

## Engineering and Design Services

### Human Performance Ergonomics Achieves Breakthrough Results

Designing for human performance is not just an option in today's competitive environment—it's essential. Humantech's ergonomic design guidelines are clear and concise. They provide product designers and advance manufacturing engineers with the specifications needed to assure employee well-being and efficiency.

Our experienced ergonomists, combined with Humantech's in-house design team, provide real solutions to real problems, from clean sheet design of a new manufacturing process to office workstation standards. Humantech engineering and design services positively impact employee health and safety and enhance productivity. The Humantech difference is:

- **Experienced Engineers and Designers**

Humantech's engineering consultants specialize in Human Performance Ergonomics across a wide variety of workplace settings, and possess a wealth of practical experience from decades of solving industry challenges. Our team's expertise ranges from production and assembly, to food processing, to distribution and transportation. Humantech's team of ergonomics engineers works closely with our staff of full-time designers to make sure that our solutions meet your design goals. Our implementation team draws on expertise in machine tooling design to assist clients in turnkey engineering solutions.

- **Practical Approach to Engineering and Design**

Our approach to engineering and design combines a high level of involvement from your key personnel with efficient and quantifiable analysis methods. Every project team is led by a Board Certified Professional Ergonomist. The results are highly useable design solutions with productivity improvement projections that provide all the information you need to make decisions for immediate and long-term improvements.

- **Implementation Support**

Humantech supports every design solution with the data you need to implement the improvements and realize the full benefit of our performance engineering solutions. We support the implementation process with illustrations, vendor involvement, action plans, and cost-benefit data.

Whether addressing product design, manufacturing engineering, or office/facilities equipment selection, Humantech offers useable solutions in an easy-to-understand manner. Our practical approach to engineering and design ensures that your resources are applied to implementing solutions, not analyzing data.

With backgrounds in Industrial Engineering, Architecture, Tooling Design, Human Factors, Kinesiology, and Ergonomics, our team has the resources to achieve breakthrough improvements in human performance.



Engineering and Design



We selected Humantech as our partner due to their excellent knowledge, engineering skills, and proactive approach to ergonomics.

Dave Pivarnik  
Director of Health & Safety  
TRW, Inc.



#### About Humantech

For 30 years, global companies have relied on Humantech for workplace improvements. By combining the science of ergonomics and our unique 30-Inch View®—where people, work, and environment intersect—we deliver practical solutions that impact safety, quality, and productivity. At Humantech, we believe people make productivity happen. The 30-Inch View is a registered service mark of Humantech, Inc., 2008.

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## Manufacturing Engineering Services

### INDUSTRIAL

#### ■ Workstation Design Standards

Design standards can be applied to families of job tasks that use similar operations and similar equipment. Design templates provide a means for transferring best-in-class manufacturing innovations throughout facilities worldwide.

#### ■ Clean Sheet Design Review

Workstation and equipment designs can be improved before fabrication, avoiding costly rework and production delays. A report detailing the ergonomic criteria applied to the design, the resulting analysis, and a range of design solutions can be presented in a working meeting with your design staff.

#### ■ Production Process Engineering

Workstation design integrated with equipment layout and line balancing achieves total system optimization. A systems view of the production process ensures that improvements in human performance are leveraged. The result is improved system performance in health and safety, production, and reliability.

## Product Design Services

### OFFICE

#### ■ Design for Assembly Evaluation

Recommendations for product design improvements are made based on Humantech's Improved Design for Ergonomics and Assembly (IDEA™) evaluation. This method quickly identifies opportunities for improvement and identifies the highest priorities.

#### ■ Design for Usability Evaluation

Select the optimum design using our detailed evaluation of ergonomic risk exposure and user preference ratings. Objective-based measures quantify the risk exposure level of design approaches for improved design for usability.

## Office Equipment Design and Selection Services

### DESIGN

#### ■ Office Design Standards

Humantech can develop office templates or review templates provided by your furniture vendors. An integrated evaluation of workstation layout, furniture, computer equipment, and lighting factors ensures that the office standards support the people and tasks performed, and minimize ergonomic risk.

#### ■ Facility Layout and Furniture Selection

Overall office system performance is achieved by integrating office design standards with facility layout factors. We'll identify the key links between and within departments, and develop facility plans and furniture selection criteria to optimize department and facility layouts.