

e-Manufacturing Seminar Series
#2

**“InterNetworking:
the technology that turns machine tool controls into Web servers”**

Today, modern machine tools remain largely closed ‘islands of automation’. Plant machinery needs to be networked into the enterprise-wide information system. Presently, this lack of connectivity represents a huge constraint as far as productivity is concerned. The goal of e-Manufacturing Networks is to create a networking standard that makes every machine tool a node on the corporate network in order to identify, monitor and optimize throughput on the factory floor. The network can be extended beyond the factory walls via the Internet, hence our term ‘InterNetworked’.

Very few manufacturers have ever considered the ramifications of machine tools as web enabled appliances on their factory floor. Giving every machine tool a hardware and software upgrade to enable it to host Internet Protocol (IP) addresses shatters the glass wall between the factory floor and the world that depends on the products produced there. Every machine tool can become a vital part of management’s information system and can become integrated into the enterprise-wide profit process. The point of production is then lined directly to the supply chain, on the one hand, and the demand chain of fulfillment on the other. This allows for the Theory of Constraints (TOC), as espoused by author Eliyahu Goldratt, to be applied in an automated way.

Speaker:

Tom Gaasenbeek is President & CEO of e-Manufacturing Networks Inc. Tom is the founder and ‘chief visionary’ of an international high tech design and manufacturing firm that upgrades (CNC) Computerized Numerical Control units for use in automated machine tools. e-Manufacturing Networks is expanding its product line, sponsoring research projects with leading developers and institutions, and growing as a high tech company dedicated to improving the productivity of machine shops. Tom is a member of the Society of Manufacturing Engineers, the Institute of Electrical and Electronics Engineers, and a past member of Mensa. And when he finds time, Tom is a first violinist with the Symphony Hamilton, a semi-professional regional orchestra.

Date/Time: October 20 (Friday), Noon – 1 PM,
followed by a discussion session

Location: 369 Link Hall,
College of Engineering and Computer Science,
Syracuse University

Institute for Manufacturing Enterprises (IME)
Syracuse University