

**For Immediate Release**

March 11, 2008

Contact: Elizabeth Keating, Museum of Science and Industry. (773) 947-6005  
Jennifer Ickes, Museum of Science and Industry, (773) 947-6003

**A TOUR THROUGH TOYMAKER 3000**

*Exploring the world of automated manufacturing at the Museum of Science and Industry*

Chicago – Explore the world of automated manufacturing in the Museum of Science and Industry’s newest permanent exhibit, *ToyMaker 3000*. Guests have the opportunity to follow a toy top through the Computer Integrated Manufacturing (CIM) process--from beginning to end--and learn and see how everyday items are made.

As guests approach the south court on the main floor of the Museum, it’s hard to miss the larger-than-life *ToyMaker 3000* entrance, which promises a new spin on science. Passing by the tower of colorful spinning toy tops, guests enter the *ToyMaker 3000* exhibit through the Museum’s existing exhibit, *Ball Enterprise*. The lobby and reception areas of *Ball Enterprise* are not only a gateway into the new manufacturing exhibit, but serves as an integrated educational exhibit explaining the financial, marketing and executive disciplines of a manufacturing business.

Upon entering the *ToyMaker 3000* exhibit, guests are greeted by an automated “disassembly” station for the Computer Integrated Manufacturing (CIM) line. Full of color and clatter, the robot whizzes by to collect bins of toy top pieces and start them on their journey through the automation process. The rest of the CIM line is half-visible through a wire mesh barrier, hinting at the energy and movement beyond. The opposite side of the hallway is a series of illuminated signs that introduce the context of the exhibit – a brief visual timeline of automation highlights throughout the years, as well as an invitation to guests to see the human brainpower that goes on behind the machines.

Making their way into the exhibit, guests encounter three large flat-panel video screens mounted on an animated robotic arm. Each video screen invites guests

-more-

to watch a short presentation and engages viewers in the manufacturing processes of today versus their perceptions or what they recall about the industry. Interviews with engineers and designers offer insight into the variety of jobs in automated manufacturing.

Moving along, guests come across a small “design office” setting, which gives them a hands-on look at Computer Aided Design (CAD). A number of interactive stations engage guests about the nature of CAD, the many industries for which it is used as well as possible uses in the future. CAD is like a “virtual sketchpad,” and unlike drawing with pens and pencils, drawing on a computer allows for incredible precision and unlimited revision in a three dimensional design. Also highlighted is a rapid prototyping machine, or a 3D printer. This machine allows designers to create the first real world version of their product before it goes into production. In *ToyMaker 3000’s* case, it makes a 3-D print of the toy top!

Around the corner is a collection of the components that are used in the typical CIM line design, and the concept of “assembling the assembly line” is introduced. Here, the amazing speed, power, and precision of automation comes to life, emphasizing the role of the human brainpower it takes to make it possible. On display is as a revolutionary pair of robots that are programmed to work together by drawing pictures (one holds a pen, one holds a writing board), as well as a “retired” robot that is well past its prime. Guests are invited to be involved in a robot programming challenge before starting their own automation adventure at *ToyMaker’s* CIM line.

Now that the world of automation has been introduced as clean, smart and safe, guests can start their own automation adventure by watching the *ToyMaker 3000* in action. For the next 5 minutes, guests will have the chance to witness a toy top being assembled from start to finish through a series of feeder systems, robotic arms, ultrasonic welders and conveyer belts. All guests have the opportunity to watch the tops move through the assembly line process, however guests may choose to customize their

own top with a color and their name and follow its path specifically. Those tops that are not customized will be rapidly disassembled by the automated cell introduced to you at the beginning of the exhibit. Each cell ensures that the separate pieces are placed in appropriate bins, ready to start the process again.

Before leaving, guests are encouraged to visit the Career Station, which highlights the jobs of the future in manufacturing and automation, and the fact that manufacturing technology has actually created a need for numerous jobs in automation and hundreds of other industries. The Automation Hall of Fame is a final interactive kiosk, which allows guests to explore the history and future of automation and the visionary award winners behind the technology.

*ToyMaker 3000* was made possible by the generous support of the following donors: Rockwell Automation, U.S. Department of Energy, ITW Foundation, U.S. Small Business Administration, Lester B. Knight Charitable Trust, Julius Frankel Foundation, and Mr. and Mrs. John P. Keller.

The Museum of Science and Industry's mission is to inspire the inventive genius in everyone by presenting captivating and compelling experiences that are real and educational. Located at 57<sup>th</sup> Street and Lake Shore Drive, just minutes from downtown Chicago, the Museum is open every day of the year except December 25. Museum hours are 9:30 a.m. until 4:00 p.m. Monday through Saturday and 11:00 a.m. until 4:00 p.m. on Sundays. General admission is \$9 for adults, \$7.50 for seniors and \$5 for children ages 3-11. (City of Chicago resident pricing: \$8 for adults, \$6.75 for seniors and \$4.25 for children ages 3-11). For more information, call (773) 684-1414 or visit our website at [www.msichicago.org](http://www.msichicago.org). Outside of the Chicago area, call 1 (800) GO-TO-MSI (1-800-468-6674).

###