

What is a latent defect?

A latent defect has been judicially defined under English law as, a defect which could not be discovered on such examination as a reasonably careful, skilled man would make.

Both the ITC, Hulls, and the American Institute Hull Clauses, provide cover in their standard form for any loss or damage caused by “any latent defect in the machinery or hull” and sustained during the currency of the policy. At face value it could be suggested that this peril covers loss or damage resulting from any form of hidden defect in the machinery or hull. However, the Courts have imposed limitations on the generality of the wording.

Jackson v. Mumford [1902] concerned a novel marine engine design, trying to attain very high power with the least possible weight. The design included a hollow connecting rod that broke during trials. It was held that the con rod, although itself sound, was unsuitable to meet the conditions of service required in that particular vessel. The assured argued that a weakness in the design that could not be perceived by ordinary calculation, was a latent defect within the meaning of the policy. However, the Judge said that although no negligence was imputed to the designer, the needful degree of strength required of the con rod was greatly underestimated and he held that this did not result in a ‘defect in the machinery’, as provided by the clause because it did not cover the erroneous judgement of the designer as to the effect of the strain which his machinery will have to resist, the machinery itself being faultless, the workmanship faultless, and the construction precisely that which the designer intended it to be.

This judgement reminds us that, without specific wording, insurance is not intended to provide a product guarantee. There has to be some accident, some fortuity that causes loss or damage.

Jackson v. Mumford included obiter dicta to the effect that, the phrase ‘defect in machinery’ means a defect of material, in respect either of its original or after-acquired composition. As a consequence, the view was held for many years that the word ‘defect’ was limited to a ‘defect in material’ and that damage caused by a weakness or defect in design was not within the term ‘latent defect’.

This view of the limits of the expression ‘latent defect’ prevailed until The “Caribbean Sea” was heard in 1979. This case concerned the loss of a 19 year old tanker. A particular type of welding was used in way of a main sea suction valve that was a source of loss of fatigue strength, although this was not generally known when the ship was built. As a result a fatigue crack developed. This led in turn to a fracture in way of the underwater valve and the subsequent loss of the vessel.



The Judge in this case asked whether, in considering whether there was a defect in the machinery or hull, one is concerned with the actual state of the machinery or hull rather than the historical reason why it is in that state. The Judge held that if there can properly be said to be a defect in the machinery or hull and that defect was the proximate cause of the loss, it would seem not to matter that it had come into existence by reason of, poor design, or poor construction, or poor repair, unless other wording precluded recovery (such as a due diligence provision).

The finding in Jackson v. Mumford was considered in The “Caribbean Sea”. The Court noted that the dictum in the earlier case with regard to a ‘defect in material’ would not exclude a defect of material, for example in its after-acquired condition, resulting from a defect in design. The Court questioned the narrowness of the definition of ‘defect in machinery’, whether if machinery had been wrongly assembled, would that not, on the ordinary meaning of the words, be a ‘defect in machinery’?



What if machinery or the hull of a ship is so designed or constructed as to be inadequate for the task required? Or the ship is subjected to work for which it is, by reason of the inadequacy in design, unsuitable and loss or damage results? The judgement in The “Caribbean Sea” suggests that inadequacy of a particular part may constitute a shortcoming in the machinery or hull, rather than a defect. On the basis of these comments, possibly the hollow con rod, as considered in Jackson v. Mumford, might be regarded as a shortcoming in the machinery, rather than a defect therein, the concept being, with hindsight, inadequate for the intended task..

The question, therefore, of whether loss or damage has been brought about by a defect in the machinery or hull or by a shortcoming, appears to be a question of degree. The effect of The “Caribbean Sea” is that a broader view of the words - any latent defect in the machinery or hull - can now be supported by this authority and which might be said to be more in accord with commercial reality.

At the beginning of the article, we quoted the test for latency as being a defect that could not be discovered on such examination as a reasonably careful, skilled man would make. What if the defect could not have been discovered by the assured but may have been discoverable by a manufacturer or seller of the part containing the defect? Can it be argued that the peril should be restricted to those instances where no one reasonably could have known of the defect?

Two English law cases appear to dispel this narrowing of the test of latency. The first is Hutchins Bros. v. Royal Exchange Assurance Corpn. [1911]. A foundry that had supplied the casting for a vessel’s stern frame in 1906, deliberately concealed the fact that shrinkage cracks occurred when the metals used to make the casting cooled. Their deception was successful and the defect in the stern frame did not become patent until three years later. The Court held that the condition of the vessel’s stern frame was a latent defect that had become patent.

The second case is the more recent, “Nukila” [1997]. The Court of Appeal judgement noted the original defect as follows. The circumferential welds attaching the top plates of the spud cans were not properly profiled. The classification society supervising the building of the mobile self-elevating accommodation and work platform, required all the relevant welding to be in accordance with their rules. The Court noted that the inadequately profiled welds were in a high stress concentration location and the poor condition of the welds would increase this concentration excessively and be likely to shorten the fatigue life of the structure and lead to fatigue cracking. The Court noted that over the past 40 years metal fatigue has become a well-understood process. It was stated that a badly designed or made weld may lead to a concentration of stress which will then over a period time cause the condition of metal fatigue to arise. It did in this case, leading to fatigue cracks that in turn gave rise to fractures in the parent metal. The judgements given did not question that the minute fatigue cracks, undiscoverable by the assured, were not latent defects, once they had concluded that damage consequential upon defective circumstantial flawed welds had arisen.

The conclusion to be drawn from the two quoted cases is that what is important in determining whether or not a defect is latent is whether or not it is latent to the assured.