

Success Story

"Incomparable quality"

CLOOS robots weld fitness equipment at gym80



Weld your way.



HAIGER/GELSENKIRCHEN – Quality and durability – these are the characteristics of the strength training, fitness, medical and performance equipment from gym80 International GmbH. For more than 20 years, the top manufacturer has relied on the welding robot systems of Carl Cloos Schweißtechnik GmbH Production takes place in the middle of the Ruhr Valley: in Gelsenkirchen! There, the traditional company now uses eight QIROX robot systems.

Because he could not find any suitable products on the market that could meet his requirements, Walter Herden from Gelsenkirchen began to build fitness equipment for his own use at the end of the 1970s. Through word of mouth, he quickly built up a large fan base and the demand increased. He then founded gym80 in 1980 to devote himself exclusively to designing and building strength equipment. In the following years, the company continuously expanded its product range and grew enormously. Today, gym80 supplies both smaller fitness studios and large fitness chains worldwide. There is also an increasing number of enquiries from the private sector. Under the MED80 label, gym80 also produces equipment for medical facilities such as hospitals and physiotherapy practices.

State-of-the-art technology meets traditional, craftsmanship

With excellent biomechanics, craftsman precision and a clear design, we have revolutionised training," says Simal Yilmaz who now heads the company as CEO. "We develop and produce strength equipment with incomparable resilience from 4 mm thick steel combining state-of-the-art technology and traditional craftsmanship."

From the very beginning, gym80 has remained loyal to the Gelsenkirchen location for the company headquarters and production with a total of more than 100 employees. In addition to the eight QIROX welding robots from CLOOS, the production includes four laser robots, its own carpentry and upholstery shop as well as many stations where welding, grinding and painting are carried out by hand. "Our manufacturing process is characterised by a production depth of around 95 per cent," emphasises production employee Jörg Noffke. "This allows us to implement individual customer requests and at the same time ensure the best product quality."



Photo 1: gym80 uses a total of eight CLOOS robot systems.

Eight compact systems for different components

In 2003, gym80 started automated welding production with two robot systems by CLOOS. Today, various components are welded with a total of eight QIROX compact systems. All systems are equipped with a 2-station workpiece positioner with two opposite stations. In five systems, the

stations have a horizontal swivelling axis with an L-shaped extension arm. A vertical rotary axis with a face plate for holding the workpiece is integrated in the extension arm. In the other three systems, the stations each have two vertically arranged face plates between which the workpiece is mounted. Thus the workpiece which is fixed on this faceplate is turned into the optimum processing position by a horizontal turning axis. The counter bearing stabilises even long workpieces during welding.

The station change in all systems is made by a horizontal rotation. Due to the two-station design, robot welding in one station and loading of the components in the other station is simultaneously possible.

The two latest compact systems are also equipped with the 7-axis QIROX QRC-350E welding robot which is mounted overhead. This enlarges the robot working space and simplifies welding of the sometimes large-volume and complex components.



Photo 2: Around 70 percent of the components are now welded automatically.

Efficiency, flexibility and quality

By using automated welding technology, gym80 has been able to significantly increase the number of pieces in recent years. "For example, we used to produce 10 parts by hand in one and a half weeks, but now we can produce 20 of the same parts per shift," explains Noffke. "The robot systems run reliably in 2-shift operation, require no maintenance and have an extremely long service-life."

Several components can be welded with each compact system. gym80 can now manufacture a much wider range of products and at the same time react more quickly and flexibly to individual customer requirements. In addition, the automated welding technology ensures excellent product quality as the robots achieve exactly reproducible results. An important factor for gym80, for which quality is the top priority.

Training, advice and support

In order to make full use of the innovative welding technology, the employees at gym80 were intensively trained by CLOOS. Since the robots do the physically heavy



work, there is less general exposure to arc radiation and welding fumes. Welders can concentrate more on process monitoring.



Photo 3: While the robot welds, the employee can load and unload the other station.

gym80 already welds more than 70 percent of its components automatically. Only a few parts still have to be welded by hand. "Our experience with the CLOOS welding technology has been very good," says Noffke. "We maintain a friendly relationship and are very satisfied with the advice and support provided both by our contacts at CLOOS and at the service partner Lixfeld Schweißtechnik."



Photo 4: The robots ensure a high product quality.



Photo 5: The gym80 fitness equipment is characterised by quality and durability.

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