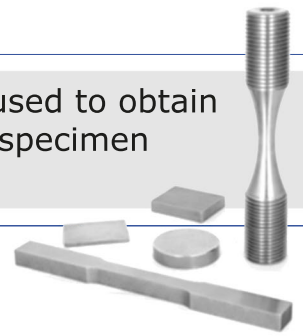


**SPECIMEN & TEST SAMPLE MACHINING
FROM AEROSPACE GRADE MATERIALS**

www.salloytech.com

A test coupon or simply a coupon is a small sample of the material used to obtain data of specific properties after the testing. More often it is called a specimen or just a sample.



Our Advantages



Quality Assurance

We maintain Quality Management System in accordance with AS9100 standard by qualified staff of internal auditors



Manufacturing processes

Using modern machining, loss and additive methods we ensure optimum price / performance ratio while meeting all requirements of the project.

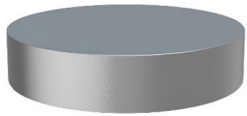


On time Delivery

Reliable processing from the design phase to the delivery to Customer through the Just-in-Time method.

Salloytech is one-stop source for high quality test coupons, specimens, samples and coupons machined from difficult-to-machine aerospace grade materials such as nickel and cobalt base superalloys (wrought, cast – inc. single crystal), titanium, and hardened steel.

Our experience includes manufacturing the specimens:



- Button for Adhesion, cohesion & bond strength test of coating

C-shape specimen for Stress Corrosion •



- Flat specimen for Tensile test

Panel for Hoffman Scratch Test •



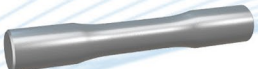
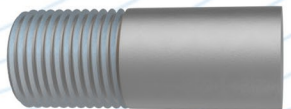
- Panel for Hardness test

Button for Cyclic Furnace Oxidation Test •



- Panel for Microstructure evaluation

Bond Cap External Thread •



- Round Specimen for Fatigue Test

Specimen for Fatigue test •



- Panel for Lap Shear Test

Bond Cap Internal Thread for Bond Strength Test of coatings •



- Panel for Bend Test



- Panel for Erosion Test

Test specimens manufactured by our developed technologies will allow you to:

- Obtain better test results for process qualification
- Improve reduced testing and sampling plan
- Stabilize statistical process control indicators
- Decrease warehouse inventory
- Receive continuous and timely deliveries

We guarantee delivery of high quality and functional products as a result of:

- Years of experience of manufacturing and testing in the aerospace industry, mainly surface engineering allow us to provide specimens with the highest quality requirements
- AS9100 certification for machining difficult-to-machine parts made of nickel & cobalt base superalloys, titanium, and hardened steel
- proven machining processes of nickel & cobalt base superalloys, titanium, and hardened steel
- fixed manufacturing processes for specimens preparation

Test coupons also called "test buttons" for tensile / bond strength test of coatings are our flagship product. We know how many variables are in testing and we do our best to minimize their influence on the test results.

Thanks to our proprietary manufacturing process we can make test buttons with tight tolerances up to 0.0004 inch or 0.01 mm TIR of:



flatness of flat surfaces



outside diameter and with:

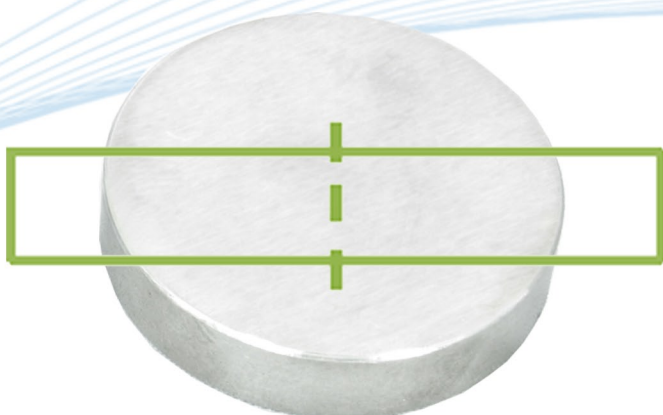


parallelism of flat surfaces

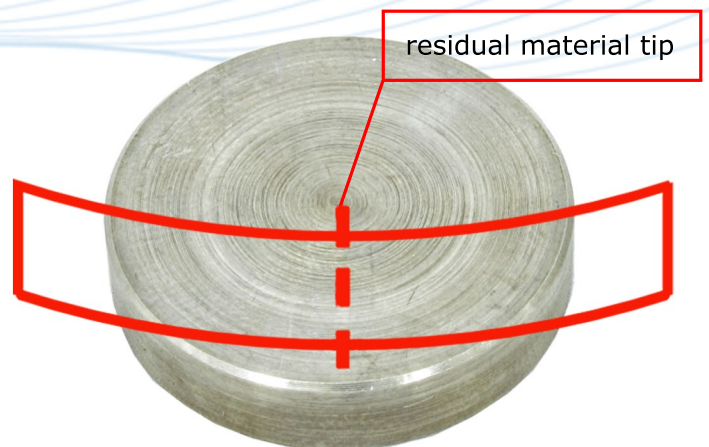


similar surface finish as the part, for the good roughness correlation of the part and the specimen after grit blasting.

TENSILE / BOND STRENGTH OF COATING TEST COUPON / BUTON



Salloytech fabrication



Conventional machining by turning

Why to use tight tolerance test coupons?

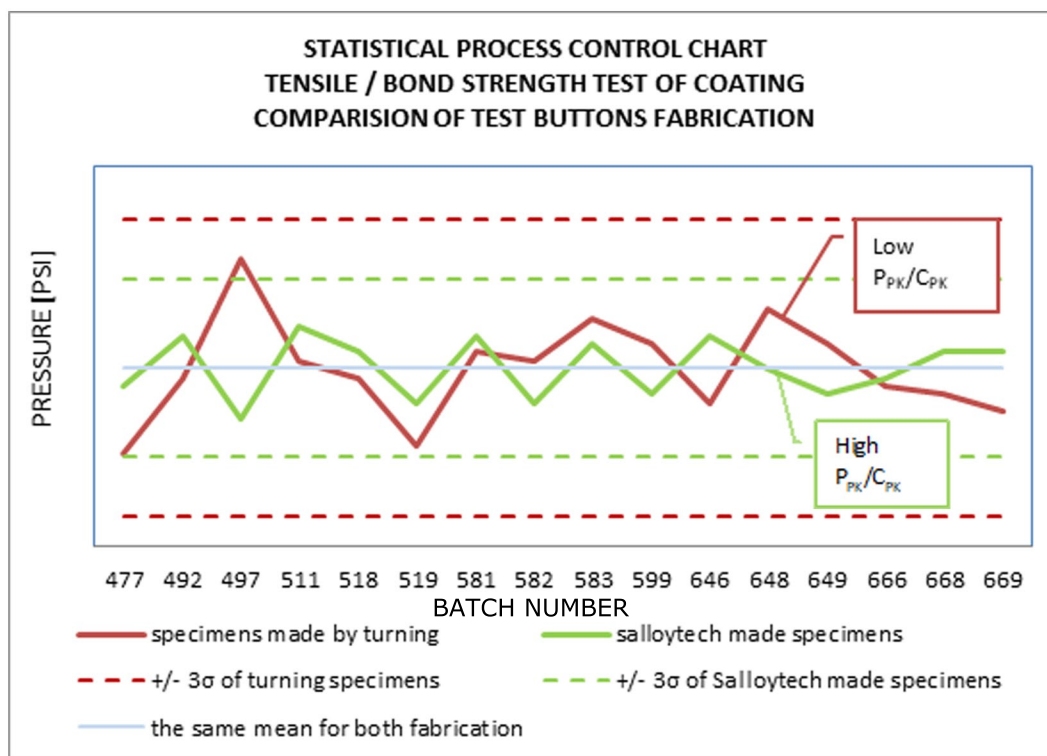
Thermal Spray facilities especially in aerospace industry often need to check coating quality on test specimens by destructive tests e.g. tensile / bond strength test. This need to be done for basically three reasons:

- ✓ to obtain approval for coating in qualification process,
- ✓ continuous monitor of coating consistency,
- ✓ decrease the frequency of testing according to Reduced Testing / Sampling procedure.

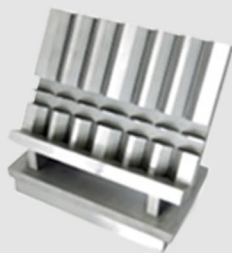
The acceptance or magnitude of above activities often depends on a process capability / performance index CPK / PPK calculated with the test results during Statistical Process Control e.g. the more stable test results are the higher testing reduction can be obtained and maintained. There are many factors of test results variation but one of them is quality of test specimens – and here we have a solution for your facility. Using our made test buttons you can:

- ✓ obtain better test results for coating qualification,
- ✓ improve reduced testing and hold it on a high level.

Please see a visualisation on the graph below.



OUR OTHER SERVICES



Machining of custom laboratory accessories:

- ▶ Gravity or pressure type V-grooved curing fixture for Tensile Bond Strength test of coating
- ▶ Loading fixture
- ▶ and more...

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