

NATEP

National Aerospace Technology Exploitation Programme

Finishing Projects



Finishing Projects

Project	Supply chain partnership	Contact
A20X Surface Treatments Development	<ul style="list-style-type: none"> • Aeromet • Poeton Industries • Boeing (customer) 	Mike Bond - Director of Advanced Material Technology mike.bond@aeromet.co.uk
<p>The project will develop and verify the performance on a range of metal finishing treatments (anodic and chemical conversion coatings) for Aeromet's A20X family of casting alloys without using hexavalent chrome compounds (which have a limited life under REACH legislation).</p> <p>NATEP grant £35,000</p>		

Project	Supply chain partnership	Contact
Temperature Indicating Paints for Aero Engines (TIPTOE)	<ul style="list-style-type: none"> • Sensor Coating Systems Ltd • Indestructible Paint Ltd • MAN Diesel and Turbo (customer) 	Dr Jörg Feist – Managing Director jfeist@sensorcoatings.com
<p>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.</p> <p>NATEP Grant £122,500</p>		

Project	Supply chain partnership	Contact
Aerospacespecialprocesses.com	<ul style="list-style-type: none"> • Valuechain.com Ltd • Stainless Plating Ltd • Blackprint Ltd t/a "Alloy Heat Treatments" • Bombardier (customer) • Hyde Coatings Ltd 	Tom Dawes – Director tdawes@Valuechain.com
<p>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.</p> <p>NATEP Grant £150,000</p>		

Project	Supply chain partnership	Contact
Dry Drilling of Aluminium Alloys	<ul style="list-style-type: none"> • Teer Coatings Ltd • Kyocera Unimerco Tooling Ltd • Airbus (customer) 	Dr Kevin Cooke – R&D Technology Centre Manager kevin.cooke@miba.com
<p>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</p> <p>NATEP Grant £105,670</p>		

Project	Supply chain partnership	Contact
Prep'ing Composite Moulds with Lasers For Enhanced Productivity and Quality	<ul style="list-style-type: none"> • Advanced Laser Technologies Ltd • CNC Robotics • Cobham Antenna System (customer) • EPM Technology (customer) 	Roger Hardacre – Managing Director roger.hardacre@atllaser.co.uk
<p>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.</p> <p>NATEP Grant £150,000</p>		

Project	Supply chain partnership	Contact
SmartHUD	<ul style="list-style-type: none"> • Artemis Optical • Plessey Semiconductors Ltd • BAE Systems (customer) 	Stuart Allan – Technology Director stuart.allan@artemis-optical.co.uk
<p>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.</p> <p>NATEP Grant £102,890</p>		

Project	Supply chain partnership	Contact
Biocomposites for Aerospace Interiors (BAIT)	<ul style="list-style-type: none"> • Net Composites Ltd • AIM Composites • Composites Evolution • AIM Cabin Interiors (customer) 	Anthony Stevenson – Project Manager anthony.stevenson@netcomposites.com
<p>The project will develop pre-impregnated (“Prepreg”) composite materials for aerospace interior applications that are based on a novel 100% bio-based fire-safe resin system that provides an alternative to conventional petrochemically-derived phenolics</p> <p>NATEP Grant £146,570</p>		

Project	Supply chain partnership	Contact
Ultrasonic Assisted Machining of Aerospace Composite (USAMAC)	<ul style="list-style-type: none"> • Teer Coatings Ltd • Kyocera Unimerco Tooling Ltd • BAE Systems (customer) 	Susan Field Collaborative Research Coordinator sue.field@miba.com
<p>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.</p> <p>NATEP Grant £137,600</p>		

Project	Supply chain partnership	Contact
Integrally Bladed Rotor (IBR) – Abrasive Flow Machining	<ul style="list-style-type: none"> • ITP Engines UK Ltd • Extrude Hone Ltd • Brunel University • Industria de Turbo Propulsores, SA (customer) 	Carlos Cenal Project Engineer Carlos.Cenal@itp-engines.co.uk
Industrial research to model the effects of an Abrasive Flow Machining polishing process on aerofoil profiles and the development of predictive 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 Circuits	<ul style="list-style-type: none"> • Laser Optical Eng. Ltd • Moulded Circuits Ltd • MBDA UK Ltd (industrial supporter) 	John Tyrer johntyrrer@laseroptical.co.uk
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		