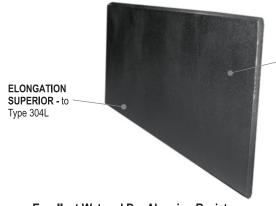
NITRONIC SX™

Stainless Steel Wear Plate

Nitronic SX[™] Stainless Steel is a nitrogen-strengthened stainless steel developed for applications requiring good level corrosion resistance and durability. The high workhardening rate Nitronic Sx[™] stainless steel results in a high-strength material with superior abrasion resistance and elongation superior to Type 304L.



NITRONIC SX STAINLESS STEEL - results in high-strength material with superior abrasion

- Excellent Wet and Dry Abrasion Resistance
- · Work Hardened Properties
- · Good Resistance to Corrosion

Abrasion / Wear Resistance

The below tables and figures demonstrate the outstanding corrosive wear resistance of Nitronic SX[™] under different sliding conditions.

Metal to Metal Wear*						
Alloy	Hardness Rockwell	Wear, mg/1000 cycles**				
		25 RPM	105 RPM	415 RPM		
Nitronic SX	B93	1.9	3.3	2.2		
304	B85	13.9	12.8	7.6		

Self-mated crossed cylinders, 16lbs (71 N), 10,000 or 40,000 cycles, unlubricated, in air, room temperature, corrected for density differences. Relative wear rate for comparison for alloys and not for design purposes.

Corrosive Wear in a Coal Mine Effluent*						
Alloy	Hardness Rockwell	Cumulative Volume Loss, mm ³				
		Period 1	Period 2	Period 3		
Nitronic SX	B93	1.31	4.27	7.13		
304	B85	1.58	4.98	8.3		

^{*} Test Conditions: Laboratory ball mill, 0.64 m/s, room temperature, Five 16-hour periods, pH 6.7, 2 liters of coal mine effluent, 0.2 liters pea gravel – 6.4mm + 3.2mm, duplicate sheets.





