



Company Profile

Company name

NSM A/S

President/Owner name

Lars Evald

Number of Mazak Machines: 13

HQR-250MSY

www.nsm.dk/da

NSM and Sandvik Coromant have significantly optimised 25 specific parts, including several with conical milling, and the joint project has reduced production costs by an average of 37 percent per part. From left: Industrial Technician Søren Pedersen, Application Specialist Kim Petersen and Team Manager Lars Navne.

NSM and Sandvik Coromant have created a significant boost

Process development is always on the agenda at NSM A/S in Kolding. This reflects the company's trajectory over the last two years, with investment in two large Mazak machines for production. However, a current project, carried out in collaboration with partner Sandvik Coromant, stands out by achieving a significant boost in productivity.

If you're not developing, you're declining. This doctrine has been heard many times from NSM Plant Manager Michael Berggreen during his time at the Kolding company, which began 3.5 years ago. One development project in particular, however, has surprised him, the company's partner and everyone else involved in parts: "We are currently starting actual production on some parts, where we have managed to reduce the part production price by an average of 37 percent for the various solutions involved," says Michael Berggreen. "The first indications from Sandvik Coromant were not quite that high and even then we found it hard to believe, but we just have to say that the project has exceeded our wildest expectations," says Berggreen. The need was based on ongoing deliveries of a package of parts including 25 variations to a customer, where the company delivers from stock and where the customer indicated that the machine plant's price was too high compared to other market offers.

This set in motion a major process that has heavily relied on product specialists from Sandvik Coromant in Denmark, in addition to the staff at NSM. It was ultimately recommended to change tooling solutions and move some of the parts to another CNC machine. This was initially carried out over the spring on a trial basis, and now more consistently, as larger series are about to be run. "We approached an already efficient manufacturing of the specific conical parts by switching to more efficient special tooling solutions, and at the same time optimized the manufacturing parameters and methods in general, to achieve significantly higher productivity," says Kim Petersen, Application Specialist at Sandvik Coromant Denmark, who together with Senior Project Manager Rene Thru, also from Sandvik Coromant, has been at the centre of the collaboration with the NSM team, led by Team Manager Lars Navne and Industrial Technician Søren Pedersen.



Søren Pedersen, Kim Petersen and Lars Navne show off a special tool, where a special holder with a standard blade is fitted with a special tool for machining conical milling on the Mazak HQR-250MSY at NSM.

NOT JUST THEORIES

Sandvik Coromant's team drew up some calculations and production data that they presented to the team, after which Kim Pedersen and Rene Thru, together with Søren Pedersen, put theory into practice on one of NSM's latest Mazak machines, an HQR-250MSY turning center. The center is directly opposite a large Mazak MULTIPLEX W-300Y center that was delivered to the Kolding company earlier this year. "We've got great conditions at NSM, and together with Søren Pedersen, we decided it would make sense to group several of the pieces on the Mazak machine, as this also increases output from the tooling solutions chosen in the machine, rather than having to move around with them," says Rene Thru. Kim Petersen adds: "Our part in this project has been the cutting technology, but we also have to emphasize that without the other factors where NSM has shown flexibility in and around the machine, it would not have been possible to achieve the same results." Both give credit to Søren Pedersen at the machine, where he has been both patient and accommodating during the transition phase, when it was to be put into practice. "That part of the collaboration probably accounts for the final ten percent of the per-piece cost reduction we achieved," points out Michael Berggreen. He firmly believes that everyone needs to be involved in projects of this scope if maximum benefit is to be achieved. "Following Sandvik Coromant's input, Søren Pedersen and Lars Navne have introduced the solutions to the other employees at the machines, so that we can now start 24/7 production of the parts in question," continues Berggreen. From the NSM team, Lars Navne also emphasises that they have been met with great flexibility from Sandvik Coromant's side, which served to further cement many years of productive collaboration.

OPENNESS IS ESSENTIAL

Everyone involved also concluded that it is not possible to make substantial leaps forward without clear and open lines between business partners. "If you want to succeed in a high-wage area like Denmark, it is important to have good partnerships. It's true with suppliers, and it's true with customers. We are fortunate to have such partnerships, and this project proves that mutual trust and the will to achieve optimal outcome make a big difference," says Michael Berggreen. He points out that without transparency, you won't get very far in development projects: "The eagerness that some people show to keep 'trade secrets' secret doesn't help projects of this nature. There is so much that is unique to NSM in this project that neither our customer nor any other Sandvik Coromant customers can directly compete with us, so we have nothing to gain by being secretive with the Sandvik Coromant specialists when they want to assist us. If they happen to learn something here, this will undoubtedly benefit us more elsewhere in the company, rather than benefit a competing machine shop where the parts, machines, quality requirements and procedures are totally different." This transparency has meant that Sandvik Coromant has had more ability to delve into questions and provide input that would not otherwise have been possible, even though the parties already have a long-standing and close working relationship. This is the result of the total openness with which the partners have entered the project, and which they have naturally also shown themselves capable of safeguarding, the partners emphasise. This transparency also applies in relation to NSM's customer, who has recently visited production in Kolding, and inspected the production of their parts. They are now very pleased the plant was not located elsewhere, because they have achieved significant savings, while maintaining a good and long-standing partner.

Berggreen Mennesker & Processer

After 3.5 good years at NSM A/S, Michael Berggreen has established Berggreen Mennesker & Processer as of 1 November. Here he will work with people on developing, improving and maintaining processes in all forms and in all industries. The consultancy's scope is broad, and there are plans for cooperation with companies, schools, organisations, individuals, associations, consultancies and more, says Michael Berggreen.

For more information visit www.mazakeu.com

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