

AUTO MOTIVE

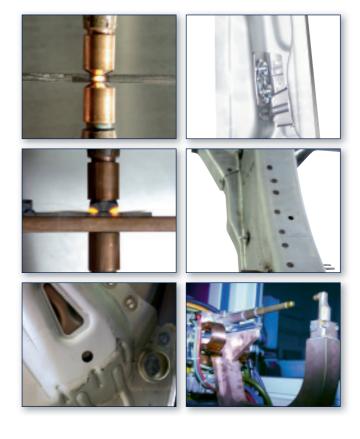


# **APPLICATIONS**



### PERFECT AUTOMATION

- resistance welding
- spot welding
- projection welding
- automated systems
- manual applications
- automotive welding and assembly lines
- sub-assembly welding
- joining of ultra high-strength steels
- pilot plants



## **DEMANDS**



THE AUTOMOTIVE INDUSTRY IS A MARKET WITH SPECIAL CHALLENGES.
AUTOMATED WELDING TASKS WITH FULLY NETWORKED EQUIPMENT REQUIRE GREAT DEMANDS ON WELDING PRACTICES.





- High-strength materials require welding control systems with highest standards concerning control properties
- Cost-effectiveness and a high output is essential.
   Therefore disturbances and process deviations must be recognized and reported.
- Safety relevant parts are in need of a high degree of durability, a longlife cycle and must be reported without interruption.
- For higher efficiency at robot applications and manual welding guns, a stable welding process is necessary.

## **ADVANTAGES**



#### USE THE ACHIEVEMENT POTENTIAL OF HARMS & WENDE RESISTANCE WELDING SYSTEMS

Quality is definable: With well-tried applications of Harms & Wende you can achieve save results.

#### Reach an effective production process

Through the stabilisation of relevant disturbances, from bad fitting to electrode wear, quicker start-up periods and lower rework costs will be achieved. This advances the productivity. By means of a neat production and longer electrode-times you can save time and money. The intelligence of our adaptive timer IQR will be your benefit.

#### Profitable joining by efficient systems

Our welding technologies guarantee high quality joining connections between various types of metals.

Whether AC, MF (1kHz) or HF (10kHz), profit from the longtime know-how of our originally welding practice. You can combine and use our operator interface XPegasus therefor. Our products are characterized by the highest system availability.

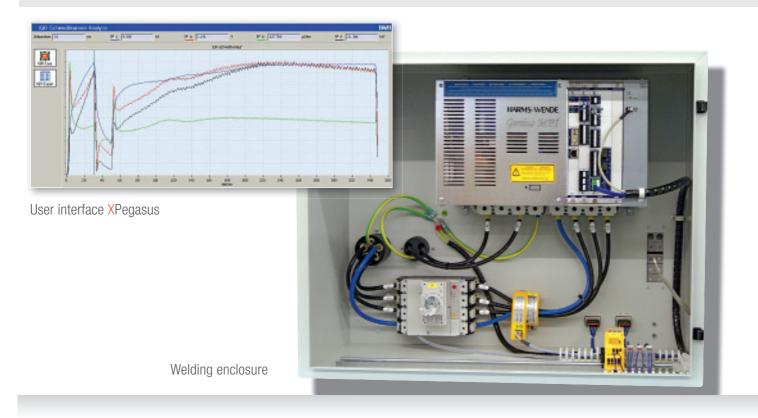




# Harms & Wende guarantees reliable products and a high degree of process stability

The adaptive timer facilitates a secure and uninterrupted production process for the user. By your automated manufacturing- and testing-techniques you will profit from a constant and high accuracy during the welding process. Thereby your equipments have an outstanding high getting. By the detection and alertation of blockages or process deviations an ideal safeguarding of the production process is demanded.

## SOLUTIONS



#### **WELDING SYSTEMS**

Harms & Wende offers customized solutions for the automotive engineering production.

Whether manual systems or fully automated applications with BUS-connection: we offer networked systems and archival storage.

Our products understand the avoidance of splatter and the escape of process fluctuations concerning medium frequency welding with adaptive control IQR.

Quality by powerful welding systems and professional consulting for entire welding machines and automation solutions.



- adaptive control system IQR
- every well-established BUS-systems
- modular inverter-systems
- exeptionally felixible assembling (flexibility at cutting points)
- splatter detection
- monitoring and documentation
- internetworking with data base systems
- open connections via OPC or Web Interface
- monitoring with HWH-inspectors
- quality assurance and testing with PQS<sup>weld</sup>



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