What makes STF’s groove tools superior to other groovers?

With a goal of producing the best PCD groove tool in the industry, we set out more than six years ago developing and building custom machinery to grind polycrystalline diamond to a razor finish.

Starting first with the best composition of tungsten-carbide blank, we grind and polish the tool shank to near perfect flatness. We then braze a PCD segment to the end of the carbide using a high-strength brazing alloy.

After developing our own diamond grinding wheel, researching the best speeds, feeds and pressure to grind PCD, we finish grinding the diamond to within micron tolerance. The process is completed by an in-house edge preparation and checked with a laser measurement system.

The resulting tool produces a cut that routinely out-performs our competitors by tens of thousands of pistons, and eliminates inclination and parallelism problems which plague manufacturing engineers and operators.

We are so convinced that our groovers will outrun your current tooling that we will manufacture a complete set for your evaluation at no charge.