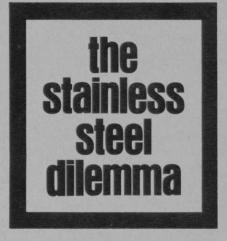
Pros heading to the PGA Merchandise Show will find that stainless steel is as scarce as gold



he quandary over stainless steel continues into 1970. Only this year, along with asking when they will be available, the golf industry is wondering what problems are stalling their production.

Notification by True Temper Corp., leading United States manufacturer of shafts, that it would delay production and shipment of stainless steel shafts until further notice, caught some golf equipment companies off guard. A few had already included stainless steel shafted models in their 1970 catalogues, and all orders for them reportedly had to be returned.

In a statement to GOLFDOM, Gurdon Leslie, True Temper's vice president for Tubular Products, said, "We have delayed deliveries of the stainless steel shafts for the present time because we couldn't get consistent production within the timetable given to us." He added that "it has never been our policy... to go to market with a product that has failed to meet our performance specifications consistently and satisfactorily."

Commenting on the company's next move, Leslie indicated that they were "going back to the drawing boards" with stainless steel shafts. "We may have manufacturing problems; we may have materials problems. We frankly don't know which or if both. All we know for sure is that

the materials and designs and processes we tried did not produce reliable, satisfactory shafts."

Leslie explained that the shafts failed to meet two specifications consistently while undergoing the permanent deflection test, which measures resistance to bending, and the impact test, which measures resistance to breaking.

"Our specifications on the deflection test call for putting a shaft in a fixture which simulates the golf hosel. We, then, come back 21 or 22 inches and apply a 24-pound weight on a shaft for irons for one minute and a 15-pound weight on a shaft for woods for one minute. This gives the shaft a permanent set. Our specification says that set cannot be more than 0.1 inch."

The impact test calls for "sections three to four inches long to be cut from the shaft," according to Leslie. "These are put into a fixture and the force required for a swinging hammer to break the specimen is recorded. Our specification says this force must be 20 foot-pounds or, more."

On the question of when the shafts might be available, Leslie replied that "there is simply no way to predict when we will have satisfactory stainless steel shafts ready for the market...We are naturally disappointed that we were not able to provide these new stainless shafts within the time available to us for this season. But, we are also proud that

we had the courage not to sell a product that was less than completely and reliably proven."

As a result of True Temper's pull-back on production, it appears that, with the exception of one manufacturer, aluminum, conventional steel and lightweight steel shafts will be the offerings from major golf club companies this season. A.G. Spalding & Bros., Inc., however, is including in its 1970 line "Top-Flite" clubs with imported stainless steel shafts, made to the club manufacturer's specifications. These shafts are being manufactured by Sandvik Steel Works, according to a spokesman for Spalding. Sandvik stainless golf shafts are made of a new mar-aging steel alloy, which is claimed to have superior corrosion resistance and permits the manufacture of woods and irons with less total weight, but greater clubhead weight for more power and distance. At press time, however, information was unavailable on the testing procedures which were used by Sandvik and Spalding.

A spokesman at the Canadian branch of Sandvik said he had been informed that two other major United States manufacturers of golf clubs had indicated they would like to place an order with Sankvik. However, the spokesman did not think the Swedish firm has the capability to handle production orders for others right now.