Ahead of its time:

Nibe heat pumps set the benchmark

Klaus Ackermann is Managing Director of Nibe Deutschland, the German arm of a Swedish company that is setting new standards in the world of heat pumps. At the company's headquarters, Klaus explains the growing demand for heat pumps, and how his company is taking the lead in Northern Europe and further afield.

"Nibe is very much like Purmo Radson, in that we are both dynamically growing companies, spreading and strengthening through Europe, with different strategies but still fitting together very well technically. We have around 6,500 people at last count, with €850 million turnover, and have been listed on the Stockholm Stock Exchange since 1997. We are a demanding employer, with hard working people, who are of course rewarded both financially and with the security of working with a company with a solid background and stable future. Our company personality is really determined by our stakeholders – hard work and high targets, driven by the ethics and example of Gerteric Lindquist, Managing Director and Chief Executive Officer."

NIBE THE BRAND

Nibe is a relatively young company, established in Sweden in 1949 by Nils Bernerup, and has three business areas; stoves, electric heaters and Nibe energy systems. These last, mainly heat pumps, are exclusively produced in Sweden, where Nibe is market leader. It also leads in many other North European countries, and is currently in the top 10 in Germany. "We either build new facilities from scratch, as we did in France, or acquire existing facilities, such as in Poland," says Mr. Ackermann. "I'd say we have around 10% organic growth, 10% acquisition, most recently the Schulthess Group AG, which was the largest acquisition in the heat pump sector. Nibe set its target for annual growth of 20%, which we are confident is achievable, since it is a level we have met consistently in recent years. I would say that we are a friendly but aggressively growing company." Aggressive product development plays a central role in this positioning. Nibe is the accepted leader in heat pump R&D, with 70 development engineers alone focusing on product innovation. "This is of course a sizeable investment and sign of confidence," Mr. Ackermann explains. And that confidence is well-founded, with a history of benchmarks proudly bearing the Nibe name. "We were the first company to produce a heat pump with a CoP above 5, the first to come out with a speed regulated exhaust air heat pump, and a speed regulated ground source heat pump," he continues.

Nibe was also the first to create what every heat pump should have: a user-friendly interface. The most complex tasks of the most complicated heat pump are simplified in such a clear and easy to use way, that when given a demonstration, you could almost believe that it was easy. Of course, the temperature settings are straightforward for the end-user, but the hard data behind it, performance, heat load, and so on – these are also displayed clearly so the installer can quickly and easily measure, check and adjust the settings when needed – via laptop or even remotely if necessary. "The interface was designed by a team of women, whose accomplishment in making complexity so simple is clearly another benchmark for the company," says Mr. Ackermann. »

THE RISE OF RENEWABLE ENERGY

Germany is renowned as being very environmentally friendly. Recently, 13 nuclear power plants were decommissioned, with the goal of replacing their output with renewables. The rest of Europe is watching the country's progress very closely, and currently around 18% of energy in Germany is renewable. For the growth of heat pumps, this is good news, as Mr. Ackermann explains, "By law, in new builds you have to use at least 10 percent renewable energy. With around 600,000 heating systems installed per year, 9 percent of those are heat pumps, which are used by around 23 percent of new builds in the country." The market split between new builds and renovation is around 70/30. "I think we are past the situation where we have to explain the physical principle of a heat pump," says Mr. Ackermann. "People either understand it or assume they do - there is no real demand from customers for the physics behind it. There is enough confidence in the proof that it works for people not to question that it does: when you switch on a light, you don't have to understand the circuitry or principles of electricity to see that it isn't dark anymore. Similarly, the end user quite understandably just asks 'How much can I save on my energy bills?'

Nibe has to segment its marketing to ensure the benefits are communicated on all levels: for installers, heat pumps provide good margin; for end-users, they provide cost-saving indoor comfort; and for house builders, they are easy to recommend because of their multiple benefits, helping them to sell their houses. But in the coming years, there is a predicted bottleneck as the number of qualified installers remains stable, although demand is set to rise.

"At a rough guess, out of 20 installers, there might be just one who would be a good match to be a heat pump installer - in terms of eagerness to learn - because it does require a certain knowledge to be able to handle heat pump installation," says Mr. Ackermann. "But that knowledge is of course very valuable to the installer, because there is a very attractive margin there. In maybe 4 years there will be certification for installers to be able to install heat pumps, and Nibe is working with the authorities to support the creation of a solid certification programme; it is voluntary today, but it will at some point become mandatory.

WHY BECOME A HEAT PUMP INSTALLER?

Typically there is an installer who is a forward-thinker, who understands that the future of energy is renewable, and that his business depends on being able to offer that to his customers. There is of course another route in to the heat pump installation world, and that's one of opportunism: being able to offer a specialist service and a specialist product - compared with traditional heat sources - simply earns him more. So 3 times a year Nibe runs workshops to train installers, and after completing the training, they are certified as an Efficiency Partner, with theoretical and practical training on installation and running of the Nibe product. "We trust them with our confidence to the degree that they can grant an additional 3 years warranty on top of the 2 years we offer on our products," says Mr. Ackerman. "Essentially they can tell end-users 'because my company is certified by Nibe, you get a 5 year warranty instead of 2'."

NIBE MAKES SENSE

Nibe does not advertise its heat pumps directly to end-users. "Of course if end users want information we will provide it. But consider this scenario: if we advertise to end-users, and convince them of the benefits of heat pumps, they don't come to us directly, they go to their installers, and we have no control over the installers' recommendation. So there could be a case where we do a perfectly good job of steering the end-user straight into the arms of the competition. By not advertising to end-users, we remove that risk. But this year Purmo Finland is working with Nibe to promote the benefits of low temperature radiators in conjunction with heat pumps. This mutually-beneficial move is a sound move for both brands, as Gunilla Laiho, Purmo Finland Sales Director pointed out, this suits our target of making professionals aware of the benefits of using modern Purmo radiators together with heat pumps in low temperature systems. Further steps in the process are joint seminars and training for installers and participation in regional trade fairs."

"There is still a misconception that heat pumps and radiators don't work together, but as people learn more, they are finally realising that they are a perfect match. As well as the solid technical match between Nibe and Purmo Radson, there is also a growing sense of co-operation. We are in the same market, on either side of the same heating system, offering multiple benefits to end-users."

SO WHY USE HEAT PUMPS WITH LOW TEMPERATURE RADIATORS?

It takes about 2 days to install a heat pump system, at a cost of between €10,000 and €20,000. With an average lifetime of 20 years, the system begins to recoup the initial investment the very moment it's turned on. "With heat pumps you enjoy a 75% energy efficiency; you invest one unit of electric energy, and you gain 3 units of clean thermal energy in return. And these systems operate generally at an optimal level of 35 degrees, making them ideal for low temperature radiators.

"Purmo Radson and Nibe products together can offer end-users the multiple benefits of lower-cost climate control, environmental friendliness, better ventilation, heating and cooling."

"The heat pump, as a heating system with electrical supply, is very much the future. It's not gas, not oil, it's electricity, which we will be able to harvest from wind or photovoltaics - and the heat pump in tandem with low temperature radiators is a sustainable and energy-efficient trend that will eventually be commonplace." ■