

Brought technology to the point

Tractors, harvester, round- and square balers up to forage-harvesting - As the European market leader for harvesters the CLAAS Group covers all areas of modern agricultural product portfolios and with a global market share of over 50 % it takes the lead with self-propelled forage harvesters. For over 100 years CLAAS has successfully succeeded the joining of nature and technology, so that experience and a time-tested expertise guide their motto 'Secure Better Harvest'.

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Most important product steps established in-house



The customer base of the CLAAS Group is clearly defined: Both traditional farmers and large contractors constitute the relevant stakeholders of the company: "Our goal is to place our machines among the professionals" says Mr. Remensperger, Head of prefabrication at CLAAS Group. The ambition for a position in the upper quality segment requires an optimally exploited value chain and flawless products. To achieve these premises the innovative company follows the philosophy to carry out the most important process

steps in product manufacturing: The welding of complex products, their paintwork and final assembly always takes place in-house. The intention of the do-it-yourself strategy is not only quality assurance but in particular in ensuring the safety of the assembly.

Good welding yes - But the service also needs to fit

Tractors, forage harvesters and Co. belong to those industrial goods in which the manufacturing processes are very complicated designed. Especially large components which are welded together represent a special challenge. Since 1988 CLAAS is familiar with robot automated welding and is therefore a pioneer in utilizing the benefits of automated welding processes. Over 20 years the company has set on one system provider – a known technique which ensured satisfactory welding results for the CLAAS Group. Nevertheless Mr. Remensperger argues: "The existing technology did not meet our expectations anymore; we have noticed deficits in the seam tracking as well as in the simplicity of programming for our employees so it was time for us to check the market for new solutions and compare manufacturers."



Focus on Panasonic Robot & Welding

Although the welding result meets CLAAS requirements more critical factors have become enormously important in the last decade: Topics like reliability of service calls, the flexibility of the system, additional services and motivated service technicians are for the CLAAS Group of great importance. In order to accentuate the importance of impeccable service and simultaneously represent one of the most important criteria in supplier selection Mr. Remensperger explains the aspect that had to be avoided: "We had the welding machine from a manufacturer, the torch cable assembly from another, and the robot was made by a third manufacturer - We had individual components that had to be harmonized."

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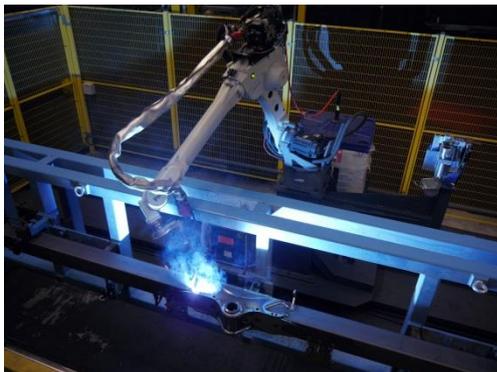
The consequence: During quality and system problems a diffusion of responsibility between manufacturers came evident. The CLAAS group was continuously sent from one partner to the next one: "This back and forth is not only costly but especially time-consuming. The new system arrival had to be able to offer everything from one manufacturer". The TAWERS technology of Panasonic Robot & Welding which is defined as the fusion of robot, robot controller, power supply and servo - wire feed, was very convincing as it solved the previous interface problem.



The "All-From-One-Manufacturer" solution incl. the torch package and consumables emerged for CLAAS as currently the best product for robotic welding on the market.

Traversing axis and European TL 2000 WGH3 premiere proven at CLAAS

To meet the challenge of an optimal welding result for large components Panasonic Robot & Welding was allowed to find a solution for the diverse requirements.



The Panasonic system has been tailored to the demands of the CLAAS Group: Thanks to a special traversing axis reaching the welded seams on the specific application geometry is facilitated. It is thus possible to provide the robot with very little effort in the desired welding position.

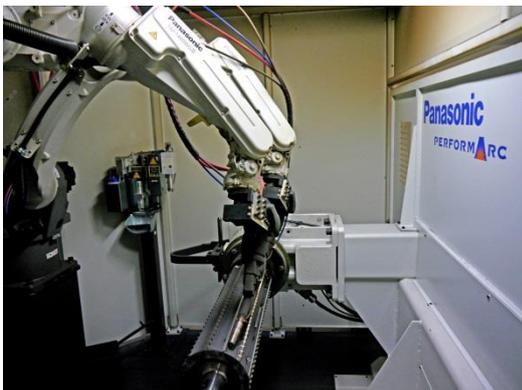


Additionally the welding manipulator was chosen which fits the specific requirements of the CLAAS Group: Panasonic presents the new TL 2000 WGH3 for his first appearance in Europe. Not only an optimal production can be guaranteed by the Panasonic product package but welding

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processes with a long range are mastered effortlessly. In addition to bridging the reach by traversing and the TL -2000 WGH3 the system also offers advantages in terms of the arc sensor. The use of TAWERS technology Hyper Dip Pulse (HD pulse) increases the welding speed with low notch effect and additionally allows a short arc which ensures greater stability and reduces the deviation of the arc. Jörg Radzei, Key Account Manager of Panasonic adds to this: "What HD-TV is for the viewers, HD-pulse is for the welding process: The fine difference." Due to the impeccable quality and fast availability of the robot the welding system was implemented very quickly in the value chain of the CLAAS Group. Nothing stood in the way for a successful commissioning.

Flexibility is the alpha and omega in the field of industrial production



Panasonic provides its customers the opportunity to establish a welding concept to match their individual requirements allowing quick responses to new market demands. Therefore CLAAS has the possibilities to extend their welding system with options such as the DTPS-Offline-Programming-Software or the

seam tracking technology to always be able to adjust the manufacturing process to the fast changing requirements of the market demand – Without investing in new solutions. The CLAAS Group will thus save not only additional costs but can harvest even better with the new TL -2000 WGH3 robot and the complete system from Panasonic the next 100 years. "Not only our production has been stabilized with the Panasonic equipment - Our machine availability increased from 84 % to 86 %" adds Mr. Remensperger. Furthermore the Panasonic systems run much more homogeneous and also a reduction of spatter is clearly recognizable: "The ignition performance is excellent – We regularly check our systems and the spare parts, like gas nozzles. We can confirm that in these topics we are situated far better with Panasonic when compared with other manufacturers."

„The start is good with every supplier – only the end has to fit “



With a total of five welding systems Panasonic Robot & Welding an integral part in the production hall of the CLAAS group. Mr. Radzei assessed the cooperation: "Together we work efficiently in the projects and create new areas of cooperation".

Three identical systems were purchased three years ago and the road to success then manifests with a follow-up order of two plants. "The projects are really taken seriously," says Mr. Remensperger "It can be seen that Panasonic is motivated in entirely satisfying the customer".

About Panasonic Robot & Welding

Panasonic develops welding technology products since 1957 and is worldwide present in the field of MIG/MAG/TIG and robot welding. Panasonic Robot & Welding is the European supplier for products and solutions all about welding. The headquarter and the technical center are located in Neuss near Düsseldorf and offer a big training area, a welding test area and the center of excellence for robot and welding systems. With our system distributors Panasonic is almost represented in every European country.