



Wheel Loader Frames: Opening Drill®

The customer is drilling wheel loader frames made from A36 structural steel using a MAG Giddings & Lewis horizontal boring mill operating at 125 HP with 400 PSI (27.579 bar) through-tool coolant.

The customer needed a better way to complete this application. They asked for a solution to decrease cycle time and increase tool life.

The **Opening Drill®** completed the process with only one tool versus the two tools previously needed. The solution also eliminated lost time due to multiple tool changes, saving the customer both time and money.



		Measure	Competitor Bores	Opening Drill®
Product:	Opening Drill®	RPM	458	732
Objective:	(1) Decrease cycle time (2) Increase tool life	Feed Rate	0.006 IPR (0.152 mm/rev)	0.005 IPR (0.127 mm/rev)
Industry:	Heavy equipment	Penetration Rate	2.75 IPM (69.850 mm/min)	3.66 IPM (92.964 mm/min)
Part:	Wheel loader frames	Cycle Time	3 min 8 sec	1 min 11 sec
Material:	A36 structural steel	Tool Life	4 parts	9 parts
Hole Ø:	4.17" (105.918 mm)			
Hole Depth:	4.33" (109.982 mm)			



125% tool life increase

The Opening Drill® provided:

- ✓ Decreased cycle time
- ✓ Increased tool life

Copyright © 2021 Allied Machine and Engineering Corp.- All rights reserved.