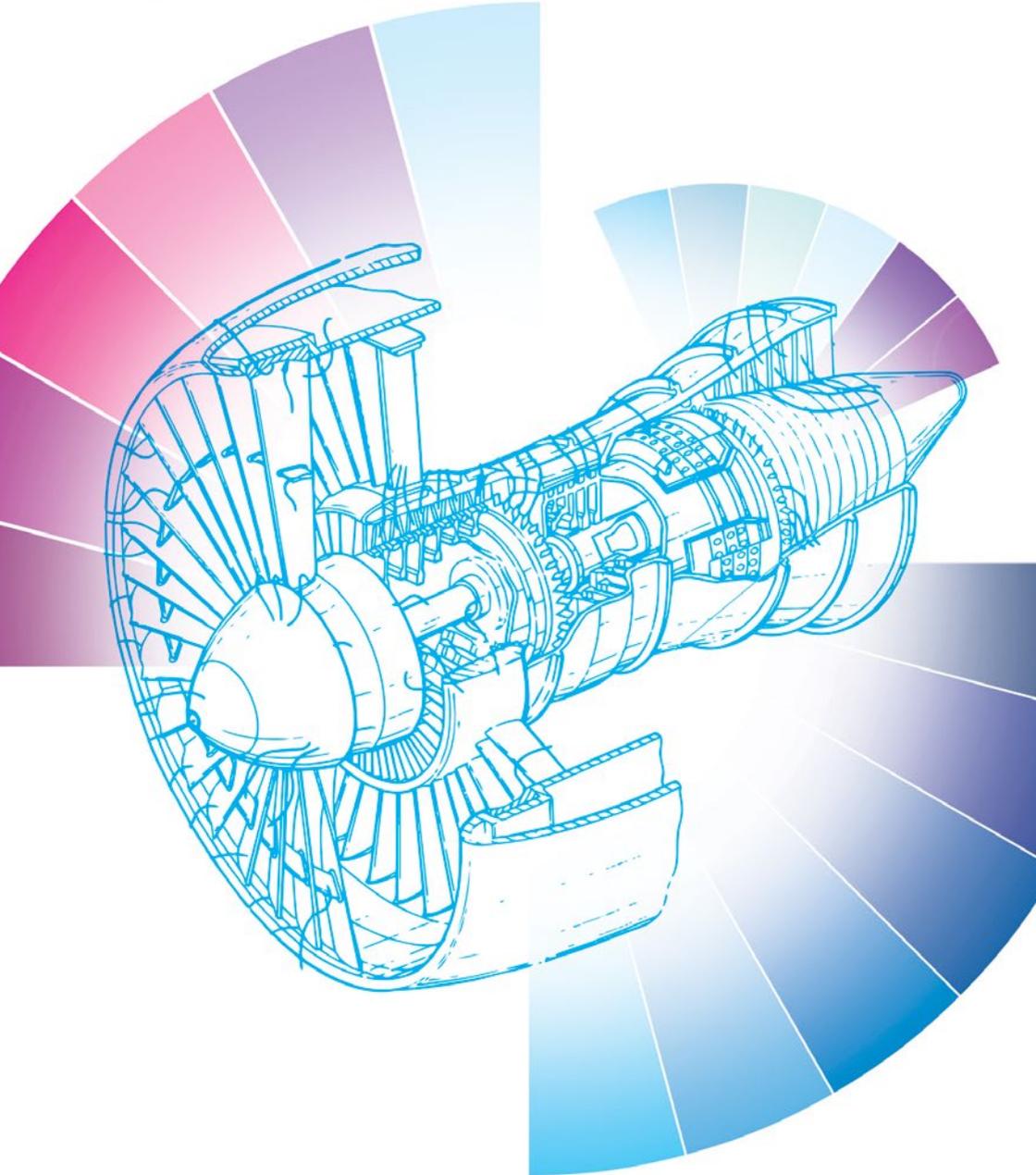


Santos Dumont

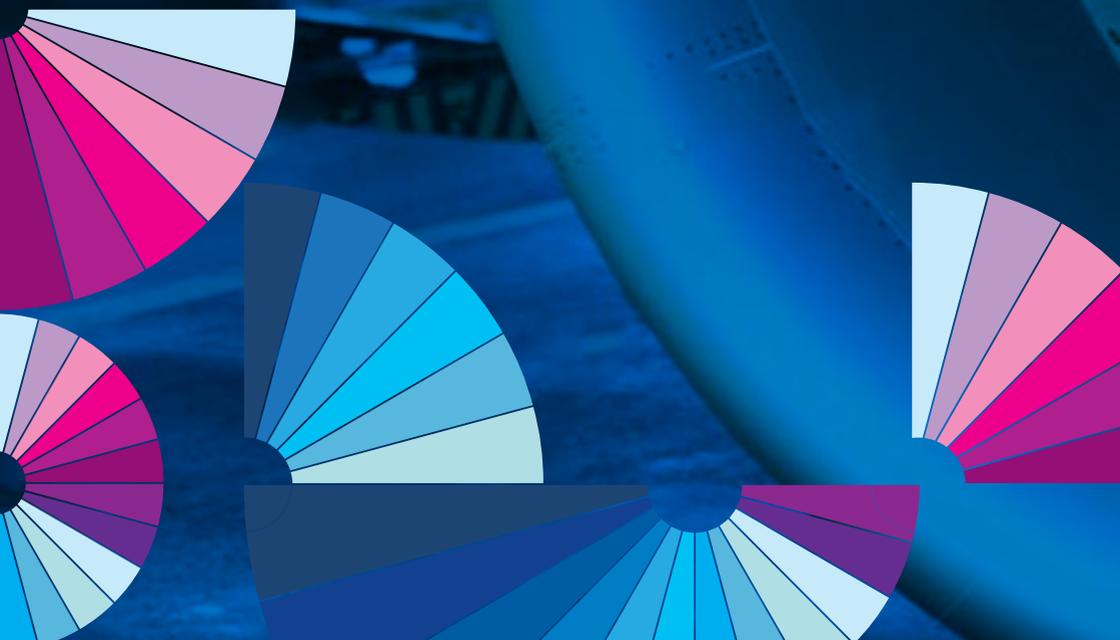
Innovation in Aviation

Engine Management Solutions



Providing **efficient** engine management **solutions**

SHOP VISIT MANAGEMENT **WORKSC**
TABLE TOP INSPECTIONS LEASE MANAGEMENT
ENGINE TRANSITIONING LEASE PREPARATION
RISK **REMOVAL FORECAST** BEYOND ECONOMIC
CONTRACT NEGOTIATION **TROUBLESHOOTING**
CLAIM MANAGEMENT MAINTENANCE COST CONTROL
ON-WING PERFORMANCE MONITORING
ENGINE TRADING MARKETING **REMARKETING**





SCOPE PRE PURCHASE DUE DILIGENCE
INSTRUMENT **MINI PACK** BOROSCOPE INSPECTION
OPERATIONS **ENGINE FLEET MANAGEMENT**
MICRO REPAIR ANALYSIS **HEALTH MONITORING**
TESTING ASSET MANAGEMENT
OPTIMISATION **LEASE PERIOD MANAGEMENT**
LOGGING **INVOICE REVIEW** REPOSSESSIONS
MARKETING END OF LIFE SOLUTIONS **SALES**

Santos Dumont

Innovation in Aviation

ENGINE SERVICES

Engine

Santos Dumont has over 100 years combined experience across a full range of engine types that includes CFM, IAE, PW, RR and GE products. Our team also brings strong metal, records and engineering backgrounds that offer comprehensive solutions on an engine by engine basis which brings true asset value to the fore and mitigates risks in event planning and management.

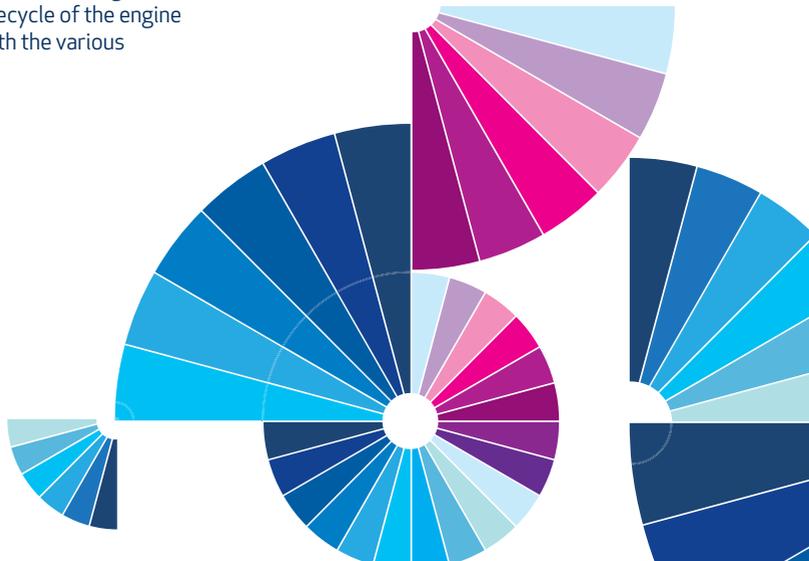
We also have significant experience in covering all aspects of engine management from the perspective of the lessor and the lessee for optimal protection of your assets. We treat all engines on an un-biased, technical basis and we bring an OEM and commercial understanding that completes the full appraisal for any engine asset.

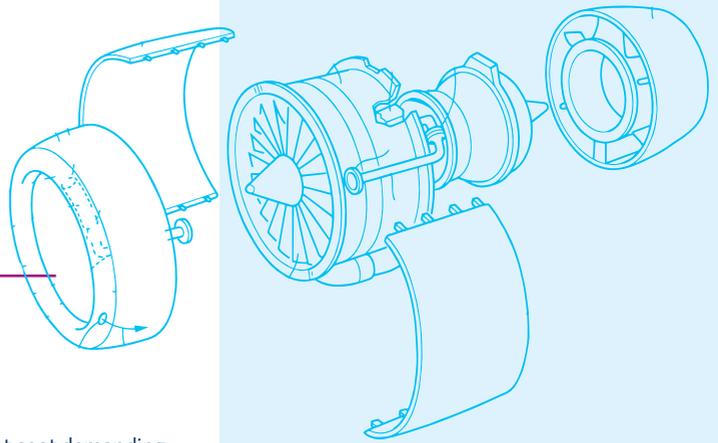
In addition to providing solutions for lessors and lessees, our appraisal team aids investors and existing engine owners in assessing their investment through the lifecycle of the engine and act as direct liaison with the various stakeholders.

Fleet

Santos Dumont has both the knowledge and expertise to provide highly efficient engine solutions that meet the varying lifecycle challenges faced by all operators and owners.

We recognise that no two fleet solutions are the same and we tailor our management services into a comprehensive program that precisely fits your operational needs. This covers the new engine selection, planning, analysis, induction and shop visit management activities that are core to successful engine management.





Material

Engine maintenance is the most cost demanding part of the aircraft maintenance operation and it is the area that can mean the difference between positive or negative investment outcomes. Understanding the relationship between engine performance and individual gas path engine components is crucial when managing engines undergoing maintenance.

Our team delivers comprehensive on-site and remote management that provides support to ensure the quality standard of repaired parts and costs are in line with best practices and expectations.

Engine sale and part-out may often be a viable exit strategy rather than going through maintenance and our market knowledge paired with our commercial team's experience offers a breadth of options for all investor's business requirements.

100

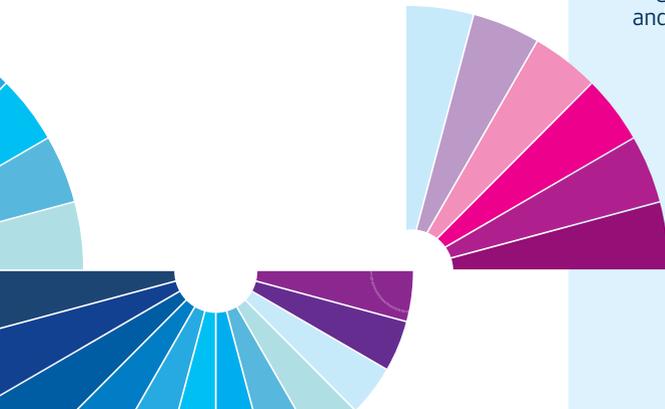
100 years of combined total engine experience

13

Santos Dumont has expert knowledge across 13 engine types

550

Santos Dumont has managed over 550 engines for various lessors, airlines and investors



Santos Dumont

Innovation in Aviation

OTHER SERVICES WE PROVIDE

Engine Fleet Management

Santos Dumont provides overall management of your engines throughout their lifecycle. Our experienced engineering team are capable of providing support in areas such as:

- Short and long term strategic fleet planning;
- Engine and portfolio management (engine selection, lease, purchase);
- End of life solutions;
- Provision of customised tools for managing key technical data for fleet;
- Engine removal and maintenance cost forecasts;
- Performance of fleet versus industry;
- Shop visit scorecard review (Quality, Cost, TAT);
- Engine health monitoring;
- Technical & commercial review with MRO provider (contract negotiation); and
- OEM liaison, technical & warranty support.

Engine Event Management

Whether it's an unscheduled removal or a programme of lease return shop visits, our representatives provide a comprehensive service from induction to completion. We will work in close co-operation with your operations and the MRO provider to ensure that your objectives are consistently met.

- Work scope assessment;
- On-site representation;
- Table-top inspections;
- Build standard monitoring;
- Shop visit mini-pack review; and
- Invoice & maintenance claim management.

Engine Documentation Management

Our team offers complete engine documentation management services, to ensure that engine records and statuses are maintained to an acceptable standard in a secure, logical and easily accessible format. Our documentation management services include:

- Historical and current documentation due diligence;
- Customised due diligence for engine pre purchase, sale, lease or part-out;
- Documentation discrepancy follow up and rectification;

- LLP back to birth compilation;
- Full record organisation & compilation (and upload to customer online library);
- Flexible documentation management solutions (online, hard-copy, digital);
- Marketing pack generation (sale / lease);
- Documentation management system re-organisation / development.

Engine Transitioning

Armed with a comprehensive knowledge of the technical and commercial value tickers for engines, in combination with market knowledge and a diversity of contacts, Santos Dumont can support you whether you are leasing in/out or purchasing/selling. We can provide services for:

- Due diligence - physical engine & records inspection;
- Lease preparations;
- Marketing pack generation;
- Management of engine purchase / lease / sale / exchange; and
- Engine part-out.

Boroscopying & MPA

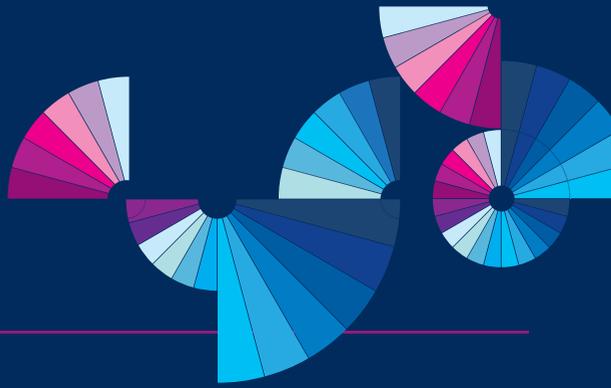
Boroscopying of the engine gas path is essential to understanding the physical condition and value of your engine. We offer support through:

- BSI co-ordination and oversight;
- Max Power Assurance (MPA) run oversight;
- Defect rectification support; and
- Recommendations for engine acceptance/rejection.

Asset and Lease Management

Our team offers a diverse range of on-lease services which assure clients that their asset and/or associated lease is being continually managed and monitored. The team offers on-lease management and protection for your assets with services including:

- Asset monitoring including physical inspections and records review;
- Monthly / quarterly utilisation monitoring and reporting;



- On-wing performance monitoring;
- Maintenance monitoring and event management;
- Event of default management;
- Lessee technical performance and lease covenant monitoring;
- Maintenance claim handling including documentation review;
- Workscope analysis and maintenance reserve drawdown settlement;
- Maintenance reserve lease management; escalations, adjustments, end of lease negotiation; and
- Maintenance event forecasting and cash flow analysis.

Engine Flight Hour Agreements

Our wealth of experience in engine removal forecasting and maintenance contract negotiation means we are uniquely placed to support customers in the establishment of engine maintenance agreements. Our services include:

- Review and negotiation of flight hour / MCPH agreements;
- Analysis and review of tri-partite owner / operator / MRO maintenance agreements.

Engine Trading, Marketing and Remarketing

A comprehensive knowledge of market conditions and assets values, as well as a diverse pool of contacts, are essential for the business of engine trading. Armed with this knowledge, Santos Dumont can support you with making the best decision whether it be for leasing, purchasing or selling your assets. We provide:

- Engine sourcing / negotiations / LOI;
- Valuation / appraisal of assets;
- Physical and records inspection / Due diligence;
- Management of engine purchase / lease / sale / exchange.

Maintenance Cost Optimisation

We have an experienced team of professionals focused on providing solutions that best serve either short, medium or long term requirements for future maintenance:

- Maintenance cost modeling and forecasting;
- Maintenance cost benchmark review and reporting;
- MRO costs / time & material review and negotiation;
- Cost per hour analysis; and
- Maintenance contract review and input.

Technical Advisory

Our in-depth market knowledge, diverse expertise and worldwide network connections means that Santos Dumont is uniquely positioned within the aviation industry.

Our team is comprised of experienced aviation professionals with backgrounds in airlines, leasing companies, maintenance organisations and OEM's with a core competency in providing detailed technical analysis.

- We are able to provide our customers with the most cost effective, reliable and flexible solutions that can be tailored to fit their individual circumstances.
- Our focus is to provide the customer with the ability to plan and make fully informed decisions that will increase the profitability of their operation.

Engine Investors

We support investors who are considering investing in engines and provide services to source and evaluate assets best suited to meet their expectations.

After a decision is made to invest, we also provide the support services required to manage the asset both technically and commercially to ensure that the value of the asset is protected during its lifespan.

Complete Service Offering

Santos Dumont is a company that provides unparalleled support to the entire aviation industry. Our multi-operational understanding, from an independent perspective, allows our company to offer key insights that enable our clients to implement and improve their operations and meet their strategic objectives.

Commercial Services



The Commercial team consists of seven operating groups: Markets, Technical, Contracts, Risk, Pricing, Cost & Operations. We are industry experts with the insights and capabilities to help transform the aviation sector's leading companies. Santos Dumont Commercial orchestrates and brings together the best of technical and commercial skill sets from across the organisation, and has primary responsibility for building long-term client relationships.

Airlines

- Asset Selection & Sourcing
- Project Management Solutions
- Technical Expertise

Lessors

- Market Analysis & Planning
- Origination & Marketing
- Asset Management
- Financial Analysis & Pricing
- Special Projects

Technical Services



The Technical team harnesses the power of experience and technology to drive innovative project management solutions, deliver value propositions and increase operational productivity. It comprises five primary areas: Redeliveries, Engines, Inspections, Training and Technology. We draw on the knowledge we have acquired over the years of practice and we use our global relationships across the aviation industry to deliver effective results for our clients.

Aircraft

- Redelivery Management
- Used Aircraft Delivery
- Aircraft Due Diligence

Engines

- Fleet Management
- Engine Management
- Material Management

Santos Dumont

Innovation in Aviation

4th Floor, Grattan House, 67-72 Lower Mount Street, Dublin 2, D02 H638, Ireland

Telephone: +353 1 808 0000 | Email: info@santosdumont.com

santosdumont.com