

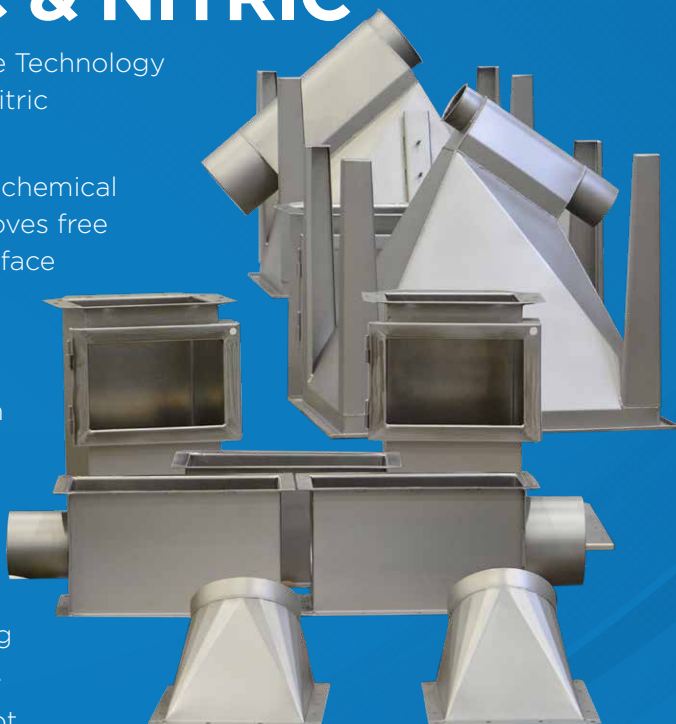
PASSIVATION/ CITRIC & NITRIC

Allegheny Surface Technology offers citric and nitric passivation.

Passivation is the chemical process that removes free irons from the surface of stainless steel.

This creates a chromium rich surface which can form an invisible inert (passive) oxide layer as soon as it is exposed to an oxygen-containing environment (air).

Passivation will not change the appearance of the stainless. If the stainless has been heat treated or welded, the resulting scale or discoloration must be removed by either abrasive methods or by pickling. Passivation will not cause any change to the surface roughness. To verify the effectiveness of the passivation, Allegheny Surface Technology applies saline, copper sulfate, and ferroxyl testing to ensure a successful passivation. The highest form of



passivation is electropolishing. Electropolishing is an electrochemical process. Due to its more aggressive nature, it results in a more prominent passive surface than nitric or citric passivation.

We can handle almost any size and shape. If you can't send it to us, we will come to you. We passivate vessels, pipes, tubing, manifolds, enclosures, and frames and architectural components, just to name a few.

TECHNICAL INFORMATION

At Allegheny Surface Technology we meet standards set by the following to better satisfy the needs and expectations of our customers.

ASTM B 912

ASTM A 380

ASTM A 967

ASME BPE 2015

AMS 2700

Whatever your surface finish requirements, AST is the one stop shop. New or used, your place or ours, we'll finish the job in time for you to do yours.

Note: The chart to the right is to be used for reference only. Material and processes can and will affect results.

Grit#	R _a Microinch Mechanical Polish	R _a Microinch Electropolish
60	80-140	60-130
80	50-75	30-65
120	35-45	20-40
150	25-40	15-35
180	20-30	10-25
240	15-25	8-20
320	10-20	5-18
400	<10	5-10
500	<7	3-7

π is approximately equal to 3.14

Radius = diameter / 2

1ft³ = 7.481 gallons

1ft³ = 28.23 liters

1 gallon = 3.785 liter



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