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## Warm Forged Parts

For over 15 years in Ningbo China, SHENGFA Hardware has been focus on manufacturing and providing almost all metal and plastic components and parts all over the world to solve challenging manufacturing problems. SHENGFA manufactures the most durable metalworking process work to produce medium t small metal forgings that will not fail in the most critical conditions. SHENGFA will bring our years of experience and success to meet your most difficult design concerns. Work with us to gain confidence that comes with knowing you have selected the right metal parts business partner. Please believe that your products from SHENGFA will survive the harshest demands. Warm forged parts are one of the most recommending products we'd like to share with you.

What is Warm Forging?

There are still several forging techniques exist for producing metal parts. And of course, each of them has specific advantages or disadvantages on certain condition. Considering everything from the steel alloy material to the shape, size, and quantity of the final product is important when determining which method will produce the best results at a lowest cost. The three forging methods are cold forging, warm forging and hot forging.

Here is the definition of warm forging: with warm forging, the workpiece heats to a temperature that exceeds the metal's work hardening temperature yet remains low enough to prevent scale formation. This process leads to tighter dimensional tolerances than hot forging and increased workpiece ductility. Warm forging is defined as a process of plastically deforming a metal or an alloy such conditions of strain rate & temperature that the drawbacks of both cold working & hot working are greatly reduced & their advantages are combined together. However, warm forged parts are less ideal for more complex designs.



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When working with hard metals such as steel, warm or hot forging techniques are generally preferable since cold forging increases the risk of cracking or breaking. Warm forged parts become more and more popular during the last few years, especially as it leads to higher cost reductions by near net shape applications. Since warm forging has greater formability of heated materials, it also has greater accuracy.

The advantages accruing from warm forged parts are:

Reduced Energy Cost Better Grain Structure Better Surface Quality Closer Tolerances Marginal Machining Requirement



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To learn more about how our warm forged parts or custom forging solutions can solve your toughest design challenges, contact us or request a quote anytime.