



WeldCloud Productivity Helps Leading Axle Supplier ADR Group Gain 500 Hours of Productivity Per Month at Poland Facility

- Analytic functions enable quick identification of productivity bottlenecks
- Non-value added time reduced to average of 26 minutes per shift, per station
- WeldCloud confirms investment in welding equipment

Situation

ADR specializes in the manufacturing of braked axles, suspensions and "boggies" (fully assembled axles ready to be fitted) for leading heavy trailer and agricultural machinery manufacturers. With headquarters in Uboldo, Italy, the ADR Group has twelve plants with locations around the world and has a rich history of R&D, customer collaboration and strong after-sales service. The company's facility in Poland has been an early adopter of WeldCloud online data management analytic tools.

Complication

In addition to online data management solutions, ADR wanted one global provider that could support them in every country with a broad portfolio that included equipment, filler metals, robotics and Value-Added Engineering services. Long term, ADR wants to enhance its documentation and traceability functions, providing customers with added confidence in the quality of its products.

Solution

The ADR Polska S.A. production facility in Zagórz, Poland, now has a complete integrated ESAB system featuring 30 Aristo Mig 5000iw inverter-based welding systems with embedded WeldCloud communication modules.

Results

WeldCloud helped ADR Group to compare operator-reported welding performance with the actual production data captured in real time directly from the welding plant.

"The analytic capabilities of WeldCloud helped us evaluate our heavy production processes. After the first year of monitoring, we achieved a 19% reduction in downtime by optimizing our welding practices."

— Daniele Radrizzani,
Plant Manager and Member
of the Board, ADR

ADR uses 30 Aristo Mig 5000i
inverters with factory-installed
WeldCloud communication modules.



BENEFIT #1

Increased Production

By identifying and eliminating waste, ADR gained an additional 500 hours of productivity per month.

Most welding stations at ADR Polska feature a robotic welding cell with an operator that manually loads parts into a jig, makes some of the welds and loads/unloads the robot.

"We talked to the operators to identify the root cause," says Paolo Morandi, Manufacturing Engineer, ADR. "We tell the welders that WeldCloud supports them and is not against them. If the productivity is not there, it means we need to improve our production planning, material preparation and part flow, equip each station with better jigs and provide more tools, such as for cleaning."



"With WeldCloud, I can control production in real time and react quickly to unjustified interruptions at work"

— Jacek Nowacki, Production Director at ADR Polska



Through the use of WeldCloud Productivity, ADR improved the arc-factor of its robots and operators, increasing axle production without adding more operators.

BENEFIT #2

Faster Responsive

"Thanks to WeldCloud, I can monitor the work of each welding station on a daily basis," says Jacek Nowacki, Production Director at ADR Polska. "I can also control the non-value added time after the shift starts, before the shift ends and around break. Through analytics, we were able to significantly improve overall equipment efficiency in the welding department."



ADR / adraxles.com



BENEFIT #3

Easy Deployment

WeldCloud is easy to deploy from a technical perspective because the Aristo Mig units connect to the plant's WiFi system. ESAB provided an on-site firmware updated on the Aristo Mig inverters and also trained ADR's IT personnel on how to remotely connect with their laptops.

Due to COVID, Nowacki started in his role without in-person training on how to use the WeldCloud Productivity application. After a brief tutorial, he found the application intuitive and was quickly able to obtain all the benefits.

BENEFIT #4

Investment Justified

ADR invested in high-performance, high-productivity Aristo Mig power sources and wire feed systems, as well as premium OK Autrod 12.51 welding wire.

"WeldCloud helps us optimize our investment by opening the door behind each welding cell. With greater visibility, we can gain the full productivity benefits of our equipment," says Radrizzani. As a next step, he says ADR will unlock more efficiency by using the weld parameter documentation and part traceability functions of WeldCloud.



Arc-factor reports generated by WeldCloud Productivity prove that low-spatter wires and processes reduce downtime for cleaning.

For more information on WeldCloud or our other software solutions, visit indusuite.com