

United States Court of Appeals
For the Eighth Circuit

No. 13-3354

IPSCO Tubulars, Inc., doing business as TMK IPSCO

Plaintiff - Appellee

v.

Ajax TOCCO Magnathermic Corporation

Defendant - Appellant

No. 13-3466

IPSCO Tubulars, Inc., doing business as TMK IPSCO

Plaintiff - Appellant

v.

Ajax TOCCO Magnathermic Corporation

Defendant - Appellee

Appeals from United States District Court
for the Eastern District of Arkansas - Jonesboro

Submitted: December 9, 2014

Filed: March 4, 2015

Before WOLLMAN, COLLOTON, and BENTON, Circuit Judges.

BENTON, Circuit Judge.

IPSCO Tubulars, Inc. contracted for Ajax TOCCO Magnathermic Corp. to provide equipment to heat-treat steel pipe. IPSCO sued for breach of contract, gross negligence, and punitive damages. The district court found Ajax liable for breach of contract, awarding \$5,162,298.55 in damages to IPSCO. Ajax appeals. IPSCO cross-appeals the dismissal of its gross negligence and punitive damages claims. Having jurisdiction under 28 U.S.C. § 1291, this court reverses and remands the breach-of-contract damages, and affirms in all other respects.

I.

IPSCO produces heat-treated steel pipe for use in the oil and gas industry. It manufactures larger-diameter casing and smaller-diameter tubing at grades defined by American Petroleum Institute (API) 5CT standards. In 2006, IPSCO took bids for induction heating (“austenitizing”), quenching, and pre-tempering equipment for its facility in Blytheville, Arkansas. IPSCO contracted for Ajax’s equipment despite concern about the design of Ajax’s quench.

IPSCO heat-treats electric resistance welded (ERW) casing and tubing formed according to IPSCO’s chemical recipe. Ajax’s equipment alters the structural properties of the pipe by heating it to a specified temperature range to form austenite; cooling it to a specified range to form martensite (which has a high degree of strength and hardness); and reheating it to a specified range (adding ductility without compromising hardness). Exiting the Ajax equipment, the pipe is tempered, straightened, and inspected with other equipment. The contract requires Ajax’s

equipment to convey pipe at certain speeds; for example, smaller tubing at 96 feet per minute (fpm). **Ajax Quotation**, “General Specifications.” *See also Technical Specifications § 6.2* (“[The equipment] shall be capable of operating continuously to meet the throughput requirements . . .”).

After installation in July 2007, Ajax’s quench did not perform properly. When IPSCO tried to process tubing at 96 fpm, the pipe had severe distortions, cracks, and inconsistency in as-quenched hardness. Pipe sometimes distorted so badly it wrecked in the quench and had to be removed manually. The pipe could not meet API specifications. To produce tubing without distortion, cracks, or inconsistency, IPSCO had to run the Ajax equipment at slower speeds, 35 to 50 fpm. Operating at reduced capacity, IPSCO began producing pipe for sale on September 27, 2007.

That fall, an Ajax expert began to troubleshoot. The quench was designed with two barrels pointing in the direction of product flow, using water to rapidly cool the pipe. Ajax’s expert identified several design flaws with the equipment and told IPSCO that the flume, which drains water from the quench, was not designed correctly by IPSCO’s contractor. Because of the small flume, IPSCO operated the quench at reduced water flows and pressures. On Ajax’s advice, IPSCO modified the flume by June 26, 2008, allowing operation at the recommended water flow.

Even after enlarging the flume, IPSCO had problems with severe distortion, quench cracks, and inconsistency (when processing at 96 fpm). In August 2008, IPSCO modified the quench itself by pointing the second barrel opposite the direction of product flow and changing the angle of the spray holes. This permitted IPSCO to produce pipe with minimal defects at a higher line speed, but still less than 96 fpm. Although Ajax’s expert continued to work with IPSCO to improve line speeds, Ajax never informed IPSCO of the suspected design flaws.

Still dissatisfied, IPSCO held a series of performance tests. Trials on casing in October 2008 were successful. Trials on tubing throughout 2009 were not successful due to distortion, cracks, and inconsistency at 96 fpm, even after IPSCO used the quench as designed and performed all Ajax-requested maintenance. In 2011, IPSCO further modified the quench without Ajax's advice. The modified equipment can process tubing at about 80 fpm with minimal defects.

IPSCO sued Ajax in February 2010, alleging breach of contract and gross negligence and seeking punitive damages. The district court granted judgment on partial findings for Ajax on gross negligence and punitive damages. After a bench trial, it found for IPSCO on the breach of contract claim, awarding \$5,162,298.55 in damages. Ajax appeals liability and the damages calculations. IPSCO cross-appeals the dismissal of the gross negligence claim and punitive damages.

II.

Ajax contests the court's interpretation of the contract, as well as the determination of breach and causation. After a bench trial, this court reviews a district court's factual findings for clear error and its legal conclusions de novo. *Speer v. City of Wynne, Ark.*, 276 F.3d 980, 984-85 (8th Cir. 2002). *See also Fed. R. Civ. P. 52(a)(6)* ("Findings of fact . . . must not be set aside unless clearly erroneous . . ."). A factual finding is clearly erroneous "only if it is not supported by substantial evidence in the record, if the finding is based on an erroneous view of the law, or if we are left with the definite and firm conviction that an error has been made." *Tadlock v. Powell*, 291 F.3d 541, 546 (8th Cir. 2002). "Where there are two permissible views of the evidence, the factfinder's choice between them cannot be clearly erroneous." *Lesch v. United States*, 612 F.3d 975, 980 (8th Cir. 2010), quoting *Anderson v. City of Bessemer City, N.C.*, 470 U.S. 564, 574 (1985).

A.

Ajax disputes the district court's construction of the contract, asserting the contract makes no guarantees on defects, including cracking and distortion. IPSCO argues that the contract obligates Ajax to provide equipment capable of heat-treating pipe to API 5CT specifications. The court held that "Ajax breached its contractual obligations by failing to provide IPSCO with equipment that performed at the contractual rates and specifications." It found, "Ajax knew that IPSCO required equipment that provided a uniform heating and cooling process" and "Ajax knew that IPSCO's intended purpose was to create higher grades of pipe, instilled with certain qualities required for use in the oil and gas industry."

Arkansas law governs the interpretation of the contract. *See Murray v. Greenwich Ins. Co.*, 533 F.3d 644, 648 (8th Cir. 2008), *citing Erie R.R. v. Tompkins*, 304 U.S. 64, 78 (1938). A breach of contract requires a valid and enforceable contract between the parties; an obligation on the part of the defendant; a breach of that obligation; and damages resulting from the breach. *Rabalaias v. Barnett*, 683 S.W.2d 919, 921 (Ark. 1985). The construction of an unambiguous contract is a question of law. *GeoVera Specialty Ins. Co. v. Graham Rogers, Inc.*, 636 F.3d 445, 449 (8th Cir. 2011) (discussing Arkansas law). The court aims to "ascertain the intention of the parties." *Id.* (internal quotation marks omitted). "Under Arkansas law, the language contained in the contract is the best evidence of the parties' intention," and this court interprets that language according to its plain and ordinary meaning. *Id.* The court should give "reasonable and sensible effect to all clauses of the contract, within the entire context of the agreement." *Taylor v. Hinkle*, 200 S.W.3d 387, 396 (Ark. 2004).

Applying these principles, the contract includes a guarantee by Ajax that its equipment will consistently produce tubing at 96 fpm without significant distortion, cracking, or inconsistency that prevent the pipe's conversion to higher API grades.

The contract reflects that Ajax intended its equipment produce API-quality pipe. The Ajax Quotation, written by Ajax and incorporated into the contract, provides, “The equipment covered by this quotation has been developed to provide an improved method of producing high strength oil country tubular products. The process has been *designed for API grades* of casing and tubing” and, “The proper selection of steel analysis, hardening temperature and tempering temperatures will produce practically any grade of heat treated tubular product.” **Ajax Quotation**, “General Description” (emphasis added). *See also Technical Specifications § 2.1* (stating that equipment will produce “ERW[] tubing and casing *which meet API tolerances and standards* in metallurgy and chemistry” (emphasis added)); **§ 3.2** (providing Ajax’s equipment “is designed to process tubular products . . . into tubular products of higher strengths and higher grades”). The Ajax Quotation also refers to specific API grades, stating that “The production of N-80 and higher strength casing from low carbon chemistry of the J and K grades, requires a quenching system operating near maximum efficiency. The proprietary Ajax TOCCO Magnethermic quench, produces the results desired for your products.” **Ajax Quotation**, “Quench Delivery Equipment.” *See also Tr. 2399-400* (Ajax’s expert testifies that pipe entering heat treatment has no API requirements, while pipe exiting heat treatment does). If the contract were read to eliminate quality standards, the provisions about API and API grades would be surplusage. *See Phila. Indem. Ins. Co. v. Austin*, 383 S.W.3d 815, 820 (Ark. 2011) (“A construction that neutralizes any provision of a contract should never be adopted, if the contract can be construed to give effect to all provisions.”).

Additionally, the contract requires that the equipment provide controlled and uniform temperatures. *See Technical Specifications § 3.4* (“The Austenitizing Unit will heat the full length of the product pipe uniformly to a temperature in the range of 1650°F to 1750°F”); **§ 3.6** (“The Quench Unit will quickly cool the product pipe from a maximum temperature of 1750°F (950°C) to a uniform temperature sufficiently low as, but no greater than 300°F.”); **§ 3.13** (“The Tempering Unit will

reheat the product pipe to a temperature controllable between 900°F (480°C) and 1300°F (705°C)”); § 4.13 (“The range of heating tolerance for each product pipe shall not exceed +/- 5°C pipe-to-pipe and end-to-end.”). Experts from both Ajax and IPSCO testified that non-uniform temperatures are a primary cause of quench cracks and distortion.

While the contract does not expressly mention “quench cracks,” “distortion,” “bowed pipe,” “bent pipe,” or “end hooks,” the parties did not intend to contract for equipment that heats pipe to a specified temperature, at a specified rate, without regard to how distorted, cracked, or unusable it is—particularly when the contract reflects Ajax’s representations that its equipment will produce pipe capable of being converted to higher API grades. It is not necessary to imply a warranty of fitness or to look at the parties’ course of performance to give “reasonable and sensible effect to all clauses of the contract” here. *See Taylor*, 200 S.W.3d at 396. The most reasonable reading of the contract as a whole obligates Ajax to provide equipment that can uniformly heat-treat pipe, at 96 fpm, without causing distortion, cracks, or inconsistency that prevent the pipe’s conversion to higher API grades.

B.

Ajax argues it did not breach the contract. It also asserts that it cannot breach because (1) IPSCO did not rely on any quality guarantees when signing the contract, and (2) IPSCO voided any guarantees by modifying the quench.

In its findings of fact, the district court stated,

Not only did the line fail to process tubing at the contract rate of 96 feet per minute, but attempts at running the line at higher speeds resulted in pipe distorting so badly that it would often become stuck in the quench, requiring IPSCO to shut down the line in order to manually cut out the distorted pipe. Pipe processed with the Ajax equipment also

experienced a high rate of defects, including quench cracks and inconsistent hardness measurements throughout a single piece of pipe.

Ajax does not dispute that pipe became so distorted it had to be cut out of the quench. The record supports the court's findings on quench cracks and distortion. Ajax contests only the court's finding on inconsistent hardness, arguing the pipe consistently exceeded the minimum required martensite levels after quenching. But IPSCO's employee Daren Joyner—whom the district court found credible—testified that hardness inconsistencies were frequent, not limited to one performance test. Joyner also testified that inconsistency was worse with Ajax's unmodified quench design. The court's findings are not clearly erroneous, and sufficiently support that Ajax breached its obligation to provide non-defective pipe at the contractual rate.

Ajax responds that it cannot breach this obligation because IPSCO was unsure from the start that the equipment could perform. The Arkansas cases cited by Ajax do not establish reliance as essential to a contractual warranty claim. *See Ciba-Geigy Corp. v. Alter*, 834 S.W.2d 136, 146-48 (Ark. 1992) (noting reliance is relevant to whether express warranty was created, and finding no warranty when farmer did not read materials containing warranty before purchasing product), *citing Currier v. Spencer*, 772 S.W.2d 309, 311 (Ark. 1989) (analyzing creation of express warranty). IPSCO's doubts before negotiating do not render ineffective the bargained-for guarantees in the contract.

Ajax also claims that IPSCO voided any guarantees when it modified the quench in August 2008. Ajax points to General Conditions of Contract § 11.4, which provides that if Ajax fails to promptly proceed with required remedial work IPSCO can complete it. This section also provides “[Ajax] provides no warranty or guarantee for work performed by or on behalf of [IPSCO] pursuant to this section 11.4.” **General Conditions § 11.4.** The plain reading of this disclaimer is that Ajax does not guarantee specific remedial work by IPSCO. Contrary to Ajax's assertions,

IPSCO did not implement its own quench system; it made non-permanent modifications to Ajax's design. Ajax is not being held liable for poor remedial work by IPSCO (IPSCO's modifications improved line speed and limited damages), but for the failure of its equipment to process tubing without significant defects at 96 fpm.

C.

Ajax disputes causation on two bases. First, Ajax contends that there is insufficient evidence that Ajax's equipment, rather than other variables (for example, the small flume, poor maintenance, or improper material chemistry), caused the defects in the processed pipe.

The record supports the district court's finding that defects in the pipe were not caused by any "failures to develop proper operating parameters and material chemistry or to properly maintain the equipment." IPSCO permitted Ajax to dictate maintenance before the performance tests. As for material chemistry, an IPSCO employee testified that outside processors did not experience similar defects in their pipe. Significant distortion and quench cracks continued even after the flume's enlargement, indicating flume size was not the cause. Moreover, IPSCO's technical experts testified that Ajax's equipment was likely the primary cause of the defects. There was also testimony that Ajax's quench failed to uniformly cool the pipe, and non-uniformity is "perhaps the greatest contributor" to distortion and cracking. The court properly credited this testimony. Ajax points to no evidence, besides reciting other variables in heat treatment, to support its claim. The court did not err in finding Ajax's breach caused IPSCO's damages.

Second, Ajax argues that the district court improperly shifted the burden of proof from IPSCO on causation, relying on the court's statement that Ajax's testimony on this issue was "unconvincing." However, the court stated that Ajax's testimony was "unconvincing when considered alongside the trial exhibits and other

more credible testimony.” The court examined the full record, and did not shift the burden of proof.

III.

Ajax raises a variety of challenges to the \$5,162,298.55 damages award. The court granted four types of damages: (1) \$3,967,954.73 outside processing costs; (2) \$784,964.82 costs from selling downgraded pipe; (3) \$306,379 modifying the Ajax equipment; and, (4) \$103,000 hiring outside consultants (which Ajax does not appeal). The court noted, “The documents offered by IPSCO to prove its damages have been reviewed and appear to accurately reflect the costs incurred by IPSCO because it was unable to produce quality heat-treated pipe.” It reduced IPSCO’s requested outside processing costs to account for the eight months IPSCO would have needed to maximize productivity had the Ajax equipment worked immediately. On the last three categories of damages, the court found, “Based on the trial testimony and the documents submitted into evidence, these damages are credible and should be awarded to IPSCO.” It made no additional findings.

In a bench trial, the district court must “find the facts specially and state its conclusions of law separately.” **Fed. R. Civ. P. 52(a)**. Although the court need not specifically decide every disputed fact, it must “set forth its reasoning with enough clarity that the appellate court may understand the basis of the decision.” *Lesch*, 612 F.3d at 981. *See also Duffie v. Deere & Co.*, 111 F.3d 70, 73 (8th Cir. 1997) (“If an appellate court does not know what facts the trial court took into consideration in drawing its conclusions, its findings become suspect.”). Factual findings “should be clear, specific, and complete, without unrealistic and uninformative generality on the one hand, and without an unnecessary and unhelpful recital of nonessential details of evidence on the other.” *Lesch*, 612 F.3d at 981.

The court's order here does not permit this court to "understand the basis of the decision." The court did not explain its rationale or make factual findings about damages (except on the outside-processing-costs reduction), although it noted that "certain factual determinations were necessary to determine the proper assessment of damages." There is insufficient information for this court to evaluate whether the damages were properly granted. *See Cody v. Hillard*, 139 F.3d 1197, 1199-200 (8th Cir. 1998) (noting court's findings did not meet Rule 52 when they were "too cryptic" to determine whether court applied required legal test, and whether it did so without clear error or abuse of discretion).

For example, Ajax claims several errors in the court's determination of outside processing costs. The court properly supported its decision to reduce outside processing costs, referring to testimony it deemed credible and explaining why it chose an eight-month reduction from the time of start-up. However, the court made no finding whether outside processing costs should—or did—include costs for processing casing and seamless (as opposed to ERW) pipe. The court made no finding whether outside processing costs are consequential damages, although General Conditions § 12.1 bars consequential damages. *See Dickson v. Delhi Seed Co.*, 760 S.W.2d 382, 389 (Ark. Ct. App. 1988) (noting whether damages are consequential is question of fact); *Williams v. Mueller*, 13 F.3d 1214, 1216 (8th Cir. 1994) (remanding when district court failed to state grounds for its conclusion, although noting conclusion was implicit in court's decision). The court also made no finding whether downstream equipment could process pipe at 96 fpm, and, if not, whether IPSCO would create work-in-process pipe (impacting whether some outside processing costs would be incurred regardless of Ajax's slower equipment). The parties point to differing testimony on these points, and it is the role of the factfinder to determine whose testimony to credit. Without these findings, this court cannot assess Ajax's argument that these costs were improperly granted. *Cody*, 139 F.3d at 1200 (noting appellate court cannot make "findings of fact or exercise discretion in the district court's stead").

The second category of damages, described by the court as “costs incurred as a result of selling pipe downgraded as a result of the Ajax equipment at a reduced price,” is also unclear. It might include revenue lost from selling downgraded pipe at a reduced cost, or costs of shipping pipe or finding new buyers for the lower grade of pipe. IPSCO describes this category as “revenue lost because IPSCO had to downgrade pipe.” But the contract prohibits liability for “loss of revenue.” **General Conditions § 12.1.** Ajax also argues that the eight-month refinement period applied to outside processing costs should be applied to this category of damages, because refinement is necessary to maximize productivity and to minimize defects causing downgraded pipe. The court did not explain why it did not apply the refinement period.

The lack of findings here stands in contrast to the court’s reasoning on the contract obligations, breach, and causation, which is sufficient under Rule 52. The court made specific findings on the failures of the quenching equipment (on the defects and the speed of the equipment), the remedial work done by Ajax and IPSCO, the causes of defects in the pipe, and the expectations of the parties when entering the contract. The court identified particular experts it relied upon and judged credible. Besides the refinement-period reduction in outside processing costs, the court did not provide similar explanation for its damages decision.

Because this court’s review is “hindered” without additional explanation from the district court, the case is remanded. *See King v. United States*, 553 F.3d 1156, 1162 (8th Cir. 2009) (noting district court is in better position to find material fact). On remand, the court “need not specifically decide each and every disputed fact.” *Id.* at 1161. But it must enter findings of fact and conclusions of law that enable this court to review its decision.

IV.

IPSCO claimed Ajax was grossly negligent for using faulty “rules of thumb” to design its equipment and for concealing identified design flaws from IPSCO. The district court granted judgment on partial findings to Ajax. *See Fed. R. Civ. P. 52(c)*. Following a Rule 52(c) judgment, this court reviews factual findings for clear error and conclusions of law de novo. *Clark v. Runyon*, 218 F.3d 915, 918 (8th Cir. 2000).

For a negligence claim, IPSCO must prove duty, breach, and causation. *Branscumb v. Freeman*, 200 S.W.3d 411, 416 (Ark. 2004). Gross negligence is “the failure to use even slight care.” *Spence v. Vaught*, 367 S.W.2d 238, 240 (Ark. 1963). *See also Doe v. Baum*, 72 S.W.3d 476, 487 (Ark. 2002) (defining gross negligence as “intentional failure to perform a manifest duty in reckless disregard of the consequences as affecting the life or property of another” (citing **Black’s Law Dictionary** 1033 (6th ed. 1990))).

IPSCO asserts that Ajax relied upon rules of thumb typically used to make equipment capable of processing tubing at 32 fpm. IPSCO claims that Ajax did no analysis to determine whether equipment made with the rules of thumb could process tubing at 96 fpm, even after an Ajax engineer determined the rules of thumb were flawed. IPSCO also argues that Ajax concealed the quench design flaws identified by Ajax’s expert in August 2008.

Dismissing these claims, the district court found, “Ajax employees continued to come to the plant and try over and over and over to repair the equipment.” The court highlighted that an IPSCO employee said Ajax was trying to fix the equipment. Discussing punitive damages in the same ruling, the court stated, “If I got the impression that Ajax went into this case not caring and just really trying to get over on you, then that would be a different story. But I don’t get that impression.” It found that Ajax “really wanted to and they were trying” to fix the equipment. It also

found that Ajax’s silence on the design flaws was not unusual business practice or proof of “misrepresentations.”

IPSCO does not argue that the court’s findings are clearly erroneous. These findings sufficiently establish that Ajax did not act intentionally, with reckless disregard, or without slight care for IPSCO. IPSCO cites to several out-of-circuit opinions that found gross negligence based on a failure to conduct due diligence in investigating and verifying data. Even if one Ajax employee questioned the rules of thumb, that does not establish that the rules were faulty or that Ajax had a duty to perform extensive engineering analyses to confirm its design parameters. And while IPSCO disputes the district court’s reference to “misrepresentations,” it acknowledges that concealment is a form of misrepresentation. The court expressly found any concealment by Ajax was not improper. IPSCO had the burden of demonstrating gross negligence, and the court’s findings that Ajax sincerely and consistently attempted to fix IPSCO’s equipment support the dismissal of this claim.

Because IPSCO asserts punitive damages only on the gross negligence claim (not the breach of contract claim), the punitive damages claim must also be dismissed. *See Ark. Code Ann. § 16-55-206* (noting to recover punitive damages, plaintiff must demonstrate compensatory damages as well as aggravating factor). *See also In re Aircraft Accident at Little Rock, Ark.*, 351 F.3d 874, 877 (8th Cir. 2003) (finding under Arkansas law that punitive damages require more than gross negligence).

* * * * *

The judgment is affirmed in part and reversed in part. The case is remanded for proceedings consistent with this opinion.
