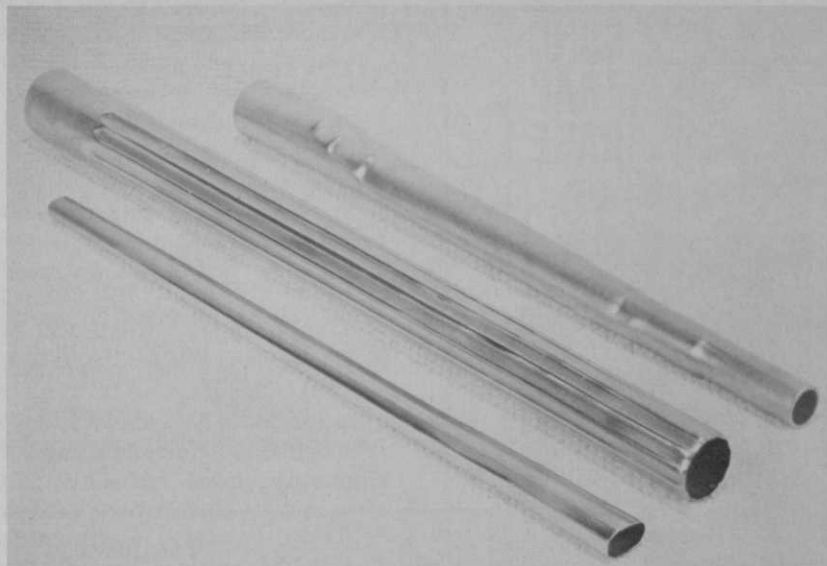


A new process for making tubular shafts

*"Economically
unfeasible,"
Superform process
may point the way to
a new method of
manufacturing shafts*



"Superform" is the name of a newly formed company and a new process, available for licensing, that is a new method of manufacturing a wide variety of structural metals and alloys in tapered or straight hollow tubular shapes, including golf club shafts.

The company is under the mandate of Kearney-National, Superform, Inc., will offer the industry a unique metal process that will result in significant savings in this type of development. According to Martin H. Dubilier, president of Kearney-National, the Superform will offer the industry a unique metal process that will result in significant savings in this type of development. According to Kearney-National, the process consists of a series of inventions that makes it possible to form a golf club shaft in only one draw "in contrast to the 15 to 20 draws that would be necessary to make a shaft by other methods." In addition, a company spokesman said that the cost of the die used in the "Superform" process is almost "insignificant" and can be re-used.

A key feature of the new process, according to the company's announcement, is a die that expands and conforms to the shape of a mandrel, or core, inserted into a tube blank.

The company spokesman said that at this point no licensing had been secured for the process. George Manning, manager of technical sales and services for True

Temper Corp., the leading manufacturer of golf club shafts, told GOLFDOM that his company had examined such a process and concluded that its present economical basis was unfeasible for golf club shaft manufacture.

The "Superform" process has been used successfully to provide tapered and straight hollow shapes in all configurations and combinations of round, oval, square, rectangular, hexagonal and special shapes. These same shapes have been made in a wide variety of wall thickness configurations and combinations. Materials tapered and shaped by the process include: alloy and stainless steels; nickel, iron and cobalt-base alloys; precipitation-hardening stainless steels; titanium alloys; and refractory-metal alloys.

Some of the marketing areas which have already been explored by Kearney-National are aerospace, airframe and transportation products such as rotor spars, helicopter blades and jet thrust chamber tubes; rocket shrouds, housing and nozzles, axles, drive shafts, and turbine blades; architectural beams, power poles, light poles, and brackets and flagpoles; sporting goods such as boat masts, golf shafts, ski poles and gun barrels; marine products such as antennas, masts and booms; chemical products such as heat exchangers and tubing; and industrial equipment for pointing, metal gathering, end forming and internal forming. □