Connecticut Center for Advanced Technology, Inc.

Press Release

STEP-NC Demonstration Event to be Held in October

HARTFORD, CT — The STEP Manufacturing team (ISO TC184 SC4 WG3 T24) will meet at the Connecticut Center for Advanced Technology, Inc. (CCAT), in East Hartford, CT, October 1 to 2, 2008, to demonstrate and discuss advanced uses of the STEP-NC AP238 standard.

The STEP-NC AP238 standard is the result of a 10-year international effort to replace the RS274D (ISO 6983) M and G code standard with a modern associative language that connects the CAD data used to determine the machining requirements for an operation with the CAM data that solves those requirements.

STEP-NC builds on the previous 10-year effort to develop the STEP neutral data standard for CAD data, and uses the modern geometric constructs in that standard to define device-independent tool paths and CAM-independent volume removal features.

At the meeting the ISO team will demonstrate the advantages of STEP-NC for closed-loop machining applications. An impeller will be machined in a titanium alloy and measured in process using an articulated arm and offline using a coordinate measuring machine (CMM) machine. The demonstration will show that:

- Feeds and speeds can be adjusted on the machine to meet the latest manufacturing schedule while minimizing tool wear.
- Surface measurements can be taken using robot arms, gages and probes and used to adjust tool path geometries for extra accuracy during finish machining.
- Complete models of the product and process enable real-time simulation and error checking for first-part-correct machining

The Event

The first day of the meeting will be held at CCAT and United Technologies Research Center (UTRC) facilities on the Pratt and Whitney campus in East Hartford, CT. This day will feature the machining and measurement of the impeller part. The day will start with an introduction to the STEP-NC concept by machining experts. This will be followed by closed-loop, five-axis machining of the impeller in a titanium alloy, with in-process measurement using an articulated arm and offline using a scanning CMM.

The day will conclude with a round panel discussion by experts from Boeing, CCAT, Sandvik, Mitutoyo, STEP Tools and the U.S. National Institute of Standards and Technology (NIST). The second day of the meeting will take place in the CCAT meeting facilities. The technical agenda will feature the latest enhancements proposed to make machining more efficient, accurate and flexible. These will include proposals for dynamic feed&speed optimization that will be finalized at the meeting, and new proposals for computing and correcting tool-paths that will be discussed for the first time at the meeting. There will also be discussions on new standards for machine tool simulation and cutting tool data exchange.

For more information about the event,
call (518) 687-2848, e-mail meeting_registration@steptools.com or visit www.steptools.com.

About STEP Tools, Inc.

STEP Tools, Inc. is a leading international supplier of professional STEP software toolsets (based on ISO standards) for application software developers, design firms and manufacturing companies in diverse industries. The STEP Tools product line is used by the world's foremost firms to leverage STEP and STEP-NC technology to facilitate the sharing of engineering product information. Over one million end users utilize product data applications built with ST-Developer, the company's flagship product. The company offers a suite of software solutions in several languages that integrate with existing tools and database systems, and also provide cross-platform compatibility and ease-of-use for streamlined development. The emerging STEP-NC technology is yielding process improvements including a 15% reduction in machining time. For late-breaking information, contact STEP Tools, Inc. by calling (518) 687-2848, email: info@steptools.com or visit www.steptools.com.

About the Connecticut Center for Advanced Technology, Inc. (CCAT)

CCAT is a non-stock, tax exempt corporation that works in partnership with industry, government and academia to strengthen technology led economic competitiveness. CCAT was chosen to take the lead in addressing the nation's need to maintain global leadership in the engineering and manufacturing of advanced propulsion and power systems by establishing the National Center for Aerospace Leadership (NCAL) in Connecticut. The center focuses on future technological advancements necessary to aid the country's aerospace, aviation and defense manufacturing industries with the goal of providing new opportunities for industry and expanding job growth. For more information please contact Brian Kindilien at CCAT, phone 860-282-4215, email bkindilien@ccat.us, or visit our website at www.ccat.us.

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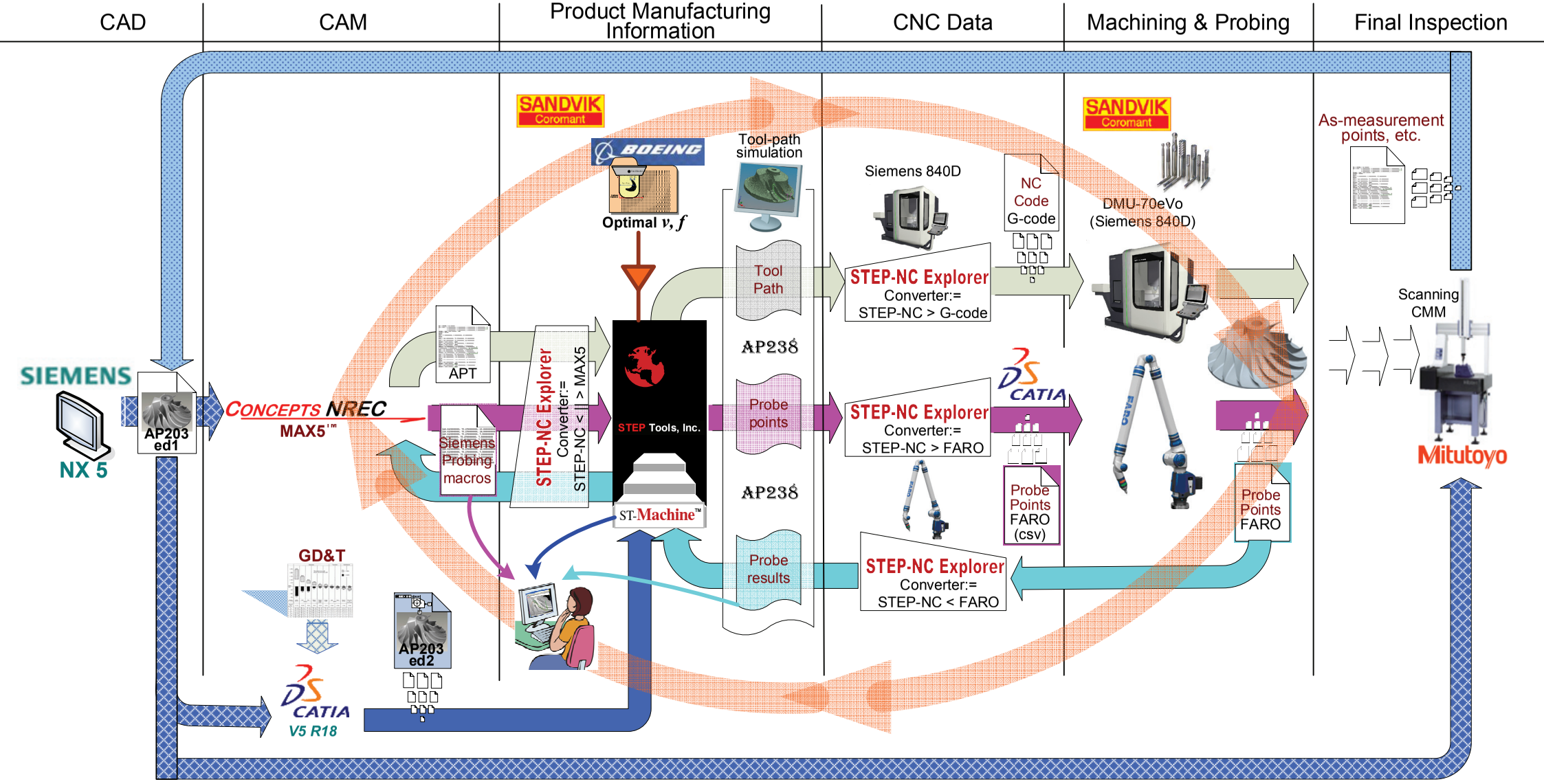
Closed-Loop Machining at CCAT – a Snapshot



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