

United States Golf Association Golf House PO Box 708 Far Hills, NJ 07931

# July 27, 2009 Notice to Manufacturers

### **Groove Geometry**

### Introduction

Recent submissions, patent literature, and communications from some manufacturers indicate that certain aspects of the new 2010 Rule placing additional limitations on grooves may not be completely clear. The purpose of this document is to provide clarification of the USGA's interpretation of acceptable groove geometries and to propose some additional requirements to prevent cross-sections or features that might circumvent the intent of the new groove specifications.

Manufacturers are reminded of the intent of the new groove regulations as stated in the February 27, 2007 Notice to Manufacturers:

The objective of this change is to limit the effectiveness of grooves on shots from the rough to the effect of a traditional V-groove design.

# **Current USGA Interpretations of 2010 Groove Specifications**

The groove starts where there is a significant departure from the plane of the face ("land") and this is joined to the wall of the groove via the edge. The wall continues to the base of the groove.

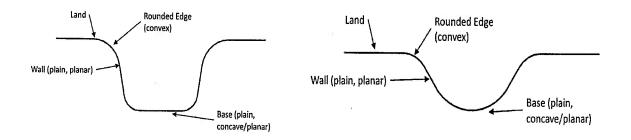
The edge must be substantially in the form of a round (having an effective radius of not less than 0.010", as determined by the two circles method, and not greater than 0.020"), which comprises an arc to which the groove wall and the land are tangential. As such, the ends of the "round" coincide with the ends of the edge - one end marking the joint to the land and one end marking the start of the groove wall. To further clarify, this means that groove edges must be a convex curve and must not include serrations, gear teeth or other similar features.

The USGA reserves the right to define the extent of the groove edge. Edge configurations, including (but not limited to) chamfers, fillets, notches, etc. do not conform to the Rules since they are not in the form of a round. An allowance may be made for edge regions not strictly fulfilling this requirement as a result of production variations, but any such variations must be minimal and not part of the club's intended design.

### **Proposed Additional Requirements**

The USGA proposes that the following two requirements are introduced to define with greater precision permissible groove geometries:

- (i) The wall of the groove must be substantially "plain" and "planar". This would disallow features such as bends, indentations in or protrusions from the wall.
- (ii) The base of the groove must also be substantially "plain" and join the two opposing walls of the groove using a concave shape or a plane.



Illustrative examples of permissible grooves

## Implementation of the Additional Requirements

Since the intent of the new Rule has been made clear, and since the majority of clubs being submitted for evaluation already meet these additional requirements, the USGA does not consider this to be a substantial addition to the new groove specifications which become effective January 1, 2010. Therefore, if adopted, these additional requirements would also be effective from January 1, 2010.

#### Comments

Manufacturers are invited to submit their comments on this proposal as soon as possible. Written comments regarding the proposed additional requirements should be sent to the USGA, attention Dick Rugge, P.O. Box 708, Far Hills, NJ 07931, Fax 908-234-0138, e-mail: <a href="mailto:drugge@usga.org">drugge@usga.org</a>. Written comments received later than August 31, 2009 will not be considered.