineering

Winning the bid may be half the battle, but it's really just the start of your hard work. There is much to be done in the final engineering phase. From finalizing specifications to laying out all the details of your design, keeping the final engineering process running smoothly and effectively is ultimately key to keeping the overall project on time and on budget.

#### Collaborating to keep costs down

Alfa Laval has knowledgeable engineers on staff that can assist with technical evaluations to make sure the final scope of supply meets the end-user's specifications. This ensures that, working together, we can significantly reduce costs – both for your customer and for your own profitability.

### Order execution

Alfa Laval has many decades of experience delivering to projects in many different types of applications across the heavy industries. Our knowledge, capabilities and proven routines are your assurance of a smooth and successfully executed project.

#### The flexibility to deliver

Even after your detailed engineering is finalized and all equipment has been selected, getting everything into place is seldom a simple path from A to B. In anything as complex as an oil and gas or petrochemical installation, there may be changes in the course of the project. Alfa Laval has the experience and the capacity to adapt when adjustments are needed. By maintaining a close dialogue with you and other stakeholders in the project, we can respond quickly and effectively to the unforeseen.

#### Global support to get it right

Despite the flexibility of our project execution, our work is thorough and precise. Before delivery to you, Alfa Laval heat exchangers are evaluated and approved in full-scale testing. Likewise, you can rely on the capabilities of our global delivery network. World-class logistics and a dedicated team ensure our deliveries are correct, on time and ready for integration.

#### Continuous dialogue for continuous improvement

The transparency with Alfa Laval that begins in the pre-FEED stage continues throughout the project. You have constant contact with a dedicated project manager who can answer your questions and make sure any changes to specifications are dealt with in a timely manner.

We also value your feedback along the way. Alfa Laval never stops aiming for improvement, and that applies to our project management just as much as it does to our technological development. We take the lessons we learn from you seriously, to ensure we can become even better – together.



erd EPC Award – Start-up and Commissioning

5

Operation and Maintenance

6

## Start-up and commissioning

Not only has Alfa Laval spent 90 years developing the market's most efficient plate heat exchanger technologies, but we have also perfected the process of bringing them into operation. From physically installing equipment to securing optimal performance, we create a solid foundation for successful long-term operation.

#### Local experts that speak your language

As a stable, global supplier with service presence in over 100 locations, both you and your customers can count on us for support – no matter where their operation is located. All around the world, we have specialists with deep insight into our products, the applications in which they are used and the specific demands of their local markets. They can be on site to assist your team with installation and commissioning, as well as walking your customers through the process of start-up and operation. If needed, they can even support with troubleshooting expertise further down the line.

#### Optimized from the start

Alfa Laval specialists can support commissioning as required, to verify and optimize the installation as well as to align performance with your overall design and the customer's expectations. This involves performance checks, but it can even extend to operator training and a dialogue around maintenance. When operation begins, all conditions are in place for smooth operation, easy maintenance and lasting uptime.

# Operation and maintenance

If your customers work in petrochemicals, refineries or the oil & gas industry, they no doubt deal with some of the most demanding process applications. But no matter what their specific duty is or where they are located, Alfa Laval is there. Our trained local experts can help to minimize risk and maximize uptime.

#### Customer confidence right from the start

Assuring your customers will have long-term support for the critical pieces of technology in their solution can play a big role in securing their peace of mind for the overall system. In fact, it can even be a decisive factor in the bidding process. From the robustness of our equipment to the strength of our global service network, they will be sure from day one that they can always rely on Alfa Laval.

Our global service network is easy to work with and committed to keeping your customers up and running throughout the solution's long lifecycle. Our experts secure their uptime, but also keep equipment optimized, energy efficient and compliant as demands and regulations change. We have a comprehensive offering of services to ensure top performance, which can be combined in a tailor-made Alfa Laval Service Agreement to suit their needs.

#### Ready when it matters most

When things do go wrong, having access to a global service network is crucial. Our committed team provides worldwide backup for all Alfa Laval equipment, including specialist troubleshooting and spare parts direct from local distribution centres. Aware that every minute counts, our experts dedicate their skills and know-how to get your customers back in production – but also to make sure they stay there. Your customer is our customer, and we never run away from a problem.

Contact us for a discussion on how we can support you in your next EPC project. Visit www.alfalaval.com/epc to learn more.

#### How to contact Alfa Laval

Up-to-date Alfa Laval contact details for all countries are always available on our website at www.alfalaval.com

#### 100004520-1-EN 2110