







# Dursan® and SilcoNert® 2000 Coating Comparison Guide

PHYSICAL PROPERTIES	Dursan®	SilcoNert® 2000 (Sulfinert®)	304 Stainless Steel
Temperature range	-210C to +450C	-210C to +450C	Per tool
Pressure range	Limited by tool	Limited by tool	Per tool
Minimum Coating Thickness (nm)	500	120	N/A
Wear resistance (x10-5mm <sup>3</sup> /N m)	6.13	14.00	13.81
Relative wear resistance vs. stainless steel	2.25	0.99	1.00
Lubricity (coefficient of friction)	0.378	0.7	0.589
Relative lubricity vs. stainless steel	1.56	0.84	1.00
Ductility, flexibility	Good, flexible with steel	Good, flexible with steel	Per tool
Hydrophobicity/moisture resistance (contact angle)	 104	 80	 36
Relative moisture resistance vs. stainless steel	2.89	2.22	1.00
CHEMICAL INERTNESS PROPERTIES			
H <sub>2</sub> S/ Sulfur and sulfur compounds (50ppm H <sub>2</sub> S, 30 day recovery)	95%	97%	0%
Mercury and mercury compounds	Fair	Excellent	Poor
Ammonia	Fair	Good	Poor
Arsenic	N/A	Good	Poor
Allowable pH exposure	0-14	0-8	Weak acid-14
Acid Exposure (50ppm MSH 12 day stability)	85%	85%	0
Base Exposure (50ppm MSH 12 day stability)	95%	0	0
Restricted chemical exposure	HF	Bases, HF, Sulfuric	Per tool
Corrosion resistance			
ASTM G31, 6M HCl 22C, mils per year	1.86	16.31	389
Corrosion improvement factor vs. stainless steel	 209.80	 23.90	 1.00

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