



S7 Technics offers aircraft and component maintenance and repair services.

Our highly qualified staff, streamlined quality control and risk management systems, state-of-the-art equipment, effective procurement, and material flow management ensure the minimum turnaround time. The continuous expansion of our operations and services, improvement of existing technologies are an integral part of our long-term strategy.

The strategy of S7 Technics focuses on developing new business areas, improving the efficiency and quality of business processes, expanding our geography and partnerships. Responding to market challenges, our Company implements a Development Strategy built around five key strategic dimensions:

- Customer focus
- Highly skilled and motivated team
- Lean production and continuous improvement system (LEAN/CI)
- Be global
- Technological leadership

1992		2003		2004			
An aviation technical complex established on the basis of the West-Siberian MRO Center at Tolmachevo Airport		The first A-Check of Airbus A320ceo in compliance with EASA Part-145	Sibir Technics LLC estal Sibir Technics LLC merç aircraft maintenance sta			MRO Center status obtained for IL-86, TU-154, TU-204	
2015			2014		2012		
The full cycle aircraft modification service introduced.  The first 12Y-Check in Russia for Aeroflot.  FAR-285 certification for maintenance of foreign-made aircraft in the Russian register			Full-size aircraft paint hangar opened in Mineralnye Vody		opened in The first C	A line maintenance station opened in Vladivostok.  The first C-check of Boeing 767, Bombardier CRJ 100/200	
2016				2017	2018		
SSJ-100 added to the capability list The first C-Check.	partnership Vacuum toile launched in Joint venture heat exchan	7B engine repair shop launched with SR Technics. et equipment maintenance shop partnership with Safran Group. e TAT Engineering focused on ge system maintenance created with TAT Technologies Ltd.		Airbus A320neo and Embraer E170 added to the capability list	EN 9110:: certificatio Start of Al	he capability list	

2005		2007	2008	2009	
S7 ENGINEERING LLC established in Moscow.	A line maintenance station opened in Irkutsk	The first C-Check of Boeing B737CL	The first C-Check of Airbus A319ceo	The first C-Check of Boeing B737-800	
2011				2010	
MRO entities consolidated into a sing A heavy maintenance station opened ENGINEERING LLC acquired and co S7 ENGINEERING LLC.	in Mineralnye Vody.	s LLC and		The first D-Check of Airbus A319ceo	
2019	2020		2022		
S7 Technics launched a CFM56 engine repair shop in Mineralnye Vody	· ·	measures involved a decision to of the company's business: aircraft		of the first plant in Russia aul of foreign engines	



# Our Geography and Structure

APU overhaul



maintenance base

line maintenance station

line maintenance station



	MRV Mineralnye Vody	DME Moscow	SVO Moscow	OVB Novosibirsk	Total
Number of sections	3 sections	3 sections		2 sections	
Capacity of hangars	4 narrow-body / 0 wide-body	7 narrow-body / 3 wide-body		6 narrow-body / 2 wide-body	
Painting hangar capacity	1 narrow-body	_		_	
Hangars	9,832 m²	12,166 m²		20,000 m <sup>2</sup>	41,998 m²
Shops	5,067 m <sup>2</sup>	3,897 m <sup>2</sup>		10,960 m <sup>2</sup>	19,924 m²
Storage area	1,491 m²	2,264 m²		2,000 m <sup>2</sup>	5,755 m²
Engine and APU maintenance	880 m²	250 m²	15,600 m²		
Types of engines	CFM56-3, 5B, 7B	CFM56-3, 5B, 7B	CFM56-5B, 7B, GTCP131-9A, 9B		
Capacity	4	2	3/6		



## **Performance Data**

2021

2,532,892

man-hours

1,622

A-Checks

104

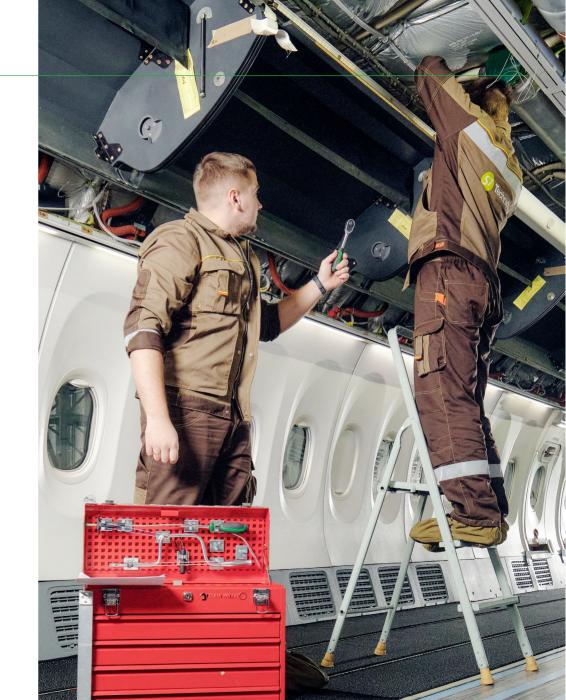
C-Checks

13

aircraft painted

62

engines serviced





RF Federal Air Transport Agency (Rosaviatsiya) Approval





BCAA
(Bermuda Civil
Aviation Authority)
• OTAR 145



Test Laboratory Accreditation Certificate



# **Serviced Aircraft Types**

	MRV Mineralnye Vody		DME Moscow		OVB Novosibirsk		IKT Irkutsk	VVO Vladivostok
	Line maintenance	Base maintenance	Line maintenance	Base maintenance	Line maintenance	Base maintenance	Line maintenance	Line maintenance
A320ceo Family	· •	•	•	<b>V</b>	•	•	•	<b>♥</b>
A320neo	>		•	•	•	•	•	•
B737 CL&NG	· •	•	•	•	•	•	•	•
B737 MAX	>		•	•	•	•		
B757	>		•		•	•		
B767	>		•	•	•	•		
SSJ-100	· •		•	•				
E-170	>		•	•	•	•	•	



## **Training Center**

The Training Center for aviation specialists on the premises of S7 Technics at Domodedovo, Novosibirsk and Mineralnye Vody airports under FAR-285/289 certificates.

The Training Center uses sophisticated technologies and equipment to facilitate understanding and learning.

#### Ratings:

(B1.1)

B2

#### Aircraft types

- Airbus A319/A320neo/A321
- Boeing 737-300/400/500/600/700/800/900
- Boeing 737 MAX
- Sukhoi RRJ-95 (SaM 146)
- Embraer ERJ-170 Series



## **Facts and Figures**

> 250

departures per day

years of market presence

2,600

employees

hangar space

41,998 m<sup>2</sup> 19,924 m<sup>2</sup> 5,755 m<sup>2</sup>

production area

storage area





30

aircraft painted per year

> 200

engineers and technicians trained per year

3

base maintenance stations

13

aircraft types supported





#### Line and base maintenance

We provide line and base maintenance services at Domodedovo, Tolmachevo, Mineralnye Vody, Irkutsk, and Vladivostok airports. Specialists of S7 Technics perform light and heavy maintenance, up to D-Check, for western aircraft.







# Repair of aircraft engines and auxiliary power units

Since 2016, S7 Technics has been providing restoration services for CFM56-3/5B/7B engines at Domodedovo and Mineralnye Vody sites. In the last 6 years, specialists of these shops have serviced over 280 engines of all major Russian airlines and the world's top customers. The Company has expanded its services by adding repair and modification of a high-pressure compressor, replacement of hot parts, certain modules, and life limited parts (LLP).

An overhaul shop for CFM56-5B/7B engines and Honeywell 131-9A/9B APU will be opened at Sheremetyevo in 2022. S7 Technics will use state-of-the-art equipment to independently perform the entire cycle, including complete engine disassembly, cleaning, inspection and certain repairs of parts, and complete engine assembly. APUs will be tested on our own test bench at Sheremetyevo, while engines will be tested on a bench of UEK-Saturn, our partner company.



#### Aircraft fleet engineering support

S7 Technics holds a CAMO Approval and provides a full package of continuing airworthiness management services in compliance with OTAR Part 39 Option 2 Subpart E.

Expert competencies in technical records audit under lease agreements and subject to requirements of aviation authorities, verification of all airworthiness data, preparation of comments for aircraft operators, representation of the lessor and aircraft operators in communications with aviation authorities and the manufacturer of aircraft and components. Physical inspections of aircraft for compliance with the lease agreement and requirements of aviation authorities. Management of aircraft acceptance and return processes at the end of lease agreements or when the owner changes.



#### Aircraft transfer support

Technical support to lessors and airlines during aircraft delivery and redelivery, including the full package of engineering support and maintenance services, with aircraft painting, interior modifications and refurbishment.

S7 Technics cooperates with the world's leading lessors: AerCap, SMBC, Avolon, GTLK, and others.



#### Aircraft painting

At its Mineralnye Vody facility, S7 ENGINEERING LLC performs painting of narrow-body aircraft—Airbus A320 CEO/NEO, Boeing 737 CL&NG, SSJ-100, CRJ-100/200, E-170, E-190, etc. using materials of AkzoNobel and PPG. A reconstructed painting hangar is equipped with advanced ventilation and fire alarm systems that meet all requirements for fire, environmental and occupational safety.

Advanced hi-tech electrostatic Graco equipment is used for aircraft painting to reduce paint consumption compared to conventional pneumatic paint sprayers.

The company develops documentation for aircraft exterior painting in accordance with CS25 (placement of a logo and placards, repositioning of decals).

The company has all the equipment necessary to make and apply aircraft livery of any complexity, as well as decals and markings.





#### **Complex aircraft modifications**

Aircraft interior modifications from design documentation development to implementation on board.

Changing the configuration of passenger cabins, repairing exterior and internal elements of aircraft, installing additional furnishings, partial / complete replacement of cabin elements, various repairs of standard cabin equipment.





Manufacturing of polyurethane foam products, soft furnishings, plastic components, decals, and metal products.

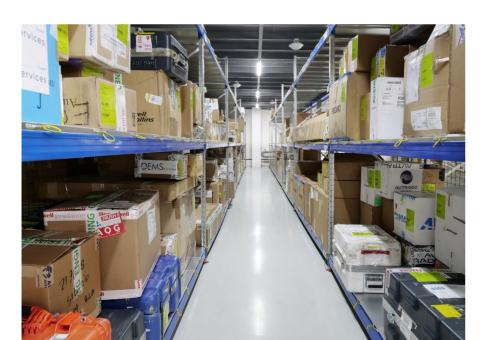
Fire-resistance tests of aircraft interior materials: fabrics, leather, carpets, plastics, films, laminates, passenger seat cushions, and other materials.

- Design of aviation equipment
- Production of aviation equipment
- Fire resistance tests of materials
- Complex aircraft modifications



#### **Logistic and Material Support**

- Purchase, delivery and storage of aviation inventory
- Exchange and short-term lease of aircraft components
- Customs clearance of aircraft materials, components and tools
- Sale and exchange of aviation inventory.
   "No-go" spare parts stock
- 24/7 AOG support
- Consignment warehouse





#### Flight Data Decoding

Flight data decoding and analysis for Airbus A320ceo Family, A320neo Family, Boeing 737-S00NG, Boeing 737-8 MAX, Boeing 757-200, Embraer E-170, Gulfstream G-550.

Operations are conducted based on certificates issued by the Aviaregister of Russia (Rosaviatsiya).

- Comprehensive and special deciphering
- Glide path calculation for assessment of touchdown accuracy
- Verification of mandatory flight data recording and report generation
- Verification of a record from a voice recorder and report generation







#### Repair of components and systems

Airborne electronic and radio communication equipment, aircraft galley equipment, components of passenger address system, survival equipment, oxygen equipment, batteries.

- Repair of wheels and brakes for A320ceo Family, A320neo, Boeing 737-300/400/500, Boeing 737-600/700/800/900, Boeing 737 MAX, Boeing 747-400, Boeing 757-200, Boeing 767-200/300, SSJ-100, Cessna 750, Embraer 170, Embraer 135 BJ
- Repair of CFM56 engine line
- After-sales repair of water & waste systems, emergency, survival and oxygen equipment manufactured by Safran Group and Collins Aerospace
- Full cycle of aircraft modifications
- Maintenance and repair of aircraft heat exchange equipment (TAT Engineering)





#### S7 Technics offers repair and maintenance services for a wide range of aviation components:

- Airborne electronic equipment of aircraft
- Radio communication equipment of aircraft
- Galley equipment
- Components of hydraulic system
- Lighting facilities
- Repair and maintenance of aviation engines
- Aircraft furnishings and components of passenger cabin lighting systems
- Survival equipment
- Oxygen equipment
- Components of air conditioning systems
- Firefighting equipment

- Survival equipment
- Repair and maintenance of aircraft heat exchangers
- Repair and maintenance of vacuum toilets
- Batteries
- Repair of aircraft wheels and brakes
- Repair, manufacture and modification of aircraft interior elements
- Manufacture of carpets for passenger cabins
- Repair of luggage nets
- Leather restoration and painting services





### **Repair of Aircraft Heat Exchange Systems**

TAT Engineering, the only Russian company specializing in heavy maintenance of aircraft heat exchange systems, owns a unique differential pressure testing unit, nitrogen testing unit, chemical cleaning line for heaters, protective finish line, vertical milling machining center welding units, a sand pasting machine, paint booth, and non-destructive testing unit.

TAT Engineering's center for maintenance of heat exchange systems is the only station in Russia certified according to EASA/FAA Part-145 and provided with a wide range of approved components to service heat exchange systems of BC Airbus A320ceo Family, A320neo, Boeing 737/757/767 and CRJ 100/200.





## Joint Projects with Leading Global Manufacturers and MROs



SAFRAN Group is one of the world's leading manufacturers of components, systems and equipment for up-to-date commercial aircraft. After-sales support is a top priority of the Group. S7 Technics is the only MRO in Russia and the CIS authorized by SAFRAN Group to support water & waste, oxygen equipment and evacuation equipment with the quality and reliability of original manufacturers. The service is provided on the premises of S7 Technics Moscow base.



TAT Engineering

The heat exchanger maintenance service is offered by the TAT Engineering joint venture and includes the full range of repair services.

Limco Airepair is a subsidiary of TAT Technologies Ltd. which provides

The TAT Engineering Center is located near the Novosibirsk base of S7 Technics.



SR Technics (Switzerland) is one of the leading MRO providers in the world. The engine maintenance shop was launched under a joint project of S7 Technics and SR Technics. In 2016, SR Technics became the leader in engine repair services by sending engines of its customers for repair to S7 Technics.

## Honeywell

Honeywell is an industrial engineering developer and a Fortune 100 company. Honeywell and S7 Technics have agreed to launch a new APU repair facility in the next two years. It will be the first one of its kind in Russia and the CIS, supporting Honeywell auxiliary power units (APUs) installed in the most popular aircraft types: Airbus A320, Boeing 737 and RRJ-95 families.



## **Information Technologies**

S7 Engineering owns a developed software and hardware package of IT services and products which allow the company to ensure successful, reliable, prompt and safe processing of big data and to maintain a high level of automation and digitization of processes.

S7 Engineering focuses on a number of strategic objectives to improve its software and hardware package, including creation of its own products and development of existing ones, as well as introduction of new technologies designed to enhance the company's level of automation and digitization of processes for improving the quality and range of services.

Long-term experience and expertise of S7 Engineering's team of professional IT technicians allow the company to participate in joint projects for introduction, creation, development and support of various software products and to provide consulting services for introduction of IT activities at MRO companies.





