Mechanical Seal Face Selection Matrix
By Application

Application	Face Materials (Rotating/Stationary) Car/Cer	Car/SiC (RB)	SiC/SiC (RB)	SiC/SiC (AS-GL)
High Purity Water	Satisfactory performance.	Superior performance	Unsatisfactory Performance	Marginal Performance
"Clean" Water	Satisfactory performance.	Superior performance	Unsatisfactory Performance	Satisfactory performance.
"Clean" Water with Low Level Dissolved Solids	Satisfactory performance.	Satisfactory performance.	Marginal Performance	Superior performance
Clean Water with High Level Dissolved Solids	Marginal Performance	Marginal Performance	Marginal Performance	Satisfactory performance.
Low Level Abrasives in Water	Unsatisfactory Performance	Marginal Performance	Marginal Performance	Satisfactory performance.
High Level Abrasives in Water	Unsatisfactory Performance	Unsatisfactory Performance	Marginal Performance	Marginal Performance

Legend

- Car/Cer - Carbon rotating vs. Ceramic stationary face.
- Car/SiC (RB) - Carbon rotating vs Silicon Carbide stationary face. Silicon Carbide is Reaction Bonded type.
- SiC/SiC (RB) - Silicon Carbide rotating vs Silicon Carbide stationary face. Both faces are Reaction Bonded type.
- SiC/SiC (AS-GL) - Silicon Carbide rotating vs Silicon Carbide Stationary face. Both faces are Alpha Sintered Graphite Loaded type.

This chart does not guarantee seal life expectancies. It is only to be used as a general guideline for seal face material selection.