

REFERENCE SPENCER FIRETRUCKS / TPS/i

SPENCER MANUFACTURING

SPENCER FIRETRUCKS

Spencer Manufacturing is a family-owned business located in South Haven, Michigan. In 1982, the company began as a fabrication shop, refurbishing fire apparatus and large construction equipment. Within three years, the company shifted its focus entirely towards custom-building fire and rescue vehicles on commercial and custom chassis.



"It's one of those tools that, once you have it, you don't know how you made it without it."

Weld shop supervisor at Spencer Manufacturing speaking about their Fronius TPS 320i with Synchropulse.

REQUIREMENT

In the past, aluminum earned a reputation for being difficult at times to weld properly. Getting a weld with proper penetration and free of porosity often times involved rework. In the case of Spencer Fire Trucks, one aspect of the fire truck build involves joining sidewalls together. The attachment points require joints that are strong, free of defect and provide a smooth surface for the paint process. The welding process took only minutes but with Spencer's previous MIG equipment, the process took a total of 16 hours to complete. Most of that time was used to router, grind and sand the welds to get solid, paintable joints. Even with that amount of time invested, the company wasn't highly confident in the current welding process. With almost 30 years of fire apparatus-building experience, Spencer Manufacturing knew there had to be a better welding process to help them meet their customer's expectations and budgets.

SOLUTION

"The Fronius welder has greatly improved our efficiency while maintaining our high standard of solidity and structure that is so important in this industry. The strength and functionality of our apparatus is what makes us proud and we are happy to have the use of more efficient tools to achieve our goals."

-Grant Spencer, Vice President

With the Fronius TPS 320i Compact welding system, they now can do both walls in four (4) hours instead of 16 hours. For the specific application the company is primarily using Synchropulse (a pulsed gas metal arc welding (GMAW) process). The most significant time savings was the reduction of rework they used to have to do. Less spatter, proper penetration and a good bead profile results in a solid seam which requires little to prep for primer and paint. The overall result saved 12 hours of production time per fire truck allowing them to build more fire trucks each year.

Spencer Manufacturing Ph: (888)439-4884 www.spencerfiretrucks.com



Spencer built pumper/rescue for Orange Township Fire Department, Indiana. *Photo: Spencer Manufacturing*



Spencer Manufacturing, Inc. HQ in South Haven Mi. *Photo: Facebook*

/ Perfect Welding / Solar Energy / Perfect Charging

THREE BUSINESS UNITS, ONE GOAL: TO SET THE STANDARD THROUGH TECHNOLOGICAL ADVANCEMENT.

What began in 1945 as a one-man operation now sets technological standards in the fields of welding technology, photovoltaics and battery charging. Today, the company has around 3,800 employees worldwide and 1,242 patents for product development show the innovative spirit within the company. Sustainable development means for us to implement environmentally relevant and social aspects equally with economic factors. Our goal has remained constant throughout: to be the innovation leader.

Further information about all Fronius products and our global sales partners and representatives can be found at www.fronius.com

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