Plasma-Jet increases process-efficiency

Wahlers Forsttechnik is one of Germany’s leading suppliers of forestry machinery. After their purchase of a KNUTH Plasma-Jet Compact, this supplier can now cut all their steel parts in-house.

Wahlers is a family business with 110 employees and primary importer for Ponsse, a worldwide leading forestry machinery manufacturer from Finland. Wahlers delivers annually 40 harvesters and 40 forwarders for harvesting and transporting tree trunks to customers in the forestry industry in Germany, Austria, Switzerland and in the Netherlands. “We retrofit every other forest machine with additional equipment, like cable winches, clambunks, grapples or stanchions”, explained Fabian Haarhaus, Master Mechanic at Wahlers. “Our customers appreciate that we are open to their wishes and
support them with custom configurations.” Since February 2020, the business cuts their own steel sheets in thicknesses up to 32 mm, allowing them to make their workshop processes much more efficient. This was made possible by their newly acquired KNUTH Plasma-Jet Compact H 1530 with Hypertherm cutting technology.

The investment in a KNUTH Plasma-Jet Compact cutting system pays for itself. Now, Wahlers Forsttechnik saves time and money.

Wahlers Forsttechnik uses the KNUTH Plasma-Jet Compact to produce components for land clearing equipment.

Compact Plasma Cutting System
**Plasma-Jet Compact 1530 H**

- Cutting width 1,500 mm
- Cutting length 3,000 mm
- Table height 600 mm

with Hypertherm plasma source optionally with Kjellberg plasma source

For complete information visit our website and search for Plasma-Jet Compact (Product Search)
“In the past, we assigned about 60% of our cutting tasks to a sub-contractor. The remaining 40% were cut and deburred manually, which was a labor-intensive process. With our outdated guillotine shears, it took one to two hours to finish one workpiece”, said Haarhaus. We had planned to change things for some time. After the construction of our new shop building was completed in 2019, we started looking for a more effective solution and requested a quote from KNUTH. For Haarhaus two items were of utmost importance: The machine had to be able to sever structural steel in thicknesses up to 32 mm with a clean cut, and it had to be easy to operate providing an intuitive user interface. Since Wahlers’ order backlog left them no time for live demos at KNUTH’s Wasbek Cutting Center, Andreas Heinrich from KNUTH Domestic Sales brought Cutting Specialist Faruk Saglam along to his second visit at Stemmen. “After a detailed technical consultation, we decided to rely on Faruk Saglam’s recommendation, and we were not disappointed”, said Haarhaus.

Excellent Cutting Results

The Plasma-Jet Compact H 1530 with MaxPro 200 plasma source features a table for a cutting width of 1,500 mm and a cutting length of 3,000 mm and is ready for the connection of a filtered exhaust system with automatic shutter control. Wahlers opted for a high-efficiency dust collector and filtration unit with 4,000 m$^3$/h capacity. It is specially designed for extraction and filtration of dust and fume generated during the cutting process. The cutting system was also equipped with a refrigeration dryer to adapt it to the existing compressed air system. The Hypertherm cutting technology ensures great cutting results.

Smart software solution

Nobody at Wahlers had any prior plasma cutting experience. Six shop employees attended a 2-day intensive training course led by Faruk Saglam. “Some things just have to be learned, e.g. that aluminum has to be cut with less current or with pure oxygen, if even better results are needed, and we also have to learn which
nozzle to use for what purpose”, explained Haarhaus. The Plasma-Jet also impressed in regards to its user-friendly interface. The Libellula Wizard PRO software allows the user to choose from a selection of standard shapes and merely adjust the measurements. Another plus: Based on the respective material, the software suggests parameter settings that will provide the best cutting results. Two employees were trained in the Libellula.CAD 2D drawing program that allows them to create and store their own shapes.

**Fast production**

“The Plasma-Jet definitely speeds up our processes and we can complete all cutting tasks in-house,” said Haarhaus. The system is in use one or two hours every morning to cut parts for frames, cable winches, reinforcement plates for cranes and aggregates, which then will be welded together in the afternoon. “Now, we can work with much more flexibility than before,” stated Wahlers’ Shop Manager. “And there is no need for rework as before with the manual cuts, since the cut edges are of good quality.” In order to ensure long-term uninterrupted productivity, Wahlers also entered a Maintenance Agreement with KNUTH, and they added a multi-user license to cover programming of the entire in-house network.