UNITED STATES DISTRICT COURT
DISTRICT OF MAINE

JOHANNAH SPEED, Personal Representative of the Estate of Vinal L. Speed, of Corinth, County of Penobscot, State of Maine,	)	
Plaintiff	)	
v.	)	Civil No. 05-149-B-K
GIDDINGS & LEWIS, LLC, et al.,	)	
Defendant and Third Party Plaintiffs	)	
v.	)	
CNC ENGINEERY, INC., et al.,	)	
Third Party Defendants	)	

MEMORANDUM OF DECISION[1]

Vinal Speed was a hardworking farm boy from Corinth, Maine who went to work at the General Electric Plant in Bangor, Maine, in 1972 and remained an employee there up until his death in June 2003. He was married for thirty-three and one-half years to Johannah Speed. They had two children, one who died in infancy. Vinal and Johannah had a "good marriage" and the loss of his care, comfort, society, and companionship is incalculable, far in excess of the statutory maximum that could be awarded in cases of this nature. Additionally, Mrs. Speed has suffered the loss of Vinal's work income and the value of his household production in terms of

[1] Pursuant to 28 U.S.C. § 636(c), the parties have consented to have United States Magistrate Judge Margaret J. Kravchuk conduct all proceedings in this case, including trial, and to order entry of judgment.

the gardening, carpentry, and other activities he performed for the household. Nothing in the following findings is intended to in any way diminish the enormity of the loss. Nevertheless, the evidence in this case simply does not support the conclusion that Giddings & Lewis can be held liable for this tragic accident. The facts strongly suggest that the accident was caused by subsequent modifications to the machine originally manufactured by Giddings & Lewis, coupled with human error.

Findings of Fact

The History of the HBM at the GE Plant

1. In January 1983, Giddings & Lewis delivered a TB-70 horizontal boring mill (HBM) to the General Electric plant in Bangor, Maine.

2. Timothy Ellis, the company representative for Giddings & Lewis and its Rule 30(b) corporate designee during discovery, was present at the time of delivery and oversaw the delivery and installation of the HBM.

3. Timothy Ellis remained at the GE plant in Bangor for approximately 10 days and provided the GE operators with instruction about how to operate the new machine following its installation.

4. The Giddings & Lewis HBM is an enormous machine weighing approximately 45,000 pounds and having the capability to perform a number of precision milling functions in a factory having a sufficient foundation to ensure its stable operation.

5. The HBM is equipped with a very large spindle into which can be clamped a variety of milling and diagnostic tools.[2] The spindle is housed in a large box known as the head or head stock. The spindle is able to extend out of the head stock along a horizontal axis and the entire head stock can move up and down on the vertical axis. The spindle roughly resembles the chuck

[2] According to Mr. Ellis, the HBM is specified for "ANSI short-shank instruments."

of a hand-held electric drill, although it is substantially larger. The spindle is able to revolve at up to 1100 revolutions per minute and can accelerate to that speed in under two seconds. Upon deactivation, the spindle will stop within a comparable amount of time.

6. In addition to the spindle, the HBM consists of a large table onto which large machine parts can be clamped in order to be milled. The table is able to move horizontally and can revolve through 360 degrees of rotation.

7. Horizontal and vertical movement of the HBM spindle and table is referred to as "jogging." Certain controls "jog" the spindle and table. Other controls activate spindle rotation.

8. The operator interfaces with the HBM primarily through a control panel, yet another component of the overall machine. The control panel is located in an operator's cage mounted to the side of the head stock. When the spindle is not extended out over a work piece, the spindle is situated roughly level with or slightly beneath the floor of the operator's cage. When the operator stands in the cage and faces the control panel his back is to the head stock.[3] When the headstock is raised or lowered the cage moves along with the headstock.

9. When the HBM was first installed by Giddings & Lewis it did not have an automatic tool changer, an optional mill component also manufactured by Giddings & Lewis. At the time of the installation until 1997 all tools had to be clamped into and unclamped from the spindle by the operator, who would hold a tool in one hand and activate or deactivate the spindle's clamp by means of a switch located on the headstock above the spindle, the so-called "headstock control." There was no button or other device on the control panel that would clamp or unclamp the spindle. An operator could change a tool from the floor or from the operator's cage. If the operator did a tool change from the cage, he would turn to face the headstock, crouch down to

[3] As originally configured, the control panel could be moved out onto the table area so that the operator could use it from a work location remote from the cage, but GE took away that functionality long before the accident giving rise to this case.

reach outside the cage and grasp the tool, and unclamp or clamp the tool using the headstock control. During this operation, his back would be turned to the control panel. If the operator did a tool change from the floor, he would stand to the side of the spindle, hold the tool in his left hand, and reach up with his right hand to activate the headstock control. Whether the operator performed a tool change from the floor or from the cage often depended upon the weight and configuration of the tool.

10. At GE's request, when Giddings & Lewis installed the HBM it installed a GE model 1050 control panel rather than the stock Giddings & Lewis-designed control panel. However, despite the use of the GE 1050 control panel, Giddings & Lewis did furnish a "spindle interface" on the control panel that functioned as a gateway through which the 1050 control panel communicated with the spindle. The spindle interface included a potentiometer dial[4] that controlled spindle speed. Rotating the potentiometer to its counterclockwise terminus set spindle speed at 6 rpm. Rotating it to its clockwise terminus set it at 1100 rpm. A low setting on the spindle interface would override a higher setting on the GE 1050 panel.

11. The spindle interface included a switch and two buttons that were necessary to activate spindle rotation. First, the operator would turn a switch on the spindle interface to put the spindle in gear. Then he would depress two buttons on the spindle interface in sequence, both of which were positioned inside protective metal rings, or sleeves, that prevented casual activation.[5]

12. In 1997, GE decided to add a 65-tool, automatic tool changer to the HBM. GE purchased a Giddings & Lewis automatic tool change product that was compatible with the original machine.

---

[4] This dial is akin to a large volume dial or tuning dial on a radio.

[5] The operator would place the switch on either "left" or "right" to designate counterclockwise and clockwise rotation, respectively. Although the spindle was "in gear" it would be locked and unable to rotate unless the operator thereafter depressed both the spindle jog button and the spindle start button on the interface.

13. Although Giddings & Lewis submitted a bid to retrofit and reconfigure the tool panel to use with the new automatic tool changer, GE decided to retain the services of Phoenix Inc. instead.

14. Giddings & Lewis had a very minimal role in the change, providing its diagrams for the automatic tool changer and some technical assistance in that regard. It gave no warnings and no recommendations in regard to the retained manual tool change function.

15. All parties were always aware that the reconfigured machine would have to retain some sort of manual tool change function because it is sometimes necessary to perform a manual tool change. For example, certain tools like a dial gauge do not fit in the automatic tool changer "cups" or "pods."

16. In conjunction with the automatic tool changer installation, Phoenix changed the HBM control panel to a GE Fanuc control panel, replacing not just the GE 1050 panel, but also the Giddings & Lewis spindle interface. Phoenix installed all new programming logic into the new control panel.

17. Additionally, Phoenix added a hand-held remote pendant (manual pendant). The manual pendant does not directly relate to manual tool changes. Instead, it is a tool that a worker can carry onto the floor that is connected to the cage by a long cord. The manual pendant is used to perform small-scale jog functions measuring a fraction of an inch. Phoenix installed an "MPG" button on the Fanuc panel that would activate the manual pendant.

18. Phoenix also added an "unclamp" button on the control panel to be used in conjunction with manual tool changes. It appears likely that this button was placed near certain jog buttons and not in close proximity to the spindle activation buttons.

19. Phoenix did not consult with Giddings & Lewis about the programming for these new functions, and all of the Giddings & Lewis installed features were eliminated, including the Giddings & Lewis spindle interface. Phoenix has never done work *for* Giddings & Lewis, although it has worked on a number of Giddings & Lewis machines, as well as machines built by Giddings & Lewis's competitors.

20. In addition to removing and replacing the control panel, Phoenix originally planned to remove the Giddings & Lewis headstock control in its entirety and, in fact, Phoenix did remove and discard the original box that housed the Giddings & Lewis headstock control.

21. A number of machine operators, including Vinal Speed, liked the functionality of having the manual tool change clamp/unclamp switch located on the headstock, so Phoenix adjusted its design to put a manual switch back on the headstock.

22. Phoenix then configured the control panel so that a button on the control panel had to be depressed to make the headstock clamp/unclamp switch "hot," i.e., able to function. This button was labeled "Remote Station" and was placed at the bottom left corner of the panel near the spindle activation buttons.

23. Four years later, in 2001, GE engaged CNC engineering to do some work on the control panel related to making the jog functions more efficient.

24. In the course of these changes CNC moved the unclamp button on the control panel and placed it in the bottom row of buttons in line with the remote station button and the spindle forward, spindle stop and spindle reverse buttons. Now there were two buttons related to the manual tool change operation that were in close proximity to the spindle activation buttons: the remote station button, just to the left of the spindle activation buttons, and the unclamp button, just to the right.

25. CNC never consulted with Giddings & Lewis about these changes and saw no reason to do so because the old GE model 1050 control panel with the Giddings & Lewis spindle interface was long gone in 2001 when CNC performed its work.

26. Sometime after 2001, GE changed the label on the remote station button to "MPG remote." It also reprogrammed the panel so that depressing the MPG remote button would both activate the manual pendant and energize the clamp/unclamp switch on the headstock. The button remained in the bottom left corner of the panel.

27. With the MPG remote button and the unclamp button located on the bottom of the control panel it was possible for an operator to reach them from the floor during a manual tool change operation.

28. At some point in time, Thomas Fish, a GE employee, developed a macro program to assist in the leveling process performed by HBM operators in order to align machine parts with the spindle.

29. The macro, as originally written by Fish, would efficiently jog the spindle, into which was clamped a dial gauge, around a diaphragm block to check for level. When finished, the machine programming returned to whatever the last spindle operation had been, so that if, prior to activating the leveling function, the machine had been operating at 1100 rpm, the spindle rotation speed would default to that speed.

30. The machine functioned without apparent incident from 1983 to 2003 with a number of different operators, including Vinal Speed.

The Day of the Accident

31. Dennis Reynolds, a twenty year veteran at GE, worked on the HBM on the shift immediately prior to Vinal Speed's shift.

32. According to Reynolds, on June 16, 2003, he concluded near the end of his shift that the part that was to be milled on the HBM was likely unsatisfactory and needed to be sent to the soldering shop.

33. When Reynolds left work that morning he explained to Vinal Speed the problem with the part and that it seemed likely to Reynolds that the part should be sent back to the shop.

34. According to Reynolds, the last milling function he performed with the HBM set the spindle speed at 1100 rpm.

35. According to Craig King, a manufacturing engineer, and Al Libby, the foreman and supervisor in the diaphragm shop, they both viewed the part with Vinal Speed and reached the conclusion that the part would have to be sent to be soldered in another part of the factory.

36. Dennis Reynolds testified that in order to remove the part from the table and send it back to the shop the operator would probably remove the dial gauge from the spindle in order to make sure it was not damaged when the part was removed from the table and also because it would be in the way when the operator went to release the part from the table.

37. The dial gauge is composed of a dial mounted at the end of a short metal rod that is welded at a right angle to another, somewhat longer metal rod, that is mounted at a right angle to an even longer metal rod that clamps into the spindle. It is apparent from photographs admitted during trial that the dial gauge would present an obstruction to an operator wishing to approach the HBM table to release a part.

38. Based upon the available evidence, it appears more likely than not that Vinal Speed was in the process of preparing to send the part back to the workshop when the accident happened.

39. It also appears likely that he was on the floor, not in the cage, and was in close proximity to the spindle which held the dial gauge.

40. In all likelihood, Speed was either about to engage or in the process of engaging in a manual tool change operation, removing the dial gauge from the spindle.

41. Although it is not clear why it did so, the spindle activated and began to rotate at approximately 1100 rpm, the last known setting programmed into the machine.

42. According to the plaintiff's expert, once the spindle reached 741 rpm with the dial gauge clamped in the spindle, the metal rods comprising the gauge bent and deformed because of centrifugal force and the laws of physics.

43. In this case, the rods did bend and took the form of, in effect, a propeller.

44. The deformed gauge struck Vinal Speed in the left arm and head. The head injury proved fatal.

45. At some point shortly after Vinal Speed was injured, the spindle stopped rotating.

46. Edward Ellis, a GE welding supervisor, heard a strange noise and came out of his office to see what happened. He and another employee by the name of Rassi appear to have been the first to discover Speed lying on the shop floor beside the HBM. Thereafter, Thomas Fish, some first responders, and Steve Howe, a maintenance worker, arrived at the scene.

47. It is unknown exactly how the accident occurred, partly because Mr. Howe, a GE employee and maintenance person, pressed the emergency stop to make sure the spindle could not be reactivated while first responders were working at the scene. When Howe pressed the

emergency stop it erased the control panel history and so it is impossible to know exactly what buttons were depressed prior to the accident.

48. Before Howe activated the emergency stop button, Thomas Fish entered the cage and observed that the spindle stop button was flashing. That flashing button meant the spindle stop button was pressed in order to stop the spindle. No witness has come forward to claim that he or she pressed the spindle stop button and it appears that the spindle had stopped by the time Edward Ellis and Mr. Rassi discovered Vinal Speed prostrate on the shop floor.

49. One theory, which is likely, in my view, based on the evidence, is that Speed was attempting to perform the manual tool change from the floor and found that he had not activated the headstock clamp/unclamp switch from the control panel. He therefore reached up to the control panel in order to press either the unclamp button located there or else the MPG remote button to activate the headstock clamp/unclamp switch.[6] Speed inadvertently pressed the spindle reverse button and the spindle began its rotation.

50. Upon pressing the spindle reverse button Speed would have heard the gears engaging to begin the spindle's rotation and he would have had slightly more than a second, possibly two, to press the spindle stop button to stop the spindle. It is most likely the case that Speed succeeded in pressing the spindle stop button. Tragically, the condition of the dial gauge tool makes it apparent that the spindle did reach a rotation speed of at least 741 rpm in order for the metal rods to deform and strike Speed.

51. It is not possible to determine with complete accuracy how the accident occurred, although this scenario appears most likely.

---

[6] Mr. Fish testified that he had observed Vinal Speed perform a manual tool change in this fashion before and that he, Fish, had done it in the same way. According to Mr. Fish, the unclamp button is easier to reach from the floor than the MPG remote button.

Safety Findings

52. If the control panel with the headstock interface had remained as designed by Giddings & Lewis, or if the subsequent modifications by GE and its subcontractors had retained the safety philosophy and features of the original Giddings & Lewis spindle interface, this accident most likely could not have happened because the mere inadvertent touching of one button on the panel would not have activated the spindle. Indeed, there would have been no occasion whatsoever for the operator to use any controls on the panel in order to unclamp a tool.

53. I conclude that the machine was reasonably safe at the time of the delivery as pertains to manual tool changes, based not only upon the testimony of Timothy Ellis, but also based upon the testimony of Professor Ralph L. Barnett, plaintiff's expert witness, who conceded that the original Giddings & Lewis controls had "good safety features"[7] with only one clamp/unclamp station and with no rotation of the spindle allowed when the clamp/unclamp button was being manipulated. Professor Barnett effectively conceded that the accident, as Mrs. Speed contends it likely happened and as I find it most likely happened, could not have occurred with the original design and programming logic in place and was made possible only by the subsequent modifications introduced by GE, Phoenix and/or CNC.[8]

54. Although Professor Barnett opined that the machine as originally configured was unreasonably dangerous to an operator entering the "cube," meaning the "area surrounding the tool itself,"[9] because of a theoretical risk of automatic spindle activation due to something other than an operator's contemporaneous manipulation of the control panel, I conclude that the existence of any such defect is not supported by the evidence (there is absolutely no evidence of an automatic activation hazard arising for an operator in the past, or in this accident, due to such

---

7 Barnett Trial Tr. at 59:11.

8 See id. at 53:20-55:5, 112:1-112:10.

9 Id. at 15:15.

a thing as a programming "glitch") and has not been shown to be causally connected with the circumstances surrounding Vinal Speed's death, in any event.

55. When a Giddings & Lewis automatic tool changer is installed on a TB-70 HBM it is necessary to reconfigure programming with respect to the operation of the clamp/unclamp switch on the original headstock control.

56. Giddings & Lewis did not provide any warning or recommendation to GE or to Phoenix about what it would consider to be a safe way to program a new GE Fanuc control panel to preserve any operator safety features that might exist in the original machine, or to avoid any operator hazards that might arise from modification of the original machine's control layout.

57. Dennis Reynolds (the night shift operator who used the machine prior to Vinal Speed's accident) testified that he regarded the original headstock control to be a better design. He also testified that Vinal Speed, who trained him how to operate the HBM, preferred the headstock control. Finally, Reynolds stated that he regarded the subsequent modifications to be somewhat awkward from an operational perspective. I regarded this testimony as significant testimony because it reflects that an operator who performed manual tool changes both before and after the automatic tool change upgrade recognized that the modifications made to the machine made it less safe to operate during a manual tool change.

58. GE is a sophisticated entity having engineering expertise, control panel design expertise and control panel programming expertise on par with that of Giddings & Lewis.

59. The danger of placing a small, unguarded spindle activation button in close proximity to the unclamp and MPG remote buttons should have been obvious to GE, Phoenix and/or CNC due to the fact that the inadvertent touching of a spindle activation button was all that was needed to activate the spindle and the programming of the MPG remote button made it a likely

scenario that an operator would be reaching into the cage from the floor to press either the unclamp or MPG remote button.

Discussion

Johannah Speed advances two theories of product liability: (1) that the HBM was defective at the time of its manufacture because it did not incorporate a lock out system that could be activated from the control panel that would prevent spindle movement during a manual tool change and (2) that the HBM was unreasonably dangerous because it lacked a warning concerning a non-obvious risk that might arise from modification to its original machine controls. I will discuss each of these theories in turn.

A. At the time of its sale the Giddings & Lewis HBM, with its original controls, was a reasonably safe machine, at least as far as manual tool change operations were concerned.

Johannah Speed's product defect claim does not fit neatly with the evidence. This is so because her expert, Professor Barnett, testified at trial that the spindle interface and 1050 panel originally installed and programmed by Giddings & Lewis would have prevented Vinal Speed's death. At closing argument, Speed's counsel asserted that Giddings & Lewis failed to "design out" or "guard out" all risk to the operator of inadvertent spindle operation during a manual tool change. This argument related to Professor Barnett's proposal that there be a lockable "disconnect"[10] lever placed beyond the reach of someone standing near the spindle,[11] which lever would deactivate the spindle rotation function during a tool change.

In Maine, claims of design defect are assessed based on the danger/utility test. The finder of fact must weigh the dangerousness of a product or product feature against its utility. Guiggey

[10] Id. at 36:19-20; see also id. at 39:6-12.

[11] Not only would this lever be beyond the reach of an operator standing on the floor near the spindle, but the lever would also be difficult to inadvertently move even if one was standing beside it. Professor Barnett proposed that an operator be able to place a lock on the lever so that reactivation of the spindle rotation function would require a conscious effort to not only activate the lever, but to first unlock the lever so that it might be thrown.

v. Bombardier, 615 A.2d 1169, 1172 (Me. 1992); St. Germain v. Husqvarna Corp., 544 A.2d 1283, 1285 (Me. 1988); Stanley v. Schiavi Mobile Homes, Inc., 462 A.2d 1144, 1148 (Me. 1983). Influencing this analysis is the matter of how feasible a safer alternative might be. Stanley, 462 A.2d at 1148.

The recurring critique of Giddings & Lewis's original design is that it did not guard against all possible means of activating the spindle when the operator was in "the cube." Mrs. Speed points to the fact that the automatic tool changer, which had already been designed as early as 1983, although not originally purchased by GE, has this "lock out" functionality which allows the control panel to prevent inadvertent activation of the spindle when the automatic tool change function is going to be engaged. However, Giddings & Lewis's design, although it did not have a lock out function on the control panel, effectively provided the same type of protection with the spindle interface and headstock control. An operator who was attempting a manual tool change was forced to use the headstock. In order to reengage spindle rotation, two guarded buttons on the spindle interface had to be depressed. While the design may not have ruled out every conceivable spindle hazard like a lock out device would, there is nothing in the record to suggest that anything in that original design could have in any way contributed to this accident.

Yes, there was a feasible design alternative with greater safety features in Professor Barnett's proposed, modified lock out system, but even the Professor conceded that the original design of the Giddings & Lewis spindle interface did not have a defect that would have given rise to the inadvertent manual activation scenario. Indeed, Professor Barnett stated at one point

that he "loved"[12] the original design feature that would have prevented such an accident, though he felt there should have been some warning to either preserve it or improve upon it.

It is routine in Maine for courts to give juries the following instruction concerning product liability claims:

> Products cannot be termed defective simply because they do not contain some hypothetical device or design configuration. A manufacturer is not required to design a product which is incapable of injuring those who foreseeably come into contact with it. A manufacturer is not required to design the best possible product, or one as good as someone else may make, or a better product than the one he has, as long as his product is reasonably safe.

Alexander, Maine Jury Instruction Manual § 7-25 (4th ed. 2004). I find the reasoning that informs this instruction to be persuasive in terms of the factual utility/risk analysis I must perform. Because the HBM was reasonably safe in terms of the manual tool change function at the time it was sold, the fact that an even safer design alternative was reasonably feasible does not render the HBM defective in my view. Additionally, because the accident was most likely the result of inadvertent spindle activation due to the layout of buttons on the Fanuc panel, which Giddings & Lewis did not design, install or program, I find that the absence of the proposed, modified lock out system does not have a causal relation to the facts of this case, even though I do regard it as a reasonably feasible design that would resolve numerous hypothetical hazards that might arise while an operator is "in the cube."

Johannah Speed strongly urges that Giddings & Lewis ought not escape liability because of the control panel modifications made by Phoenix and CNC at the behest of GE, particularly as the changes grew out of the installation of a Giddings & Lewis automatic tool changer. Because the Maine strict liability statute conditions product liability on a finding that the product **"**is expected to and does reach the user or consumer without significant change in the condition in

[12] Barnett Trial Tr. at 112:8.

which it is sold," 14 M.R.S.A. § 221, the Law Court has had occasion to consider what kind of modifications will free a manufacturer from liability. In Marois v. Paper Converting Machine Company, the Law Court held that the standard to govern the *factual* question of substantial modification is whether "the change was an unforeseen and intervening proximate cause of the injury." 539 A.2d 621, 624 (Me. 1988). In Speed's view, the dangerous button configuration introduced by GE, Phoenix and/or CNC was foreseeable because Giddings & Lewis knew that its machine was so durable that it would outlive many electronic control panels in its useful life, because modifications would be required to incorporate machine upgrades such as the automatic tool changer, and because purchasers like GE might wish to change or modify a control panel for a variety of reasons connected with machine functionality and efficiency. To be sure, these are artful arguments. Nevertheless, I find that it would be unreasonable and unfair, on a factual level (i.e., assuming the arguments are legally tenable), to hold Giddings & Lewis responsible for the very significant modifications made by GE, Phoenix and/or CNC to the HBM's controls and programming. Although Giddings & Lewis could certainly foresee that control panel replacements and modifications would occur, they could not reasonably anticipate that a sophisticated entity like GE would condone the particular hazardous configuration of buttons that, more likely than not, made this tragic death possible. In other words, the complete revamp of the control panel fourteen years after Giddings & Lewis installed the HBM in GE's diaphragm shop and, more particularly, the particular configuration of the spindle activation buttons and the manual tool change buttons in close proximity to one another, changed the essential features of the product and deleteriously impacted its safety in a manner that was not reasonably foreseeable to Giddings & Lewis, making these modifications an intervening cause of the accident.[13]

[13] There may be a legal obstacle to Johannah Speed's claim in the form of a modified component part manufacturer defense. See, e.g., Davis v. Komatsu Am. Indus. Corp., 42 S.W.3d 34, 38-39 (Tenn. 2001) (collecting

B. The evidence does not support a failure to warn claim because the particular danger to be warned against was obvious and because the absence of a warning was not the proximate cause of the accident.

Johannah Speed also contends that the HBM was unreasonably dangerous because it was foreseeable to G&L that the original control panel might be replaced or redesigned and Giddings & Lewis failed to provide a warning that any new configuration should incorporate equal or greater measures to ensure operator safety during a manual tool change.[14]

A product, "though faultlessly made," may nevertheless subject the manufacturer to strict liability "if it is unreasonably dangerous to place the product in the hands of a user without a suitable warning and no warning is given." Lorfano v. Dura Stone Steps, Inc., 569 A.2d 195, 196 (Me. 1990) (citation omitted). In such circumstances, a manufacturer must provide expected users of its product with warnings of the risks and "specific directions for the product's safe use." Violette v. Smith & Nephew Dyonics, Inc., 62 F.3d 8, 13 (1st Cir. 1995) (quoting Pottle v. Up-Right, Inc., 628 A.2d 672, 675 (Me. 1993)). A failure to warn claim turns on three issues: "(1) whether the defendant held a duty to warn the plaintiff; (2) whether the actual warning on the product, if any, was inadequate; and (3) whether the inadequate warning proximately caused the

---

cases) ("The component parts doctrine provides that a manufacturer who supplies a non-defective and safe component part generally will not be held liable for a defective or unreasonably dangerous final product."); Koonce v. Quaker Safety Prods. & Mfg., 798 F.2d 700, 715 (5th Cir. 1986) (collecting cases and holding that "if the component part manufacturer does not take part in the design or assembly of the final system or product, he is not liable for defects in the final product if the component part itself is not defective"); see also Restatement (Third) Products Liability § 5 (1998). Here, the Giddings & Lewis HBM is an inert machine hulk in the absence of an electrical control panel (the "brains" of the machine). It is not difficult to conceptualize the HBM as it existed in 2003 as, essentially, a new GE machine using a Giddings & Lewis mill part. Giddings & Lewis repeatedly argued that the HBM circa 2003 was an entirely different machine because the mill has no functionality without a control panel and programming logic. Although Giddings & Lewis did not argue any component part legal theory, its factual argument is compelling for the same reason as the component parts doctrine is. In any event, my decision is based on factual findings regarding substantial modifications, following the holding of Marois.

[14] It is difficult to articulate how the proposed warning would be worded. During closing argument, Speed's counsel spoke of warning "of the danger in the cube" and that, if the headstock switch configuration was essential, then it should not be undone. Speed's counsel also asserted that Giddings & Lewis should have articulated in its manuals or elsewhere whatever safety analysis went into its design so that the purchaser might take it into consideration when considering any subsequent modifications.

plaintiff's injury." Pottle, 628 A.2d at 675. I conclude that Johannah Speed has failed to establish the first and third elements on the failure to warn test.

The duty to warn requires manufacturers to "inform users and consumers of dangers about which [it] either knows or should know at the time the product is sold." Lorfano, 569 A.2d at 197 (quoting Bernier, 516 A.2d at 540). However, when a danger is "obvious and apparent" a manufacturer is relieved of the duty to warn. Id. "If this were not true, a manufacturer could not design and sell a pocket knife, axe, planer or gun." Plante v. Hobart Corp., 771 F.2d 617, 620 (1st Cir. 1985) (quoting Ward v. Hobart Mfg. Co., 450 F.2d 1176, 1188 n.41 (5th Cir. 1971) (quoting Harrist v. Spencer-Harris Tool Co., 244 Miss. 84, 140 So. 2d 558, 562 (1962)). "Indeed, if the law required suppliers to warn of all obvious dangers inherent in a product, 'the list of foolish practices warned against would be so long, it would fill a volume.'" Id. (quoting Kerr v. Koemm, 557 F. Supp. 283, 288 n.2 (S.D.N.Y. 1983)).

It would be obvious and apparent to any person who walked into the GE plant and observed the HBM in operation that an operator standing within "the cube" was exposed to any number of inherent dangers. Likewise it was obvious and apparent to operators of the machine that a bad control panel configuration could expose them to danger. Dennis Reynolds and other operators of the post-1997 control panel, including Vinal Speed, recognized the lack of functionality and potential pitfalls in placing the sole unclamp button on the control panel rather than on the headstock. There is no evidence that suggests a lack of warning about the need to retain the headstock mechanism caused this accident. "It seems superfluous to require a manufacturer to warn a user of the danger of using a machine without a safety device where the user is fully conscious of such danger in the absence of a safety device." Plante, 771 F.2d at 621 (quoting Ward, 450 F.2d at 1188).

Finally, GE is a sophisticated entity, sophisticated enough to manufacture, supply and install its own control panels. I do not find that GE, Phoenix and/or CNC would have been prevented from designing and programming the Fanuc control panel as they did based on a generalized warning to ensure a comparable or better manual tool change safety protocol. Thus, even assuming for the sake of argument that a duty to warn did exist here, it has not been established that the failure to provide a warning was the proximate cause of Vinal Speed's death. "Proximate cause is 'that cause which, in natural and continuous sequence, unbroken by an efficient intervening cause, produces the injury, and without which the result would not have occurred.'" Merriam v. Wanger, 2000 ME 159, ¶ 8, 757 A.2d 778, 780 (quoting Searles v. Tr. of St. Joseph's Coll., 1997 ME 128, ¶ 8, 695 A.2d 1206, 1209). "The mere possibility of such causation is not enough, and when the matter remains one of pure speculation or conjecture, or even if the probabilities are evenly balanced, a defendant is entitled to a judgment." Crowe v. Shaw, 2000 ME 136, ¶ 10, 755 A.2d 509, 512.

C. Warranties and negligence.

As with products liability, a plaintiff must show some defect in the product at the time it was sold in order to maintain a claim for breach of the implied warranties of merchantability and fitness for a particular purpose. Walker v. GE, 968 F.2d 116, 119 (1st Cir. 1992) (citing Lorfano, 569 A.2d at 196. The same applies for negligence claims based on product defect. Ames v. Dipietro-Kay Corp., 617 A.2d 559, 561 (Me. 1992) ("In order to recover under either a product liability or a negligence theory, it is essential that the plaintiff prove that a product's defective design or the defendant's negligent conduct proximately caused the plaintiff's injuries."). For reasons that have already been stated, Giddings & Lewis did not breach any implied warranties or other common law tort duties apropos its design and manufacture of the mill in question.

Conclusion

The HBM machine involved in the accident which killed Vinal Speed performed with greater ease, efficiency and functionality than the HBM machine originally installed by Giddings & Lewis. Those increased functions and conveniences, such as the leveling macro, the single switch jog mechanisms, and the automatic tool changer, came with a price. It was not foreseeable to Giddings & Lewis that part of that price would be the loss of security and safety features they had programmed into the logic of the original spindle interface that dictated the manner in which manual tool change operations were to be conducted. Giddings & Lewis cannot be legally liable for this tragic accident. Judgment for the defendant.

So Ordered.

/s/ Margaret J. Kravchuk
U.S. Magistrate Judge

November 29, 2007

SPEED v. GIDDINGS & LEWIS LLC et al
Assigned to: MAGISTRATE JUDGE MARGARET J. KRAVCHUK
Case in other court: Penobscot County Superior Court, CV-05-00130
Cause: 28:1332 Diversity-Notice of Removal

Date Filed: 09/21/2005
Jury Demand: None
Nature of Suit: 365 Personal Inj. Prod. Liability
Jurisdiction: Diversity

Plaintiff

JOHANNAH SPEED
Personal Representative of the Estate of VINAL L SPEED

represented by **JAMES M. BOWIE**
THOMPSON & BOWIE
3 CANAL PLAZA
P.O. BOX 4630
PORTLAND, ME 04112
774-2500
Email: jbowie@thompsonbowie.com
LEAD ATTORNEY
ATTORNEY TO BE NOTICED

ROBERT C. HATCH
See above address
Email: rhatch@thompsonbowie.com
LEAD ATTORNEY

ATTORNEY TO BE NOTICED

ROY E. THOMPSON, JR.
See above address
Email:
rthompson@thompsonbowie.com
ATTORNEY TO BE NOTICED

V.

Defendant

GIDDINGS & LEWIS MACHINE TOOLS LLC represented by **HAROLD J. FRIEDMAN**
(See above for address)
LEAD ATTORNEY
ATTORNEY TO BE NOTICED

PHILLIP S. BIXBY
(See above for address)
LEAD ATTORNEY
ATTORNEY TO BE NOTICED

BLAIR A. JONES
(See above for address)
ATTORNEY TO BE NOTICED

ThirdParty Plaintiff

GIDDINGS & LEWIS MACHINE TOOLS LLC	represented by	**BLAIR A. JONES** (See above for address) *LEAD ATTORNEY* *ATTORNEY TO BE NOTICED* **HAROLD J. FRIEDMAN** (See above for address) *LEAD ATTORNEY* *ATTORNEY TO BE NOTICED* **PHILLIP S. BIXBY** (See above for address) *LEAD ATTORNEY* *ATTORNEY TO BE NOTICED*