# DISTRICT COURT OF QUEENSLAND

CITATION:	<i>Ide Enterprises Pty Ltd v Hale's Engineering Pty Ltd</i> [2015] QDC 98	
PARTIES:	IDE ENTERPRISES PTY LTD	
	ACN 080 450 657	
	(plaintiff)	
	and	
	HALES ENGINEERING PTY LTD	
	ACN 010 924 731	
	(defendant)	
FILE NO/S:	D23 of 2008	
DIVISION:	Civil	
PROCEEDING:	Trial	
ORIGINATING COURT:	District Court at Bundaberg	
DELIVERED ON:	7 May 2015	
DELIVERED AT:	District Court at Maroochydore	
HEARING DATE:	29 – 31 October 2014	
JUDGE:	Long SC, DCJ	
CATCHWORDS:	CONTRACT – whether the Court should find a breach of an implied term of an entirely oral contract for the construction of agricultural machinery, through lack of reasonable care and skill in the workmanship of the defendant – whether there was any relevant failure of the plaintiff, to exercise due care and skill in the design of the machinery and amounting to contributory negligence – whether and to what extent the plaintiff has suffered damage and how to measure any such damage – whether there should be an allowance for interest and whether that would be allowed from the date of the accrual of loss	
	Law Reform Act 1995 s 10(1)	
	Uniform Civil Procedure Rules 1999 r 159	

Clark v Macourt [2013] HCA 56

Foster v AT Brine & Sons Pty Ltd [1972] WAR 157

	Hadley v Baxendale (1854) 9 Ex 341
	Johnson v Perez (1988) 166 CLR at 351
	Knott Investments Pty Ltd & Ors v Fulcher & Ors [2013] QCA 67, [2014] 1 Qd R 21
	MBP (SA) Pty Ltd v Gogic (1991) 171 CLR 657
	Robinson v Harmon (1848) 1 Ex 850
	The Commonwealth v Aman Aviation Pty Ltd (1991) 174 CLR 64
	Vreman & Morris v Albury City Council [2011] NSWSC 39
COUNSEL:	D. Marks for the plaintiff
	C. Harding for the defendant
SOLICITORS:	Suthers Lawyers for the plaintiff
	Baker O'Brien Toll Solicitors for the defendant

#### Introduction

- [1] In early 2007, the plaintiff acting through its director, Mr Jeff Ide, contracted with the defendant, which acted in that regard through Mr Peter Hale, for the construction of a large piece of agricultural machinery called a "laser bucket". That contract was not completed and the evidence discloses that the disputes which are the subject of this proceeding arise in regard to the construction, of two substantial components of what would ultimately comprise such a piece of machinery. In due course, it will be necessary to consider different issues as they relate to the construction of those different components in accordance with this contract.
- [2] Mr Jeff Ide had sought the construction of the machinery in order to further his business of laser levelling of farming land. It was his aim to incorporate these components into a machine of a type that he was accustomed to using for that purpose, but on a scale that was considerably larger than anything he had experienced using for that purpose. In that sense and as referred to in the evidence, the contract related to a prototype and Mr Ide sought the assistance of the defendant due both to the size of the project and his limited capacity, at the time, to have completed it himself.
- [3] Mr Ide claimed long experience in the construction or fabrication of machinery, including doing welding work. Although this was all on a self-taught basis, he had himself fabricated a much smaller version of a laser bucket and this was used as a concept model for the project which is now in dispute.<sup>1</sup>
- [4] It was, as explained by him, a long held interest of Mr Ide to construct a laser bucket on such a large scale and he began to discuss the prospect of engaging the defendant, with Mr Peter Hale, particularly through 2006 and after having that engineering firm construct some axles and hubs for him.<sup>2</sup>
- [5] Mr Peter Hale is a qualified fitter, turner, welder and machinist and a director of the defendant.<sup>3</sup> He has conducted that engineering business for over 30 years.<sup>4</sup> His son, Mr Alan Hale, is a qualified fitter and turner, boilermaker and crane driver<sup>5</sup> and he

<sup>&</sup>lt;sup>1</sup> As depicted in the photograph in Exhibit 1 at p 174 and see T1-53 line 16 - T1-54 line 3.

<sup>&</sup>lt;sup>2</sup> T1-44.39 - 1-45.42.

<sup>&</sup>lt;sup>3</sup> T3-4.27 -29.

<sup>&</sup>lt;sup>4</sup> T3-4.31.

<sup>&</sup>lt;sup>5</sup> T2-93.16-35.

was principally engaged in the performance of the work which was undertaken by the defendant pursuant to the contract.<sup>6</sup>

Before moving to the critical issues and in circumstances where there were no detailed [6] plans as to the work to be performed or any attempt to reduce the contract or scope of works to writing and having seen the protagonists give evidence, it can be observed that the scene was amply set for the dispute which has found its way to the Court. Both Mr Ide and Mr Peter Hale demonstrated, as witnesses, a tendency to have their own fixed ideas, often based upon their own past experience. Mr Peter Hale presented such a dogmatic and aggressive demeanour and, on occasions, gave such evasive or non-responsive answers, so as to demonstrate himself to be, as the plaintiff submits, both a poor historian and a poor listener. As a general observation, Mr Alan Hale presented as a better witness but there will be need to guard against a tendency by him to be dogmatic in respect of defence of his and the defendant's position, in respect of the litigation. Mr Ide's evidence was also not without difficulty, particularly in converting the thoughts and recollections in his mind, into completed and coherent descriptions. However, and unlike Mr Peter Hale, he was, at least, not overtly antagonistic to the court processes.

# The contract

- <sup>[7]</sup> The plaintiff's claim is founded only in breach of contract and, as has been noted, this contract was formed entirely orally. Although there was reference made in the pleadings and in evidence, to a plan or sketch that was produced at an early stage by the plaintiff, that was not put into evidence and was only described as being a piece of graph paper with some arcs on it and without any measurements.<sup>7</sup> Accordingly, and as was common ground, this was not a plan of sufficient certainty to be, and nor could it have been intended to be, a contractual document.<sup>8</sup>
- <sup>[8]</sup> Further, and although there is evidence that the desirability of obtaining engineering plans was discussed,<sup>9</sup> it was the plaintiff's desire to proceed without incurring that cost.<sup>10</sup> Further, and notwithstanding an evidential dispute as to Mr Peter Hale's

<sup>&</sup>lt;sup>6</sup> T2-94.9-19.

<sup>&</sup>lt;sup>7</sup> T3-5.45 – 3-6.12.

<sup>&</sup>lt;sup>8</sup> Such incorporation of plans as a term is to be assessed objectively: *Bannerman v White* (1861) 10 CB(NS) 844 at 860.

<sup>&</sup>lt;sup>9</sup> i.e. produced by a suitably qualified, professional engineer.

<sup>&</sup>lt;sup>10</sup> T1-50.40-44 and T1-132.38- 1 -133-9.

response in a discussion, in a particular Saturday meeting, in relation to how the project would proceed, it appears to be of little consequence as to whether or not Mr Peter Hale specifically endorsed proceeding without any such plans or not. This is because, on any view of the evidence, this is the basis upon which the project did proceed and the critical issues in dispute must necessarily be considered and determined in that context.

- [9] It is common ground from the evidence, that the following were the express terms of the contract:
  - "(a) That the plaintiff would provide to the defendant suitable steel to construct the laser bucket;
  - (b) That the plaintiff would provide to the defendant the design for the laser bucket;
  - (c) That the contract was for reward; and
  - (d) That the defendant was obliged pursuant to the contract to construct the laser bucket in accordance with the design provided by the plaintiff."
- <sup>[10]</sup> Although the defendant pleaded that there was an additional term, that the construction was to be "under the supervision and direction of" the plaintiff's principal, Mr Ide, it was ultimately accepted that this contention was not supported in the evidence. Mr Ide's involvement was accepted in two respects. First, there was his involvement, from time to time, in performing work on the project and for which the plaintiff was charged a rate, described to cover the use of the defendant's equipment and other resources and notwithstanding that the consumables used in the project were otherwise separately charged to the plaintiff.<sup>11</sup> Secondly, and more critically, his involvement was necessary in order to provide the design for the construction and in the absence of any detailed written plans or drawings, this was necessarily provided orally and conceptually and accordingly became the subject of discussion as to how the design was to be implemented, into a finished product.
- [11] In its pleading, the plaintiff also contends for the implication of a term that the defendant would undertake the construction it was engaged to do "in a proper and workmanlike manner using proper construction techniques in carrying out its part of the agreement". The defendant accepts the implication of a term to the effect that the

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<sup>&</sup>lt;sup>11</sup> T2-124.35 – 2-125.11.

defendant would undertake the work it was contracted to perform, with reasonable care and skill and to perform the work in a workmanlike manner<sup>12</sup> and, this may be regarded as an appropriate description of the term implied in this contract and the plaintiff accepted that the latter part of the pleaded term, is simply a reflection of the former part.<sup>13</sup>

# The issues

- [12] Whilst it should be noted that the defendant only accepted the implication of such a term subject to the express terms of the contract, it is not apparent that there is any contention raised that there was any express term of the contract that negated or affected the implied term. Rather, it is the defendant's contention that this contractual term and Mr Ide's involvement in the provision of the design, is critical context in understanding and assessing any alleged breach of the implied term. In that regard, there is an obvious necessity to be alert to the distinction between discussion in respect of imparting the design and discussion in respect of the implementation of the design.
- [13] Accordingly, there are issues as to whether the defendant has breached the contract and, if so, whether and to what extent the plaintiff has suffered damage and as to whether, if there is no breach of contract by the defendant, it is entitled to recover the value of the work performed for the plaintiff, as invoiced and to the extent that such remains as unpaid by the plaintiff and as was the subject of the defendant's counterclaim.

## **Breach of contract?**

[14] As has already been noted, it is necessary to consider the issue of breach of contract separately, as far as each component of the laser bucket is concerned. The project commenced in the construction of a component which would ultimately be used to suspend the second component, which was described as the floor of the laser bucket. The first component was described, in evidence, as a "collared pipe".

<sup>&</sup>lt;sup>12</sup> See *Foster v AT Brine & Sons Pty Ltd* [1972] WAR 157 at 162 and Cheshire & Fifoot Law of Contract, 10<sup>th</sup> Australian edition at paragraphs 10.50 and 10.53.

<sup>&</sup>lt;sup>13</sup> *Vreman & Morris v Albury City Council* [2011] NSWSC 39 at [120] was cited by way of example.

#### The Collared Pipe

- <sup>[15]</sup> In broad terms, the method of construction of the collared pipe involved taking a large piece of metal piping, which was described as approximately 12 metres long and 460mm in external diameter and with a wall thickness of 12mm and welding collars or sleeves onto the pipe, onto which a series of perpendicular collars or flanges were then welded.<sup>14</sup> The object of the perpendicular pieces, which were attached in pairs, was to allow a pin to be inserted between each pair, in order to allow both attachment to the laser floor and also to other componentry including wheels, so that the laser floor would be suspended and able to be dragged by a tractor so as to level the ground being worked.
- [16] As far as the design of this component was concerned, it was obviously critical that when completed, the holes in each pair of perpendicular pieces, be aligned so that a pin could be fitted and held in place. Mr Peter Hale accepted that he was aware that this was the desired outcome.<sup>15</sup>
- [17] Further and although both Peter and Alan Hale were each, in their evidence, dismissive of the extent of any misalignment and were want to suggest that sufficient alignment may have been achieved by the defendant being allowed to employ a technique of heating and cooling the metal pieces and hammering through the pins, the following evidence of the defendant's expert<sup>16</sup> serves to confirm and describe the problem in the outcome:

"There are three different types of collars welded to the pipe. Each collar consists of a cylindrical sleeve of 15mm thick steel welded to the pipe and the number of 15mm thick bell shaped profiles welded around the pipe and to the sleeve (see photograph 13). The collars also have 2 projections called pivot plates welded perpendicular the axis of the pipe. Each pivot plate contains three steel plates (25mm, 20mm and 15mm thick) welded to the three plates (see photograph 15).

The bosses all contain a through hole, and I understand that pins were to be fitted through the holes in each pair of adjacent bosses on the pivot plates of each collar. Thus the alignment of the hole in the boss on one pivot plate of the collar to the hole in the boss on the other pivot plate of the collar was required to be aligned. Since Ide Enterprises

<sup>15</sup> T3-16.36-46.

<sup>&</sup>lt;sup>14</sup> The use of descriptive terminology varied as between the witnesses.

<sup>&</sup>lt;sup>16</sup> Dr Ray Hope, a mechanical engineer and more recently engaged as a specialist research and development engineer (see Ex 5, report dated 29/4/09 at p 17). Dr Hope agreed in cross-examination, that he had examined all pairs of flanges; T2-81.34-36.

Pty Ltd did not supply any detailed drawing specifying alignment of components, I am unable to determine if any other alignment of the holes was required.

A steel ruler was used as a straight edge to check the alignment of the holes in the bosses on each collar. Photograph 17 shows the steel ruler being used to check the alignment of the holes in the bosses on one collar. If the holes were aligned, the edge of the ruler would lay flat along the surfaces of both holes. Each pair of holes was found to visibly show a small amount of misalignment with the ruler lying flat on one hole, but not the other."

- <sup>[18]</sup> It was effectively common ground between the expert witnesses that the problem of poor alignment of the holes was due to the sequence of the process of manufacture.<sup>17</sup> The plaintiff called Dr Clegg, a metallurgical engineer,<sup>18</sup> and his opinion included the observation that "[t]he alignment of the holes would have been very difficult to achieve with the manufacturing procedure used" and that accorded with all of the evidence as to the effects of the distortion which would be expected with the amount of welding involved in this construction and the efforts undertaken in order to control or minimise this occurrence.
- [19] There was general consensus that the most appropriate methodology that could and should have been adopted and which, even now, remains available to repair any misalignment, was to use a line boring machine, to align the holes on the flanges, in situation on the pipe.
- <sup>[20]</sup> The plaintiff's claim for damages is predicated on proof of the cost to the plaintiff of now doing that<sup>19</sup> and particular reliance is placed upon the evidence of Mr Ide, that in the discussions, with Mr Peter Hale, in respect of this aspect of the design and manufacture of this component:

".... It wasn't my choice. I said, well, I can't see why you can't just undersize it and just put it on - put the line borer through there, and he said, we're not using the line borer. It's going over that mil.

So you had a definite idea you wanted to put - - -?--Oh, yeah. I – we argued. Well, I wouldn't really call it argue. I had a fairly robust discussion there for a couple of hours with him trying to – I said I can

<sup>&</sup>lt;sup>17</sup> See Ex 1, report of Dr Clegg dated 4/6/14, at p 125 and cf. Ex 5, report of Dr Hope dated 29/4/09, at pp 8-9 and 13.

<sup>&</sup>lt;sup>18</sup> Whose evidence I found to be generally more helpful and objectively based. The tendency for Dr Hope's views to be intrinsically caught up with the defendant's position and therefore tending to be expressed as a justification for it, may be observed in the passages of his report referred to in the preceding footnote.

<sup>&</sup>lt;sup>19</sup> See the evidence of D P McKenzie commencing at T2-26.31 and Ex 7.

– I appreciate where you're coming from. It will work, but why put yourself through that agony of 25 or 28 of these that you have got to do and they have got to line up? I said, that's – it doesn't make sense."<sup>20</sup>

- <sup>[21]</sup> The plaintiff contends that in order to achieve an outcome as to the alignment of the holes in the pairs of flanges, it must now pay more to achieve that.<sup>21</sup> However, the situation is not necessarily so straightforward. Apart from any complications arising from my previously expressed view as to a general approach to the evidence of the key witnesses, the discussions that occurred in respect of this issue clearly intertwine aspects of the design of the component with the process of manufacture to be adopted.
- [22] It may be accepted that, as the defendant contends:
  - (a) it did not warrant the particular result and the plaintiff's claim is not that the defendant did but rather that it breached an implied term, to construct the components of the laser bucket in a proper and workmanlike manner, using proper construction techniques; and
  - (b) that compliance with that implied term only obliged the defendant to take reasonable care, within the parameters imposed on it by the plaintiff's design.<sup>22</sup>
- <sup>[23]</sup> There is no contention that there was any want of care or workmanship in respect of the fabrication of the flanges or the drilling of holes in them, or in the welding of the flanges to the pipe. Rather, it is common ground that, particularly because of the known prospect of distortion due to the amount of welding required, the adopted process was problematic to ensuring that the design was achieved, quite apart from any lack of reasonable care in the work performed in implementing that methodology.<sup>23</sup> Accordingly, the question is as to whether the adopted process of manufacture itself involved a failure of the defendant to take reasonable care in the performance of its contractual obligations, in accordance with the design or outcome desired by the plaintiff and as communicated to the defendant. That, however, is not, having regard to the evidence on this issue, a straightforward matter.

<sup>&</sup>lt;sup>20</sup> See the evidence of JG Ide at T1-75.13-21.

<sup>&</sup>lt;sup>21</sup> Plaintiff's outline of submissions at [52].

<sup>&</sup>lt;sup>22</sup> Written submissions of the defendant, at [8].

<sup>&</sup>lt;sup>23</sup> For example see Dr Hope's report dated 29/4/09 and Ex 5 at p 8.

[24] A high point of the evidence of Mr Ide, on this issue, was as follows:

"MR MARKS: All right. Now, let's just go back to cutting out the holes. You have had an idea about how you want to cut the holes out, and could you just tell the court again what that idea was? --- Well, what I was going to - wanted to do was to cut it out, put the - yeah, well, just cut it out about 10 mils smaller than the 70 mil size. ... Of all of them there and then weld them on to the pipe ... after they'd been welded in place there, you get the line - well, that's what I wanted to - I wanted to line bore them";<sup>24</sup> and

"MR MARKS: Yeah. So what you're saying is, is it, that it doesn't matter that in the course of putting the flanges on there's been distortion? --- You get them as accurate as you can like we did here. You put your struts on there to hold it while you weld it. Then you take your struts off and you put your line borer through it and bore it. It's finished.

And it all lines up? --- Yeah. Perfect". .... OK. But you're opinion wasn't followed? --- No. It was rejected."<sup>25</sup>

Mr Ide's evidence was that this occurred in a discussion involving just he and Peter

Hale and he continued:

"... And I – I said I can understand what you're doing there but I said it's going to be a lot harder to do it your way than what it is to do it with a line borer. And he said, well you know, that's the way we're going to be doing it. And I said, well, how are you going to - once you've got them machined out to the right size - I said how you going to line them up. And he said, well they did what they did there. They lined them up with the laser - got everything lined up. I said once you do that - once you start welding it's going to distort."<sup>26</sup>

[25] Otherwise, his evidence was that he knew that the defendant did not have a line boring machine and that, in order to engage someone to line bore the holes after the fixing of the flanges to the pipe, there would be an additional cost for him.<sup>27</sup> As noted, his evidence was that his discussions as to whether or not line boring would be involved, were only with Peter Hale and that Alan Hale was involved in the consequential discussions as to how the holes would be drilled into the flanges and a sleeve or a boss,<sup>28</sup> included. Mr Ide described Mr Peter Hale's response to his suggestion to use a line borer, in terms that "his immediate response was too dear, too slow and I don't

<sup>26</sup> T1-79.37-43.

<sup>28</sup> i.e. a hollow piece of metal or tube.

<sup>&</sup>lt;sup>24</sup> T1-78.15-27.

<sup>&</sup>lt;sup>25</sup> T1-79.17-27.

<sup>&</sup>lt;sup>27</sup> T1-74.16-26 and T1-119.39-42.

subby work out...<sup>29</sup> However, there was also this passage in the evidence-in-chief of Mr Ide:

"MR MARKS: Okay. So did you have a suggestion then about how these holes were to be cut?---Well, I was a bit lost, actually, because there are different ways you can do it there, and the way he proceeded to do it there was – can be done, and that is to – well, what I was going to do, I was going to cut the holes there under size and then I wanted to laminate it a little bit out, a bit thicker there to get a bit more width to allow the pins to sit on a wider area, surface area, and he said – and I said, well, can I put that on there? He said no. He said you're going to have to put a sleeve through there. I said, what do you want a sleeve through there?"<sup>30</sup>

- [26] At this point, it can be noted that the construction of the flanges did include the lamination of shaped pieces of metal so that the holes, which were to be aligned between pairs of flanges, had a wider surface area and also that what was obviously described as a sleeve or boss was fixed, by welding, into the hole that was otherwise drilled through the laminated metal and so as to form the inside of the hole into which a pin could be inserted.<sup>31</sup>
- [27] It was common ground in the evidence, that Alan Hale, the son of Peter Hale and himself a qualified fitter and turner, boiler maker and crane driver, was engaged to actually perform most of the metal work and particularly the welding, in respect of Mr Ide's project. It was also common ground that apart from the assistance provided by Mr Ide, Alan Hale was also, at times, assisted by an employee of the defendant, Mr Shane Bawden<sup>32</sup>.
- [28] Similarly to the evidence of his father, Alan Hale insisted that the job was one where they just did as they were asked by Mr Ide and that "everything was approved before it was moved on". As to the present issue, he explained:

"... We had three options. We could either put it on the jig, which is going to make all three holes in exactly the same position on every plate, which is what was required. We could either bore it ready so all three holes were in the same spot, and they would be bored smaller. So once it was fitted to the machine, it could be line-bored later. The second option was bore it bigger, so once it was fitted, the machine bushes could be fitted, the sacrificial bush to replace as required for maintenance. And the third option was to bore it to size with a small amount of clearance, enough clearance that when it was fabricated and

<sup>&</sup>lt;sup>29</sup> T1-74.1-2.

<sup>&</sup>lt;sup>30</sup> TI- 74.28-35.

<sup>&</sup>lt;sup>31</sup> For example, see Exhibit 1 at pp 80-91.

<sup>&</sup>lt;sup>32</sup> T2-94.17-19.

things moved with welding, that it would still fit with a bit of minor buffing. We allowed four to five thou clearance on the third option."<sup>33</sup>

He then continued to explain that the reference to "four to five thou" was to four to

five thousandths of an inch and he then said:

"So we set it up. It was designed – it was happy to go with the third option, just for costs. We didn't – he didn't want to line bore it."<sup>34</sup>

There is then the following passage:

"You said he was happy to go with the third option. Were there – you said what the options were. Were there discussions in which you were involved with and Mr Ide was involved with about these options?---Yeah. It was myself, Jeff, and Peter Hale about these three options. Boring them undersize and line boring it later wasn't an option. It was too expensive and too time-consuming. To put a sacrificial bush in there wasn't required because the pin didn't move in that part. So he was happy to go with the third option and bore them to size."<sup>35</sup>

- [29] It is then useful to note that although it was not at any stage an accepted or preferred option of Mr Ide, there was common ground in the expert evidence that the most appropriate course was and had been to incorporate a "sacrificial bush"<sup>36</sup> into an oversized hole and into which the metal pin would be inserted.
- [30] As to the result that was achieved in respect of the alignment of holes in the flanges, Alan Hale's evidence was:

"Well it's a fabricated job. We had a little bit of movement and the holes aren't lined up perfect but that's fabrication."<sup>37</sup>

[31] When further cross-examined on the suggestion that his father's response to Mr Ide's suggestion had been to flatly tell him "too slow, too expensive, don't subby out", Alan Hale respondent:

"No... Not to my memory".<sup>38</sup>

<sup>&</sup>lt;sup>33</sup> T2-96.25-34.

<sup>&</sup>lt;sup>34</sup> T2-96.44-45.

<sup>&</sup>lt;sup>35</sup> T2-97.1-7.

<sup>&</sup>lt;sup>36</sup> As understood to be a free fitting rather than fixed equivalent of the sleeve or boss that is depicted in Exhibit 1, at pp 80-91 and sacrificial in the sense of being easily replaceable if distorted by the process of wear.

<sup>&</sup>lt;sup>37</sup> T2-99.25-27.

<sup>&</sup>lt;sup>38</sup> T2-105.46.

However, he also indicated that he was aware of meetings and discussions between Mr Ide and his father, at which he was not present, but that he was there at "the main discussion when it came to the crunch".<sup>39</sup>

[32] In further cross-examination and when he was asked whether an inevitable result of the process adopted in respect of the fixing of the flanges to the pipe, was "some distortion", Alan Hale responded:

"Well, it's an inevitable you're going to get movement on a 12 metre pipe, and that's why this stayed the way it is and that's why it required even more clearance or to be line-bored afterwards as discussed ... and he went with the third option."<sup>40</sup>

Subsequently, he added:

"... All three options were good options whether you bored it, put a sacrificial bush in there, or bored it with clearance. My qualm against that was it should have had more clearance. As I say, we should have three to four thou clearance and he wanted one thou, and with one thou you'll get those pins in there, but you're going to have to do a little bit of buffing to get them in there.

Right. Now, you mentioned while we're talking about buffing - - -

HIS HONOUR: When you say "buffing", sorry, what do you mean? Is it - - -?---There's two different options, but basically a machine with sandpiper on the end that you just take it at your high spots. It's exaggerated. Your plates are either twisted out a little bit or twisted in a little bit. So you're just going to have little high spots without clearance, so as your pin comes through it's not going to quite line up in that hole without hitting it in. So you give a bit of a buff and open that clearance up a bit more to make it looser in the hole, they'll fit through.

And did you have equipment to do that, did you?---Yeah Yes?---But if they had have been bored just that little bit bigger - - -

I understand what you say about that?--- - - beforehand – they're all good options. It just comes back to cost.

MR MARKS: Yeah. So how many of these holes did you buff?---Did we buff?

Yeah?---Peter played around with one with Jeff.

Peter – your father, Peter Hale?---Yes.

<sup>&</sup>lt;sup>39</sup> T2-105.35-2-106.11.

<sup>&</sup>lt;sup>40</sup> T2-110.14-19.

Okay. And he worked with Jeff, did he?---They just played around with one to prove a point - - -

All right?--- - - and you could hammer it in. There's nothing wrong with them; they're just too tight. They should have a bit more clearance."<sup>41</sup>

[33] When it came to the evidence of Mr Peter Hale, counsel for the defendant had considerable difficulty in directing the witness to the point to be addressed and at one point, Peter Hale said, in relation to cutting out the holes in the flanges:

"...After they'd all been oxy cut out, I put on the fixture, they were bored to a size of a pin. Now, on the discussion previously, I told him how we could do it. I said, we'll go for a pin size. I said and when the fabrication comes along, we could have a problem. I said so if we miss - if we get it, we get it; we don't, we go - we'll go for pin size because we've got that material there. So I bored one to five thou clearance. And he said no, that was too sloppy. I said - so I bored one to one thou clearance. And I told him - I says that's not even grease clearance. I said if that's what you want at one thou clearance, that's what you will get. And that's what the man got. One thou clearance."<sup>42</sup>

[34] Following that and after being directed to the necessity of the alignment of the holes and the witness confirming his understanding that they were to be aligned in pairs, he explained his observation as to the alignment achieved, after the flanges had been wielded to the pipe:

> "...There was a little bit of a misalignment, which you had to expect with the amount of - with the - being welding like that, which I was not surprised at when I've half expected it. And that's where I thought, well - that's what I said to him, if we miss there, it should have a sacrificial sleeve in it anyhow. We'll bore it then and then it will be - in align after it is fully welded, and there'll be no more welding to be done. I said we'll have a sacrificial sleeve and the pin will just go straight through."<sup>43</sup>

[35] That was followed by a somewhat confusing passage:

"And when the discussion about the - just so I get the timing right - the line boring and the sacrificial sleeve, when was that - did that take place?---Oh, maybe a week or something afterwards. Because you've got to remember Jeff Ide wasn't there all the time. He was going away doing - doing work.

<sup>&</sup>lt;sup>41</sup> T2-110.30 - 2-111.16.

<sup>&</sup>lt;sup>42</sup> T3-16.7-15.

<sup>&</sup>lt;sup>43</sup> T3-17.31-37.

Yes?---He had - he was doing other work, and sometimes we'd have work to do, and [indistinct] my stock for a week, or three days, or a fortnight, you know.

What was his response to the suggestion of line boring and a sacrificial bush?---Well, he talked about it - and it was talked about very early in the piece before it was - the job was ever started. He talked about buying a line borer himself to do it. I talked about buying a line borer. And then I found out whether a friend of mine in Emerald had one, and he said you could have a lend of it, do the job with, if you're happy, you can buy it. There had been plenty of discussion on what could happen to these holes."<sup>44</sup>

[36] The following passage in cross-examination of Peter Hale and which is indicative of

some difficulty encountering in taking his evidence in this trial, should then be noted:

"MR MARKS: Yes. All right. Can I put it another way. Let's move on from any idea of having a sleeve in. Do you remember Mr Ide suggesting, finally, that the holes be bored or cut through the flanges slightly undersized; that the flanges then be welded on to the pipe; and then that the holes be line bored out to the desired size? Do you remember Mr Ide making that suggestion to you?---That was one of many suggestions made.

And did you follow that suggestion, sir?---The suggestion I put back to him is we get it - we bore into the size of the pin that was going to be used, with five thou clearance, and he wanted one thou, which is absolutely ridiculous for agricultural equipment. And then if we got them - if we got them all to line up, well and good, which I told him it was - it would be, you know, very lucky if we do. I said but then if we miss, we had talked about sacrificial bushes in there, which is the correct way to do it, put - bore it and put a sacrificial bush in.

Now - - -?---And if we hadn't - if we did and we were lucky enough that all the pins went through - and a pin's probably that long, from what I can remember – if they went through, well, later on when they did wear, you could bore them and put a sacrificial bush in then.

Right?---He had a little bit of luck on his side.

So you didn't follow his suggestion to bore to undersize, weld on - weld the flanges on - - -?---Let's get one thing straight: there was nothing done, nothing whatsoever on that site or on that job that was not approved by Mr Jeff Ide. And that depends whether I had a drink of water or not. Now, that's how it was.

In response to Mr Ide's suggestion that the holes be bored to a slightly smaller size, the flanges be welded on, and then line bored out to the desired size, I put it to you you said to him that, "The line boring was

<sup>&</sup>lt;sup>44</sup> T3-17.39-3-18.6.

too dear, too slow, and I don't subbie work out"?---Well, if that was the case why was he talking about going to buy a line borer to do it.

Do you disagree, sir?---Run that past me again.

You said to him, in relation to the idea that the - your Honour is - should we take a break.

HIS HONOUR: Not unless Mr Hale wants one.

MR MARKS: Okay. In response to the idea of cutting the sizes slightly - cutting the holes slightly undersize, welding the flanges on to the pipe - - -?---Mmm.

- - - and then line boring out to desired size - - -?---Yeah.

- -- you said to him, "Too dear, too slow and I don't subbie work out"; do you disagree sir?---Once again, sir, I got to ask what you been drinking.

HIS HONOUR: No, do you - do you disagree that you said that or do - - -?---Yeah, I disagree, totally."<sup>45</sup>

[37] Shortly after that, Peter Hale added:

"Mr Ide made suggestions to me and I made suggestions to him on different things, on engineering principles, the right and wrong ways of doing on engineering principles that I knew of. The decision was entirely his. If the decision wasn't right, well, that was his problem. But I would endeavour to try and overcome the problem if we had one."<sup>46</sup>

[38] Then there were the following exchanges:

"In relation to the suggestion made by Mr Ide to cut the holes in the flanges slightly undersized – and I won't repeat the rest of the procedure unless you need me to – do you agree that you used your judgment as a workman to do something different to cut the holes out to full size before – mill the holes out to full size before the flanges were attached to the pipe?---That was the agreed procedure that was going to be done with discussions with Jeff Ide.

So Mr Ide was not directing what was done, he was following your suggestions as a workman?---It was put to him over a period of probably four to five hours of different ways that it could be done. And it wasn't only me involved. It was him involved, it was Shane involved, it was Alan involved but all the pros and cons were put to him of what could happen, how it could have been done, and the final decision was his" ;<sup>47</sup>and

<sup>&</sup>lt;sup>45</sup> T3-28.30 - 3-29.33.

<sup>&</sup>lt;sup>46</sup> T3-29.41-45.

<sup>&</sup>lt;sup>47</sup> T3-34.7-19.

"But the pins do not fit into the holes – into the pairs of holes?---Of course they won't. With one thou clearance, of course they won't.

And so the standard of - - -?---I told him all that in the beginning."48

[39] Otherwise, it may be noted that Peter Hale was at pains to explain, as he said in evidence in chief:

"Bear in mind, I'm the machinist. I'm not running the job. This man's running the job by himself with - with labour and machinery supplied."<sup>49</sup>

[40] In the context of this entirely oral contract and the evidence, the difficulty in proof of a breach of the implied term of the contract is apparent. The fundamental difficulty is in disentangling the communication of the design of this component from the proposed implementation of it and in respect of which the plaintiff relied upon the defendant to exercise due care and skill or proper workmanship. As Mr Ide discussed in his evidence:

"Well, why wouldn't you cut it all out at once?---Well, you may – design may change – as you – as you build something you – and everywhere you work there they – you find that you can improve in the workshop what you can't put on paper, or you can't see it before you start building it. And with a prototype there you just build as you go."<sup>50</sup>

- [41] Accordingly in these circumstances, the evidence does not allow of reasonable satisfaction as to any lack of reasonable care and skill in the workmanship of the defendant, either as to determining how the implementation of the design of this component was to be achieved or as to the work that was to be performed.
- [42] Further, this remains the most appropriate conclusion, notwithstanding the plaintiff's contention that from the evidence of Peter Hale, as to the involvement of the employee, referred to as Shane Bawden, in the discussions as the methodology of construction of the flanges and paired holes<sup>51</sup> and the unexplained absence of him as a witness, an inference might be drawn that his evidence would not assist the defendant.<sup>52</sup> It suffices to note that even if allowance were made for such an inference, that would not overcome the difficulty which emerged in the plaintiff's case and as

<sup>&</sup>lt;sup>48</sup> T3-34.30-33.

<sup>&</sup>lt;sup>49</sup> T3-19.10-11.

<sup>&</sup>lt;sup>50</sup> T1-69.6-10/

<sup>&</sup>lt;sup>51</sup> See para [38], above/

<sup>&</sup>lt;sup>52</sup> Jones v Dunkel (1959)101 CLR 298.

to demonstrating a breach of the implied term of the contract, particularly by disentangling the design of this component from the implementation of it and in the context of what must be regarded as the plaintiff's acceptance of the adopted approach.

- [43] However, it should also be noted that had the plaintiff succeeded in establishing a breach of contract in relation to this component, the defendant also pointed to a matter of some significance in respect of any proof of loss or damage. This is because the entire approach of the plaintiff is to point to the cost of now line boring the holes, as the measure of such loss. The evidence of Mr McKenzie was that the cost of now doing that would be \$22,660.<sup>53</sup> Although, it was also established that if the recommended or preferred approach of the experts were to be adopted and the holes now rebored oversize and a sacrificial sleeve or bush incorporated, that would approximately halve the cost.<sup>54</sup>
- [44] In the circumstances of this case and particularly where it was common ground that the accepted approach to the initial construction of this component had necessarily envisaged the additional cost of later line boring the holes, I would accept the defendant's contention that no relevant loss or damage had been proved, for instance by proof of any wasted cost in the methodology that was adopted.

# The laser bucket floor

- [45] As to the other component, described in evidence as the laser bucket floor, the plaintiff also claims for breach of the implied term and for failure to perform that work with reasonable care and skill or in a workmanlike manner.
- <sup>[46]</sup> In relation to this aspect, there are not the same evidential complications as to the implementation of the plaintiff's design. Rather, it was common ground as to how the laser bucket floor was to be constructed, with the desired outcome of a level finish to the plates attached to the upper side of this component, or if that was not achievable, an upward bow of 5mm or 10mm, at most, would be accepted.<sup>55</sup>

<sup>&</sup>lt;sup>53</sup> T2-29.40.

<sup>&</sup>lt;sup>54</sup> T2-31.10-33.

<sup>&</sup>lt;sup>55</sup> T1-108.6-48 (J Ide), 3-25.43- 3-26.28 (P Hale) and 2-106.40-46 (A Hale).

- [47] The evidence is also clear that this outcome was not achieved and the effect of the distortion of the steel plates constituting what is described as the top of the laser bucket floor were bowed in both directions, as may be described as across the length and depth of those plates, in a horizontal plane. It was also established that this bowing exceeded the acceptable design tolerance of no more than 10mm.<sup>56</sup>
- [48] The critical issue was whether or not this outcome was:
  - (a) as claimed by the plaintiff due to lack of reasonable care and skill in the workmanship of the defendant; or
  - (b) as claimed by the defendant, due to the inherent difficulties of the plaintiff's design of this component; or
  - (c) as alternatively claimed by the defendant, partly due to those inherent design difficulties, in the sense that this constituted contributory negligence on the part of the plaintiff.
- [49] In this instance, although it will be necessary to return to the defendant's alternative contention, the plaintiff's primary contention should be accepted. The contractual expectation was clear and the defendant undertook the work to meet that expectation and the evidence was clear that the expectation was not achieved and fell significantly short of it. That occurred due to want of due care in the performance of the work.
- [50] Of the expert evidence on this topic, Dr Clegg's evidence is to be preferred and provides a clear basis for concluding that there was a failure to take due care to control the effect of distortion as a consequence of the extent of welding required in the construction process. That is not to say that there was no such care taken. As the defendant contends, some measures were adopted in this regard but this only serves to demonstrate recognition of the need to take such measures and the question becomes one as to whether sufficient steps were taken.
- <sup>[51]</sup> Dr Clegg identified the extent of distortion that had occurred and Dr Hope agreed that there was distortion that was visible to the naked eye.<sup>57</sup> Dr Clegg had both reviewed and confirmed the measurements taken at an earlier time by Mr Cowan.<sup>58</sup>

<sup>&</sup>lt;sup>56</sup> T2-42.5 - 2-45.24.

<sup>&</sup>lt;sup>57</sup> T2-82.5.

<sup>&</sup>lt;sup>58</sup> Mr Cowan was an engineer initially engaged as an expert, by the plaintiff but he had passed away before the trial and Dr Clegg was then engaged and gave evidence at the trial. Mr Cowan's report was admitted as part of Exhibit 1 (pp 29-70), primarily because of the references made to this report in the reports of the experts who were called to give evidence at the trial. Dr Clegg in particular

[52] There is also no doubt that the amount of welding that was involved, because of the design of this component, presented particular challenges in the construction of it. However and in the context of his expertise in metallurgy and his explanation of the process of welding in terms of the heating of metal to liquid form and re-cooling to solid form and the associated phenomena of expansion and contraction involved,<sup>59</sup> Dr Clegg explained how the prospect of distortion may have been controlled:

"If we allow the weld then to solidify – if the plates are unconstrained, they're just sitting on the ground, then one side of the plate will lift up, and we will have a deformed plate, and we will then have distortion as a result of the weld. If we wanted to push that distortion out without significantly heating the weld, then we have to use a very high force. You'd have to push very hard in order to force that back down to the position that you desire, because the weld is cold, the yield stress is very high, and you're fighting against the yield stress of the weld metal, which is quite high. If, however, we constrain our plates so that they cannot move during the time that we weld, then, as we weld, the plates are stopped from moving, and it doesn't have to be a particularly high force, because, if we look at the amount that the steel expands or contracts as it cools down, it's fairly linear from 1600 degrees down to room temperature. It's not entirely linear, but reasonably linear. So we have a period from 1600 to 1000 - to 600 degrees, which is 1000degrees, during which the steel is trying to contract, and it's going to contract a considerable amount, but during which time the weld metal is soft. It's hot. It's still well above the 600-degree mark that I mentioned before. So, with relatively little force, we can prevent that weld from deforming and deflecting. Once we get below 600 degrees, we then have another period of cooling, during which time the yield stress is gradually increasing, and increasing to the room temperature yield stress, and you will continue to get a certain amount of deflection then, but, really, by constraining the weld before it reaches that 600degree mark, you've gotten rid of two thirds of your deformation already, you've gotten rid of most of the deformation. You'll get a small amount of residual deformation that occurs during that lower part when the steel is strong, but maybe you can manage with that."<sup>60</sup>

<sup>[53]</sup> On the other hand, Dr Hope indicated that this aspect was not his area of expertise, but he did confirm the desirability, from the perspective of workmanship, of taking precautions against the prospect of distortion due to welding.<sup>61</sup> Further and as demonstrated by the following expressions of opinion in his original report,

relied upon Mr Cowan's inspection of the laser bucket floor and his measurements as to the effects of distortion (after some independent verification).

<sup>&</sup>lt;sup>59</sup> T2-54.20-2-56.25.

<sup>&</sup>lt;sup>60</sup> T2-55.34-2-56.10.

<sup>&</sup>lt;sup>61</sup> T2-75.26-33.

Dr Hope's conclusions as to the appropriateness of what was done was clearly influenced by the position of the defendant and particularly that of Mr Peter Hale:

- "(1) In my opinion, without details of the intended function, or design drawing specifying tolerances and degree of flatness required for the correct function of the laser bucket, it cannot be determined if the fabricated components were not fit for the purpose they were intended to perform. I understand that Hale's Engineering Pty Ltd informed Ide Enterprises Pty Ltd that the design of the floor of the laser bucket would buckle and bow when welded the way they instructed. I understand the only instructions supplied by Ide Enterprises Pty Ltd to Hale's Engineering Pty Ltd regarding the flatness of the floor of the laser bucket were they were happy with a 'bow up' as it would tend to level under the load of use.
- (m) In my opinion the claimed problems with the components fabricated by Hale's Engineering Pty Ltd are due to lack of a proper design and specification being provided by Ide Enterprises Pty Ltd, the sketches and instructions provided by Ide Enterprises Pty Ltd being poor and not representative of good design and manufacturing practice, and Ide Enterprises Pty Ltd failing to heed the claimed advice and warnings of Hale's Engineering Pty Ltd during the fabrication process, as disclosed in the statement of Peter Hale."<sup>62</sup>
- [54] In his report dated 4 June 2014, Dr Clegg expressed the following views, both responsively to Dr Hope's report and after identifying some specific aspects of the design of the structure, which tended towards high distortion levels:

"As a result of these issues, in my opinion the design of the bucket as constructed was susceptible to significant levels of distortion. The potential problems should have been obvious to a person experienced in welded structures. As a result, steps should have been taken to mitigate the distortion of the bucket. Such steps are:

- 1. Change the design of the bucket to address the issues raised above (i.e. lack of a cross brace along one edge of the plates, welding of the angle section on the bottom of the plate and the use of welded angle).
- 2. Ensure appropriate bracing and welding procedures are used in order to minimise the effects of distortion.

In his report, Dr Hope indicated that the construction and welding methods used by Hale's engineering were in line with good fabrication and welding practice. However, no evidence has been presented in either report to indicate that Hale's engineering took specific precautions to reduce the distortion levels in the bucket due to welding. If Hale's engineering had indicated to the plaintiff that they considered that distortion was likely to be an issue, it would be useful to understand what precautions were taken to mitigate this problem.

<sup>&</sup>lt;sup>62</sup> Exhibit 5: report of Dr Hope dated 29/4/09, at p 14.

The resultant welded structure was out of specification with regards to the instructions of the plaintiff concerning distortion (see 3.2 Assumed facts, part 6, Figure 2 and Figure 3). It is my view that the design of the bucket was such that distortion of the nature observed was a real likelihood. As a result, in order to ensure that the distortion in the bucket was below the specified limits, a number of precautions should have been taken. I would have expected that this would have included the use of jigs during welding in order to prevent distortion of the structure. Although Dr Hope reported to having seen bracing for the collared pipe, there was no report of any bracing for the bucket. In my view, the level of distortion observed is consistent with the fabricator having taken no effective precautions to control the distortion of the bucket."<sup>63</sup>

[55] Dr Clegg also expressed a summary of his conclusions on this aspect as follows:

"I have concluded that the design of the laser bucket was such that unacceptably high levels of distortion were likely to occur during fabrication in precautions were not taken. The distortion of the bucket observed was consistent with the fabrication of the bucket with minimal control of distortion. The distortion levels observed by Mr Cowan were in excess of those agreed to between the parties. In my opinion, the fabricator should have been able to use methods to control the distortion of the welding in order to ensure that the level of distortion was below the agreed levels."<sup>64</sup>

- <sup>[56]</sup> However and as the defendant points out, apart from asserting that he would have advised that the structure "be braced in some way" in order to reduce the effects of distortion and achieve the desired outcome, Dr Clegg indicated that an appropriate person to consult about precisely what was necessary was a structural engineer.<sup>65</sup>
- [57] It will be necessary to return to that aspect of Dr Clegg's evidence in relation to the defendant's alternative contention as to contributory negligence. However and for present purposes, the question is as to whether it has been proved that the defendant failed to take reasonable precaution in the course of what it undertook to do and in order to prevent or minimise the distortion which was anticipated. The defendant submits that it did and specifically contends that "bracing was used by Mr Alan Hale to attempt to control distortion in the floor of the laser bucket".<sup>66</sup> However, not all of the passages referred to are directed at the particular concept of bracing in order to avoid or minimise the distortion in the top sheet of the laser bucket flaw and so as to

<sup>&</sup>lt;sup>63</sup> See Exhibit 1 at pp 138-139.

<sup>&</sup>lt;sup>64</sup> See Exhibit 1 at p 125.

<sup>&</sup>lt;sup>65</sup> T2-63.9-15.

<sup>&</sup>lt;sup>66</sup> Defendant's written submissions, at [24] and footnote 45.

achieve the contractual expectation of no more than an upwards bow to ten millimetres.

[58] In the context of what is disclosed in the evidence as to the obviously developing tensions between the parties as the work under the contract continued, including the problems that were encountered with the plaintiff's expectations in respect of the collared pipe, it can be concluded that insufficient attention was paid to this requirement and the need for effective steps, particularly by way of specifically directed bracing, in order to meet the commonly understood expectation in respect of this component. That conclusion is particularly exemplified by the following evidence of Mr Alan Hale, who, as has been noted, was primarily responsible for the work that was performed:

"It bowed length – the longest – lengthways if you want to call it that way. And then as we were putting angle irons in, it was bowing up and that was determined by – I think we had a bit of scrap aluminium or something as a straight edge to see where it was bowing but that was – he was committed to doing it that way so there's not much you can do about it at that stage besides when you roll it over straighten it back out again.

Okay. What was the most bowing that you saw?---In that? I can't recall figures but it wasn't anything too substantial. The main concern was the floor had to run over it and that could be designed in a way the floor ran that it wasn't such an issue.

Yeah?---He was more concerned it was bowed up and not bowed down because a lot of machines are – are dead flat from new and as they run around the paddock with a belly full of dirt they sag down. So to bow up was a positive rather than a negative though it was probably a bit more than he – he wanted. It was a positive rather than a negative because they sag over time.

Okay. Were any steps taken by you to try and remedy the amount of bowing. I actually went away at that point in time and whatsaname - - - When you say you went away?---I went away to another – another job for a few days and whatsaname Peter and Jeff spent a bit of time up there playing with it.

Well, you weren't there at the time?---Not – not when they come to straighten it, no.

So I won't ask you about that if you weren't there?---No. I made a few suggestions before I went away. It was shot down. Jeff – Jeff went away for work himself and then when I come back they were – they were working on it.

Okay. So that was the last of your involvement?---In that respect, yeah. I've – the way they were trying to straighten it – mainly – mainly Jeff – I'm surprised no one got killed.

Okay. I won't ask you anything further about that?---Yeah."67

[59] Accordingly, I am reasonably satisfied that the plaintiff has proved its primary contention that there was a breach of the implied contractual term as to workmanship. That is in terms of a failure to exercise reasonable care and skill in the manufacture of this component.

# **Contributory negligence**

- [60] There remains the defendant's alternative contention as to contribution of the plaintiff's own failure to exercise reasonable care and skill in the design of this component. Accordingly and pursuant to section 10(1) of the *Law Reform Act 1995*, the defendant contends that "the damages recoverable for the wrong are to be reduced to the extent the court considers just and equitable having regard to the claimants share in the responsibility for the damage".
- [61] The plaintiff took no issue with the application of the statutory provision to the present circumstances but contested the suggestion of contributory negligence.
- [62] In this regard the defendant points not just to the opinions of Dr Hope but also to the evidence and opinions given by Dr Clegg. In his report dated 4 June 2014 and as an immediate precursor to the extract which has already been set out above,<sup>68</sup> Dr Clegg observed:

"the level of distortion is strongly influenced by the design of the structure. Several factors concerning the design of this bucket would have tended to lead to high distortion levels. These are:

- 1. Lack of a cross base along one edge of the plates. If a cross brace had been used to support the long edge of the plate opposite to the leading edge, the level of distortion shown in Figure 3 at number 3 would have been reduced.
- 2. Welding of the angle section on the bottom of the plate. It is likely that the bowing of the plate shown in Figure 2 was at least in part due to the welded angle on the bottom of the plate. These welds would have contracted on cooling, tending to bow

<sup>&</sup>lt;sup>67</sup> T2-101.27-102.14.

<sup>&</sup>lt;sup>68</sup> See paragraph 49.

the plate upwards in a manner similar to that shown in Figure 1 and Figure 2.

- 3. The use of angle section. Angle section has a relatively low stiffness in bending when compared with other types of sections, such as rectangular hollow section (RHS). The effect of low bending stiffness is that the section will not provide significant resistance to the bending of the plate induced by the weld shrinkage."<sup>69</sup>
- [63] As has been noted, Mr Ide (who at all times acted for the plaintiff) claimed practical experience in welding techniques but he has no engineering qualifications and as was pointed out by the defendant, he chose not to obtain engineering input into the design of the componentry, due mainly to cost considerations.<sup>70</sup> Such an approach has the potential to be regarded as negligent or evidencing a failure to exercise due care in the design of this component and so as to achieve the desired outcome. However, it must be borne in mind that the propensity of the welding to cause distortion of the finished component was both recognisable and well recognised by both parties and as Dr Clegg explained, the distortion may have been effectively controlled.
- [64] In such circumstances, it is not appropriate to find that a failure to have an optimal or at least better, design is to be regarded as contributory negligence or that any such failure relevantly contributed to the result. This is particularly because the basis for the defendant's liability is found in contracting to implement the design that was provided and in failure to take sufficient measures to control and minimise the distortion that was an inherent but not necessarily inevitable consequence of the plaintiff's design of this component.

## **D**amages

- [65] As to the assessment of damages, the attempt will be to put the plaintiff in the same position, as far as money can do it, as it would have been had the promise been performed.<sup>71</sup>
- [66] As to its loss in respect of the laser bucket floor, the plaintiff claims:
  - (a) \$18,710.43, as the replacement cost of the steel that was used;<sup>72</sup> and

<sup>&</sup>lt;sup>69</sup> See Exhibit at p 137-138.

<sup>&</sup>lt;sup>70</sup> T1-50.40-44.

<sup>&</sup>lt;sup>71</sup> Clark v Macourt [2013] HCA 56 at 106 and the cases therein cited, including Tabcorp Holdings Limited v Bowen Investments Pty Ltd (2009) 236 CLR 272 at 286.

<sup>&</sup>lt;sup>72</sup> See Exhibit 1 at pp 114-115, as identified by Mr Ide as equivalent to the steel only used for the construction of the floor of the laser bucket: T1-60.5-24.

- (b) \$12,987.59, as the wasted cost of fabrication.<sup>73</sup>
- [67] It should also be noted that the defendant counterclaims for \$10,550.54, as the amount remaining unpaid on its invoices for the work that was performed.<sup>74</sup> However, it would only be necessary to separately consider that counterclaim, had the plaintiff entirely failed in its claims. Otherwise, it was accepted that the appropriate course is to deduct the unpaid sum from the plaintiff's recoverable damages.
- [68] For the defendant, it is correctly pointed out that recoverable damages for breach of contract may only be:

"... such as may fairly and reasonably be considered either arising naturally, i.e. according to the usual course of things, from such breach of contract itself, or such as may reasonably be supposed to have been in the contemplation of both parties, at the time they made the contract, as a probable result of the breach of it."<sup>75</sup>

Further it is contended that the plaintiff is not entitled to be placed in any superior position to that which he or she would have been, had the contract been performed<sup>76</sup> and the "duty to mitigate" was identified, as recently discussed in *Knott Investments Pty Ltd & Ors v Fulcher & Ors.*<sup>77</sup>

[69] The plaintiff's approach is that the laser floor bucket is only useful for scrap metal and in that regard, proposes a reduction in damages of \$665.50, as the scrap value of the steel (calculated as 5.5 t @ \$100/t). This calculation was not put in issue<sup>78</sup> and I accept that the taking of a more contemporary value for the scrap steel, rather than any assessment of the value at the date of breach, is appropriate in the light of Exhibit 4, wherein the defendant expressed a need for maintenance of the items the subject of the claim, as "evidence". Such an approach is consistent with the absence of any earlier reasonable opportunity to realise a scrap value of the steel and with the approach in *Johnson v Perez*.<sup>79</sup>

<sup>&</sup>lt;sup>73</sup> In final submissions and subject to an issue which is dealt with subsequently and although the written submissions of the plaintiff referred to the higher figure of \$14,844.94, it was common ground that this was the appropriate conclusion from the evidence, including the invoices.

<sup>&</sup>lt;sup>74</sup> See Exhibit 6 and T2-18.1-3, where Mr Ide accepted this as a correct calculation of the amount outstanding.

<sup>&</sup>lt;sup>75</sup> *Hadley v Baxendale* (1854) 9 Ex 341 at 345.

<sup>&</sup>lt;sup>76</sup> *The Commonwealth v Aman Aviation Pty Ltd* (1991) 174 CLR 64 at 82.

<sup>&</sup>lt;sup>77</sup> [2013] QCA 67, [2014] 1 Qd R 21, at [29-36].

<sup>&</sup>lt;sup>78</sup> Either as to weight (T1-26.8-10) or rate (T2-64.6-10).

<sup>&</sup>lt;sup>79</sup> (1988) 166 CLR at 351, at 366-7.

- [70] On the other hand, the defendant points to an absence of explanation as to the significance of the distortion in the floor of the laser bucket and as to how that makes it unusable or ineffective. It was not however contended that there was any failure by the plaintiff to take any reasonable step towards avoiding unnecessary loss in this regard.<sup>80</sup> Rather, the contention is that the plaintiff has not therefore established that it has suffered any loss in this regard.
- [71] I do not accept that contention. It was the plaintiff's dissatisfaction with the outcome in the fabrication of the laser bucket floor, which effectively concluded the work done under the contract and brought about the termination of it. Although that situation was also complicated by the unpaid invoices to that point in time, the plaintiff was clearly dissatisfied with the outcome that had been achieved. As I have found in respect of this component, the design imparted by the plaintiff had a clear expectation as to an outcome, in terms of a level finish but allowing a tolerance of an upward bow of no more than 10mm. That defines what the defendant contracted to direct its efforts towards constructing and whilst its breach of that contract lies in a failure to take or exercise reasonable care or workmanship towards achieving that outcome, as opposed to a mere failure to do so, it nevertheless remains relevant to the issue of loss, that the expected outcome and what the plaintiff was relying on the defendant to produce, was not achieved. Further, the evidence is that Mr Ide has since constructed a replacement laser bucket floor.<sup>81</sup>
- [72] Accordingly, the uncontradicted evidence of Mr Ide that the component constructed by the defendant as the laser bucket floor, was of no use to the plaintiff, should be accepted.<sup>82</sup> It is therefore apparent that the plaintiff has suffered loss. However there are further issues as to the measure of that loss.
- [73] Next and as correctly pointed out by the defendant, the plaintiff's pleading was as to damage in the sense of the cost of replacement of the laser bucket floor, but such a measure of damage has not been established by the plaintiff.<sup>83</sup> However it was also

<sup>&</sup>lt;sup>80</sup> A contention upon which the defendant would bear the onus of proof: eg see *TCN Channel 9 Pty Ltd v Hayden Enterprises Pty Ltd* (1989) 16 NSWR 130 at 158 and *Wenkert v Pitman* (1998) 46 NSWR 502 at 523.

<sup>&</sup>lt;sup>81</sup> T2-20.44 - 2-21.10.

<sup>&</sup>lt;sup>82</sup> T1-109.14-40.

<sup>&</sup>lt;sup>83</sup> Neither, as was pointed out by the defendant, was this explained. A problem may have been the complications of valuing the work of Mr Ide in the construction of the replacement component and further such an approach would have required that an equivalent design was adopted.

conceded that it would have been open to the plaintiff to seek to establish the cost of the unusable component, as an appropriate measure of its damages. In this regard it can be noted that in *The Commonwealth v Amann Pty Ltd*, it was observed:

"... The expressions 'expectation damages', 'damages for loss of profits', 'reliance damages' and 'damages for wasted expenditure' are simply manifestations of the central principle enunciated in *Robinson* v *Harman* rather than discrete and truly alternative measures of damages which a party not in breach may elect to claim."<sup>84</sup>

[74] The general principle in respect of measuring damages for breach of contract, as stated in *Robinson v Harmon*, is:

"The rule of common law is, that where a party sustains a loss by reason of a breach of contract, he is, so far as money can do it, to be placed in the same situation, with respect to damages, as if the contract had been performed."<sup>85</sup>

- [75] Once it is accepted that the plaintiff has been occasioned loss by the defendant's breach of contract, it is necessary to assess or measure that damage, as far as the evidence will allow. The onus is on the plaintiff and notwithstanding that it departs from its particularised case, the plaintiff seeks to discharge that onus by reference to aspects of the evidence which can come as no surprise or disadvantage to the defendant and apart from pointing out the departure, the defendant did not identify any particular consequence of that, in the conduct of the trial or otherwise.
- [76] As to the wasted cost of construction, the plaintiff relies upon the evidence as to the defendant's invoices, as they were relied upon to support the defendant's counterclaim. There was some contradiction in the plaintiff's position in this respect, in the sense that as far as the defendant's reliance upon these invoices was concerned there was a challenge to the weight that could be placed upon them and the evidence of Mrs Hale, who both produced them and proved them in evidence. This was asserted to be because of the absence of the source documents such as the timesheets and invoices for supplies. There was also an issue raised with respect to the charge made for Mr Ide's use of resources but no issue had been raised by Mr Ide about this before the contract was terminated and in respect of the paid invoices. However and not only is the point met by the authorities to which the defendant referred<sup>86</sup> but the plaintiff seeks to rely on the agreed figure of \$12,987.59, as drawn from these

<sup>&</sup>lt;sup>84</sup> (1991) 174 CLR 64, at [82] per Mason CJ and Dawson J.

<sup>&</sup>lt;sup>85</sup> (1848) 1 Ex 850 at 855.

<sup>&</sup>lt;sup>86</sup> Placer (Granny Smith) Pty Ltd and Thiess Contractors Pty Ltd (2003) ALR 257 and Miccon Hire Pty Ltd (in liquidation) and Birla Mt Gordon Pty Ltd [2013] QSC 139 at [22]-[25].

invoices, in relation to the wasted costs of the construction of the unusable laser floor bucket, in the discharge of its onus in proof of its damages. In the circumstances that is the most appropriate measure of the plaintiff's damages in this regard.

- As to the cost of the steel incorporated into this unusable item, the plaintiff relies upon a quotation obtained on 7 January 2008 and as to the cost, at that time, of replacing the steel that was used in the construction of the unusable item, in the sum of \$18,710.43.<sup>87</sup> Again, the defendant is critical of this approach. First it is correctly pointed out that it is simply unexplained as to why the actual cost of the steel that was delivered to the defendant's site and used in the construction of this item, was not established. Secondly, it is noted that although it was Mr Ide's evidence that this quotation was obtained in respect of the cost of replacement steel, so that he could rebuild this component, there was no proof as to the actual cost of the steel used in the replacement component. Again it is contended that this also remained unexplained by the plaintiff.
- [78] However it must also be noted that any lack of explanation about which the defendant complains, is also in the context of the absence of cross-examination about such issues. The onus is of course on the plaintiff and whilst there are obviously unsatisfactory aspects of the evidence in this respect, I am inclined to accept the plaintiff's submission that this is the best evidence before the Court as to a reasonable measure of the plaintiff's loss in respect of the steel incorporated in the unusable component. In particular it can be noted that this is an estimation of that loss at a time which was reasonably proximate to the point of the breach and termination of the contract.
- [79] Accordingly, the assessment of the plaintiff's damages is:

\$665.50	less scrap value of steel
\$31,698.02	
\$12,987.59	for the wasted cost of construction
\$18,710.43	for the value of wasted steel

<sup>&</sup>lt;sup>87</sup> See Exhibit 1, at pp 114-5 and T1-60.5-24.

## <u>\$10,550.54</u> less unpaid invoices

# <u>\$20,481.98</u>

# Interest

- [80] As to an allowance for interest, ordinarily that would be allowed from the date of accrual of loss, as the function of such an award is as compensation for loss by "being kept out" of money from such a point.<sup>88</sup> In this case and although it was imprecise, the evidence is that the contract was breached and then terminated in late 2007 and then the plaintiff collected it's steel, including as constructed into the components which have been discussed, from the defendant's premises. On that basis, the relevant period might be about seven and a half years.
- [81] Although the defendant conceded that recovery in respect of the work for which payment had been made, would be allowed for that whole period, it otherwise mounted an argument that recovery in respect of the cost of the replacement steel might only be allowed from the point, in 2011, when Mr Ide said that he constructed the replacement laser bucket floor. The basis of that contention was that notwithstanding the absence of direct evidence to this effect, it might be expected that he then incurred the cost of the replacement steel.
- [82] However and particularly where it might just as much be expected that the plaintiff incurred the cost of the steel that was used in the performance of the contract, sometime in 2007 and where, as it has been found, the January 2008 quotation may be accepted as an appropriate measure of that loss, in the absence of better evidence, it is more appropriate to allow interest for the whole period, on all of the plaintiff's damages.
- <sup>[83]</sup> However there is also difficulty in determining the precise period for such an allowance. The last of the invoices of the defendant is dated 11 July 2007 and relates to work performed up to 14 June 2007.<sup>89</sup> It was common ground that after a period, during which some attempt was made to rectify the identified problems, eventually Mr Ide took the components from the defendant's premises to his own. Mr Ide's evidence was that by September or October 2007, he was concerned about his position

<sup>&</sup>lt;sup>88</sup> *MBP* (*SA*) *Pty Ltd v Gogic* (1991) 171 CLR 657 at 663.

<sup>&</sup>lt;sup>89</sup> See Ex 1 at p 79 and Ex 8.

and that by November, Mr Peter Hale had indicated that he did not know how to fix the problems and that he then removed the items.<sup>90</sup>

- [84] In these circumstances my inclination is to allow interest on all damages from 1 December 2007, which will be for a period approaching seven and a half years and to do so by taking guidance from the methodology applied in Practice Direction No.6 of 2013. In particular, by reference to the prevailing cash rates through this lengthy period and during which there has been some substantial variation as to such rates.
- <sup>[85]</sup> So far, I have dealt with the extent to which the issue of interest was engaged in the submissions of the parties and it can otherwise be noted that notwithstanding interest is claimed<sup>91</sup> and the requirements of rule 159 of the *Uniform Civil Procedure Rules 1999*, there is no reference made to the interest claim, or the basis of it, in the plaintiff's pleadings. It will, however, be necessary to further hear the parties, on costs, when this judgment is delivered and accordingly, I will also allow further submissions as to the issue of interest.

# Conclusion

[86] At this point it is only necessary to note that there will be judgment for the plaintiff for a sum that would include damages assessed in the amount of \$20,481.98 and that the parties will be heard further as to interest and costs.

<sup>&</sup>lt;sup>90</sup> T 1-88.39 – 1-89.44.

<sup>&</sup>lt;sup>91</sup> See Claim filed on 30 May 2008.