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Mirra Chair ©2004 Herman Miller, Inc., Zeeland, Michigan

HERMAN MILLER, INC. MIRRA™ CHAIR

INDUSTRIAL SOLUTIONS

HERMAN MILLER, INC. MIRRA™ CHAIR

Office Furniture Design and Material Development

CHALLENGE

Herman Miller Inc. (HMI), a premier U.S. office seating and systems manufacturer, sought a molding partner to work on the development of a new mid-market chair design. The chair would be the first under HMI's "Design for the Environment" protocol and, as such, required the use of recyclable materials. The design also demanded flexibility as the chair would be designed to accommodate 95% of the world's body shapes. Cost reduction was another goal, as the chair needed to meet a mid-level price point.

SOLUTION

Cascade Engineering worked with HMI designers to review chair components and provide alternatives for non-recyclable materials. Cascade Engineering utilized a glass-filled Nylon (PA6) for the upper spine to replace the structural steel back support typically used in office furniture. MoldFlow analysis minimized filling issues during engineering and production start-up. Gating and design changes incorporated in the tooling assured consistent aesthetics. Including the upper spine, Cascade Engineering provides six components for the Mirra chair.

RESULTS

The Mirra chair design met with instant success:

- Openness of Mat Back design increased airflow and comfort
- Using the molded polypropylene material back allowed the chair to meet the mid-level price point
- Tooling designed to ensure consistent aesthetics
- Chair is 96% recyclable
- Design earned a Gold Medal Award as Best of NeoCon in June, 2003

For additional information about this project or other Cascade Engineering case histories, visit our web site at cascadeng.com or call 800.968.2278.

