

# — Hard Masking Improvement

OR 3



# — Hard Masking Improvement

## Project definition and overview

### Problem statement

- Reduce cycle time and powders for three different plasma spray processes
- concurrence with Ellison to share our knowledge, design and realization new fixtures
- dovetails bld5&6 plasma spray qualifications
- seal teeth bld5 qualifications, close to qualify z notch bld5. To qualify z notch bld6 and seal teeth bld6

### Project overview

**Hard masking:** Different concept to mask the blade. The old process was a soft masking using tape and silicon masks. The new masking method is an hard masking using metal shields without tape. Furthermore the blades for each spray run are 10 instead of 4.

**Samples:** the old concept had one part program and one fixture for samples and blades, now there is a fixture for samples and one for blades, this allowed to reduce the cycle time for each blades spray run from 30 min to 10 min.

### Project Goals description + business impact

- Expected Benefit: to be finalize

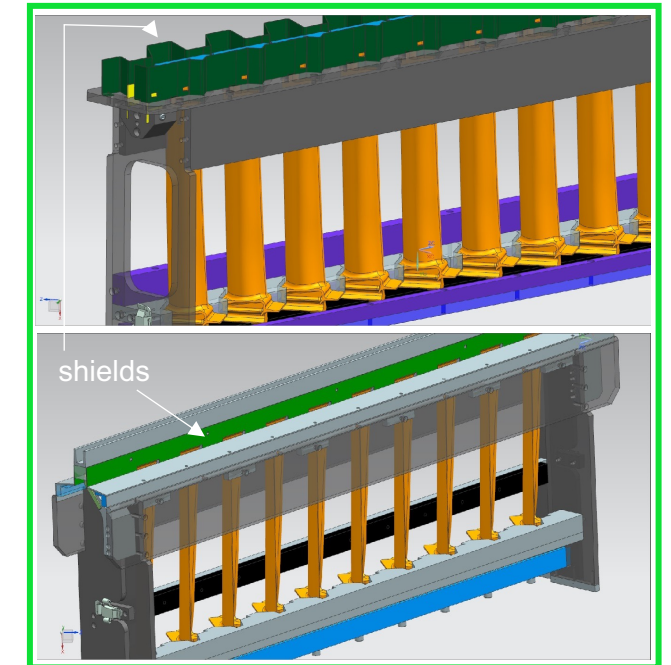
### Resources

Lead: Veneruso, Trapani, Montagna

### OLD MASK



### NEW FIXTURES



# — HSM Improvement

OR 3



# — HSM Improvement

## Project definition and overview

### Problem statement

- Reduce cycle time and cutting tools cost for milling airfoil
- concurrence with Liecthi to improve the milling process and the clamping method
- New milling strategy developed and qualified on bld5
- To qualify new milling strategy on bld6

### Project overview

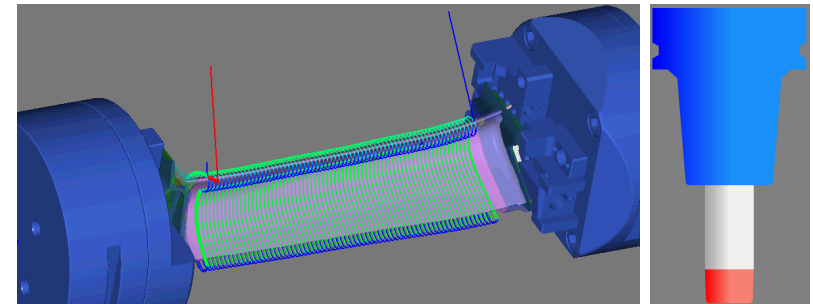
**HSM for airfoil**: Different roughing strategy to remove stock material  
The saving was very important in terms of tool wear: we moved from three blades for tool to ten blades for tool.  
Also in terms of timing we had a little saving of 10 min.

### Project Goals description + business impact

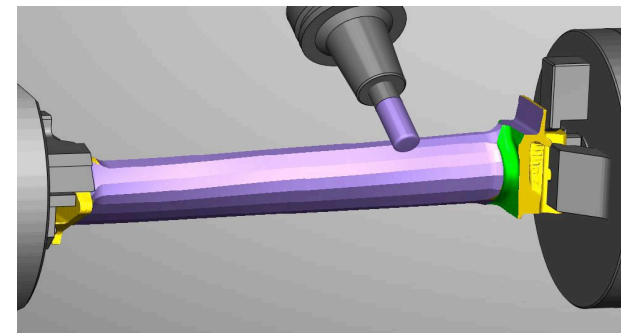
- Expected Benefit: to be finalize
- VT closure FW 32 2022

### Resources

Lead: Veneruso, Alterio



OLD  
PROCESS



NEW  
PROCESS