



OTT's Safer Welding Cart Moves From the Air Force to Industry



An Air Force-invented welding cart, that's safer than previous ones, moved to industry, using AS&C's Office of Technology Transition (OTT) tools.

For years, welding equipment was carried on a two-wheeled, tip cart, with gas cylinders chained to it. The cart was difficult to balance and maneuver. Also, hoses connected to the cylinders posed trip hazards. If knocked over, the cylinders' valves could break, causing them to move with considerable force. According to the Department of Labor, 15,500 welding accidents occurred nationwide between 1994 and 2001.

The Training Device Design and Engineering Center at Vandenberg Air Force Base regarded such carts as unsafe, and developed the Gas Guardian welding cart. It is a four-wheel platform, with enclosed regulators, hose-reel, fire barrier separating gas bottles, and strong latching mechanism. The base safety office brought the cart to the Air Force Safety Office's attention. It was rated as a Best Practice by the 2004 Air Force Space Command Inspector General Operational Readiness Inspection team.



Gas Guardian with hose-reel... enclosed regulators ... and fire barrier for gas bottles

An invention's widespread use depends on it being commercially made. The new welding cart moved to industry by means of OTT's tools. AS&C-sponsored TechLink, an intermediary between defense and industry, brought the Air Force and a Montana-based company together. In 2007, a patent licensing agreement — another OTT tool — was executed, authorizing production and sale, and payment of royalties to the Air Force and inventors.

The cart is likely to be bought by defense and industry maintenance shops. The cart was featured in the July 2008 issue of the Federal Laboratory Consortium's *Newslink* at www.federallabs.org/news/top-stories/articles/?pt=top-stories/articles/0708-09.jsp, and in such publications as *Metalworker*, *Fly Safe*, and *Industrial Manufacturing News*.

For more information on the TechLink program, visit www.techlinkcenter.org.