

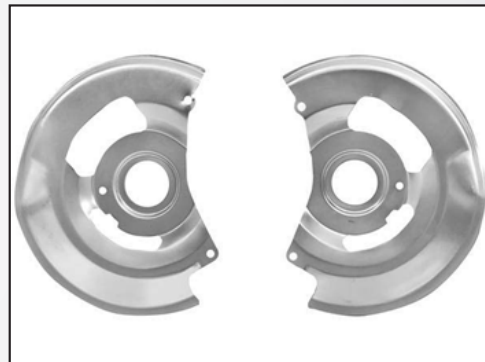


Mold Backing Plates: Revolution Drill® / Opening Drill®

The customer is machining A36 mold backing plates using a DOOSAN DB 130CX Horizontal Boring Mill with 200 PSI through tool coolant.

Competing with off-shore mold makers, the customer was looking for a way to speed up this job. Allied was asked if they had a solution.

The difference was amazing as Allied was able to reduce the operation time from hours to just minutes. Completion of 6 holes using **Revolution Drill®** took less than 3 minutes, while the **Opening Drill®** opened 3 holes from 2" to 3.6" in under 2 minutes, outperforming the competitive tooling by over 4 hours!



Product: Revolution Drill® Objective: Decrease cycle time Industry: Tool, mold, & die Part: Mold backing plates Material: A36 Hole Ø: (1) 2.0" - x3 (2) 3.6" - x3 Hole Depth: (1) 3.5" - x3 (2) 4.0" - x3	Measure	Competitor Tools	Revolution Drill®	Opening Drill®
	RPM	Tools used in process: (1) - Center drill (2) - Standard twist drill (3) - Circular interpolation tool	2,200	1,200
	Feed Rate		0.0055 IPR	0.0055 IPR
	Penetration Rate		12.1 IPM	6.6 IPM
	Cycle Time	4-8 hours	under 5 min	

- ▶ Revolution Drill
Holder: **R34X22-150L**
Inserts: **OP-05T308-H**
- ▶ Opening Drill
Holder: **OP3-1L-CV50**
Inserts: **OP-05T308-H**



Revolution Drill

Opening Drill

The Revolution and Opening Drill provided:



Decreased cycle time

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