

CHAIR FAILURE

Experts Investigate Office Chair Failure

A firefighter sustained back injuries when the office chair he was sitting on failed, causing him to fall backwards onto the ground. Robson Forensic experts in product liability and metallurgy were retained to determine the causes of the incident.

Among other materials, our experts reviewed the incident chair, an exemplar, and x-ray images of both the incident and exemplar chairs. The subject chair was equipped with a hexagonal torsion bar that allowed the back support to tilt and automatically return to an upright position. By sectioning and polishing the torsion bars from both chairs our experts identified internal cracks in the incident bar that were not present in the exemplar. The defects present within the torsion bar derived from incorrect and/or uncontrolled fabrication processes, which could have been detected by the use of quality control inspection equipment.

Featured Experts:

Eric C. Heiberg, P.E. (eheiberg@robsonforensic.com)

Eric has a diverse design background that spans the complete product development cycle. He has taken products from initial concept through design, hazard analysis, prototyping, testing and manufacturing. Eric has engineered a wide variety of products, ranging from electro-mechanical machines to medical devices and sports equipment. Eric holds three U.S. patents and has two others pending. He is a P.E. in New York and New Jersey and has provided testimony for cases in both state and federal courts.

James A. Waldvogel (JamesA.Waldvogel@robsonforensic.com)

Jim has been working as a professional metallurgist since 1978. In 1987 he founded a consulting corporation where he works as the principal metallurgist for a variety of commercial and military projects. Prior to founding his own company he was a Materials Engineer at Lockheed Martin where his responsibilities included material selection and failure analyses. Jim is an AWS Certified Welding inspector, and a member of ASTM and the American Society for Metals.