

Flow International Lands Multimillion Dollar Aerospace Deal with Mitsubishi Heavy Industries

Flow Waterjets Will Be Used to Cut Wings for Boeing's 7E7 Jet

Kent, WA, November 2, 2004 – Flow International Corporation (Nasdaq: FLOW), the world's leading developer and manufacturer of ultrahigh-pressure (UHP) waterjet technology equipment used for cutting, cleaning (surface preparation) and food safety applications, has been awarded a multi-million dollar contract by Mitsubishi Heavy Industries to supply the waterjet machine tools that will cut the carbon fiber wing skins for Boeing's new 7E7 commercial jet aircraft.

The large waterjet machining system for the carbon fiber composite wings will measure 118 feet long and 21 feet wide. It will be built and tested in Jeffersonville, Ind., one of Flow's six worldwide manufacturing plants. The UHP pumps that provide the ultrahigh-pressure water will be made at the Kent, Wash. headquarters.

"The award of Flow's first B7E7 related contract proves that leading aerospace companies recognize waterjet technology can be used to create "state of the art" aircraft parts in a cost-effective manner," said Stephen R. Light, CEO of Flow International Corporation. "We will deliver the system to Japan and expect production to begin prior to the end of 2005. Long term support for the machine will be provided by our service team based in Nagoya, Japan."

Traditionally, conventional cutting tools — handheld diamond or carbide-tipped routers, bandsaws, cutoff saws and abrasive wheels — were used to cut composites. However, due to the composition and fiber orientation of advanced composites, these traditional cutting tools can damage the composites either by over heating, or by leaving frayed or delaminated edges. Frequent delamination and fraying requires costly rework. In addition, these slow processes allowed parts to be cut only one at a time.

Waterjets eliminate cutting problems associated with advanced aerospace composites, because abrasive waterjets cut by erosive action rather than friction and shearing. To cut carbon composite aircraft parts, a thin stream of water moving at three times the speed of sound is emitted from a tiny, jeweled orifice in the tool head of Flow's machine. The one gallon-per-minute water flow draws in a separate stream of fine garnet particles that slice into the surface being cut. They produce exceptional edge quality-free of frayed or delaminated areas, which minimizes costly secondary finishing. The waterjets' low operating temperature doesn't affect the material being cut. Furthermore, because waterjets

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exert far less lateral force on the material than conventional machines, tooling and fixturing requirements are simpler and less expensive.

Flow Waterjets have been used to increase productivity at leading aerospace companies such as Boeing, Airbus, Rockwell, Teledyne Ryan, General Dynamics, Lockheed, Raytheon, Bell Helicopter, Northrop and other firms that provide composite machining services.

Flow International Corporation is a leading developer and manufacturer of ultrahigh-pressure waterjet technology equipment used in various industries including aerospace, automotive, paper, job shop, surface preparation, and food production.

Flow Europe GmbH is a division of Flow International Corporation, USA and the European Headquarters for all products relating to ultrahigh-pressure waterjet cutting technology. FLOW is a world leader in the development, design and sales of complete water- and abrasive-jet cutting machines for processing a wide variety of raw materials.

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