













Llywodraeth Cymru Welsh Government







Department for Business, Energy & Industrial Strategy

## **Finishing Projects**

Project	Supply chain partnership	Contact
A20X Surface	• Aeromet	Mike Bond - Director of Advanced Material
Treatments	<ul> <li>Poeton Industries</li> </ul>	Technology
Development	<ul> <li>Boeing (customer)</li> </ul>	mike.bond@aeromet.co.uk
The project will develop and verify the performance on a range of metal finishing treatments (anodic and		
chemical conversion coatings) for Aeromets A20X family of casting alloys without using hexavalent chrome		
compounds (which have a limited life under REACH legislation).		

NATEP grant £35,000

Project	Supply chain partnership	Contact
Temperature	<ul> <li>Sensor Coating Systems Ltd</li> </ul>	Dr Jörg Feist – Managing Director
Indicating Paints	Indestructible Paint Ltd	jfeist@sensorcoatings.com
for Aero Engines	MAN Diesel and Turbo (customer)	
(TIPTOE)		
Thermal History Paint records temperature information by going through irreversible changes which can be		
detected non-destructively using specialised hand-held read-out equipment. This project will support the		
development of the technology to demonstrate its applicability in aerospace engine development.		
NATEP Grant £122,500		

Project	Supply chain partnership	Contact	
Aerospacespecialprocesses.com	<ul> <li>Valuechain.com Ltd</li> </ul>	Tom Dawes – Director	
	<ul> <li>Stainless Plating Ltd</li> </ul>	tdawes@Valuechain.com	
	<ul> <li>Blackprint Ltd t/a "Alloy</li> </ul>		
	Heat Treatments"		
	<ul> <li>Bombardier (customer)</li> </ul>		
Aerospacespecialprocesses.com is a cloud-based platform which aims to develop a collaborative on-line			
platform that streamlines communication between aerospace manufacturers and special process houses by			
optimising complex planning variables, sharing 2-way information with customers and co-operative partners			
and consolidated logistics planner providing intuitive decision support to improve service levels, productivity			
and therefore increase the competitiveness of aerospace special process houses.			

## NATEP Grant £150,000

Project	Supply chain partnership	Contact
Dry Drilling of	• Teer Coatings Ltd	Dr Hailin Sun - R&D Technology Centre
Aluminium	<ul> <li>Kyocera Unimerco Tooling Itd</li> </ul>	Manager
Alloys	• Airbus (customer)	hailin.sun@miba.com
Dry, in-situ drilling of aluminium alloys, with no significant loss of performance, will reduce costs while improving the work place environment. The project facilitates dry-drilling with newly designed tools exploiting the latest high performance solid lubricant coatings NATEP Grant £105,670		

Project	Supply chain partnership	Contact
Prep'ing Composite Moulds with Lasers For Enhanced Productivity and Quality	<ul> <li>Advanced Laser Technologies Ltd</li> <li>CNC Robotics</li> <li>Cobham Antenna System (customer)</li> <li>EPM Technology (customer)</li> </ul>	Roger Hardacre – Managing Director roger.hardacre@altlaser.co.uk
The project will develop an advanced system that can clean, polish and repair moulds made of metal or		

composite used to produce composite parts. The intention is that a successful outcome will lower supply chain costs & improve productivity of skilled labour by developing an automated technology for cleaning composite material moulds The system can be in a bureau format for low frequency users, or for high frequency users it can be a factory based solution.

NATEP Grant £150,000

Project	Supply chain partnership	Contact
SmartHUD	Artemis Optical	Stuart Allan – Technology Director
	<ul> <li>Plessey Semiconductors Ltd</li> </ul>	stuart.allan@artemis-optical.co.uk
	<ul> <li>BAE Systems (customer)</li> </ul>	
SmartHUD aims to use the recent proliferation in LED light sources and design unique and novel thin film		
coatings to enable their use in Head Up Display systems. The advantages sought are reduced weight, longer		
useful life of the light source and enhanced optical performance of the overall module.		
NATEP Grant £102,890		

Project	Supply chain partnership	Contact
Ultrasonic Assisted	<ul> <li>Teer Coatings Ltd</li> </ul>	Susan Field
Machining of	Kyocera Unimerco Tooling Ltd	Collaborative Research Coordinator
Aerospace Composite	BAE Systems (customer)	sue.field@miba.com
(USAMAC)		
USAMAC will demonstrate a new generation of drills, where tool design and state of the art coatings		
will enable the full benefits of ultrasonic assisted machining technology to be realised in the drilling		
of advanced composite stacks.		
NATEP Grant £137,600		

Project	Supply chain partnership	Contact
Integrally Bladed Rotor	ITP Engines UK Ltd	Carlos Cenal Project Engineer
Machining	Extrude Hone Ltd     Brunel University	Carlos.Cenal@itp-engines.co.uk
	<ul> <li>Industria de Turbo Propulsores,</li> </ul>	
	SA (customer)	
Industrial research to model the effects of an Abrasive Flow Machining polishing process on aerofoil profiles and the development of prodictive process controls which will lead to a reduction in		
manufacturing time and an improvement in quality.		
NATEP Grant £107,350		

Project	Supply chain partnership	Contact
3D Moulded	<ul> <li>Laser Optical Eng. Ltd</li> </ul>	John Tyrer
Circuits	<ul> <li>Moulded Circuits Ltd</li> </ul>	johntyrer@laseroptical.co.uk
	<ul> <li>MBDA UK Ltd (industrial supporter)</li> </ul>	
Develop a laser writing system capable of producing 3D copper tracks or circuits on 3D aerospace lightweight		
structures.		
Create the ability to produce fully functional circuitry directly onto 3D parts, enhancing functionality and		
enabling them to become part of a larger product or system, thereby reducing size, weight and cost.		
NATEP Grant £145,727		