



**S7**

# Aircraft Component Repair and Manufacturing



**S7 Technics**



# TABLE OF CONTENTS



Our advantages	<b>3</b>
Component repair	<b>8</b>
Component manufacturing	<b>16</b>
Additional services	<b>26</b>
Contacts	<b>31</b>

# OUR ADVANTAGES

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## **Comprehensive services**

S7 Technics is a company with the widest range of component maintenance and repair services in the Russian Federation and the CIS.



## **Quality standards**

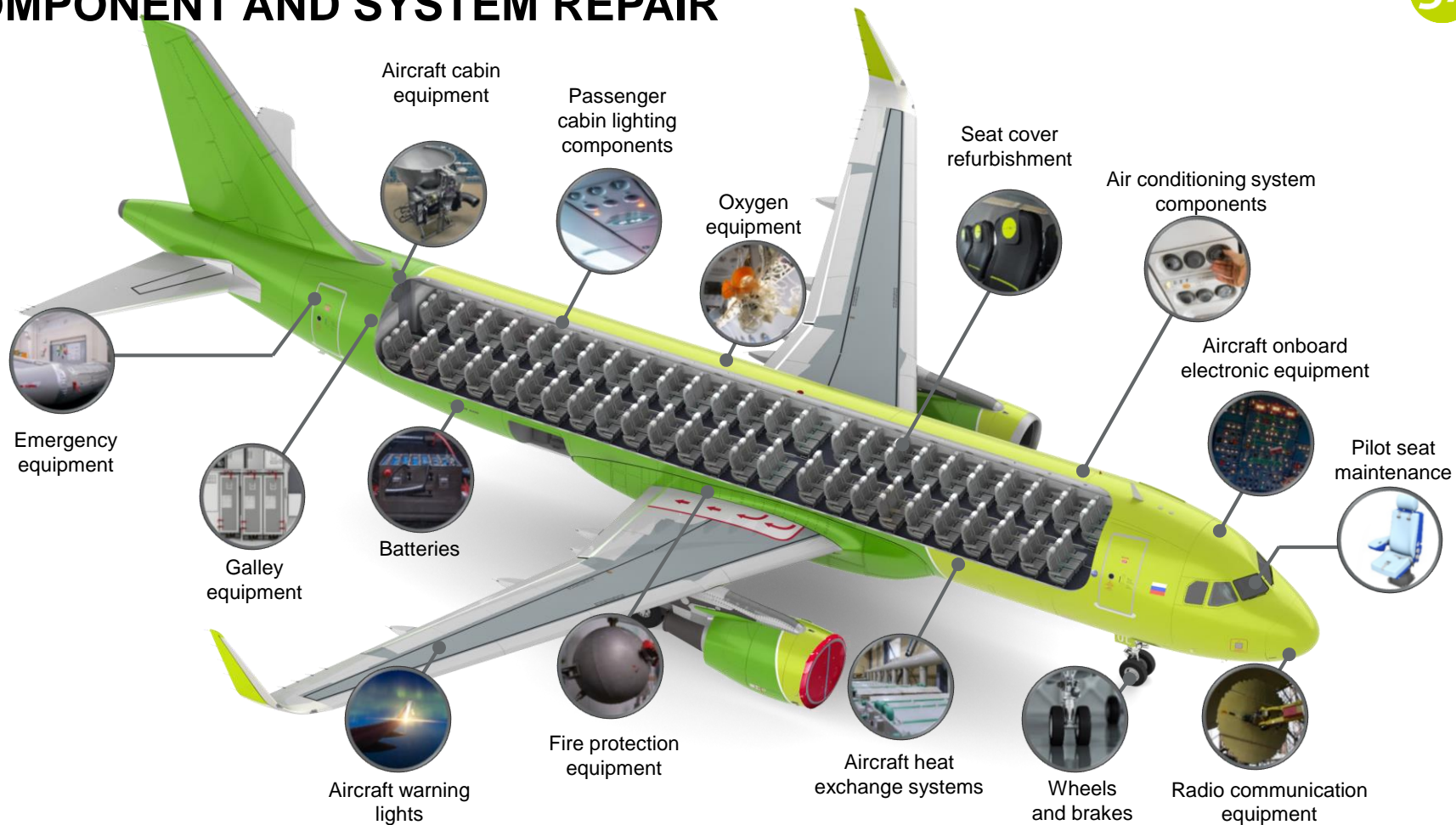
The company's products and services comply with international quality standards. S7 Technics holds certificates as a design organization for civil aircraft interior components.



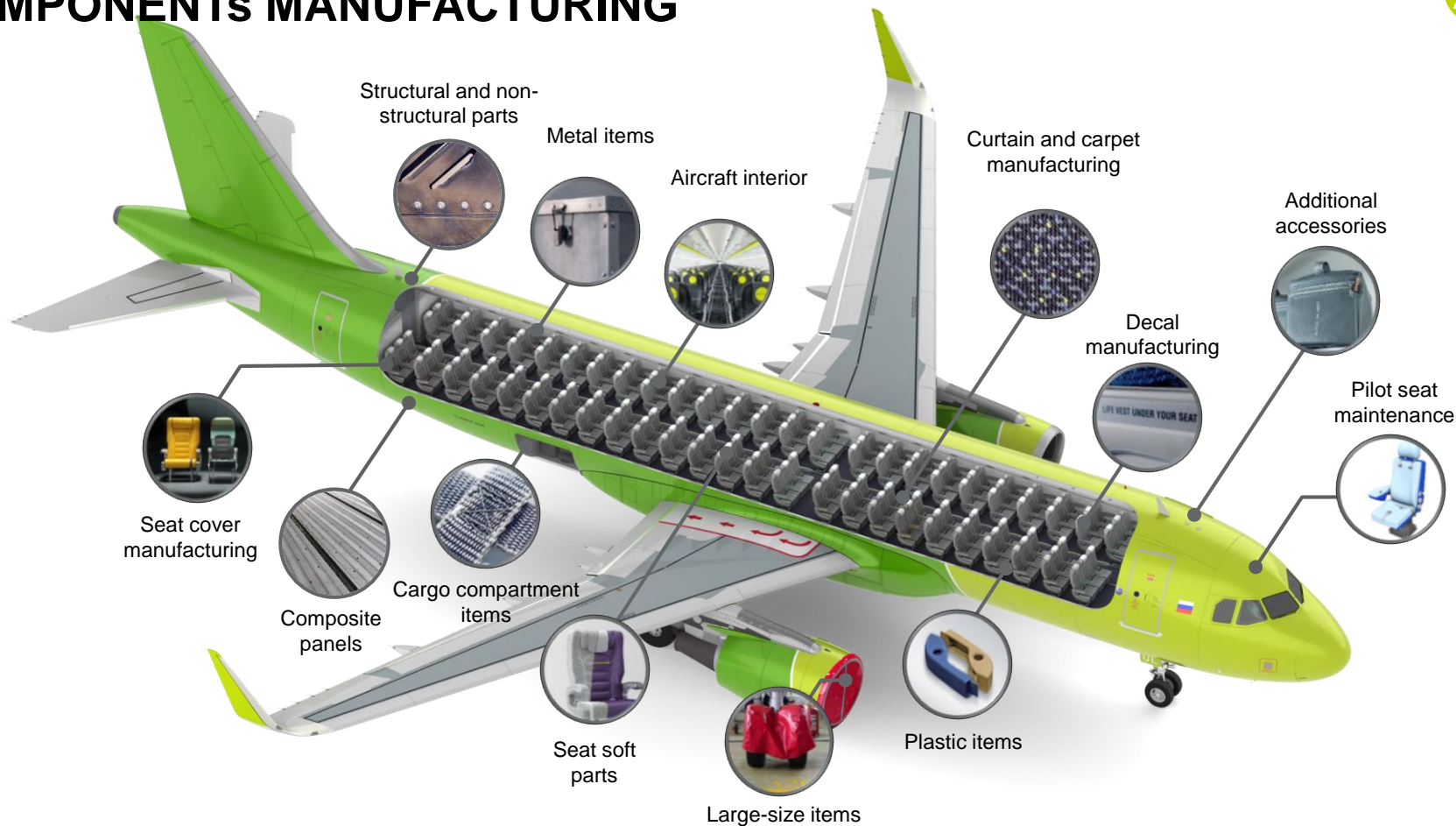
## **Full-cycle capability**

Development, testing, manufacturing, and installation onto in-service aircraft.

# COMPONENT AND SYSTEM REPAIR



# COMPONENTS MANUFACTURING



# COMPANY GEOGRAPHY AND STRUCTURE



## DME

### Domodedovo

Maintenance Base

- ATC
- Training Center
- Full range of component repair services
- Sewing products
- External and internal aircraft marking

## SVO

### Sheremetyevo

- Engine overhaul
- APU overhaul
- Component repair

## KUF

### Samara

- Design office

## MRV

### Mineralnye Vody

Maintenance Base

- ATC Mineralnye Vody
- Aircraft painting shop
- **Full range of component repair services**
- **Seat soft parts**
- **Sewing products**
- **External and internal aircraft marking**
- **Composite products**

## OVB

### Novosibirsk

Maintenance Base

- Full range of component repair services
- **Sewing products**
- **External and internal aircraft marking**
- **Plastic components**
- **Metal components**

## IKT

### Irkutsk

- Line maintenance

## VVO

### Vladivostok

- Line maintenance

# COMPONENT REPAIR

# CERTIFICATION



Approval of the Federal Air  
Transport Agency of the  
Russian Federation  
(Rosaviatsia)

FAP-145



# AIRCRAFT EQUIPMENT REPAIR



The S7 Technics repair complex repairs the following aircraft equipment:

- Aircraft onboard electronic equipment
  - Aircraft radio communication equipment
  - Galley equipment
  - Aircraft warning lights
  - Aircraft cabin equipment
  - Passenger cabin lighting components
- Aircraft onboard electronic equipment
  - Aircraft radio communication equipment
  - Galley equipment
  - Aircraft warning lights
  - Aircraft cabin equipment
  - Passenger cabin lighting components

S7 Technics is the sole provider of aircraft maintenance in Eastern Europe, Russia and the CIS authorized by Safran Group to perform repair of:

- Oxygen equipment
- Vacuum toilets
- Evacuation equipment



# PILOT SEAT MAINTENANCE



The pilot seat repair and maintenance shop is certified for component repair of A320F, B737NG, RRJ-95.

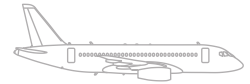
S7 Technics specialists perform after-sales maintenance of RRJ-95 pilot seats.



**Airbus A320 Family**



**Boeing 737NG**



**Russian Regional Jet 95**

# THERMAL AND ACOUSTIC INSULATION



**S7 Technics performs maintenance and repair of insulation blankets (thermal and acoustic insulation). The shop operates at the S7 Technics center at Moscow Domodedovo airport.**

Thermal and acoustic insulation is located between the fuselage skin and decorative panels in the cabin, on doors, in cargo compartments, under lavatories.

S7 Technics can service thermal and acoustic insulation of any model of passenger aircraft from Embraer and Airbus.



**Embraer**



**Airbus**



# HEAT EXCHANGER REPAIR AND OVERHAUL



**TAT Engineering**, part of the S7 group of companies, provides high-quality repair and overhaul services for western-made aircraft heat exchangers.



# SEAT COVER REFURBISHMENT



## Refurbishment

We perform repairs of any complexity, including restoration of paint finish, covers for economy and business class passenger seats, pilot seats, jump seats for accompanying personnel and flight attendants.

The repair technology has been developed and approved under a FAP-21J certificate. After refurbishment, each item receives an Airworthiness Tag.



# COMPONENT MANUFACTURING

# CERTIFICATES



Approval of the Federal Air Transport Agency of the Russian Federation (Rosaviatsia)

FAP-21 Subpart J

FAP-21 Subpart G

Test Laboratory Accreditation Certificate

License of the THE MINISTRY OF INDUSTRY AND TRADE of Russia

Test Laboratory Accreditation Certificate  
ILAC system accreditation



# AIRCRAFT INTERIOR

Airlines' corporate identity is formed based on many components — from website design to interior design and exterior livery. During the flight, passengers pay attention primarily to interior details. A well-designed cabin interior gives passengers a good impression of the flight, which in turn helps build their loyalty to the airlines company and encourages repeat business

S7



# SEAT COVER MANUFACTURING



## Manufacturing

The company manufactures a wide range of seat covers from fabrics and leathers, including laminated (multi-layer) covers on special equipment. A modern automated cutting system is used for cover manufacturing. Materials for cover manufacturing are supplied by leading manufacturers and comply with flammability requirements of AP/CS/FAR/AP-25.853 and AP-23.

**Colors:** in accordance with customer's corporate identity

**Materials:** wool, wool-polyester, acrylic-wool, leather, multi-layer leather



# FLAMMABILITY TESTING

Testing materials in our own test laboratory guarantees that finished products meet flammability requirements

Laboratory specialists conduct flammability tests in accordance with AP/CS/FAR/AP-25.853 and AP-23 requirements for all types of materials used in aircraft interiors

The laboratory is accredited to perform tests according to the following methods:

- Determination of flame resistance of vertically and horizontally oriented specimens using a Bunsen burner
- Determination of flame resistance of specimens oriented at 45 and 60 degrees using a Bunsen burner
- Determination of flammability of seat cushions (specimens consist of cover material and seat soft parts)



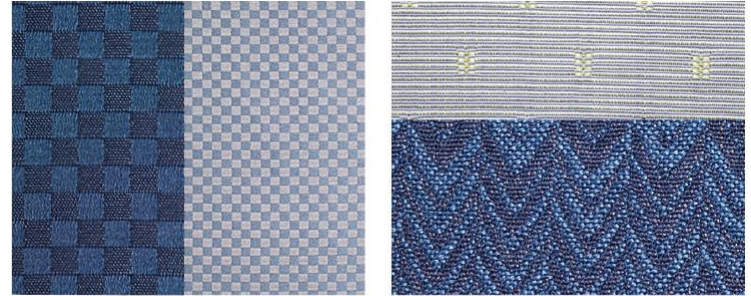
# CURTAIN AND CARPET MANUFACTURING

## Curtains

A set of curtains and partitions, depending on the aircraft configuration for business and economy class cabins, is manufactured from materials supplied by leading manufacturers.

**Colors:** in accordance with customer's corporate identity

**Materials:** polyester-wool

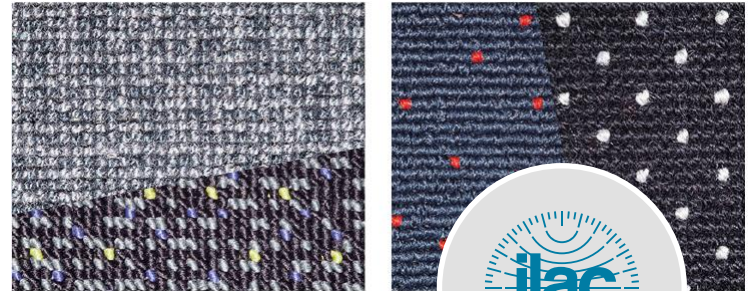


## Carpets

Carpets for business class, economy class cabins and flight deck are manufactured from carpet materials supplied by leading manufacturers, as well as from in-house production. Carpets comply with flammability requirements of AP/CS/FAR/AP-25.853 and AP-23.

**Colors:** in accordance with customer's corporate identity

**Materials:** wool, polyester, wool-polyester



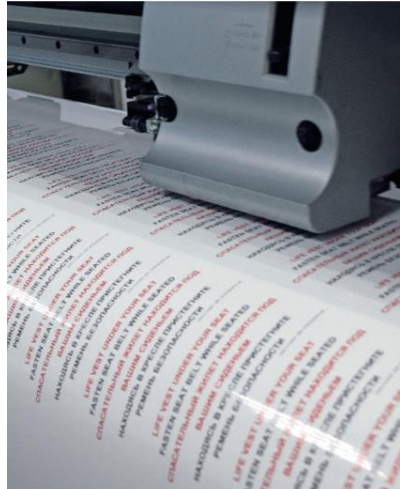
# DECAL MANUFACTURING

Development and production of external and internal aircraft markings: decals, stencils, Braille decals

Materials for decal production are resistant to external influences, tested and approved under a FAP-21J certificate at the modification development stage, and comply with flammability requirements of AP/CS/FAR/AP-25.853 and AP-23.

**Colors:** in accordance with customer's corporate identity

**Materials:** certified aviation films resistant to external influences and tested for flammability of aircraft interior materials.



# PLASTIC ITEMS

The company produces a wide range of plastic interior elements and passenger seat components for aircraft: backrests, trim panels, edgings, protective boxes, covers, plugs, bushings.

## Manufacturing methods:

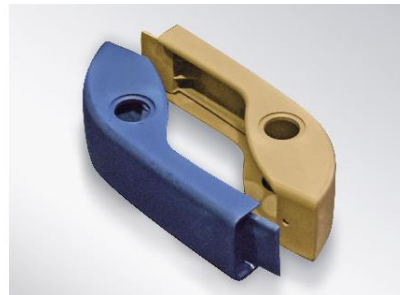
Parts are manufactured by injection molding, vacuum thermoforming from supplied materials, vacuum casting into silicone molds, using materials supplied by leaders in plastic raw materials. Through a partnership program, we are implementing a project to produce rail plugs by extrusion.

## Small-scale production:

A plan is being implemented to launch the production of plastic parts by **3D printing of plastic** reinforced with composite materials. This method will allow single-piece plastic components to be manufactured quickly and without tooling costs.

**Colors:** as per customer's corporate style

**Materials:** polypropylene, ABS plastic, polycarbonate



# METAL ITEMS



S7 Technics performs design and manufacturing of metal items, such as seatback literature pocket springs, drawers, brackets, machined metal items: brackets, beams, etc.

**Materials:** aluminum, steel



# SEAT SOFT PARTS



S7 Technics performs design and manufacturing of all types of soft parts for passenger and crew seats from materials supplied by leading global and Russian manufacturers.

**Materials:** polyurethane foam, polyethylene



# COMPOSITE SHEETS AND PANELS



## Composite panels

Aircraft panels are manufactured from composite materials approved by the aircraft manufacturer, using high-precision CNC milling.

The full scope of work, from graphic processing to issuance of a certificate for the finished product, is performed by experienced S7 Technics specialists who have already received the necessary training.

## Composite sheets

We have launched production of composite sheets for manufacturing composite panels. This is a blank from which a panel of the required size is cut.



# FILTER MANUFACTURING (AIR, WATER)

In cooperation with Rosatom, we produce import-substituting filters for various aircraft systems:

- air conditioning system
- water system, etc.

Filters are produced under FAP-21G



# TRAY TABLE MANUFACTURING



We have launched production of tray tables for economy class seats. Tray table is a multi-component assembly consisting of parts manufactured by different methods and from different materials.





# ADDITIONAL SERVICES

# LARGE-SIZE ITEMS



## Engine covers

Engine covers can be manufactured for all aircraft types. Airline logo and information decals can be applied.

Colors: predominantly red  
Materials: PVC

## Protective covers for light aircraft, as well as protective covers for engines with reversers removed

When manufacturing protective covers for light aircraft, drawings developed either by the customer's company or by S7 Technics specialists may be used.

Materials: tent fabric,  
AST-100 fabric, PVC.



# ADDITIONAL ACCESSORIES

## S7 Technics manufactures:

- Jack covers
- Grounding bags
- Technician bags
- Document folders
- Demonstration kit bags
- Additional equipment bags
- Soft covers for protruding aircraft parts
- Signal tapes

**Colors:** in accordance with customer's corporate identity

**Materials:** avizent (canvas), tarpaulin, vinyl leather, genuine leather, PVC

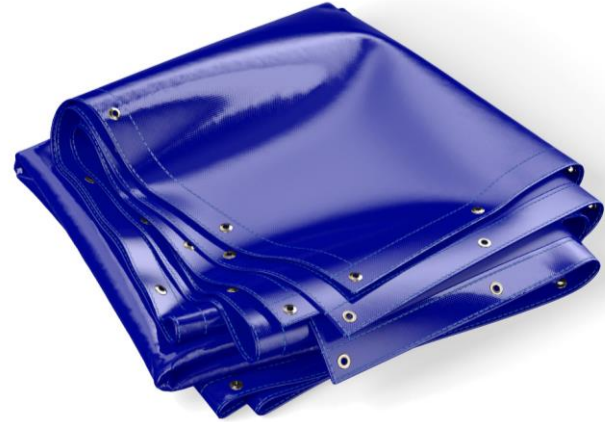


# CARGO COMPARTMENT ITEMS

## Cargo net repair

Full repair of cargo nets is performed according to C6 rating for Airbus, Embraer and Sukhoi Superjet:

- Replacement of base material
- Replacement of webbing straps
- Replacement of attachment locks



## Container curtain for cargo containers and information pocket for the container

Items are manufactured with airline logo and information decals.

**Colors:** predominantly red, blue

**Materials:** PVC

# EXCHANGE SERVICE AND PARTNER SERVICES



## Developing the exchange market in the Russian Federation

Opportunity to receive a serviceable component in exchange for a failed one and continue operations.



A wide range of partners worldwide allows components to be serviced by leading repair organizations in Europe and America.



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# CONTACTS

*S7*

The image features the text "S7" in a white, italicized, sans-serif font. The letters are positioned in the center-left of the frame. A bright green, glowing arc curves over the top of the "7", extending from the right side of the "7" towards the left, partially overlapping the top of the "S". The background is a dark, uniform gray.