**IN THE UNITED STATES DISTRICT COURT**
**FOR THE NORTHERN DISTRICT OF GEORGIA**
**ATLANTA DIVISION**

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| **JEFFREY GADDY,** **Plaintiff,** **v.** **TEREX CORPORATION, et al.** **Defendants.** | **1:14-cv-1928-WSD** |

# OPINION AND ORDER

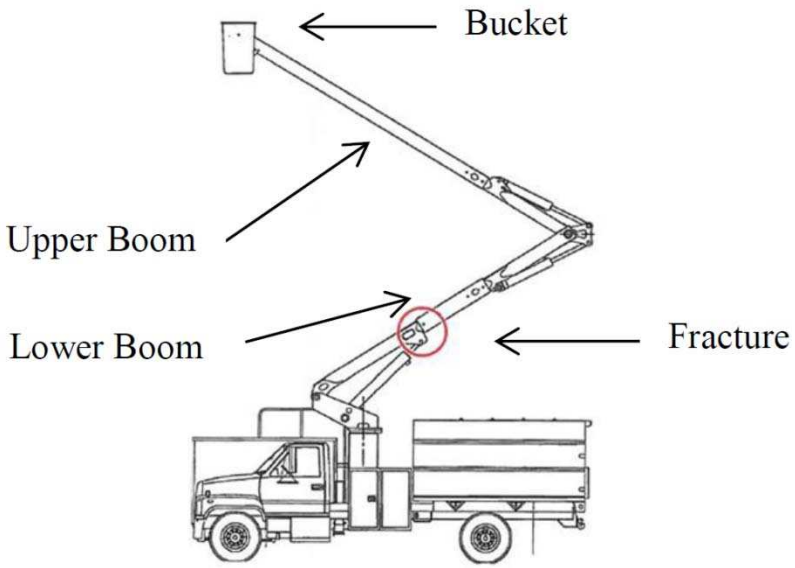
This matter is before the Court on Defendants Terex Corporation ("Terex Corp."), Terex South Dakota, Inc. ("Terex SD"), and Terex Utilities, Inc.'s ("Terex Utilities") (collectively, "Terex" or the "Terex Defendants") Motion for Partial Summary Judgment Regarding Plaintiff's Claims [317] ("Motion for Summary Judgment").

## I. BACKGROUND

### A. Facts

This is a products liability action stemming from the failure of a 2002 Terex Hi-Ranger XT 60/70 boom, Serial No. 2021020554 (the "Subject Boom Truck"), an aerial lift device. Terex XT aerial devices are commonly utilized by tree

trimming companies. The Subject Boom Truck consisted of a lower boom, upper boom, and bucket, as depicted in the following diagram:




On April 9, 2014, Plaintiff Jeffrey Gaddy ("Plaintiff") was in the bucket of the Subject Boom Truck when the lower boom stub fractured, causing Plaintiff to fall to the ground. Plaintiff suffered spinal injuries resulting in paraplegia. Plaintiff claims Terex negligently manufactured and designed the Subject Boom Truck, and that it failed to warn him of certain dangers.

1. Design

The Subject Boom Truck was part of Terex SD's XT aerial device line, which consisted of XT52, XT55, XT58, and XT60 aerial lifts. (Defs.' Statement of Undisputed Material Facts [317.2] ("DSMF") ¶7; Pl.'s Resp. [340.1] ("R-DSMF")

¶ 7). The line, beginning with the XT52, was first designed by Terex SD in 1996. The number following the XT designation represents the maximum height that the bucket platform can reach when fully extended. The Subject Boom Truck was an XT60, which was originally designed in 1999. (DSMF ¶5; R-DSMF ¶ 5).

a) ANSI Standard

The American National Standards Institute ("ANSI") sets forth standards for the design of vehicle-mounted elevating and rotating aerial devices, like the Subject Boom Truck. (DSMF ¶8; R-DSMF ¶ 8). Section 4 of ANSI A92.2 (2001) (the "ANSI Standard") sets forth the design requirements that apply to the Subject Boom Truck, including structural safety factors. (See DSMF ¶ 9; R-DSMF ¶ 9). Regarding the Subject Boom Truck's structural safety factors, the ANSI Standard provides that "[t]he calculated design stress shall be based on the combined rate load capacity and weight of the support structure. For ductile materials, the design stress shall not be more than 50% of the minimum yield strength of the material." (DSMF ¶ 10; R-DSMF ¶ 10). Thus, the steel boom of the Subject Boom Truck, a

ductile material, needs to meet a safety factor of 2.0 to comply with the ANSI Standard. (See id.).[1]

The standard further requires that, in designing the aerial device, a manufacturer must consider "stress concentrations, dynamic loadings, and operation of the device at a 5 degree slope." (DSMF ¶ 11; R-DSMF ¶ 11). The ANSI Standard does not provide any specific direction as to how these three factors should be considered, allowing manufacturers to exercise their discretion in considering them. (DSMF ¶¶15-16; R-DSMF ¶¶ 15-16).

Terex claims that the calculated design safety factors for the upper and lower booms of the Subject Boom Truck exceeded the 2.0 safety factor in the ANSI Standard. (DSMF ¶13). Specifically, for the specified minimum yield strength of 70,000 psi (pounds per square inch), Terex claims the lower boom stub where the Subject Boom Truck failed had a calculated design safety factor of 4.0. (Id.). Plaintiff contends these figures are estimated calculated stresses, and that Terex knew, pre-production, that its actual stress numbers far exceeded those estimations.

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[1] The safety factor is calculated by dividing the minimum yield stress of the material by the design stress. Thus, for a 2.0 safety factor, the design stress would be half of minimum yield stress. The greater the safety factor, the more safe the design is.

Plaintiff argues that, had Terex calculated safety factors based on the actual stresses in its design, its boom would, by a wide margin, have failed to have a 2.0 safety factor. (See R-DSMF ¶ 13).

At the time the Subject Boom Truck was designed, Terex SD's calculated design measurements were independently verified by Terex SD's Director of Engineering, Jon Promersberger, to ensure their accuracy. (DSMF ¶ 20; R-DSMF ¶ 20). Plaintiff's expert, Nathan Morrill, P.E., stated that any design that meets a calculated design safety factor of 2.75 adequately considers the factors set forth in the ANSI Standard and otherwise complies with the ANSI Standard requirements. (DSMF ¶¶ 18, 21; R-DSMF ¶¶18, 21).

b) Strain Gage Testing and Internal Standards

In 1999, as part of its analysis and verification of the XT60 design, Terex SD retained All Test & Inspection, Inc. ("All Test") to conduct strain gauge tests on the Subject Boom. (DSMF ¶¶ 21-22, R-DSMF ¶¶ 21-22; see also Pl.'s Statement of Additional Material Facts [349] ("PSAF") ¶¶ 25, 29, 45-46).[2] Strain

[2] Terex SD also conducted fatigue testing on certain components of the XT boom series prior to its production. (DSMF ¶ 27; R-DSMF ¶ 27). An elbow consisting of the lower boom and upper boom was loaded with a hanging weight of

gauge testing measures how much a material changes shape when a force is applied on the object, and it is utilized to determine measured, or actual, stresses in a design. (DSMF ¶ 22; R-DSMF ¶ 22; PSAF ¶ 30).

Plaintiff contends that the strain gauge testing on the XT60 boom showed that Terex's theoretical calculations did not adequately account for the actual stresses in the boom. Although the hand-calculated theoretical stress in the boom failure area, an area of stress concentration, was 17,625 psi, (PSAF ¶ 40; Defs.' Resp. to PSAF [349] R-PSAF ¶ 40), All Test's strain gauge testing showed that the stress in that area was actually 35,300 psi, (PSAF ¶ 41; R-PSAF ¶ 41).

Plaintiff contends that Terex's internal design safety standard required that its booms meet a 2.0 safety factor based on the actual, rather than calculated, stresses. (PSAF ¶ 44). Terex argues that it had an internal safety factor of 2.75 for calculated stress, which it claims accounted for measured stresses, dynamic loading, and a 5 degree slope. (R-PSAF ¶ 44).

Plaintiff points to several of All Test's reports to Terex SD regarding strain gage testing of multiple previous boom models. The reports state that the object of

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2,700 pounds, and no cracks were reported at either the upper boom or lower boom after more than 63,000 full cycles had been applied. (Id.).

the tests was to test for compliance with the ANSI Standard, and that the "structural safety factor used to evaluate the stress levels was 50% of the minimum material yield strength," that is, a 2.0 safety factor. The test reports stated that certain "areas do not meet the requirements called for in [the ANSI Standard]." (PSAF ¶¶ 21-24). Plaintiff presents evidence that, because of these reports, Terex redesigned the failing areas of these booms and retested them later. (PSAF ¶¶ 21-23). A Terex SD internal report states that "[m]easured stresses should not exceed 50% of the material's yield stress." (PSAF ¶ 24). Terex SD presents evidence that this statement appears under the header "Objective" because it was Terex SD's goal to "go above and beyond what is required by ANSI." ([318.27] at 134:21-135:11).

2. Manufacture

The Subject Boom Truck was manufactured in September 2002. (DSMF ¶ 31; R-DSMF ¶ 31). The manufacturing process begins with the purchase of component parts, each of which is inspected for compliance with the purchase order and part number. (DSMF ¶¶ 34, 36-37; R-DSMF ¶¶ 34, 36-37). The component parts are welded at Terex SD's plant in Huron, South Dakota, ("Huron Plant"), then delivered to Terex SD's plant in Watertown, South Dakota

("Watertown Plant") for final assembly. (DSMF ¶¶ 36, 42; R-DSMF ¶¶ 36, 42). Following assembly, Terex SD conducted a final inspection, which included load testing to twice the rated load limit of the Subject Boom Truck. (DSMF ¶ 44; R-DSMF ¶ 44). On or about October 4, 2002, the Subject Boom Truck was certified compliant. (DSMF ¶¶ 43-44; R-DSMF ¶¶ 43-44).

One of the main structural components of the lower boom stub where the subject failure occurred was a lower boom tube, identified as part no. 444195. This boom tube was designed as a hollow rectangular steel beam with a length of 113 inches, and was to be manufactured of steel with a minimum yield strength of 70,000 psi. (DSMF ¶¶ 32-33; R-DSMF ¶¶ 32-33). At the time the Subject Boom Truck was manufactured, Terex SD ordered part no. 444195 from Defendant Joseph T. Ryerson & Son, Inc. ("Ryerson"). (DSMF ¶ 34; R-DSMF ¶ 34). Each purchase order submitted to Ryerson specified that part no. 444195 was to be cut to a length of 113 inches and was to consist of steel with a minimum yield strength of 70,000 psi. (DSMF ¶ 35; R-DSMF ¶ 35). Part no. 444195 was the only component on the Subject Boom Truck that specified a length of 113 inches, and every tube of steel purchased by Terex SD that was 113 inches in length was

required by Terex SD's design specifications to contain 70,000 psi yield strength steel. (Id.).

When part no. 444195 was delivered to the Huron Plant, Terex SD verified the delivery by the part number and purchase order number to ensure the correct component part had been delivered. (See DSMF ¶¶ 36-37; R-DSMF ¶¶ 36-37). Terex SD further measured the material to verify that it was cut to the proper length and width. (See id.). Terex claims that, because part no. 444195 was the only component on the Subject Boom Truck that specified a length of 113 inches, and every purchase order specified that steel cut to 113 inches required 70,000 psi yield strength steel, Terex SD had no reason to believe that the shipments of part no. 444195, measuring 113 inches in length, contained nonconforming steel. (DSMF ¶ 38).

Plaintiff claims that every piece of steel Ryerson bought and sold contained writing, placed by stenciling, down one side of the tube, which repeated a pattern of letters and numbers. The stenciling pattern communicated the strength and quality of the steel. ( PSAF ¶¶ 16-17). Plaintiff contends that these indications gave Terex actual knowledge of the strength and quality of any steel tube delivered to it. (R-DSMF ¶ 38; PSAF ¶¶ 16-17). Ryerson's corporate representative,

Brad A. Orterstrom, testified that any employee of Terex would have known, at the time of delivery, the strength and quality of the steel by looking at the stenciling on the side of the tube. (Orterstrom Dep. [306.2] at 32:9-22). Mr. Orterstrom acknowledged the possibility that the stenciling could be "removed somehow or scuffed off," and that "we have no knowledge about how long Terex would have had something in their inventory." (Id. at 32:17-19). Ryerson also provided Terex SD with certifications that its deliveries conformed to Terex SD's purchase orders. (DSMF ¶ 39; R-DSMF ¶ 39). In 2002, Terex SD relied on Ryerson's representations. (DSMF ¶ 40; R-DSMF ¶ 40).

At the time of manufacture, a part number 444195 tube was transferred from the storage facility to a welder at the Huron Plant, who fabricated the component parts for the Subject Boom Truck. (DSMF ¶ 42; R-DSMF ¶ 42). When welding was completed, the component parts of the Subject Boom Truck were delivered to the Watertown Plant for final assembly. (Id.). On or about October 4, 2002, Terex SD assembled and certified the Subject Boom Truck compliant. (DSMF ¶¶ 42-43; R-DSMF ¶¶ 42-43).

Terex SD's Final Inspection Report shows that an in-depth inspection of the hydraulic lines, cylinder rods, leveling systems, hydraulic swivels, pivot areas,

fasteners, and seals of the Subject Boom Truck was conducted. (DSMF ¶ 44; R-DSMF ¶ 44). Terex SD also performed tests to determine the system pressure, hydraulic flow, and time needed to move the boom into several positions. (Id.). This included overloading the unit to 700 pounds, twice the rated load, at both the worst-case overcenter and the worst-case non-overcenter positions. (Id.). A worst case position is a position in which the upper and lower booms experience the most stress. (Id.). No cracks or distortions were identified. (Id.).

On May 8, 2015, testing conducted in this case revealed that the yield strength for part no. 444195 was approximately 45,000 psi, not 70,000 psi. (DSMF ¶ 47; R-DSMF ¶ 47). Terex SD claims that, until this May 2015, testing, it was not aware, nor did it have a reason to suspect, that the Subject Boom Truck contained nonconforming steel. (See DSMF ¶¶ 38-40, 46).

3. Warnings

Plaintiff contends that Terex's load capacity warnings regarding the Subject Boom Truck were not adequate. These warnings appear in the following locations: (1) a warning decal inside the bucket; (2) an ID plate on the side of the boom; (3) a Certificate of Conformity; and (4) the Operator's Manual. Terex claims Plaintiff never read any of these warnings. (DSMF ¶¶ 53-54).

B. Procedural History

On June 19, 2014, Plaintiff filed his Complaint [1]. On March 10, 2016, Plaintiff filed his Sixth Amended Complaint [215], asserting claims of negligence per se, negligent design and manufacturing, and failure to warn. Plaintiff seeks punitive damages and attorneys' fees.

On December 20, 2016, the Terex Defendants filed their Motion for Summary Judgment. Terex moves for summary judgment on the following claims: negligence per se, negligent design and manufacture, and failure to warn regarding the loading capacity of the Terex XT60/70 bucket truck boom. Terex does not move for summary judgment regarding Plaintiff's claim for punitive damages or his remaining warning claims, including those relating to cracking issues, high stresses in the boom, the use of noncompliant steel, failure to comply with ANSI, and the existence of fix kits for these problems.

On January 20, 2017, Plaintiff filed his response to Terex's Motion for Summary Judgment. Plaintiff concedes that the Court should grant summary judgment to the Terex Defendants on Plaintiff's negligence per se claim, and that it should grant summary judgment to Terex Utilities and Terex Corp. on Plaintiff's negligent design and manufacture claims. Terex's Motion for Summary Judgment

is thus granted to these defendants on these grounds. The Court now is required only to decide (1) if Terex SD is entitled to summary judgment on Plaintiff's negligent design and manufacture claims, and (2) whether the Terex Defendants are entitled to summary judgment on Plaintiff's claim for failure to warn regarding load capacity.

## II. DISCUSSION

### A. Legal Standard

Summary judgment is appropriate where the pleadings, the discovery and disclosure materials on file, and any affidavits show that there is no genuine issue as to any material fact and that the moving party is entitled to judgment as a matter of law. See Fed. R. Civ. P. 56. The party seeking summary judgment bears the burden of demonstrating the absence of a genuine dispute as to any material fact. Herzog v. Castle Rock Entm't, 193 F.3d 1241, 1246 (11th Cir. 1999). Once the moving party has met this burden, the nonmoving party must demonstrate that summary judgment is inappropriate by designating specific facts showing a genuine issue for trial. Graham v. State Farm Mut. Ins. Co., 193 F.3d 1274, 1282 (11th Cir. 1999). The nonmoving party "need not present evidence in a form

necessary for admission at trial; however, he may not merely rest on his pleadings." Id.

"At the summary judgment stage, facts must be viewed in the light most favorable to the nonmoving party only if there is a 'genuine' dispute as to those facts." Scott v. Harris, 550 U.S. 372, 380 (2007). Where the record tells two different stories, one blatantly contradicted by the evidence, the Court is not required to adopt that version of the facts when ruling on summary judgment. Id. "[C]redibility determinations, the weighing of evidence, and the drawing of inferences from the facts are the function of the jury . . . ." Graham, 193 F.3d at 1282. "If the record presents factual issues, the court must not decide them; it must deny the motion and proceed to trial." Herzog, 193 F.3d at 1246. The party opposing summary judgment "'must do more than simply show that there is some metaphysical doubt as to the material facts . . . . Where the record taken as a whole could not lead a rational trier of fact to find for the nonmoving party, there is no genuine issue for trial.'" Scott, 550 U.S. at 380 (quoting Matsushita Elec. Indus. Co., Ltd. v. Zenith Radio Corp., 475 U.S. 574, 586-87 (1986)). A party is entitled to summary judgment if "the facts and inferences point overwhelmingly in favor of the moving party, such that reasonable people could not arrive at a contrary

verdict." Miller v. Kenworth of Dothan, Inc., 277 F.3d 1269, 1275 (11th Cir. 2002) (quotations omitted).

B. Analysis

1. Negligent Manufacture and Design Claims Against Terex SD

Plaintiff asserts his negligent design and manufacture claims against Terex SD under Georgia's product liability statute, O.C.G.A. § 51-1-11. Terex argues that these claims are barred by the ten-year statute of repose. Subsection (b)(2) bars strict liability actions as follows:

> No action shall be commenced pursuant to this subsection with respect to an injury after ten years from the date of the first sale for use or consumption of the personal property causing or otherwise bringing about the injury.

O.C.G.A. § 51-1-11(b)(2). Subsection (c) extends the ten-year statute of repose to negligence actions, but provides an exception "for injuries or damages . . . arising out of conduct which manifests a willful, reckless, or wanton disregard for life or property." Id. § 51-1-11(c).[3] It is undisputed that more than ten years have passed from the date of the first sale for use of the Subject Boom Truck. The question here is whether Plaintiff's injury arose out of "willful, reckless, or wanton

[3] The statute of repose does not bar claims for failure to warn, regardless of the date of first purchase. See id.

disregard for life or property," such that the ten-year statute of repose does not apply to his negligent design and manufacture claims.

Under Section 51-1-11(c), "'[w]illful conduct is based on an actual intention to do harm or inflict injury; wanton conduct is that which is so reckless or so charged with indifference to the consequences . . . [as to be the] equivalent in spirit to actual intent.'" Watkins v. Ford Motor Co., 190 F.3d 1213, 1216-17 (11th Cir.1999) (quoting Chrysler Corp. v. Batten, 450 S.E.2d 208, 212 (Ga. 1994)); accord Ivy v. Ford Motor Co., 646 F.3d 769, 773 (11th Cir. 2011). "[A] reckless act [is] an act that is 'intended by the actor, although the actor does not intend to cause the harm which results from it. It is enough that he realize or, from facts which he knows, should realize that there is a strong probability that harm may result, even though he hopes or even expects that his conduct may prove harmless.'" Chrysler Grp., LLC v. Walden, 792 S.E.2d 754, 760-61 (Ga. Ct. App. 2016) (quoting Arrington v. Trammell, 62 S.E.2d 451 (Ga. Ct. App. 1950)) (applying this "reckless" standard to Section 51-1-11(c)). Plaintiff must show, by

a preponderance of the evidence, that the statute of repose exception in Section 51-1-11(c) applies. See Ivy, 646 F.3d at 773 (citing Watkins, 190 F.3d at 1217 n.2).[4]

a) Negligent Manufacture Claim

Plaintiff claims that Terex SD negligently manufactured the Subject Boom Truck by knowingly using nonconforming steel. Plaintiff presents evidence that (1) every piece of steel Ryerson bought and sold contained stenciling indicating the strength and quality of the steel; and (2) based on the stenciling, any Terex employee, at the time of delivery of the steel, would have known its strength and quality. There is no evidence of the content of stenciling on the steel pieces delivered.[5] The evidence shows that Terex verified the delivery of each part it received to ensure the correct component part had been delivered, and that

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[4] The case law with respect to Section 51-1-11(c) is "sparse," but "the substantive standard for proving punitive damages is similar" to the standard to show that the Section 51-1-11(c) exception applies. See Ivy, 646 F.3d at 776; see also Watkins, 190 F.3d at 1217 n.2 ("Because of the similarity of the two standards, we find these cases [applying the punitive damages standard] instructive when addressing the standard in O.C.G.A. § 51-1-11."); Chrysler Corp. v. Batten, 450 S.E.2d 208, 212-13 (Ga. 1994) (citing punitive damages case, Louisville & Nashville R.R. Co. v. Young, 145 S.E.2d 700 (Ga. Ct. App. 1965), in finding Section 51-1-11(c) exception did not apply).

[5] There is no evidence the stencil was present on steel but Terex SD presented evidence that if it was present, the stenciling could be scuffed off or otherwise removed.

Ryerson, the manufacturer, certified to Terex that Ryerson's delivery of part number 444195 conformed to Terex SD's purchase order, which specified 70,000 psi yield strength steel. Terex SD relied on the certification Ryerson made. Terex presents evidence that it did not have any reason to believe that the shipments of part number 444195 contained nonconforming steel.

Viewing the evidence in the light most favorable to Plaintiff, the Court finds that no reasonable juror could find that Terex SD knew Ryerson delivered nonconforming steel and that it used the steel knowing it was nonconforming. That is, the evidence, viewed in a light most favorable to Plaintiff, does not create an issue of fact as to whether Terex SD's use of part number 444195 manifested a willful, reckless, or wanton disregard for life or property. Beyond mere speculation, Plaintiff does not present any evidence to show that anyone at Terex knew of the nonconforming nature of the steel. To the contrary, the undisputed evidence shows that Terex relied on Ryerson's representations in its delivery certification that the part conformed to Terex's specifications. At most, the evidence shows that Terex was negligent in not confirming the steel strength by checking the information in the stenciling against the information in the delivery certification. This negligence is not enough to show that Terex "intended" to

perform an act that it "realize[d] or, from facts which [it] kn[ew], should [have] realize[d]" was likely to result in harm. See Chrysler, 792 S.E.2d at 760-61. Because Plaintiff fails to show a genuine issue of fact whether the statute of repose exception in Section 51-1-11(c) applies to his negligent manufacture claim, Terex's Motion for Summary Judgment is granted on this claim.

b) Negligent Design Claim

The parties disagree primarily whether the ANSI Standard or Terex SD's internal design standard required a 2.0 safety factor to be calculated by actual, rather than theoretical, stress. The ANSI Standard requires a manufacturer, in calculating the 2.0 safety factor, to consider "stress concentrations, dynamic loadings, and operation of the device at a 5 degree slope." The ANSI Standard does not provide specific direction on how a manufacturer should calculate the parameters in the standards. To support that the ANSI Standard safety factor should be calculated using measured, rather than theoretical, stress, Plaintiff presents the opinion of his expert, Nathan Morrill. Mr. Morrill, however, also testified that a manufacturer can comply with the ANSI Standard using hand calculations of theoretical stress, without actual measured stress values. (Morrill Dep. [318.31] at 57:6-11). Mr. Morrill was unaware of any other expert opinion or

literature that agrees with his interpretation of the ANSI Standard that compliance with it requires use of measured stress. (Id. at 145:4-9).

Terex SD's theoretical stress calculations showed that the expected stress in the boom failure area was 17,625 psi. All Test's analysis showed the actual stress in the area was 35,300 psi. Plaintiff contends that this testing shows that Terex SD's hand calculations were wrong, and that actual stress measurements were required. Plaintiff also contends that, in 1999, Terex had an internal design requirement that its bucket truck booms have a 2.0 safety factor based on measured stress. Terex claims its internal policy only required a 2.75 theoretical design stress factor. To support its argument that Plaintiff had an internal 2.0 measured, rather than theoretical, stress safety factor, Plaintiff relies on language from several of All Test's reports to Terex SD regarding testing on multiple of its boom models, including the SC42 and HR50. The reports state that the object of the strain gage tests was to test for compliance with the ANSI Standard, and that the "structural safety factor used to evaluate the stress levels was 50% of the minimum material yield strength," that is, a 2.0 safety factor. The test reports stated that certain "areas do not meet the requirements called for in [the ANSI Standard]." (PSAF ¶¶ 21-24). Plaintiff presents evidence that, because of these reports,

Terex redesigned the failing areas of these booms and retested them later. (PSAF ¶¶ 21-23).

Terex argues that strain gauge testing is not required, and that it conducted the tests as an additional step in its safety analysis. Terex also argues that the "irrefutable affidavit" of Bernard Rung, All Test's vice president, shows that the ANSI Standard "does not provide any sort of requirement for a measured stress" and that its statements in its reports were "a misstatement of the [ANSI Standard] requirement" and a "mistake." ([318.6]).

Plaintiff also presents a Terex SD internal report that states that "[m]easured stresses should not exceed 50% of the material's yield stress." (PSAF ¶ 24). Terex SD presents evidence that this statement appears under the header "Objective" because it was Terex SD's goal to "go above and beyond what is required by ANSI." ([318.27] at 134:21-135:11).

The evidence before the Court, including the opinion of Plaintiff's expert, is that the ANSI Standard does not require manufacturers to calculate the 2.0 safety factor using measured stress, and that Terex SD's theoretical calculations met the 2.0 safety factor. Whether a manufacturer meets industry guidelines, while important, is not dispositive on the question of negligence, or whether the statute of

repose exception applies here. See Luckie v. Piggly-Wiggly S., Inc., 325 S.E.2d 844, 845 (Ga. Ct. App. 1984); see also Wickersham v. Ford Motor Co., 194 F. Supp. 3d 434, 449-50 (D.S.C. 2016) (noting that Georgia law and Eleventh Circuit precedent suggest that a defendant's own assessment of design and manufacturing risks is a component in analyzing the propriety of the defendant's actions under Section 51-1-11(c)).

Construing the evidence in a light most favorable to Plaintiff, there is a dispute of material fact as to whether Terex SD had an internal standard requiring the use of measured stress to calculate the 2.0 safety factor. The evidence shows that Terex SD conducted strain gage testing to confirm its theoretical calculations and to make appropriate design changes. The strain gage tests performed on the Subject Boom model showed an actual stress concentration approximately twice the theoretical stress concentration. All Test's reports assumed that actual stress results were used to calculate the 2.0 safety factor. Based upon All Test's results showing that certain areas of Terex's booms did not meet the 2.0 safety factor based on measured stress, Terex SD altered the design of its booms. That All Test's vice president, years after the fact, now maintains that his company's statements regarding the 2.0 safety factor using measured stress were "a mistake"

does not change the fact that Terex SD used measured stress results to confirm its theoretical calculations and to redesign its booms. That Terex SD had an internal document stating that "[m]easured stresses should not exceed 50% of the material's yield stress" further supports that Terex SD used measured stress results to calculate the 2.0 safety factor.[6]

The evidence viewed in a light most favorable to Plaintiff shows that, though Terex SD was not required to perform strain gage testing, (1) it performed the tests to confirm its theoretical calculations and to make necessary adjustments to its boom design, (2) it previously used strain gage tests to determine compliance with the 2.0 safety factor and made design adjustments as necessary, (3) it had an internal policy to use measured stress to calculate the 2.0 safety factor; (4) the strain gage tests on the Subject Boom Truck model showed it did not comply with the 2.0 safety factor when calculated using actual stress results and that the actual stress results were approximately twice the theoretical results; and (5) there is no evidence to show that Terex SD took steps to remedy the disparity between its actual and theoretical results with respect to the Subject Boom Truck model.

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[6] Terex SD's evidence that this statement merely reflects a goal, rather than an internal safety standard, and its impact on the claim of negligence, is for a jury to decide.

The evidence here presents disputed facts on the issue whether Terex SD had an internal policy to use measured stress results in calculating the 2.0 safety factor, and because the evidence shows the results of the strain gauge testing on the Subject Boom model did not meet this factor and Terex SD did not take steps to remedy these results, the Court finds there is an issue of material fact as to whether Terex SD's conduct in designing the Subject Boom "manifests a willful, reckless, or wanton disregard for life or property." O.C.G.A. § 51-1-11(b)(2). Specifically, the facts are disputed whether Terex SD recklessly disregarded life or property, that is, that Terex SD "realize[d] or, from facts which [it] kn[ew], should [have] realize[d] that there [was] a strong probability that harm may result" from its design of the Subject Boom Truck. Chrysler, 792 S.E.2d at 760-61; see Mack Trucks, Inc. v. Conkle, 436 S.E.2d 635, 639-40 (Ga. 1993) (evidence that defendant's engineer informed defendant that the truck's frame rail was inadequate created a dispute of fact as to the defendant's "conscious indifference to consequences" in designing the frame rail); cf. Ivy, 646 F.3d at 775-78 (finding that plaintiff did not provide sufficient proof that Ford designed the 1996 Explorer with willfulness or wantonness because plaintiff did not provide evidence that Ford failed to make necessary safety changes known to it, and because the evidence

showed Ford complied with all internal and industry safety guidelines). A jury is required to determine whether the statute of repose exception in Section 51-1-11(c) applies to Plaintiff's negligent design claim, and, as a result, Terex SD's Motion for Summary Judgment on Plaintiff's negligent design claim is denied.

2. Failure to Warn

Plaintiff claims that information on: (1) a warning decal inside the bucket; (2) an ID plate on the side of the boom; (3) a Certificate of Conformity; and (4) the Operator's Manual was inadequate to warn of the Subject Boom Truck's load capacity. Terex claims Plaintiff's failure to warn claim fails because Plaintiff did not read these notifications.

Under Georgia law, a seller may breach a duty to warn in two ways: (1) by failing to adequately communicate the warning to the ultimate user or (2) by failing to provide an adequate warning of the product's potential risks. Wilson Foods Corp. v. Turner, 460 S.E.2d 532, 534 (Ga. Ct. App. 1995). A failure to warn claim, like other negligence claims, requires a causal connection between the breach of duty and the injury claimed. See id.; see also Dozier Crane & Machinery, Inc. v. Gibson, 655 S.E.2d 333, 336 (Ga. Ct. App. 2007). "Generally,

where there is no evidence that a plaintiff read the allegedly inadequate warning, causation cannot be shown." Dozier, 655 S.E.2d at 336.[7]

Terex contends that Plaintiff's claims based on a failure to provide an adequate warning must be dismissed because Plaintiff does not present any evidence that he actually read the warnings. The Court agrees. Terex argues that Plaintiff fails to present evidence to show that Plaintiff read the warnings contained in (1) the warning decal; (2) the ID plate; (3) the Certificate of Conformity; and (4) the Operator's Manual. ([348] at 14; see DSMF ¶¶ 53, 54). With respect to the Operator's Manual, Plaintiff presents evidence that Plaintiff read it "as needed," but does not present evidence that Plaintiff read the warning with respect to load capacity. (R-DSMF ¶ 53) As to the remainder of the warnings, Plaintiff argues the following:

> In order to prevail on summary judgment, Terex must show that [Plaintiff] did not read any of these notifications. And Terex cannot point to any record evidence that supports this argument. The record is silent about whether [Plaintiff] ever read the ID plate on the side of

[7] Terex concedes that "Plaintiff's failure to warn claims relating to the adequacy of communication—placing the ID plate and warning decal in an observable and appreciable location—survive summary judgment." ([348] at 15 n.3). Accordingly, to the extent Terex moves for summary judgment on Plaintiff's failure to warn claims based on adequacy of communication, Terex's motion is denied.

> the Subject Boom. The record is also silent about whether [Plaintiff] ever read the Certificate of Conformity. But the record is not silent about the load capacity decal inside of the bucket: [Plaintiff] never saw it.

([340] at 22).

Plaintiff concedes he never read the warning decal in the bucket, and the Court accordingly grants Terex's Motion for Summary Judgment on Plaintiff's failure to warn claim with respect to the warning decal in the bucket. See Dozier, 655 S.E.2d at 336. The Court next turns to Plaintiff's claims based on the Certificate of Conformity and ID plate. Plaintiff's argument that "[t]he record is silent" with respect to these claims misconstrues the standard on summary judgment. It is well-settled on a motion for summary judgment that "the moving party has the burden of either negating an essential element of the nonmoving party's case or showing that there is no evidence to prove a fact necessary to the nonmoving party's case." McGee v. Sentinel Offender Servs., LLC, 719 F.3d 1236, 1242 (11th Cir. 2013). Terex meets that burden here by showing there is no evidence to show causation, a necessary element of Plaintiff's failure to warn claims. That "[t]he record is silent" as to whether Plaintiff read the ID plate or the Certificate of Conformity is fatal to Plaintiff's failure to warn claims. In the absence of any evidence showing a connection between the adequacy of a warning

and Plaintiff's injury, summary judgment is granted on Plaintiff's failure to warn claim based on the ID plate and Certificate of Conformity. See Camden Oil Co., LLC v. Jackson, 609 S.E.2d 356, 358-59 (Ga. Ct. App. 2004) ("[W]here a plaintiff does not read an allegedly inadequate warning, the adequacy of the warning's contents cannot be a proximate cause of the plaintiff's injuries, and proximate cause is a necessary element of [plaintiff]'s negligence claim.").

Finally, with respect to Plaintiff's claim based on the Operator's Manual, the evidence, at best, shows that Plaintiff read the Operator's Manual "as needed." Plaintiff did not present any evidence to show that he actually read or was aware of the load capacity warnings in the Operator's Manual, and thus Plaintiff fails to present any evidence to show that the allegedly inadequate warning in the Operator's Manual proximately caused his injuries. See Camden, 609 S.E.2d at 358-59; cf. In re Stand 'N Seal, Prod. Liab. Litig., No. 1:07-md-1804-TWT, 2009 WL 2145911, at *6 (N.D. Ga. July 15, 2009) (denying summary judgment on failure to warn claim where plaintiff testified that he "probably" read and "believe[d]" he read the warnings at issue). Summary judgment is granted on Plaintiff's failure to warn claim based on the Owner's Manual.

## III. CONCLUSION

For the foregoing reasons,

**IT IS HEREBY ORDERED** that the Terex Defendants' Motion for Partial Summary Judgment Regarding Plaintiff's Claims [317] is **GRANTED IN PART** and **DENIED IN PART**. Terex's Motion is **GRANTED** on Plaintiff's claims against the Terex Defendants for negligence per se, negligent manufacture, and failure to provide adequate warnings, and on Plaintiff's claims against Terex Utilities and Terex Corp. for negligent design. Terex's Motion is **DENIED** on Plaintiff's claims against the Terex Defendants for failure to adequately communicate warnings and on Plaintiff's claims against Terex SD for negligent design.

**SO ORDERED** this 26th day of April, 2017.

WILLIAM S. DUFFEY, JR.
UNITED STATES DISTRICT JUDGE