

MANUFACTURER OF HEAVY STEEL STRUCTURES



Levator Oy

Torture testing of Kemppi X8 MIG Welder  
in heavy duty welding

Published in Teräsrakenne 3/2017

2017

[www.kemppi.com](http://www.kemppi.com)

## Torture testing the new X8 MIG Welder

Levator Oy produces cranes, offshore components, and other heavy steel structures. Its key partners include Konecranes, for whom Levator fabricates cranes of all sizes as a contract manufacturer, and the shipyard industry for which Levator produces hulls.



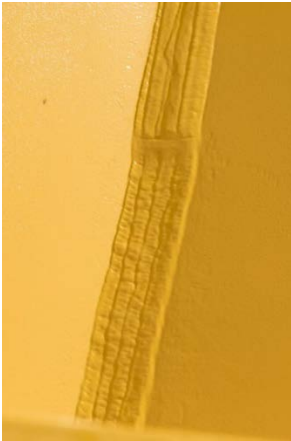
The CEO of Levator **Petri Metsola** says that container cranes have been the most important product group for decades. In the last couple of years, Levator has also manufactured various offshore structures, such as wind turbine components and pressure vessels.

"In our industry, offshore equates to strict requirements that are also followed to the highest degree; and production planning, quality control and documentation must be flawless."

## Production must flow smoothly

All the structures produced and handled by Levator are big and heavy, which makes production planning very demanding. Over the years, Levator has developed into a flexible supplier who, when needed, can also stretch its production to a 24/7 basis. Its key strengths include its own port and a large lifting capacity over water.





"Excellent welding expertise is also vitally important, as we have absolutely no room for failure in these projects. Any problems with welding would disturb production and even compromise the future of our business."

You can't bargain with the quality or schedule – even if you get the blueprints from the customer at the last moment or later.

"The production schedule does not allow welding defects caused by a welding machine or welder interruptions due to equipment failure. Production simply can't be interrupted. The reliability of the welding equipment from both the quality and durability point of view is therefore critical for us."

## Testing without mercy

Levator's welding fleet consists of 200 welding machines of which the majority is Kemppi-made equipment, representing various types and ages. The company became interested in the new **X8 MIG Welder** which Kemppi offered for a trial test.

The X8 MIG Welder is Kemppi's latest multi-process welding solution that is suitable even for the most demanding industrial welding applications. Every aspect has been designed to meet the best usability practices, and provide durability and operability under extreme performance conditions. The system equipment introduces the use of digital welding procedure specifications (dWPS) and features native connectivity to WeldEye welding management software. There is also a wide range of Kemppi application software available for different applications.



*Welder Slawomir Jankowski considers the X8 MIG Welder as a quality machine for heavy duty welding.*

“The X8 MIG Welder has all the features you can possibly think of. Kemppti’s application software provides additional arc control finesses that certainly come in handy when when projects and their welding specifications vary. However, in our test drive of the X8 MIG Welder we did not focus on the software opportunities, but stationed the machines on production lines that demanded heavy duty welding. We wanted and got as many weld miles as possible for them,” Metsola says.

“To be honest, I had my doubts about how the new machine with all its electronics and advanced digital features would endure the harsh and dusty workshop environment, so I instructed the welders to give the machines no mercy, and reminded them that the equipment is here for test use.”

The machines were used for four months on a 24/6 basis to assemble heavy transition pieces for offshore windmill foundations.

“The X8 equipment operated with excellent reliability during the test. The only issue we encountered was a detached button from a Control Pad that was dropped on the floor, but the button didn’t even break in the incident. The welders also rated the ergonomics of the machine and new welding gun as excellent. They described the device as a true professional's tool.”



*The last batch of the 30 heavy transition pieces for the offshore windmill foundations of the Beatrice wind farm in Scotland await shipping at Levator’s pier. The large 150-ton objects connect the supporting tubes projecting into the seabed to the actual wind turbine tower and must endure the extreme weather conditions of the North Sea. During the torture test, Levator was able to produce one transition piece every five working days.*