



GO BEYOND

ENGINEWISE



PART REPAIR SERVICES

ENGINEWISE REPAIR BROCHURE

EXPERIENCE MATTERS

For more than 90 years, Pratt & Whitney has been a leader in the engine industry, amassing a wealth of experience unmatched in the business. Today, we blend OEM (original equipment manufacturer) capability with our MRO (maintenance, repair and overhaul) flexibility. We listen to you from both sides of the business and take the time to understand each customer's unique operational needs. Together, we'll develop a customized repair solution that works for you.

Pratt & Whitney's EngineWise service solutions is committed to maintenance innovation and customer satisfaction. Our EngineWise Part Repair offers a comprehensive repair portfolio for a variety of engines and accessory parts. You can count on Pratt & Whitney to deliver high quality, on-time repairs with proven cost savings through cutting edge technologies. We're continually developing innovative repair techniques to support your evolving needs, resulting in higher reliability and longer time on wing. With over 300 dedicated repair development engineers and 10 repair centers in North America, Europe, Asia, Pratt & Whitney offers OEM-level knowledge and decades of experience that other MROs cannot match.



United States

- Columbus Engine Center
- West Palm Beach
- Connecticut Rotating Parts
- Connecticut Stators & Components
- Repair Supplier Logistics
- Dallas Airfoil Repair Operations
- North Berwick Part Repair Operations
- Pratt & Whitney AutoAir Inc.
- Pratt & Whitney PSD

Turkey

- Turkish Engine Center

China

- Shanghai Engine Center

New Zealand

- Christchurch Engine Center

Singapore

- Eagle Services Asia
- Component Aerospace Singapore
- Pratt & Whitney Component Solutions
- Turbine Overhaul Services

ANNUAL PART REPAIR PERFORMANCE

\$100 MILLION+
SAVED THRU SCRAP AVOIDANCE

\$40 MILLION
REPAIR R&D SPEND

1 MILLION
PART REPAIRS PERFORMED

1,400
REPAIRS DEVELOPED

Contact Us

USA: 860-565-4321

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GLOBAL REPAIR CAPABILITIES

PW Component Solutions Singapore (PWCS)

Singapore

GM: Sim Cheng Tan

Specializing: Stators, ducts, duct supports, airseals, shrouds, split cases, variable vanes, FEGVs & carbon seals, rotating air seals.

Capabilities: coatings, abradable coating, air plasma spray, High Velocity Oxy-Fuel (HVOF), wire arc spray, diffusion coating, chemical cleaning, Ni plating – electrodeless & immersion, anodizing, waterjet stripping.

Inspections: FPI, ultrasonic Inspection, CMM inspection, optical flat, metallurgical evaluation.

Mechanical repairs: Machining – turning, milling, grinding, lapping, spark erosion grinding, electro discharge machining, TIG welding (manual & auto), shot peening (manual & auto), Blasting – plastic and abrasive, super polish surface finishing, heat treatment, brazing, silicon rubber/epoxy injection molding.

Connecticut Rotating Parts

Connecticut, USA

GM: Nate Beach

Specializing: Major rotating parts, air seals, disks, drum rotors, shafts, hubs, plates, GTF IBR.

Capabilities: Full 4-Step automated immersion clean line, wet/dry blasting, ultra high sensitivity FPI, X-Ray, ECI, CNC turning & milling, 5 Axis machining, CMM, waterjet stripping horizontal & vertical grinding, ultrasonic inspection, vertical honing, robotic plasma spray, robotic shot peening, robotic plasma welding, vacuum heat treating, induction stress relief, static & dynamic balance, robotic grit blasting, anti-gallant, acid etching, plasma & HVOF coating, HPC drum disk replacements. Manual GTAW, manual laser welding, robotic shot and ceramic peen, 5 axis machining, CMM.

Connecticut Stators and Components

Connecticut, USA

GM: Nate Beach

Specializing: HPC stators, Hollow fan blades, Combustion chambers, Duct support segments, HPC & LPT honeycomb air seal segments, HPC vane cluster assemblies.

Capabilities: Laser holography, thermal acoustic imaging, fan blade moment weigh, vacuum braze, CBN grind, ultrasonic inspection, eddy current inspection, hollow fan blade leading edge blade scraping. Manual GTAW, manual laser welding, robotic shot and ceramic peen, 5 axis machining, CMM.

Dallas Airfoil Repair Operations

Texas, USA

GM: André Davis

Specializing: HPT & LPT Hot Section Airfoils & Components, super alloy coatings.

Capabilities: Advanced Coating capabilities include EBPVD, LPPS, APS, Turbotip, Cathodic Arc, PtAl, Vapor and pack diffusion coatings. Advanced process capabilities including automated plasma/laser welding, elevated temperature welding, FIC/FCC, Nickel & Cobalt diffusion crack/dimensional brazing, laser hole drilling, autoadaptive CNC machining and grinding, fast drill hole EDM, ram EDM and CNC wire EDM, Internal cavity cleaning. Advance Inspection capabilities include airflow, radiography, magnetoscope, FPI, Eddy current, Thermography, Ultrasonic Wall CT Scan and full metallurgical lab.

North Berwick Part Repair Operations

Maine, USA

GM: Frank Cortez

Specializing: Vane supports, BOAS, brush seals, HPC vane and case set.

Capabilities: Thermal barrier coatings, HVOF coatings, EB weld, laser weld, waterjet, climate control rubber room, laser drilling, vacuum heat treat (induction heat, local).

Pratt & Whitney AutoAir

Michigan, USA

GM: Albert Rhodes

Specializing: Composite & metal bonded parts, thrust reversers, nacelle components.

Capabilities: Faro laser, blue light scan, Geomagic, laser shearography, phosphoric acid anodize, autoclave, FTIR (infrared spectrum analyzer), X-ray, honeycomb HOBE machining, thermal acoustic imaging, moment weigh, low plasticity burnishing, 3D printer, E-drill, acoustic testing, full design authority (Test), structures analysis.

Component Aerospace Singapore

Singapore

GM: Sim Cheng Tan

Specializing: Combustion Chamber, Fuel Nozzle Injectors and Guides, Low Pressure Turbine Ducts, High Pressure Turbine Supports, Heat Shields, Band Segments, Tubes, Ducts, Manifolds and Sync Rings.

Capabilities: Automated Fixture Build, Tube Bending, Brazing, CNC Machining, Seam Welding, TIG Welding, Electron Beam Welding, Heat Treatment, Plasma Spray, Flow & Patternation Tests, Pressure Test, FPI, Real Time X-ray & Metallurgical Analysis.

Pratt & Whitney PSD

Arkansas, USA

GM: Patrick Petree

Specializing: HPC, Diffuser, HPT, LPT, and Turbine Exhaust Cases. HPT Supports.

Capabilities: Electron beam welding, large CNC turning/milling, 5-axis laser milling/ drilling, dual wire & powder plasma spray, vacuum heat treat, FPI and X-Ray inspection, coordinate measuring machine inspection.

Repair Supplier Logistics

Connecticut, USA

GM: Paul Crisnati

Specializing: Repair solutions & engineering services.

Capabilities: We provide a one-stop part repair solutions for customer's sourcing and logistic needs. The RSL team will work directly with you to identify repair solutions for all parts that are not currently repaired by P&W Aftermarket repair facilities. Our repair network is made up of over 200 licensed, quality approved repair stations as well as our P&W OEM business units. Our commitment is to delight our customers by providing them with the lowest turn time, the highest quality and the most competitively priced repair solutions possible. All RSL repairs are backed by the standard P&W OEM warranty.

Turbine Overhaul Services

Singapore

GM: Richard Wong

Specializing: LPC, HPC, HPT and LPT airfoils.

Capabilities: Advanced Coating capabilities include EBPVD, LPPS, APS, Cathodic Arc, CBN Turbotip, Compressor blade tip coat, Vapor and pack diffusion Coatings. Advanced process capabilities include nickel & cobalt Turbobox-crack/dimensional brazing, Laser cladding/laser drill/laser weld, Internal cavity cleaning process-autoclave/Robotic Turboclean, Robotic polishing, Adaptive CNC machining, CNC wire, EDM, Advance Inspection capabilities include airflow, Equator-automated CMM, radiography, Magnetoscope, FPI, Eddy current, Robotic ultrasonic wall inspection & full metallurgical lab.

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SERVICE OFFERINGS

Parts Repair Agreement Services (PRA)

Offers predictable pricing & the opportunity to receive volume rebates - ideal for high repair volume needs.

- Predictable pricing
- Sole source provider
- Variance protection
- Tailored TAT agreement

Transactional Agreement Services (TA)

Offers flexibility to send components on a transactional basis - ideal for low repair volume needs.

- Transparent pricing
- Customer management flexibility
- Standardized contract
- Part specific TAT

SUPPORT



Field Service Network

120+ Field Reps
60+ Field Offices



EngineWise® Connect Customer Portal

Single point access
from your location



Customer Training

3 Locations/e-Learning/
On-Site Training
China / USA / India



Global Operations Center

24/7/365 Support
800-565-0140

TEAMWORK

We respond quickly and effectively to your engine repair questions & issues.

A dedicated account manager will work with you to determine the best course of action to quickly get your engines back in service.



Karisti Mundy
Director

Aftermarket Sales/
Customer Experience



Adam Renfrew
Senior Manager

Production Analytics/
Customer Experience



Graeme Wood
Sales

Europe



Tom Nevins
Sales

Auto Air



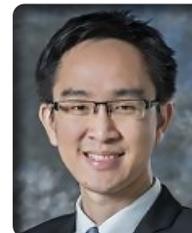
Tony Noble
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