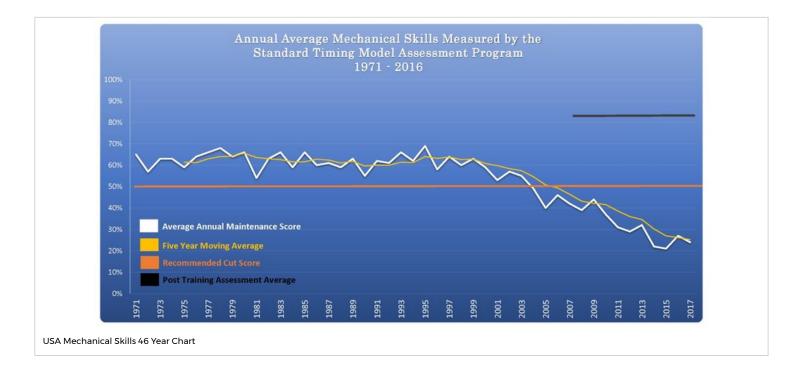


## Scientific Management Techniques Has Been Measuring the Manufacturing Skills Shortage for Decades

Company Uses Data Analytics to Design and Deliver Effective Solutions to this Acute and Growing Problem

NEWS PROVIDED BY Scientific Management Techniques → Mar 22, 2018, 08:40 ET

MERRIMACK, N.H., March 22, 2018 /PRNewswire/ -- The manufacturing skills shortage/skills gap is real, acute and growing. Manufacturing organizations of all sizes are searching for effective solutions to this "efficiency killing" problem. We have not always had a manufacturing skills shortage. When did this problem begin.... and, more importantly, how do you measure it?



Scientific Management Techniques (SMT), located in Merrimack NH, has been measuring the skill level of the manufacturing workforce since 1971. We have data regarding the skill level of the manufacturing workforce for forty-five states in the USA, and dozens of other countries. SMT's hands-on competency-based "Assessment Machines" measure the skills required to operate, maintain and troubleshoot a manufacturing facility.

The Manufacturing Skills Shortage problem started slowly primarily due to societal changes regarding the consideration of promising career paths, creeping into the workforce quietly for many years. Our data indicates that the problem started to grow in earnest, impacting performance and profitability, in 1998. For many years assessment scores in the USA were

relatively stable. From 1971 to 1997 the average score on our Mechanical Skills assessment program was 61% (a score of 50% or higher identifies strong skills). In 1998 average scores began to decline and that decline has accelerated markedly since then (see chart). Currently, the average score on our mechanical skills assessment is 39%. In the 1980s and early 1990s our typical client would need to administer 10 assessments to identify 5 top performers for hire. Today, as all manufacturers recognize, highly skilled individuals are harder to identify and hire. The current ratio of assessments to hires is approximately 3:1. Given the current state of our manufacturing workforce, that top performer is more valuable than ever before.

As we all know, the long-term solution to the skills shortage is effective training. The question is "Who Needs What Training?" Our assessment program/data provides answers. How an individual performs during the hands-on assessment provides a clear window into what skills an individual possesses, and what areas he/she is weak in. With this data you have the ability to design and deliver highly targeted training. This data-driven, targeted training dramatically increases the ROI of manufacturing skills training programs.

Our Assessment Machines also measure the effectiveness of training delivered. With pre-training and post-training assessment data our clients have the ability to correlate assessment score increases with other internal measurements (output, downtime, quality, etc.....) to model the ROI of their training program.

Given the demographics of the manufacturing skills crisis, it is clear that the problem will be with us for some time. It takes years to retrain an entire workforce and position these jobs as a "career of choice" for new entrants into the workforce. As long as the problem exists, our analysis suggests that a data driven solution is the most effective and cost efficient solution.

## **About Scientific Management Techniques**

Scientific Management Techniques is the global leader in hands-on industrial skills assessments and industrial skills training. SMT's manufacturing skill solutions are currently deployed in forty-four countries. The skills training curriculum trains the critical hard skills required to operate, maintain and troubleshoot an industrial facility. Their hands-on manufacturing skills assessment machines and assessment protocols are used in the hiring process to identify and measure industrial skills; Mechanical, Electrical, PLC, CNC and Process Control Skills. Many organizations assess their incumbent workforce and deliver targeted training based on the assessment data.

## Scientific-Management.com

Contact: Mr. Ward Ashton, Senior VP of Marketing & Client Services, 192195@email4pr.com, Phone: (603) 421-0222

SOURCE Scientific Management Techniques