

Press Release

2015/11/27

Success Secured With Loctite

Henkel Solutions Help HydraForce Improve Its Lean **Manufacturing Program**

Thanks to close collaboration between Henkel's engineering staff and HydraForce, the hydraulic valve manufacturer was able to use the principles of lean manufacturing to help improve process efficiency. The project also created opportunities for HydraForce to revisit its Loctite application and assembly procedures to help move product quality to the next level by taking full advantage of an innovative Loctite retaining compound.

HydraForce, based in Lincolnshire, USA, designs and manufactures hydraulic valves, manifold systems and electronic controls used in off-highway vehicles such as tractors, excavators and harvesters. In 30 years, it has grown to become the market leader in its product area.

HydraForce is focused on improving efficiency and quality through lean manufacturing. By making a few units at a time instead of large batches, HydraForce achieved lower reject rates and reduced turnaround time, especially for custom valves. This has allowed the company to progressively gain market share and build a reputation for quality in the hydraulic market.

Validation Testing

As part of Henkel's technical support, Henkel engineer Chris Powers conducted a line survey at HydraForce to identify opportunities to improve its processes. Chris collaborated with HydraForce engineers to design validation tests for a new upgraded Loctite 648 retaining compound. Henkel's Technical Customer Service engineers conducted the validation testing in Henkel's labs and provided a detailed report. HydraForce agreed with Henkel's recommendations to begin using the upgraded Loctite 648 to enable a faster processing time.





"Chris and the Henkel staff brought some good ideas to the table about improving our processes and reducing batch size," said Jesse Arias, HydraForce design engineer. By using Loctite 648, HydraForce can now test its parts after 5 minutes instead of waiting for hours.

Another benefit to HydraForce is the global availability of the upgraded Loctite 648. HydraForce has manufacturing plants in China, the U.K., and the U.S. and a network of global systems integrators who adhere to HydraForce's obtain the same formula and same quality worldwide.

Throughout its 30 years in business, HydraForce has relied on innovation to become a leader in its industry and maintain its global position. "We appreciate having a partner like Henkel that values innovation as we do, and who can provide solutions to help us improve our processes," said Jesse Arias.

About HydraForce

HydraForce, based in Lincolnshire, USA, manufactures high quality hydraulic cartridge valves, manifolds and electro-hydraulic controls. HydraForce creates customized solutions for a wide range of industries and applications, including mobile agricultural machinery such as harvesters, sprayers and tractors, light and heavy construction equipment, and aerial lifts. Since the company's founding in 1985, it has grown to include several manufacturing locations in Europe and China and a network of 120 distributors who can offer local support around the globe. For more information, visit www.HydraForce.com

About Loctite 648 Retaining Compound

The new upgraded Loctite 648 Retaining Compound offers exceptional performance for clearance or interface fit parts. It offers excellent performance for dynamic, axial and radial loads.

- Bonds through contaminants including oil, cutting and corrosion protection fluids
- · Cures on metals without an activator
- Higher temperature resistance

Loctite is a brand of Henkel Adhesive Technologies, the leading solution provider for adhesives, sealants and functional coatings worldwide.

More information about Loctite: www.loctite-success.com

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Henkel operates worldwide with leading brands and technologies in three business units: Laundry & Home Care, Beauty Care and Adhesive Technologies. Founded in 1876, Henkel holds globally leading market positions, both in the consumer and in the industrial businesses, with well-known brands such as Persil, Schwarzkopf and Loctite. Henkel employs about 50,000 people and reported sales of 16.4 billion euros and adjusted operating profit of 2.6 billion euros in fiscal 2014. Henkel's preferred shares are listed in the German stock index DAX.

Photo material is available at http://www.henkel.com/press

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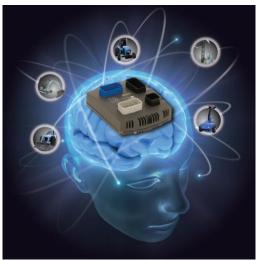
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The following material is available:



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