

## NYSEARCH/RIT Working to Commercialize Ergonomic Needle Bar Tool

As part of a collaborative effort with Rochester Institute of Technology (RIT), NYSEARCH has designed, built and field tested a new tool that will help reduce injuries to gas utility operators. The project was originally initiated by RG&E and is targeted at replacing the existing manual needle bar with a device that will reduce back, arm and wrist injuries when making barholes during routine leak surveys. It has been estimated that utilities make hundreds of thousands barholes annually that result in injuries to utility operators. Many of these injuries can result in lost time and can cost thousands of dollars.

This project, funded under the “Traditional “ funding mechanism, continued from an RG & E project at NYSEARCH in early 2005 with an prototype tool and quickly went to a final design that ended in six (6) tools being built for utility field tests. The new design makes use of an innovative, weighted sliding shaft that allows the operator to go through the entire barhole process without bending over. Ergonomic tests performed on utility operators have shown a dramatic improvement over the old type tool. For example, tests indicate that forces generated on a person’s back are reduced by almost a 2.5 times with the new tool. In early January 2006, NYSEARCH and RIT delivered the tools to member companies along with a special training program. Ten member companies field tested the tools over a 3 month period with many different operators.

Companies successfully completed the field tests and provided their feedback to NYSEARCH Staff and RIT. Many utility operators agreed that the tool is an improvement over the old version and will help reduce injuries. Although the tool weighs twice as much as existing tools, utilities understand that the additional weight is needed to achieve the ergonomic benefits and consider weight a lesser issue. Based on this, NYSEARCH is currently seeking vendors to commercialize the Ergonomic Needle Bar for the Gas Industry. NYSEARCH invited a number of industry tool distributors/ manufacturers to a meeting on June 15 to learn about the tool and seek potential commercializers.

