

# Did YOU KNOW

#2019-004

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**Question:** Did you know that you can cut titanium with an oxy-fuel torch?

**Answer:**

OFTENTIMES, OPERATORS BELIEVE THAT THEY CAN ONLY CUT STEEL WHEN USING A TRADITIONAL OXY-FUEL HAND-CUTTING TORCH. **DID YOU KNOW** THAT THIS SAME TORCH COULD ALSO CUT TITANIUM? IT IS TRUE, AS LONG AS THE OPERATOR CONSIDERS A FEW ASPECTS SUCH AS CUTTING SPEEDS, PROPER PERSONAL PROTECTION EQUIPMENT (PPE), AND THE RIGHT TIP FOR THE JOB.

Cutting speeds will increase up to 50% when cutting titanium. This is because titanium accepts oxygen at a much faster rate at higher temperatures. This requires consideration of the tip size. Due to the attraction of titanium and oxygen, the tip size should be 50% to 75% of the tip size recommended for mild steel at the same thickness. (Example: For 2" titanium, the operator should use a tip recommended for 1" - 1 1/2" of steel). The operator must determine the tip size needed based upon the quality of the cut. Consider using a machine torch tip when cutting titanium if it is not a scraping operation. The result is a higher quality cut with a smaller kerf, thus reducing costs.

**MODEL SHOWN:** 6290VVC



In addition to the normal PPE required for oxy-fuel cutting, the operator must wear a proper respirator. This reduces the chance of inhaling titanium oxides from the dust and excessive smoke produced when cutting titanium. The operator should also use a #5-shade face shield rather than glasses to reduce the chance of injury due to the intense sparks produced, as they can travel further distances. As added precaution, the operator should ensure that the surrounding work area is hazard-free.



Turn to the  
 Pros

FOR MORE INFO ABOUT OXY-FUEL CUTTING  
Email our Customer Service group at  
custservmason@jwharris.com  
or call - 1.800.733.4043.