



**EB INDUSTRIES, LLC**

## **EB INDUSTRIES NEARS COMPLETION OF WELDING OF COOLING TUBES FOR THE ATLAS PIXEL DETECTOR FOR THE CERN SUPER CONDUCTING SUPER COLLIDER**

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The ATLAS experiment is being constructed by 2,000 physicists and engineers participating from more than 150 universities and laboratories in 36 countries. It will search for new discoveries in the head-on collisions of protons at the Large Hadron Collider (LHC) at the European Laboratory for Particle Physics CERN. The detector is due to begin operation in the year 2007. The primary purpose of the detector will be studies of the origin of mass at the electroweak scale; therefore the detector has been designed for sensitivity to the largest possible Higgs mass range. The detector will also be used for studies of top quark decays and super symmetry searches.

The cooling system for the detector operates at a temperature of -25 C (-13 F). The pressure ranges from 1 to 13 BAR (14.5 to 188.5 PSI), using fluorinert FC-40 as a coolant.

There are 88 cooling circuits in the system, which will have a total of 1,112 laser welds, 1,000 of which will have been welded by EBI and 112 electron beam welds, all of which will be welded by EBI.

EBI has been part of the program through the Lawrence Berkley National Laboratory in Berkley, California since 2001. Production welding started in 2004 and should be completed by the end of 2008.

You can learn more online by going to: [www-atlas.lbl.gov](http://www-atlas.lbl.gov) or visit us at [ebindustries.com](http://ebindustries.com).