

**PRESS RELEASE**

*For immediate release*

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**Logos and photos available at the following link: <http://www.shc.ca/rp/air-liquide/Plasma>**

**Air Liquide Introduces Automated Plasma Welding Systems in Canada**

**A process that boosts productivity, requires little joint preparation and minimizes workpiece deformation**

**Montreal, March 16, 2007** - Air Liquide, a leader in the industrial gas and welding products industries, is introducing automated plasma welding systems in Canada under a new Advanced Fabrication Technologies (AFT) program, the purpose of which is to increase performance and productivity for different types of fabrication. Little known and used in North America, this automated electric welding technology, which has full penetration capacity, allows piping and vessel manufacturers to achieve significant productivity gains and save on both time and materials.

With plasma welding, base materials ranging in thickness from 3 to 10 mm can be welded with a square edge butt joint preparation (single pass), without requiring multiple filling passes. In addition, owing to the automated process (vertical or horizontal position) and the low-profile bead shape, post-weld operations are much reduced, given the excellent appearance of the resulting weld beads. The process, which attains variable welding speeds (15 to 50 cm/min depending on the thickness of the base material), can be used to produce complete circular and longitudinal welds in one pass from a single side.

Plasma welding processes, relatively new in North America, use gas mixtures of argon combined with hydrogen, CO<sub>2</sub> or helium for welding different materials. With this technique, steel, other corrosion-resistant metals, nickel alloys, titanium, zirconium, tantalum and even noble metals can be easily welded with a degree of accuracy not found with any other welding methods.

**Industrial uses**

Plasma arc technology is used primarily in metallurgy, engineering and the chemical industry for welding and cutting, due to the high temperatures generated by its powerful concentrated arc and its 100% penetration capacity. In addition, plasma applications for welding very large cylindrical vessels are particularly favoured in the aerospace, agri-food and petrochemical industries.

**About Air Liquide**

Established in 1911, Air Liquide Canada has over 2,000 employees across the country. The international group Air Liquide is active in 70 countries around the world and is a world leader in the manufacture and distribution of industrial and medical gases and related services. The group offers innovative solutions based on constantly evolving technologies, to help our clientele in the fabrication of a number of essential everyday products. Founded in 1902, Air Liquide employs over 36,000 people around the world.