Dura-Bar for Oil and Gas Applications

Dura-Bar continuous cast iron is an ideal material for many oil and gas industry applications, including those used in onshore and offshore completions and hydraulic fracturing. Although each application is unique, the core advantage of Dura-Bar is machinability in comparison to low to medium carbon steels. Dura-Bar can be machined at higher speeds and feeds allowing operators to yield more parts per hour at a lower total part cost.

Completion Tools

Dura-Bar gray iron is used extensively in well completions for the tools used to isolate stages; bridge plugs, frac plugs and packers. The material has the strength required to seal a well, but can also be effectively drilled out. For slips in particular, the flake graphite enables the material to break apart predictably during tool setting. Dura-Bar has continued to evolve its product line to meet the needs of the oil and gas market by adding a high-strength grade (G2S) and a highly pearlitic grade (G2P). Applications include: slips, rings, cones, retainers, and mandrels.

Frac Pumps

Frac pumps contain a number of components on both the power end and fluid end where Dura-Bar has demonstrated significant advantages over alternative materials. For example, pony rods and plungers can be machined as much as 45% faster with Dura-Bar ductile iron than carbon steel, and due to the heat transfer characteristics have a lower critical coating temperature. The end result is a high quality lower cost part. Applications include: pony rods, plungers, crossheads, seals, valves and valve seats.

Contact us today to discuss your application and how you can benefit from Dura-Bar.