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Results concerning manufacturing of tubular car components using hydroforming and hydroperforation processes

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Abstract

The purpose of the paper is to highlight the advantages that the automotive industry gains by using hydroforming and hydroperforation processes in automobile manufacturing. In recent years, progress has been made concerning the equipment and tools needed to carry out the hydroforming and hydroperforation processes. As these machines and tools have been perfected and produced on a large scale, becoming cheaper and more cost-effective were main scopes of the development, increasing the mass production, supporting the automotive industry, as well, is another goal. The improvement of the tools used and the equipment determined that these processes have to be extended for a quite large number of components of the vehicle, in the production of large series. A comparative analysis and advantages of the technology are presented regarding the impact on the environment of these processing, hydroforming, and hydroperforation processes, in relation to other traditional processing processes.

Keywords: hydroforming, hydroperforation, hydroforming tools, hydroperforation tools

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