

GROWTH AT ALL LEVELS

Bronkhorst High-Tech (with 300 employees at its headquarters in Ruurlo in the Netherlands and 100 at its sales and service offices worldwide) has achieved continuous growth for a long time now. Company co-founder Wybren Jouwsma identifies a number of key growth factors: innovation, its own webshop and global presence. Germany is and remains the most important sales region. However some of the company's German customers are now supplying products to South-east Asia.

Bronkhorst High-Tech develops, manufactures and markets volume and mass flow meters and controllers for liquids and gases. It offers both standard instruments and customer-specific instruments. The company also manufactures complete flow control systems which are used in both laboratories (research and analysis) and the chemical and semi-conductor industries as well as in solar technology and glass coating. Five years ago, Bronkhorst launched an important innovation in the form of its mass flow meter based on the Coriolis principle. Compared with the classic thermal measurement principle, "Coriolis" is more precise and supplies the information required immediately as mass and not volume is measured directly. "It is a new and unique product in the micro-measurement market. We have seen our sales of Coriolis mass flow meters grow by thirty per cent per annum. In the long term, mass flow measurement will become more important than volume flow measurement." What Wybren Jouwsma means, is that with Coriolis, Bronkhorst has definitely backed the right horse. Standard products are doing well, also through the company's own webshop *Mass Flow ONLINE*. "We have had the webshop for a few years now and it has been a great success", says Jouwsma. "It has also enabled us to reach countries where we don't have our own office. Once we have achieved a certain level of success via this route, we then consider whether or not it would make sense to open an office in that country."



PROXIMITY TO CUSTOMERS

Representation often starts with an agent or sales representative. In South Korea, sales of flow meters sky-rocketed to such an extent that the sales representative was unable to keep pace with the growth financially. Bronkhorst recently took over the sales representative's business, at the request of the latter, so that the company now has another sales office and service centre serving the important growth market in South-east Asia, alongside the already existing offices in Japan, Taiwan and China. However, Bronkhorst is not just focussing its attention on this part of Asia. In March, the company was represented at ArabLab 2014 in Dubai where it targeted the analysis technology market in the Middle East as well as Asia and Africa. "There has been a lot of activity in the Middle East already and we wanted to gain an insight into that by exhibiting at the trade fair." Jouwsma puts the growth in Asia down to the bandwagon effect amongst other things. "For example, we are now supplying flow meters which we have previously sold in Germany to countries such as China where they are being installed in our German customers' systems." The same shift has also been observed with the company's American customers. Five years ago, the company set up its own sales office in the USA. Since then, a strong growth in sales has been achieved. Proximity to the customer is still important, says Jouwsma. "For we often still have to show new customers how to connect and use our flow meters."

PRECISE MEASUREMENT

Bronkhorst has a strong focus on research and development. More than one in every seven euros of its sales revenue is re-invested in research and development activities which are carried out both in-house and at research facilities like the University of Twente. Research is being carried out there into the miniaturisation of flow meters – another benefit of the Coriolis measurement principle is that it is ideally suited for miniaturisation. For instance, a mini Coriolis flow meter can be used in a *lab-on-a-chip* for the medical market for the precise dosing of small quantities of medication or for the analysis of (blood) samples. "When companies involved in the medical and pharmaceutical market are able to carry out dosing more efficiently and precisely, their level of quality improves. There is a clear difference between dosing with an inaccuracy of five per cent or 0.1 per cent." On the subject of precise measurement: Bronkhorst is in the process of setting up a new calibration laboratory. Bronkhorst is already ISO 17025 certified for gas flow measurement. Very small liquid flows of less than one gram per hour present a major challenge. "We have been working on the precise measurement of small flows with the *Nederlands Meetinstituut* and various foreign laboratories as part of a European research programme. This has involved rates of one drop every three minutes. That is almost nothing as such rates fall within the nanolitre range. We are the only company in the world to have been certified for that."