

Socket Manufacturing Process

A key feature of GEDORE'S socket manufacture is the use of chrome vanadium steel in a hot forging process. As the heated metal is forged, the grains are bent to follow the shape of the forging die, thus maintaining an unbroken grain structure throughout the article. This grain structure and the resulting elastic and toughness properties of a GEDORE socket can easily be compared to the fibrous resilience of a tree branch.

As chrome vanadium steel cannot be cold forged, GEDORE'S competitors using cold forging processes are forced to use metallurgically modified steels to accommodate this type of manufacture, resulting in inferior elastic and toughness properties.

In summary

GEDORE sockets are hot forged to obtain a superior strength to weight ratio.

Competitor sockets are cold forged primarily to reduce manufacturing cost.



1.

Blank cropped to size from 31CrV3.



2.

Hot forged in the forging press.



3.

Machined to size.



4.

Outside diameter turned and knurled using high-tech CNC machinery.



5.

Counterbored, square socket drive fluted, manufacturer and socket size permanently stamped.



6.

Degreased - grease would destroy the protective gas atmosphere in hardening.



7.

Hardened under protective gas atmosphere, followed by annealing.



8.

Sand blasted in preparation for surface coating.



9.

Nickel plated and matt-chrome plated. The electrolytically applied nickel coating ensures corrosion protection. The electroplated chrome improves the look and gives the socket a perfect finish.

