

Andron Stainless Corporation

Manufacturing High Quality Sanitary Stainless Steel Products for the Food, Dairy, Beverage, and Chemical Industries



Stainless Steel Fittings

Clamp & Butt Weld Fittings .5" to 12"
 Bevel Seat/John Perry Fittings & Ferrules 1" to 4"
 Eye-Line Fittings & Ferrules 1" to 6"
 Schedule 5 Clamp Fittings & Ferrules 1" to 8"
 AWF Fittings .5" to 6"



Stainless Steel Valves

Ball Valves - Butterfly Valves - Check Valves
 Valve Modifications - AL6XN & C22 Butterfly Valves
 Industrial Stainless Steel Ball Valves - Actuated Valves
 Valves Available in Various End Connection Types



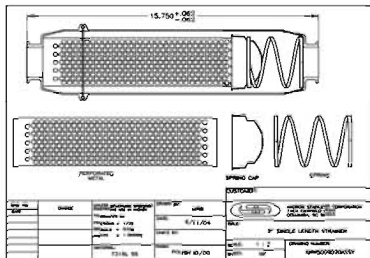
Gaskets

Buna - EPDM - Teflon - Viton - Silicone
 Orifice Plate - Screen - Metal Detectable - Specialty Teflon



Tubing

.5" to 6" T304/304L - T316/316L - A270 Polished ID/OD



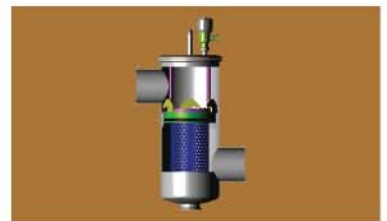
Strainers

Inline & Side Inlet 1" to 4"
 Basket Strainers - Duplex - Jacketed Strainers
 Hi Capacity Strainers - Y Strainers



Misc. Products

Manifold Assemblies - Instrument Tees - Camlock Fittings
 1.25" Fittings - 5" Ferrules - Spool Pieces - Weldments
 Jacketed Spool Pieces - Gauge Adapters - Sightglasses
 Pipe to Tube Adapters - Pacific Coast Threads
 Close Tolerance Fittings - Dip Tube Assemblies
 Large Radius Sweep Elbows - Hose Assemblies
 Hex Wrenches - Hangers - Flow Panels - U-Bends
 Pig Launchers - Product Recovery Systems
 Temperature Gauges - Pressure Gauges



Exotic Alloys

C22 - C276 - 317L - Inconel - 2205 - AL6XN - Titanium - Etc.



Custom Fabrication

Large Variety of Custom Capabilities Available
 Redesign or Replicate Existing Fittings
 Multiport Manifolds - Various Angle Bends
 Machined Pieces - Entire Tube Fitting System



Services Available

Mechanical Polishing - CNC Machining - Welding
 Fabrication - 3 Axis CNC Milling - 2D & 3D CAD Drawings
 In-House Engineering and Design - Fast Turn-Around

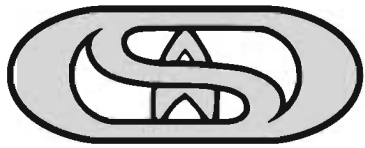
MEMBER OF:

International Association of Food Industry Suppliers



Visit us on the web at: www.andronstainless.com

7404 Fairfield Road
 Columbia, SC 29203
 Phone: (803) 754-8808
 Fax: (803) 754-8838
 Toll Free: 1-800-222-3312



Polish Terminology

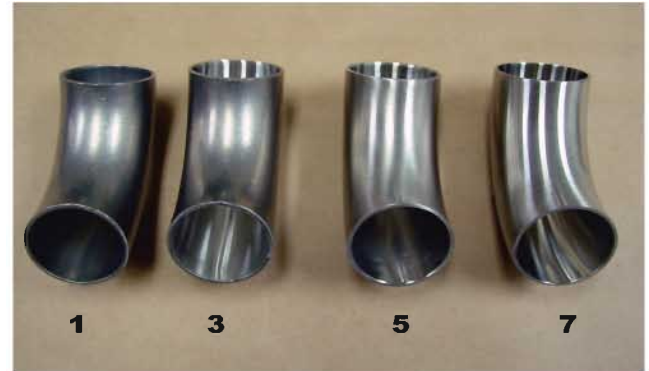
Within various industries related to metal working, polish terminology varies causing considerable confusion. This area is meant to define and outline Andron Stainless Corporation's interpretation of these different polish terms.

Andron Stainless Corporation's Polish Combinations

When calling out a polish type on our coding system, it is defined as a polish combination. There are four different polish combinations.

- 1 - Unpolished
- 3 - Polished on the inside only or ID
- 5 - Polished on the outside only or OD
- 7 - Polished on both the inside & outside ID/OD

304/304L Standard Polished Finish 32Ra ID / 32Ra OD
316/316L Standard Polished Finish 25RaID / 32Ra OD



We determine our polish finish using the Ra scale. Ra is defined as roughness average and is the most accurate measure of surface finish roughness. We measure the Ra using a surface roughness tester or profilometer. Often times the desired level of polish is called out in terms of grit. Below is a reference chart to cross reference grit to Ra.

Ra $\mu\text{in} / \mu\text{m}$	Grit	Rms $\mu\text{in} / \mu\text{m}$
43 - 48 / 1.09 - 1.22	120	48 - 54 / 1.22 - 1.37
30 - 35 / .76 - .89	150	34 - 39 / .86 - .99
23 - 28 / .58 - .71	180	26 - 32 / .66 - .81
15 - 20 / .38 - .51	240	17 - 23 / .43 - .58
9 - 13 / .23 - .33	320	10 - 15 / .25 - .38

Often used is the biopharm industry codes. These codes are also defined below.

Surface Finish Code	ID / OD Finish (Maximum Ra Allowed)	BPE Designation
PX	Unpolished / Unpolished	SF0
PZ	Unpolished / 32 Ra	SF0
PC	20 Ra Mechanical / Unpolished	SF1
PF	25 Ra Mechanical / Unpolished	SF2
PB	30 Ra Mechanical / Unpolished	SF3
PL	20 Ra Mechanical / 32 Ra	SF1
PT	25 Ra Mechanical / 32 Ra	SF2
PQ	30 Ra Mechanical / 32 Ra	SF3
PD	15 Ra Mechanical & Electropolished / Unpolished	SF4
PG	20 Ra Mechanical & Electropolished / Unpolished	SF5
PK	25 Ra Mechanical & Electropolished / Unpolished	SF6
PM	15 Ra Mechanical & Electropolished / 32 Ra	SF4
PO	20 Ra Mechanical & Electropolished / 32 Ra	SF5
PR	25 Ra Mechanical & Electropolished / 32 Ra	SF6