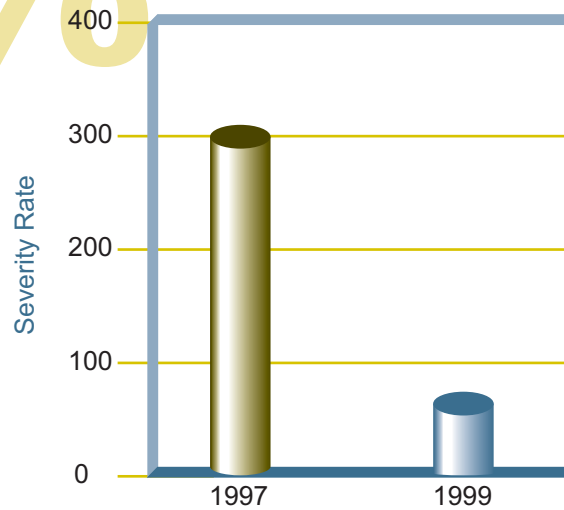


## TRW Improves Health and Safety While Increasing Productivity with Humantech

TRW's Automotive division, representing two-thirds of the company's sales with over 90,000 employees worldwide, is a world leader in braking, steering, suspension, occupant safety systems, electronics, engine valves, fastening systems, and aftermarket replacement parts for the global automotive industry. TRW provides advanced technology products and services to the automotive, aerospace, and information technology markets.

# 90%

## 90% Reduction in Severity Rate



Humantech assisted TRW's Cookeville, Tennessee, facility with integrating ergonomics and lean manufacturing to achieve a 90% reduction in severity rate while improving plant-wide throughput by 15% over two years. Four years after our assistance, the WMSD incidence rate had been reduced by 83% and the total lost workday incidence rate by 85%.

## The Challenge

TRW's Automotive Division, including its Cookeville, Tennessee, site, embraces lean manufacturing as its operating philosophy. Its facilities aggressively target areas of waste to reduce costs and increase profitability. Measurable improvements in lean metrics such as work-in-progress and throughput are being achieved through focused initiatives. In parallel, TRW targeted improvements in injury/illness rates to harness the power of lean manufacturing's impact on worker health and safety.

TRW also utilized a job improvement process emphasizing operator involvement. The division embraced operator involvement through formal reviews of new job designs and Kaizen processes for continuous improvement, welcoming the operators' expertise into the process and, at the same time, gaining their approval and support.

## The Solution

Lean manufacturing initiatives rely on quantifiable measures to prioritize improvement needs and track success. To effectively integrate ergonomics with lean manufacturing, ergonomic risk must also be measured. TRW uses Humantech's BRIEF™ Survey to quantify ergonomic risk at workstations. It combines the survey data with operator discomfort and past injury/illness data to develop a site risk map that is used to prioritize areas for improvement. Because the BRIEF Survey provides objective risk criteria, the impact of interventions can be quantified before projects are implemented, ensuring measurable results.

An integral part of TRW's approach included targeting technicians, engineers, and supervisors to attend Humantech's Applied Ergonomics training course, giving them the essential skills they needed to be successful in improving existing workstations and designing new processes for future products.

## The Results

TRW's experience with ergonomics and Lean manufacturing evolved over time. Early success bred senior staff confidence and assured operators that the lean initiative can make their jobs better and safer. Today, ergonomics action teams submit low-cost, high-impact issues for immediate resolution, and a health and safety action list is reviewed weekly to ensure that issues are being addressed. Ergonomics is being applied proactively to new assembly lines and in areas outside the main assembly lines. According to plant manager Bill Wallace, "The Humantech system was the piece of the puzzle we were missing in our lean manufacturing initiative. It has proven to be a simple yet effective tool in making our work environment safer."

Leading TRW's ergonomics initiative is its Cookeville, Tennessee, site. The site achieved a 90% reduced severity rate in the first 24 months. This impressive achievement was reached with little capital investment during a time when production volume was increasing by 15%. Over the past four years, MSD incidence rates have been reduced by 83% and the total lost workday incidence rate by 85%.

### About Humantech

Since 1979, Humantech has accelerated workplace improvements to enable people to perform at their best. Humantech provides vital workplace solutions through Human Performance Ergonomics™, employee engagement, task-specific problem solving, training programs, and extraordinary service. The results are operational excellence, increased profitability, and improved worker morale, as well as reduced workplace injuries and costs related to inefficiencies. With a corporate office in Michigan and consultants across the country, Humantech consults with successful companies worldwide. The 30-Inch View™ is a service mark of Humantech, Inc., 2007. For more information, visit [www.humantech.com](http://www.humantech.com).