

## TOP 100 VERDICTS of 2007

TWENTY-TWO

## PRODUCTS LIABILITY

## Design Defect — Manufacturing Defect

## Storage system collapse in printer co. led to 3-week inferno

VERDICT \$63,335,819

**CASE** Industrial Risk Insurers and Quad/Graphics Inc. v. HK Systems Inc., St. Paul Surplus Lines, Federal Insurance Co., Leavitt Tube Co., Lumbermen's Mutual and Casualty Co. and Rack Structures Inc., No. 03-CV-7184

**COURT JUDGE** Milwaukee County Circuit Court, WI  
Elsa Lamelas

**DATE** 9/27/2007

**PLAINTIFF ATTORNEY(S)** Bruce A. Schultz (co-lead), Coyne, Schultz, Becker & Bauer, S.C., Madison, WI  
Jeffrey R. Zehe (co-lead), Ellison, Nielsen, Zehe, & Antas, P.C., Chicago, IL  
Patrick C. Hess, Ellison, Nielsen, Zehe, & Antas, P.C., Chicago, IL

**DEFENSE ATTORNEY(S)** Philip W. Domagalski (lead), Kralovec & Marquard, Chartered, Chicago, IL (St. Paul Surplus Lines Insurance Co.)  
John V. McCoy (lead), McCoy & Hofbauer, S.C., Waukesha, WI (Leavitt Tube Co., Lumbermen's Mutual and Casualty Co.)  
Edward B. Ruff III (lead), Pretzel & Stouffer, Chartered, Chicago, IL (Federal Insurance Co.)  
Suzanne M. Crowley, Pretzel & Stouffer, Chartered, Chicago, IL (Federal Insurance Co.)  
Thomas C. Hofbauer, McCoy & Hofbauer, S.C., Waukesha, WI (Leavitt Tube Co., Lumbermen's Mutual and Casualty Co.)  
Michael T. Sprengnether, Kralovec & Marquard, Chartered, Chicago, IL (St. Paul Surplus Lines Insurance Co.)  
Not represented (HK Systems Inc., Rack Structures Inc.)

**FACTS & ALLEGATIONS** Plaintiff Quad/Graphics, one of the world's largest privately held printing companies, completed construction of an automated storage retrieval system, known as an AS/RS, in May 2002, which was housed in building 15 of its Lomira plant

Longer than two football fields and 80 feet wide, the AS/RS was a

steel storage rack meant to carry 108 million pounds of paper products on pallets. Steel tubes served as the 110-foot columns that supported the AS/RS and the stored product. Computer-controlled cranes moved pallets of paper products in and out of the AS/RS.

In July 2002, after two months of use, the AS/RS collapsed and sparked a fire that destroyed the AS/RS and more than 45 million pounds of paper products stored in the AS/RS. Nearly 50 fire departments responded to the inferno, which burned for three weeks. A handful of Quad/Graphics employees who were working at the time evacuated safely, but a janitorial contractor who was in the parking lot adjacent to the west wall of building 15 was killed when his car was crushed by a collapsing wall.

Quad/Graphics and insurer Industrial Risk Insurers sued HK Systems Inc., the New Berlin contractor that agreed to design and build the AS/RS; Rack Structures Inc. of Livonia, Mich., the HK subcontractor that designed and built the AS/RS rack structure and Leavitt Tube Co., the Chicago-based manufacturer of the 110-foot steel columns. Rack Structures was no longer in operation at the time of trial, nor was it represented. Plaintiff's counsel claimed products liability (defective design and manufacturing) against all three defendants and breach of contract against HK.

The plaintiffs entered into a partial settlement with HK Systems' first- and second-layer insurance providers,

Admiral Insurance Co., and Westchester Insurance, respectively. Both settled prior to trial. However, HK's third-layer insurer, St. Paul Surplus, and fourth-layer insurer, Federal Insurance, did not settle. Prior to trial, the plaintiffs settled for an undisclosed amount with Graef Anhalt, Scholoemer & Associates Inc., the engineering firm that Quad Graphics hired to oversee construction of building 15. The plaintiffs received in excess of \$19 million prior to trial with the settling parties. The remaining parties that went to trial were: HK Systems, HK's carriers, St. Paul Surplus and Federal, Leavitt Tube, Leavitt's carrier Lumbermens Mutual Insurance, and Rack Structures.

The plaintiffs tried their claims against Leavitt and Rack structures to a jury and, as required by contract, tried their claims against HK to the bench. HK remained on the jury verdict form for purposes of establishing contribution rights. The parties presented their evidence to the jury and the bench at the same time.

Plaintiffs' counsel argued that the design, manufacturing and installation of the AS/RS shelving were defective, as the shelves were improperly welded, and that inadequate bracing supported the structure. Plaintiffs' counsel argued that HK breached its contract to provide a structurally sound, state-of-the-art automated retrieval system.

Plaintiffs counsel argued that the steel tubes supplied by Leavitt Tube

Co. and used by HK as columns in the AS/RS were incomplete and defective because Leavitt improperly welded and inspected the tubes at its Chicago-based tube mill. (Leavitt Tube Co. formed a flat piece of steel into a round tube, welded the seam with automated electric resistance welding, then formed the round tube into a square, 4-inch-by-4-inch tube approximately 50 feet in length).

Presenting a microscopic analysis of the steel columns, William O'Donnell, the plaintiffs' metallurgical engineer, opined that the welds of the Leavitt Tube Co. steel columns/tubes were incomplete and not of full thickness. O'Donnell testified that there were methods available to inspect and check the welds coming off the production line, which Leavitt Tube Co. failed to perform at the time the columns were manufactured.

German Gurfinkel, the plaintiffs' structural engineering expert, opined that there were three causes for the collapse: defective design, bad welds and defective column components of the rack, which were manufactured by Leavitt.

The defendants denied the allegations.

Defense counsel for Federal Insurance contended that RSI failed to properly manufacture the shelving of the automated shelving system. Defense also argued that Quad/Graphics had sufficient information and knowledge that the AS/RS was inadequately working at the time of the collapse and contributed to the equipment's failure by continuing to use the structure.

Defense for St. Paul Surplus Lines argued that Quad/Graphics, through GAS, was involved in the design of the structure and at least partially responsible for the design problems. Defense contended that GAS was negligent in permitting Quad/Graphics to continue using the AS/RS when problems developed and failed to obtain permits from the state prior to occupancy.

Counsel for Leavitt Tube Co. argued that the company's steel columns met industry standards, and that any open welds or defects occurred as a result of the collapse, rather than being the cause of the collapse. The plaintiff had known that the AS/RS was not properly working but continued operation of it.

Mark Lawrence, Leavitt Tube Co.'s structural engineer, conducted independent testing by applying various load pressures to steel tubes (including samples that he split open to various lengths). He said that the columns would have withstood the intended load forces placed on them, even if they had been inadequately welded. Lawrence concluded that the inadequate design of the AS/RS bracing, and not the tubes, caused the structure to collapse. Counsel argued that Leavitt Tube Co. merely supplied tubes and had no input into the design of the AS/RS or the selection of these particular tubes into an AS/RS as a primary load bearing support.

Plaintiffs' counsel countered that prior to the AS/RS collapse, a rack broke and Quad/Graphics notified HK, which inspected the rack and found bad shelf welds, and began remedial action when the structure collapsed.

**INJURIES/DAMAGES** After firefighters extinguished the three-week blaze, various inspectors examined the debris and marked any parts, material or fragments to preserve and placed in an open field. Cleanup efforts lasted for several months and an intermittent storage facility was set up in Lomira. A new AS/RS was then built on the same slab of the original site.

The plaintiffs sought \$63,335,819 in damages, which was presented by John Peters, the plaintiffs' accountant. Peters presented a multi-prong damages model that presented figures on property damage, loss of business, fire cleanup, intermittent storage, transportation of products from the storage facility and reconstruction. Plaintiffs' counsel asked the

judge to answer the question of damages as a matter of law. The defendants did not rebut.

Prior to deliberation the defendants asked the court to place GAS on the verdict sheet, which the court granted.

**RESULT** The jury found that a defect was a cause of the collapse of the AS/RS; that the steel tubing was in a defective condition when it left the possession of Leavitt Tube Co.; and that the defective condition of the steel tubing was a cause of the AS/RS collapse. The jury found that HK Systems and Rack Structures were responsible for a defect in the AS/RS that made the AS/RS unreasonably dangerous to a prospective user. GAS was not found responsible for a defect in the AS/RS. The jury found that Leavitt Tube was 10% liable, HK Systems 51% liable and Rack Structures 39%. The jury found that Quad/Graphics was not negligent. Judge Elsa Lamelas determined as a matter of law that the plaintiffs damages totalled \$63,335,819. The jury's verdict is binding as to Leavitt Tube and Rack Structures. It is only advisory as to HK Systems.

After the jury rendered its verdict, Judge Lamelas decided in favor of the plaintiffs on their claims against HK. However, before trial, Federal Insurance negotiated a high-low agreement of \$2.5 million and \$1 million with no pre- or post-judgment interest payments. In addition, St. Paul Surplus has policy limits of \$15 million. St. Paul's maximum exposure is its limits plus recoverable costs and interest.

**POST TRIAL** St. Paul Surplus Lines' affirmative defenses on insurance coverage were tried during a two-day bench trial following the jury trial. Additional briefs were submitted post trial on insurance coverage issues by the plaintiffs and St. Paul. Judge Lamelas ruled that St. Paul covers HK's Liability to plaintiffs. HK cannot be made to pay any judgment because the plaintiffs' entered a settlement agreement with HK whereby they released HK from any liability not covered by St. Paul and Federal. Judgment will be entered and costs taxed. A remaining issue involves the validity of offers of settlements made to the defendants which would entitle the plaintiffs to prejudgment interest and double costs. A further hearing is scheduled for Feb. 4.

<b>DEMAND</b>	\$15 million (as to HK and its insurers); \$20 million (as to Leavitt and its insurers)
<b>OFFER</b>	\$6 million (by HK and its insurers); \$3 million (by Leavitt and its insurers)
<b>INSURER(S)</b>	Lumbermens Mutual Insurance Co. (Leavitt Tube Co.) St. Paul Surplus Lines and Federal Insurance Co. (HK Systems Inc.)
<b>TRIAL DETAILS</b>	Trial Length: 4 weeks Trial Deliberations: 2.5 days
<b>PLAINTIFF EXPERT(S)</b>	William J. O'Donnell, Ph.D., failure analysis (metallurgy), Bethel Park, PA German Gurfinkel, Ph.D., structural, Champaign, IL John Peters, C.P.A., lost earnings, Brookfield, WI
<b>DEFENSE EXPERT(S)</b>	Mark A. Lawrence, Ph.D., mechanical, Aurora, IL