

## **GEP STEEL MACHINING**

### Introduction:

Machining and fabrication of steel and stainless steel requires certain special techniques to ensure successful outcomes. These guidelines will provide some important considerations to be applied.

1. The wide range of steel and stainless grades available to industry need to be well considered. Machining characteristics differ across the grades and competent suppliers should be consulted when necessary.
2. As with all machining of all materials special considerations should be given to jigs and fixtures to hold the work properly. This will greatly facilitate safe and efficient machining.
3. Tool materials, design details such as angles, speeds and feed rates are a specialized field not to be underrated. To obtain optimum results consult as well with competent material suppliers and tool suppliers.
4. Heat effects from machining need careful consideration both from expansion effects and heat affected zones, when high tolerance parts are being machined. The specifications of parts should have detailed machining stages and full tool design details specified.
5. Final finishing and polishing effects are frequently required with stainless steel components or parts and these needs should also be carefully considered and documented.

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