CUSTOMER SUCCESS

Power Generation | Stainless Steel - 304







Hi-PerCarb 142P

Series 142P

Material

Stainless Steel - 304

Part Type

Stainless Flange

SGS Product

11.90mm Dia, 137 Degree Point Solid Carbide Drill

Competitor Product

0.4685" Dia. 1 Flute

Application Drilling

SGS Tool Information

- 0.4685" Cutting Dia.
- 1.5748" Usable Length
- 2.1654" Flute Length
- TX (Ti-NAMITE-X) Coating
- EDP: 66489

Goal

A metal fabrication facility was interested in a drill with increased tool life while decreasing cycle time and part costs overall.

Strategy

The customer sought to improve tool life and reduce cycle time from their current HSS drill. SGS recommended the Series 142P Drill, which allowed removal of the unnecessary peck cycle during testing—streamlining the process and optimizing performance.



Learn more about the Series 142P

Result

The implementation of the Series 142P Drill resulted in a **65%** reduction in the number of tools required. Machining cycle time decreased by **70%**, and the cost per part was reduced by **68%**. Overall, the customer achieved a total cost reduction of **85%**, generating annual savings of more than **\$4,300**.



| SGS Hi-PerCarb 142P (1-Flute |
|------------------------------|
| Competitor (1-Flute) |

Tools

| Cutting Dia. (DC) | RPM | SFM | IPM | IPR | Axial Depth (AP) | Coolant |
|-------------------|------|-----|------|--------|------------------|-----------------|
| 0.4685" | 1239 | 152 | 9.29 | 0.0075 | 0.9000" | Coolant Through |
| 0.4685" | 800 | 98 | 3.20 | 0.0040 | 0.9000" | Coolant Through |

Tools Required

♣65%

Machining Cycle Time

₹70%

Cost Per Part

♣ 68%











