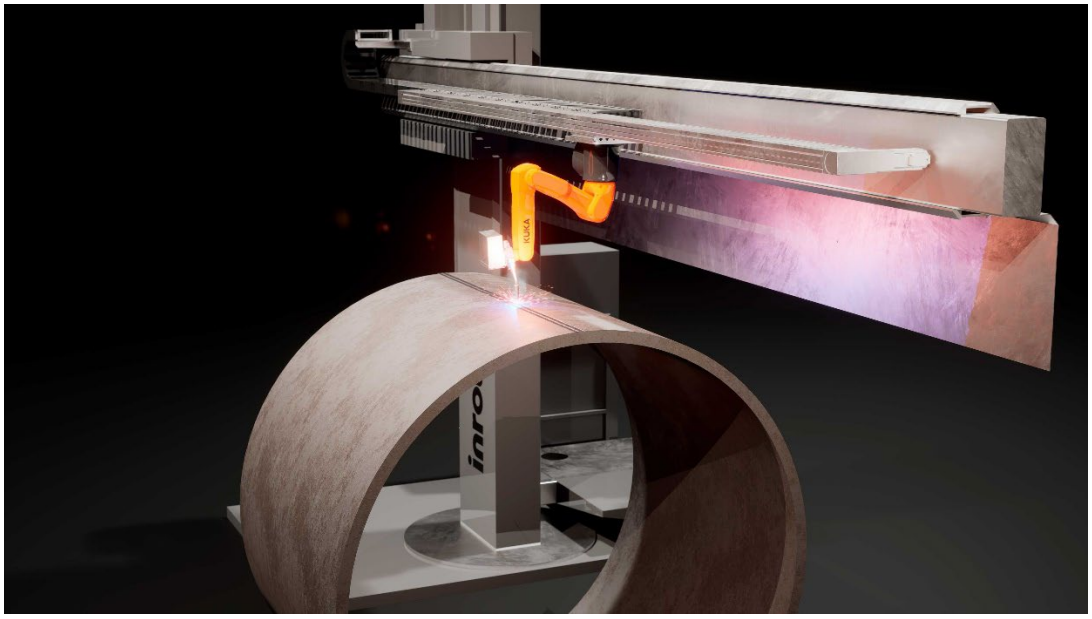
Inrotech to deliver welding robots for Welcon's largest expansion of its factory

Inrotech has received another order from Welcon for the deployment of various welding robots, which will be used to weld wind towers and floating foundations on the largest expansion in the history of the company.

The expansion consists of four large plate preparation lines, a new surface treatment facility, additional storage, and several welding shops, enabling Welcon to produce the largest offshore towers and the innovative Stiesdal floating foundations.



Inrotech-C&B

The expansion is in total 30.000 m2 of buildings and 45.000 m2 of new hard brick surface storage area, leading up to a total of 100.000 m2 under roof and 180.000 m2 of hard brick surface areas.

Welcon expect to have a total of fifteen preparation and welding lines with a capacity of producing 200.000-ton steel for towers and 40.000-ton steel for Stiesdal floating foundations per year.

"We are pleased to announce that our long-lasting partnership between the wind tower production giant Welcon and Inrotech is prosperous. Welcon's successful operation with the installed Inrotech-C&B (Column&Boom) over the past years is the basis for new order. This clearly strengthens the fact to utilize complex robotic welding in the wind industry where quality, feasibility and reliability is in high demand", says Thomas Bøgner, Sales Director, Inrotech.

The heavy plates found in most wind towers, monopiles and floating foundations must be welded together perfectly to avoid loss of strength to hold turbines that weigh hundreds of tons. The welding robot Inrotech-C&B is an intelligent welding robot for demanding welding purposes for offshore towers and floating foundations. It's ideal for automatic welding in PA position of plate joining and longitudinal seams on cans plates between 15-150 mm. thickness.

“The Inrotech-C&B robots are equipped with Inrotech’s unique WeldLogic and runs fully automatically throughout the whole process. The robot initially locates, scans and analyzes the welding grove, thereafter, plans and performs the weld without any interaction from the operator. This makes it very cost-efficient solution and for the largest welds, the robots can run unmanned for more than 10 hours”, says Rasmus Faudel, Software Manager, Inrotech.

In addition, the very simple and intuitive design of the user interface makes it easy for everyone to operate the systems.

Mass production and efficient welding production setup are key factors in keeping prices for wind energy low. With this new factory expansion Welcon will be able to increase capacity and capability significantly, producing both the current and future sizes of towers and floating foundations in an efficient way.

Welcon have invested in Inrotech welding robots since 2016 and will have 13 Inrotech welding robots deployed in 2022” says Rasmus Faudel, Software Manager at Inrotech.

The construction of the expansion has started in January this year and will be completed in September 2023.