



5-axis Schuler Held Laser Portal with PA 8000e™ CNC-System for 3D welding and cutting of over sized work pieces.

Power Automation CNC-System controls big 5-axis laser portal for extremely large pieces.

## 5-axis Laser Portal for welding and cutting of large work pieces with the PA 8000e™ CNC-System

The IMAWIS GmbH, located in Wismar Germany, is a supplier of engineering services for the maritime industry. IMAWIS supports the maritime industry with the operation of laser hybrid machines for welding and cutting. Customers of IMAWIS are mainly shipyards or their suppliers, among them the Aker Ostseewerften in Wismar and Rostock. In the shipbuilding industry often very large and very long parts have to be welded or cut and accordingly large machines are needed. That's the reason IMAWIS decided to buy the Laser Portal System Pedilas 8040 from Schuler Lasertechnik with a work envelope of 20 x 10 x 3 feet. The machine is controlled by a High-End PA 8000e™ CNC-System from Power Automation.

The PA 8000e™ is mainly used in 5-axis applications. Especially the 5-axis

functions, like the 5-axis Transformation or the 3D Adaptive ART of Power Automation make with a much better tool path control the major difference to other CNC's.

A further advantage of the PA 8000e™ is the openness of Power Automation's user interface, the PA HMI™. The browser based PA HMI™ user interface communicates via TCP/IP with the CNC and the integrated Soft-PLC (IEC 61131-3). Because of the openness of the PA HMI™ the machine manufacturer is enabled to arrange changes at the basis HMI in a very simple and flexible way. This can be the entire design or integration of various functions and additional displays.

IMAWIS for example integrated many functions for the handling of the Rofin Laser. Additionally visualization for Laser gases is implemented directly on



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The IMAWIS – Maritime Wirtschafts- und Schiffbauforschung – GmbH was established in 1997 and is an engineer and manufacturing service supplier.

IMAWIS generates and realizes process innovations for the maritime and metal working industry. Initiation, coordination and handling of National and European research and development projects take center stage.

APPLICATION REPORT **PA 8000 Series™**

PA 8000e™



*Staff members of IMAWIS operating the PA CNC-System.*



the HMI using Applets.

“For anyone looking for an open, powerful and price attractive CNC-System, our Control Systems are an interesting alternative to the traditional CNC’s of other manufacturers”, explains Jan Hilpert, Sales Manager at Power Automation. “Machine Manufacturers have the chance with our systems to separate from the competition and add value as a unique selling point using the open architecture of our controls.”



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