

*Experience
Agricultural equipment*



COPPENS GROEP

AUTOMATION FOR A JUST IN TIME PROCESS

We are talking about stable equipment, and if you feel that it is off-topic, then we better start from a look at the products of the company that we are visiting, Coppins Groep at Westerhoven in Holland, that started with the production of stable equipment and is today a major tube processing subcontractor. In the show room, Bas Coppens, owner of the business, shows us many examples of an extremely wide range of stable equipment designed and produced within the company, and our eye is immediately attracted by the presence of metal tube everywhere. Its flexibility and strength make it ideal to build the lightweight and strong structures that make up the equipment. The tube is cut, bent, pierced and forms the framework of all the containment structures, the mechanisms necessary to open and close the gates and the systems to access food.

Bas explains that the business idea at the base of this activity found its roots in the passion for stable equipment and in practical experience: *“Over 40 years ago, my father started manufacturing the artisanal equipment that my grandfather needed for his activity as a farmer. Other farmers, who noticed the usefulness of the tools created by my father, started asking him to design and build similar equipment and since then we have never stopped”*. Today, the Coppens Group consists of four companies. Every company has its own core business; Coppens Stal-techniek is active as a leading partner, advisor and producer in pig housing and stable equipment. Coppens Agri-techniek enters the market as a total supplier for dairy farming in the role of milk production specialist, stable furnisher and project realizer. And then there is Coppens Metaal-techniek, with a very clear message to the market: Today’s bar sets tomorrow’s standard in tube processing. With this vision, they want to become market leader as job shopper, both nationally and internationally. The potential is enormous, because in principle they process everything that is bendable,

in all shapes and sizes. Finally, there is Coppens Productie-techniek, the ‘internal’ supplier for the companies within the Coppens Group.

The company has soon moved from artisanal production to industrial mass production using automatic machine tools. *“Many years have passed since the first CNC machine tool came across the doors of the company. It was a tube bending machine. Then it was the turn of the drilling machines and, over time, our experience in metal tube machining process has grown together with customer requests who noticed our capabilities and asked for unique machining processes and repairs on tubes, not only in the stable equipment field”*.

Thanks to his deep knowledge in tube machining processes, and sound production and design experience, Bas soon understood the advantages that could come from laser machining on tube: *“Our desire to expand dates back 15 years ago. We identified the lasertube as the product that could help leap us forward. We had to wait a few years for the*

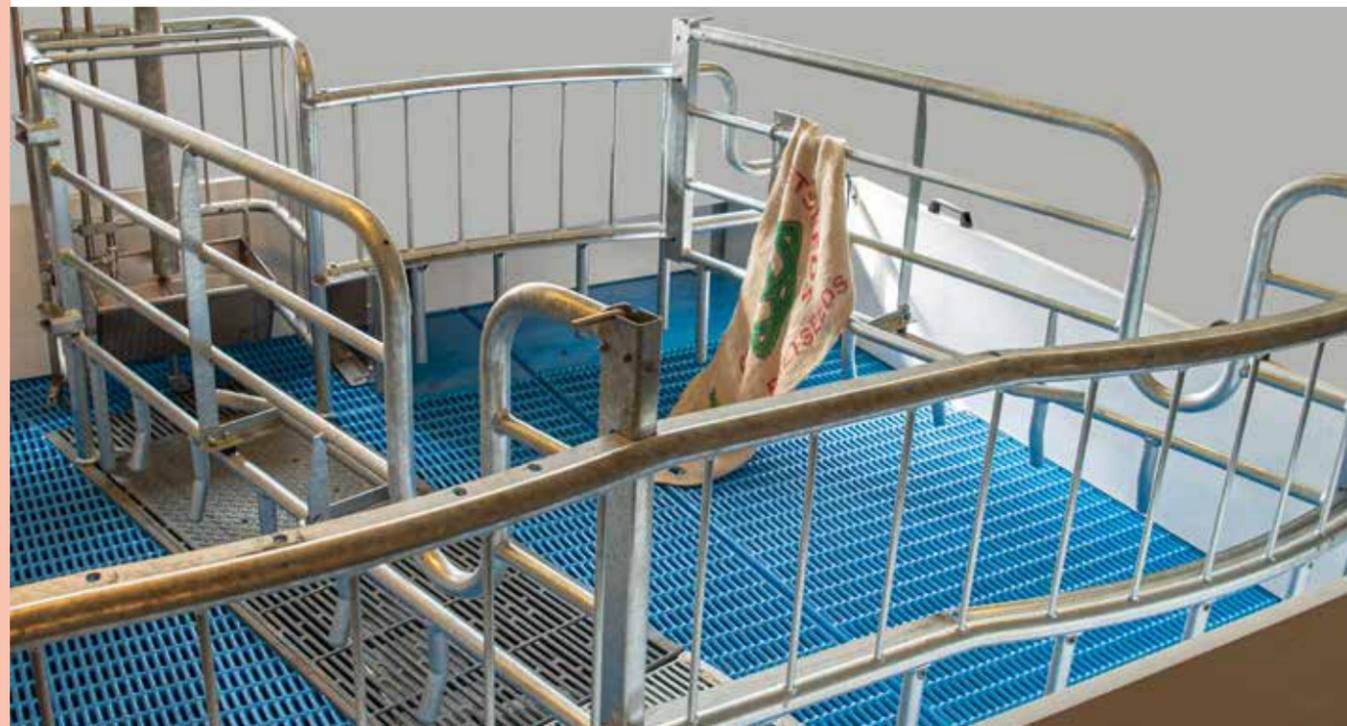
authorization to expand, but as soon as we could we bought a LT722D Lasertube from BLM GROUP. The machine was very fast, and the rate and volume of production was incredible. Furthermore, the LT722 eliminated the need for secondary machining processes, which saved us the time previously needed to move the semi-finished parts from one machine to the other”.

Before using the laser, Coppens Group used to work with drills. After performing a simple cost-benefit analysis on the laser, the many advantages became even clearer: *“we realized that by means of the laser we could do things that were impossible before and our customers understood this. With the ability to do much more complex and different machining operations, we had the opportunity to significantly expand our operations. Many opportunities have opened up and more will follow in the future”*.

After buying the laser machine, our partnership with BLM Group has extended to the whole range of products: laser cutting and bending. Bas explains: *“An important aspect to be efficient is to have the right machine for each job and that is why we bought bending systems suitable to any need. Today we have a complete fleet of bending machines”*. To date, they have purchased six tube bending machines, two laser systems, a blade shearing machine and an end-forming system from BLM to be able to guarantee a complete array of jobs on tubes to their customers.

At Coppens Group we have a great deal of experience in bending and appreciate the quality of the systems: *“For bending machines, the aspect of excellence is the quality and robustness of the machines. To be able to obtain a good quality bend with a diameter one time the radius on a 32 dia. tube is an important aspect to us”*.

Our experiences with the LT722 has been so positive that recently Coppens has doubled and bought the latest gem of the Lasertube family, the LT7 system: *“Many people think that laser cutting a tube is like laser cutting sheet metal, but it is not so. Sheet metal is flat and requires a two-dimensional process, whereas the tube is moving, and machining is always three-dimensional. The quality of the tube must be considered and the geometrical accuracy of the*





material has a big impact on the final result. Each tube is different from the others and it takes experience”.

The tube handling phase is actually for a critical element of the machining process and the LT7 encompasses the technological developments BLM has acquired with over thirty years of experience. “When I came to look at the LT7, I was thinking about my LT722 and I analyzed, one after the other, all the points that had been a problem. One was solved, and the other one too, All the critical aspects were taken into consideration and solved. In addition, there’s the possibility of 3D cutting, which some customers request, even if was unnecessary”.

With the LT7, Coppens has been able to implement one of the BLM GROUP’s strengths, the process called “All In One”, in other words, using tube bending machines and laser cutting machines communicating in an integrated process to obtain parts bent and cut according to specifications from the first time, without wasting time in several attempts and transfers from one machine to the other over the long way to reach the desired result. “As we also work as a Job Shop, the combination of bending and cutting offers important advantages in terms of saving of time. We can produce just in time, drastically reducing delivery times”, Bas explains. The interconnection between systems also includes the connection between the two bending machines and a measuring system of the bent parts for automatic corrections.

In fact, Coppens has to manage different types of production, each with specific organizational quirks: “On the one side, we have our products that we can plan in terms of time and volume so that we never fail, and on the other, we are a job shop working just in time to meet the different requests coming from many customers”. Software now has a key role, and the BLMelements software suite seems to offer an advantage from this point of view. “The



software is a very important aspect. Today, everybody provides us with the 3D model of the parts. It’s very easy to import it and create the programs, both for the laser machine and the tube bending machine”, Bas explains.

But the thoughts of the business person are already aimed towards the future, towards new investments “many parts need to be drilled after bending because the hole is on a part subject to deformation stress” and he continues: “the next step will probably be an LT Free, the 5-axis system by BLM GROUP able to cut a pre-bent tube as well as deep-drawn, hydroformed, and sheet metal parts”.

We are looking forward to new opportunities to collaborate with BLM GROUP, wishing you all the best for your work.

