

SURFACE FINISH DETAILS/IMPLICATIONS/SPECIFICATIONS:

1. STANDARD STAINLESS STEEL SHEET FINISH. THIS IS WHAT WE CALL 'STANDARD FINISH' ON A FABRICATED STAINLESS STEEL TANK.
 - A. #2B = ANNEALED, PICKLED, AND COLD ROLLED, GIVING A BRIGHT SMOOTH SURFACE ON THE SHEET METAL. WELD JOINT AREAS ARE SANDED AND POLISHED TO PROVIDE A SURFACE FINISH OF SIMILAR QUALITY, BUT WILL NOT LOOK EXACTLY THE SAME.

2. TYPICAL MECHANICALLY POLISHED VALUES: THESE FALL UNDER THE 'DELUXE FINISH' CATEGORY.
 - A. #4 = SANDED WITH 150 - 180 GRIT ABRASIVES, GIVING A SURFACE FINISH THAT HAS "GRAINLINES." NORMALLY RESULTS IN SURFACE ROUGHNESS VALUES OF 20 TO 40 MICRO-INCHES. THIS LEVEL OF FINISH IS SUITABLE FOR WETTED PARTS IN MOST PHARMACEUTICAL APPLICATIONS.
 - B. #7 AND #8 = SANDED WITH VERY FINE ABRASIVES, EQUIVALENT TO 300 - 400 GRIT, AND THEN POLISHED WITH A BUFFING COMPOUND. NORMALLY RESULTS IN SURFACE ROUGHNESS VALUES OF LESS THAN 25 MICRO-INCHES. SUITABLE FOR 99.9% OF THE MOST STRINGENT SANITARY REQUIREMENTS. LEAVES NO PITS OR VOIDS IN THE STAINLESS STEEL SURFACES WHICH ARE IN CONTACT WITH THE PRODUCT.

3. TYPICAL ELECTROPOLISHED VALUES: THIS ALSO FALLS UNDER THE 'DELUXE FINISH' CATEGORY BUT IS NOT INCLUDED AS NORMAL FINISHING. STAINLESS STEEL PARTS ARE FIRST MECHANICALLY POLISHED TO A HIGH LEVEL (#7 OR #8) THEN SENT TO A VENDOR THAT USES A CHEMICAL PROCESS TO FINELY SMOOTH OUT THE SURFACE OF THE MATERIAL. COMMON SURFACE FINISH VALUES ARE LESS THAN 15 MICRO-INCHES. THIS FINISH SPEC. IS CALLED OUT FOR VERY SENSITIVE PROCESS REQUIREMENTS, TYPICALLY IN THE BIO-PHARMACEUTICAL MARKET.