



SALLOYTECH

**TECHNOLOGICAL SOLUTIONS
FOR THE
AEROSPACE INDUSTRY**



SST Schüfer Surface Technologies

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MANUFACTURING OF TEST SPECIMENS FOR DESTRUCTIVE TESTING MADE OF AEROSPACE GRADE MATERIALS

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



NICKEL AND COBALT BASE SUPERALLOYS

Salloytech offers a complete line of nickel and cobalt base superalloys – wrought and cast including single crystals such as Inconel, Rene, MAR, GTD, PWA, CMSX, Haynes and many others. We are able to supply aerospace grade alloys even in small quantities and with wide range of sizes.



COMPLEX MACHINING OF DIFFICULT-TO-MACHINE MATERIALS



Our well-equipped production floor connected with AS9100 certificate give us a possibility to specialize in the complex machining of parts made of superalloys (nickel, cobalt base) titanium alloys by using loss and additive methods. Cutting of difficult-to-machine materials is our strong point.

We also work with more popular metal alloys such as aluminum and steel. Our machine park includes a range of machining such as CNC milling, turning, grinding, tumbling, WEDM, micro-impact marking, sandblasting and is constantly being expanded with manufacturing equipment. Other production processes, e.g. galvanic coatings, heat treatment, we are able to provide through controlled suppliers.

HYBRID MANUFACTURING

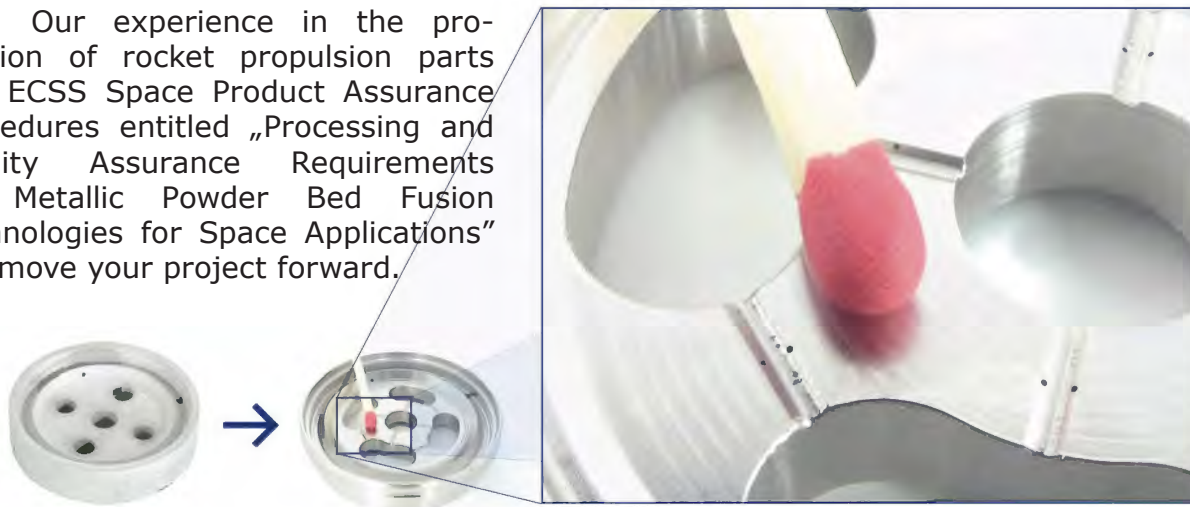
Salloytech supports its New Space customers with hybrid manufacturing. While „hybrid“ can be used for many combinations of subtractive and additive manufacturing, the „Hybrid Manufacturing“ offered by Salloytech is a combination of machining and 3D printing of metal parts.

WHY IS HYBRID MANUFACTURING A GREAT SOLUTION FOR SPACE APPLICATIONS?

In short, the Hybrid Manufacturing combines the best features of traditional subtractive machining and 3D printing. The additive capability allows material to be added only where needed, reducing material costs. It also reduces the amount of subtractive machining required by only adding material where it is needed and reducing the area that needs additional finishing. The real benefit, however, is the ability to design a metal part with sophisticated channels without having to weld multiple components. These value-added features open up new opportunities for high-tech sectors like New Space. Space propulsion engineers are able to design high performance, cost effective rocket parts with almost no constraints.

We are able to print metal parts using a state-of-the-art DMLS printer and achieve tight tolerances using a 5-axis milling machine. Our AS9100 certificate guarantees the high quality of the manufacturing process.

Our experience in the production of rocket propulsion parts and ECSS Space Product Assurance procedures entitled „Processing and Quality Assurance Requirements for Metallic Powder Bed Fusion Technologies for Space Applications“ can move your project forward.



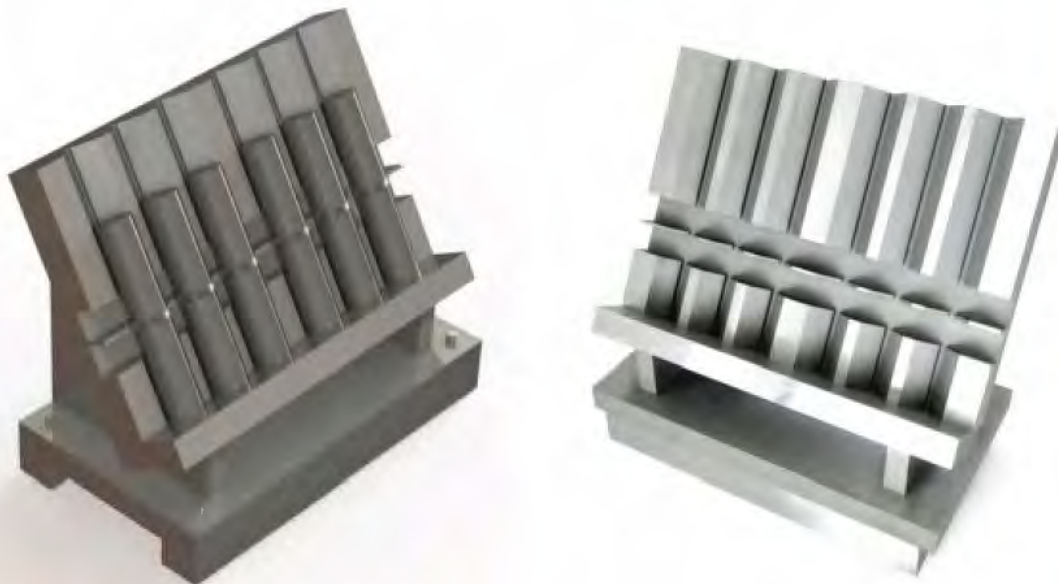
SMALL HOLE DRILLING

Experience in manufacturing rocket propulsion injectors allowed us to develop the technology of making small holes. We are able to make holes with a diameter smaller than 0.1 mm with an accuracy of a few microns.



LABOLATORY ACCESSORIES, FIXTURE DESIGN AND MANUFACTURING

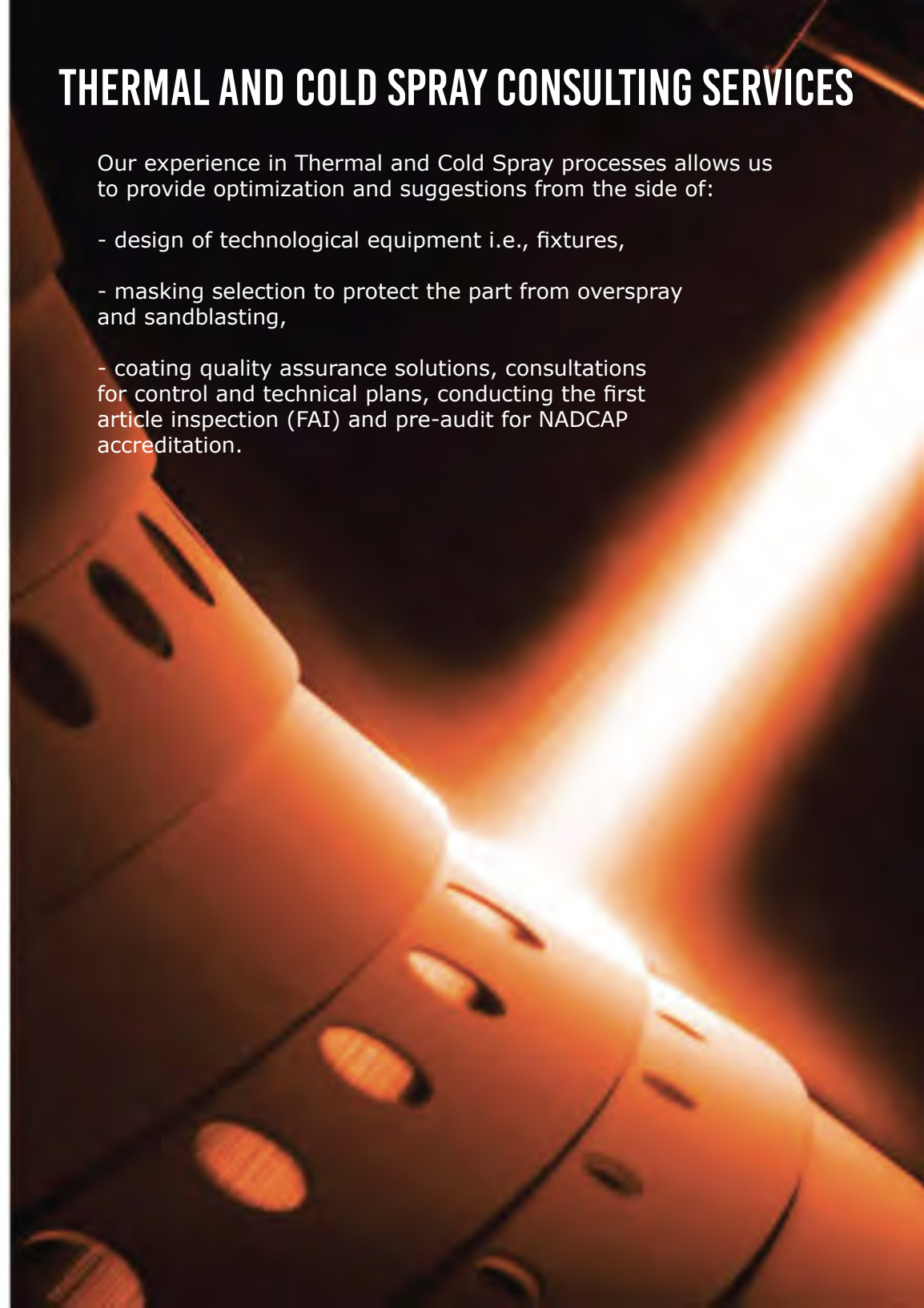
Salloytech offers a wide variety of test accessories for a wide variety of purposes. These accessories include grips, fixtures, and sample preparation items. With these accessories, you can have confidence that your specimens will be tested consistently, correctly, and will yield ideal results.



THERMAL AND COLD SPRAY CONSULTING SERVICES

Our experience in Thermal and Cold Spray processes allows us to provide optimization and suggestions from the side of:

- design of technological equipment i.e., fixtures,
- masking selection to protect the part from overspray and sandblasting,
- coating quality assurance solutions, consultations for control and technical plans, conducting the first article inspection (FAI) and pre-audit for NADCAP accreditation.



REUSABLE SILICONE MASKING / HARD MASKING

Our reusable silicone masks are the perfect solutions for serial production, which allow you to save masking time and costs of specialized tapes in such processes as:

- thermal spray
- grit blast
- shoot peen



QUALITY MANAGEMENT SERVICES

Consulting, auditing, preparation for certification, training for implementation and maintenance of:

- Quality Management System compliant with ISO9001 / AS9100 and PRI AC7004 (NADCAP Aerospace Quality System),

- NADCAP Coatings (PRI AC7109 - Thermal Spray, Coating Evaluation Laboratory, Stripping of Coatings, do not hesitate to ask about other processes),

- Laboratories that meet the NADCAP criteria (list AC7101),

as well as assistance in preparation of control and technical plans for special processes.



QUALITY ASSURANCE

CERTIFIED TO AS9100 AND MILITARY CONSESSION

- Working with technological standards/specifications describing:
 - » production requirements regarding the equipment, staff and the process itself,
 - » raw material properties
- CMM measurements
- First Article Inspection (FAI) according to AS9102
- Control and technical plans for special processes
- Technological Validation for each manufacturing process
- NADCAP best practices implemented in manufacturing processes
- Materials and coatings properties testing
- Statistical Process Control for production



AS 9100D
CERTIFIED
ISO 9001



SALLOY TECH



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