

PREDICTIVE STUDY ON: CRICKET BAT WITH DETACHABLE HANDLE

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Abstract

Even though in-spite of the fact that the sports of cricket is 500 year old, there has been little scientific researches done to study the bat. Since the 17th century cricket bat has been changed various times; the earliest cricket bats were made from a single piece of wood. The gradual development of cricket bat made this single piece of wood in to two parts i.e. the blade and the handle. Over the last 3 years there has been a spate of innovation in cricket bat handles to improve bat performance. But this time the guardian of the rules MCC decided the trend would tilt the balance in favor of the batsman too much, where the ball, pitches and boundaries have remained unchanged. So they modified Rule 6, and allow only 10% of 'non-wood' material in the handle. So by keeping in mind the rules of cricket bat characteristics a new recent development takes place that would be dominant in the era of modern cricket. This innovation further bifurcates the handle in two parts and the blade will remain same as it was (Ali, S. & Murtaza, S. T. 2014).

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Introduction

Today's cricket has transformed from 5-days test matches to One Days to T-20s, that is much faster and more exciting version of cricket is seen now-a-days and shall be more faster.

New kinds of materials are needed to make bats that will help batsmen to score more 4s and 6s. So be ready to see new kinds of cricket bats being tested out and hopefully this time they shall be fairly available to all without any type of restrictions and within the laws of MCC (MCC 2008). Because over the years cricket has incorporated into the game a few of latest technological advances available and there have been some rejection of technology, such as use of Aluminum Cricket Bat (Sengupta, A. 2012), Kookaburra Beast (a thin sheet of glass fiber across the back of the bat), The Carbon Fiber Composite Handle, Mongoose MMi3 (Curtis, D. 2009) etc. but generally the ICC have been rightly cautious about making changes to the game that will impact the players and spectators. All these were sadly exposed by the MCC in 2008 who took a rather adversary view of technology, and change Law 6 (the bat) to ban them.

There's a bit of chemistry and physics involved in the manufacturing of cricket bats. As the era of modernization, industrialization and digitalization is at its peak, thus everyone wants to tested out and implement in context of some new and old laws for maintaining the integrity and balance between bat and ball with applying basic principles and theories of physics for manufacturing or innovating the equipments i.e. the cricket bat handle. Using some new kind of materials in it and stand on the platform of trust and flexible foundations.

The credibility of historical performances in all over the world undoubtedly goes to the quality of cricket. Anyone would be in dilemma as far as quality cricket is concerned and would have bifurcations. Besides the technical knowledge of players, the rest of the capability depends on the equipment that he used. Here we deal with the tangible part of success which includes the cricket bat with detachable handle with its varying lengths.

We take care about the affordability parts which should be accommodative to everyone's pocket.

The main objective of making this type of cricket bat follows the human interest which primarily relies on the batsman satisfaction.

There are a lot of decision which are made by the players when they are going to play, practice or purchasing new bats that which model, style, long handle, short handle, heavyweight or lightweight bats are required to the need of an individual player.

The choice of purchasing bat is entirely an individual issue that relates to both personal preference and finance. So as the researchers from the field of Physical Education & mechanical engineering are integral parts of sports development, and has been trying every possible choice to meet and satisfy to the individual players decision making process for purchasing the new cricket bat for any level of players i.e. for beginners, intermediate and proficient level of standard within the budget. When the players knows this proficiency or the capacity to make runs or save the wicket in the demanding situation, then he has to select best possible equipments i.e the bat, which give support to the batsman for making innings long and safe and score more runs.

We have carried out an exhaustive testing of materials that best suited for detaching the handle from the blade on all potential new cricket bats and models.

This testing program quite literally watched-out by the experts panel including (cricket experts, mechanical engineers, craftsman) going around the cricket-based industries, mechanical testing labs and buying materials and testing new modified cricket bats for potential inclusion into our range. First and foremost on our list of 'Must have' is the quality of material which gives best performance and reliable result in playing with modified cricket bat with detachable handle of its varying lengths.

Conclusion

The cricket bat, a thing of beauty and power, has struggled to evolve from its 1860's incarnation. In shape and style it changes continuously as bat makers look to differentiate themselves, driven by rapacious need to create new models for each seasons. In structure, the bat barley moved, despite regular attempts to add new materials, technologies and techniques. Law 6(the bat) pretty much consigns the blade to being a lovely carved piece of solid willow for the rest of time. On paper and in practice the only place for experimentation and innovation is in the handle and the splice.What about reverting back to the truly splice less bat? A full willow bat and a handle but with the handle having some novel hollowing out and in fill with appropriate materials to provide damping and resilience to breaking. With modern computer-aided machining the shape is easily repeatedly achieved but it needs to start with longer clefts. Keeping to the 10% non-wood materials in Law 6 (the bat) might be challenging.

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