

How does Sovereign Fortune Force Work?

With Low Pressure Coolant (Flood Coolant) there are lots of problems.

Sovereign Fortune Force - High Clarity, High Force Coolant Delivery fixes 3 of those problems i.e. Heat, Chip Damage & Poor Lubrication at the cutting zone.

Heat, while Cutting Metal causes Super-Heated Steam much like in our Tea-Kettle.

Water at any Temperature above 100 deg. C is no more a Liquid it gets transformed into Vapor or Steam.

Water dropped on to a hot skeleton does not reach the surface instead it Rides on the Barrier Steam.

Physics of Metal Cutting causes much Higher Temperatures creating Enormous Steam Barrier. The Barrier Steam prevents the Low-Pressure Coolant (Flood Coolant) from Reaching the Point-of-Cut but cannot stop the Chips from falling back causing Chip damage both to Tool and the Work Piece.

One needs the Localized Pressure to Eliminate the Formation of Vapor while applying Coolant.

In order to Create Force though, one needs 2 elements i.e. Mass & Velocity.

$$\text{FORCE} = M * V$$

M – how much does it Weigh? Mass

V - how much fast is it Moving?Velocity

The **Sovereign Fortune Force** - High Clarity, High Force Coolant Delivery Pressurizes the Cutting Zone with Force to eliminate the Steam Barrier.

With **Sovereign Fortune Force** - High Clarity, High Force Coolant Delivery, you provide adequate Volume of Clean Coolant at High Velocity to Pressurize the Cutting Zone and Eliminate the Heat and vapor formation.

The **Sovereign Fortune Force** - High Clarity, High Force Coolant Delivery helps form Small Brittle Chips instead, of long curly chips.

These Small Brittle Chips brake much more easily and are Flushed out Effectively. Chips don't fall back in to Chip-Tool-Interface.

The **Sovereign Fortune Force** - High Clarity, High Force Coolant Delivery provides many times Greater Lubricity at the Point-of-Cut with its Volume Flow.

With Elimination of Heat, Vapor and Chip Damage, the Tools Wear Predictably and don't fail. The Metal Cutting Process thus becomes more Optimal, Predictable and Reliable.

With **Sovereign Fortune Force** - High Clarity, High Force Coolant Delivery, every bit of Coolant Energy goes where it is supposed to go in the most Appropriate Manner. This can never happen with Low Pressure Coolant.

With **Sovereign Fortune Force** - High Clarity, High Force Coolant Delivery you are sure of Greater Tool Life with Faster Speed and Feed with undoubtedly Superior Component Finish and Geometrical Tolerance.