

## CASE STUDY

Application: **Rail Truck Carriers**

Industry: **Transportation**

Material: **Low Carbon Steel**

Tool: **BSF Manual (Back Spot-Facer)**

Benefits: **Ease & replaces spec tooling**

**Challenge:** The task at hand is to perform a manual back counterbore operation with a diameter of  $\text{\O}1.870$ " (47.5mm) and a through hole of .807" (20.5mm) on a large 50 taper horizontal Machining Center, while utilizing flood coolant.

**Solution:** To address this challenge, HEULE recommended the utilization of their BSF G Series Manual Back counterbore tool. Operating at 409 RPM with a surface speed of 200 SFM and a feed rate of 0.002 inches per revolution (0.81 inches per minute), this tool has proven effective. With this setup, operators are able to complete 2-3 parts per shift, with each part requiring 6 holes.

**Results:** The adoption of the BSF G Series Manual Back counterbore tool has yielded significant improvements. It has replaced a special manual tool from a competitor, which had long lead times and expensive tooling. Unlike the previous tool that required manual assembly and disassembly after each hole operation, the BSF tool offers ease of use and a superior finish. Additionally, operators are able to avoid potential errors associated with manual assembly. The customer is highly satisfied with the results, evident from the purchase of a second tool size.



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Special Manual Cutter*

