TROUBLE SHOOTING GUIDE
ID Multi-Roller Tool

Result	Possible Reasons	Corrective Action
Bell mouth on entry and or exit	• Tool runout • Alignment between tool and part	• Zero the tool to reduce runout • Alignment between tool & part
Taper in the bore	• Tapered bore prior to burnishing • Incorrect feed rate *(feeding the tool too slow can cause the rolls to walk down the mandrel's taper and lose size)* • Attempting to shift too much stock from pre-burnished finish	• Inspect the pre-burnished bore • Set feed rate to recommended values
Cloudy finish	• Worn rolls • Dirty coolant • No lubrication *(coolant concentration too low)*	• Inspect the pre-burnished bore • Set feed rate to recommended values • Add coolant to increase concentration *(minimum 6%; 8%+ recommended)*
Size changing through the bore	• Incorrect feed rate *(feeding the tool too slow can cause the rolls to walk down the mandrel's taper and lose size)* • Removing the tool from the bore without using a rapid feed *(causes intermediate burnishing as you retract)*	• Set feed rate to recommended values • Increase speed when tool is removed from the bore
Spiral lines or nicks	• Excessive tool runout *(tool pushing too heavy on one side can cause the cage to drag while retracting)* • Material stuck to a roll or lodged inside the cage's cavity • Cage stops rotating / tool is locked up	• Correct the tool runout • Inspect the cage and rolls for material build-up, damage, or worn spots • Clean the tool and inspect for worn, damaged, or bent components that would prevent it from working correctly
Nicks on the part's face	• If the tool is rotating, the rolls will flare out to the tool's maximum size • If the tool is horizontal in a lathe, the bottom will sag	• Increase the lead chamfer (if possible) or a tight lipped cage may be required

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