

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

ILLINOIS NATIONAL INSURANCE CO., et al.,
Plaintiffs,
v.
ACE STAMPING AND MACHINE CO. INC.,
Defendant.
No. 17 C 7567
Judge Virginia M. Kendall

MEMORANDUM OPINION AND ORDER

General Electric Transportation ("GET") manufactures locomotive engines and uses various washers in those engines. In 2015-16, GET retained Optimas OE Solutions, LLC ("Optimas") to source washers from outside vendors to use in its engines. When GET began manufacturing the engines, the washers cracked and, upon inspection, GET determined that the washers were not flat and were brittle. As a result, GET disassembled the locomotive engines and rebuilt them with different washers incurring approximately \$1.7 million in losses. GET made a demand to Optimas, the supplier of the washers, for the loss. Optimas had contracted with manufacturer Ace Stamping and Machine Co. Inc. ("Ace") to provide the washers to Optimas's customers. When GET complained about the defective washers, Optimas settled with GET and the Plaintiff-Insurers reimbursed it for that settlement.

This Court denied Plaintiffs' Motion for Summary Judgment on September 24, 2019. (Dkt. 58). The parties reported that depositions of Plaintiffs' and

Defendant's 26(a)(2)(B) witnesses were complete as of the May 14, 2020, Joint Written Status Report. (Dkt. 72 ¶ a). Plaintiffs now move to bar the testimony of Arthur Hedrick, Defendant's 26(a)(2)(B) expert witness. The motion is granted.

LEGAL STANDARD

“The admissibility of expert testimony is governed by the Federal Rule of Evidence 702 and the Supreme Court's opinion in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993).” *Lewis v. CITGO Petroleum Corp.*, 561 F.3d 698, 705 (7th Cir. 2009); *see also Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 147–49 (1999) (extending application of *Daubert* factors to engineers and other non-scientific experts). Trial judges act as gatekeepers to screen expert evidence for relevance and reliability. *Daubert*, 509 U.S. at 589; *see also C.W. ex rel. Wood v. Textron, Inc.*, 807 F.3d 827, 834 (7th Cir. 2015). Under Rule 702, a “witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion” if the following conditions are satisfied:

- (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
- (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable principles and methods; and
- (d) the expert has reliably applied the principles and methods to the facts of the case.

Fed. R. Evid. 702. In other words, “the key to the gate is not the ultimate correctness of the expert's conclusions . . . , it is the soundness and care with which the expert arrived at her opinion.” *Schultz v. Akzo Nobel Paints, LLC*, 721 F.3d 426, 431 (7th

Cir. 2013). In evaluating the expert’s proposed testimony, the Court should “scrutinize proposed expert witness testimony to determine if it has the same level of intellectual rigor that characterizes the practice of an expert in the relevant field so as to be deemed reliable enough to present to a jury.” *Lapsley v. Xtek, Inc.*, 689 F.3d 802, 805 (7th Cir. 2012) (internal quotation marks omitted).

Pursuant to the *Daubert* framework, the Court must determine: (1) “whether the witness is qualified”; (2) “whether the expert’s methodology is scientifically reliable”; and (3) “whether the testimony will assist the trier of fact to understand the evidence or to determine a fact in issue.” *Myers v. Illinois Cent. R. Co.*, 629 F.3d 639, 644 (7th Cir. 2010) (internal quotation marks omitted); *see also Gopalratnam v. Hewlett-Packard Co.*, 877 F.3d 771, 779 (7th Cir. 2017). The expert’s proponent bears the burden of demonstrating that the testimony would satisfy the *Daubert* standard by a preponderance of the evidence. *See Gopalratnam*, 877 F.3d at 782; *see also* Fed. R. Evid. 702 Advisory Committee’s note to 2000 amendment.

DISCUSSION

Ace retained Arthur Hedrick to offer expert opinion testimony regarding “whether the washers would fail once they were pushed back to totally flat.” (Dkt. 86 at 1). To that end, Hedrick offered two opinions in his April 14, 2020, expert report:

1. [I]t is highly un-probable that any of the washers manufactured by [Ace] during the time in which they were being installed by [GET] were likely to fail; and

2. [I]t is even more unlikely that any of the washers manufactured by [Ace] and used by [GET] were not capable of properly functioning in the assembly.

(Dkt. 86-1 ¶¶ 4.2–4.3). Plaintiffs argue that Hedrick’s testimony should be barred both because he is not qualified as an expert competent to render these opinions and because the methodology Hedrick applied to arrive at his opinions is inadequate. (Dkt. 81 at 3, 12–14).¹

I. Hedrick’s Qualifications

Hedrick has several decades of experience in the stamping business, specifically the tool and die design industry. (Dkt. 86-1 ¶¶ 1.1–1.7). This background includes work training others in stamping and die design and consulting for the automotive industry. (Dkt. 86-1 ¶ 1.7). To offer expert opinion testimony, it is not enough that Hedrick be an expert in any field. Hedrick must qualify as an expert in the field in which he offers opinion testimony. *See Ancho v. Pentek Corp.*, 157 F.3d 512, 519 (7th Cir. 1998) (affirming the district court’s decision to bar a mechanical engineer from offering expert testimony as to plan reconfiguration); *U.S. v. Vitek Supply Corp.*, 144 F.3d 476, 513 (7th Cir. 1998) (affirming the district court’s decision to bar a toxicologist who was “neither a licensed physician nor a surgeon” from offering expert testimony as to the cause of birth defects).

¹ Plaintiffs also argue that Hedrick’s testimony is not relevant to the issues of this case. (Dkt. 81 at 12). Because Hedrick is not qualified as an expert to offer opinion testimony and because his methodology is flawed, the Court need not reach the issue of relevance.

Although Hedrick possesses “limited” training involving failure analysis, he has no training on how to actually perform a failure analysis and himself has never conducted one. (Dkt. 81-3 at 33–34). While Hedrick considers washers an aspect of sheet metal stamping, he has no background or experience in washer engineering, washer production, the use of washers in locomotives, or detecting cracks in washers. (Dkt. 81-3 at 9–11). Indeed, Hedrick has no experience designing fasteners at all, including for use in a locomotive engine. (Dkt. 81-3 at 11). Finally, Hedrick does not have a background in locomotive engineering. (Dkt. 81-3 at 10). Hedrick’s education, training, and experience do not qualify him to offer expert opinion testimony as to the propensity of Ace washers to fail or function.

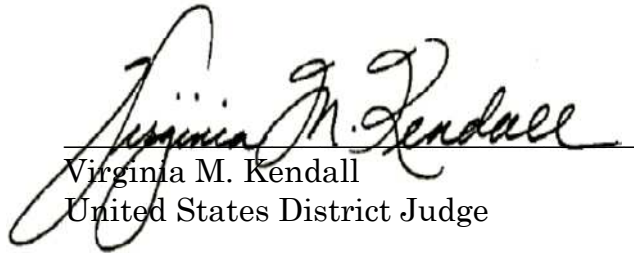
II. Reliability and Application of Hedrick’s Methodology

The methodology which forms the basis of Hedrick’s opinions does not satisfy Rule 702. Hedrick reviewed the deposition testimony of Adam Roberts (the GET Supplier Quality Manager), calculated the washers’ maximum load requirements, and performed a self-designed load test on fifty hardened washers provided by Optimas. (Dkt. 81-2 ¶ 3.3–3.4). Hedrick used a hydraulic press to exert downward force in excess of the calculated maximum load on the washers for “a half second maybe.” (Dkt. 81-2 ¶ 3.4.2.2; Dkt. 81-3 at 18–20). Finally, Hedrick visually checked the washers for cracks without the aid of a microscope. (Dkt. 81-3 at 18–20; 23).

First, while Hedrick reviewed Roberts's deposition account of the test he performed on the washers, Hedrick did not seek to replicate Roberts's test. (Dkt. 81-3 at 28–29). Hedrick is not aware if the test he performed “is the commonly accepted method of evaluating the performance of a metal material.” (Dkt. 81-3 at 28). Moreover, Hedrick supplied no secondary evidence demonstrating that the test he performed is an appropriate way to predict washer performance. (Dkt. 81-3 at 27–28). Second, Hedrick testified that, until he used a hydraulic press to test the Ace washers, he “rarely or never” used a hydraulic press to “test for metal mechanical ability.” (Dkt. 81-3 at 29–30). Third, although Hedrick opined as to the washers' performance after installation, he only tested their performance for a short period of time. (Dkt. 81-3 at 20). Hedrick did not “make any effort to determine to what extent these washers would develop cracks when put under pressure for the normal lifespan of the washer.” (Dkt. 81-3 at 24). Fourth and finally, Hedrick only tested the Ace washers in a static application while, upon installation by GET, they would be used in dynamic applications as well. (Dkt. 81-3 at 21–24). While Hedrick opined that the test he performed on the washers also offers insight into their performance in dynamic applications, he offered no support and cites no authority for his conclusion other than the “logic in [his] mind.” (Dkt. 81-3 at 21–24). Hedrick's opinion testimony is inadmissible under Rule 702 because the underlying methodology is not sufficiently reliable.

CONCLUSION

For the foregoing reasons, Plaintiffs' motion to bar Arthur Hedrick as an expert witness is granted.


Virginia M. Kendall
United States District Judge

Date: October 5, 2020