SSP – Part Of Senior Aerospace

Senior Aerospace is an international manufacturing group with operations in 11 countries. Senior designs, manufactures and markets high technology components and systems for the principal OEM producers in the worldwide aerospace, defense, diesel engine, exhaust system and energy markets.

The company is divided into three groups: the Aerospace Group, Fluid Systems and Structures and Flexonics. Senior Aerospace SSP is a part of the Aerospace Fluid Systems group.

The Aerospace Group services customers that include companies like Boeing, United Technologies, GE, Airbus, Rolls-Royce, Goodrich and Bombardier and continues to experience strong growth in this market.

As part of Senior Aerospace, SSP can ensure that it has the resources to meet any customer needs, the financial stability to be there for the long haul, and the backing to invest in new and exciting technologies and equipment.

For more information on how SSP can help you solve your air management system problems, please contact us.

VE SYSTEMS AND MATERIALS UNMATCHED FABRICATION AND MANUFACTURING COMMITMENT TO QUALITY

INNOVATIVE SYSTEMS AND MATERIALS UNMATCHED FABRICATION AND MANUFACTURING COMMITMENT TO QUALITY

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Advanced Air Management Systems

INNOVATIVE SYSTEMS AND MATERIALS UNMATCHED FABRICATION AND MANUFACTURING COMMITMENT TO QUALITY

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Experts In Advanced Air Management Technologies

Senior Aerospace SSP is the leader in the design and manufacture of air management systems. For more than 50 years we have provided advanced engineering solutions for our customers' most complex challenges. We become a valued partner through the design and manufacture of innovative pneumatic and propulsion systems for heating, cooling, ventilation, humidity/contaminant control, pressurization, and anti-icing.

Working with SSP, customers realize bottom line benefits by taking advantage of our:

- Expertise in dealing with pressure and temperature – both hot and cold side
- Expertise in designing and manufacturing complete air management systems that integrate easily with other aircraft systems
- Unique, flexible ducting solutions
- Innovative creation and use of composite materials
- A "one stop shop" for a complete system solution
- Exceptional fabrication, manufacturing and assembly process control to keep every project on schedule and under budget
- Comprehensive support and service – including 24/7 AOG coverage

Engineering Creativity

We have complete design capabilities in-house, with experienced engineers who know how to solve air management system problems innovatively and cost-effectively. Our engineers have:

- Experience and expertise in extremes of temperature and pressure
- The latest CAD and analysis tools
- Model and file transfer capabilities
- Full in-house testing and qualification – cryogenic, fireproof, endurance, shock and vibration
- An innovative approach that results in patentable solutions – such as our lightweight, fireproof composites and our bleed leak detection system
- No barriers between the design and its manufacture – 90% of all work is done in-house for complete control of the process

Turning Innovative Designs Into Highly Functional Systems

Our unique forming, fabricating and manufacturing capabilities serve our customers well. We can bend and form complicated ducting and piping components and then assemble them into fully integrated systems that can be kitted directly to the customer's assembly floor. Our manufacturing capabilities include:

- Unprecedented control and integration of the design through assembly process
- Lean and green manufacturing practices
- Cell manufacturing approach
- MRP system, JIT, HOC metrics boards, Kaizen events and Kanban process
- Bellows, Gimbal and Ball Joint fabrication
- Sophisticated bending and forming
- A wide range of welding technologies
- Continual equipment and facility upgrades including a hi-bay facility and automatic bending equipment

INNOVATION

ENGINEERING | FABRICATION | MANUFACTURING | QUALITY

Committed to Quality and Customers

Quality is a part of every process and is designed into every system.

- 6 Sigma approach with 6 Sigma "blackbelts" on our manufacturing floor
- Up-to-date with current standards, including AS 9100, ISO 9001, and PRI Nadcap
- Rigorous testing at every stage in every process

In addition, our commitment to meeting the customer's needs includes:

- Complete program management from contract signing through delivery
- Program management using MAPICS and a staged gate development process to ensure that all milestones are met
- An open and transparent relationship with customers
- Extensive customer service and technical support with AOG support

Part of the Senior Aerospace Fluids Group

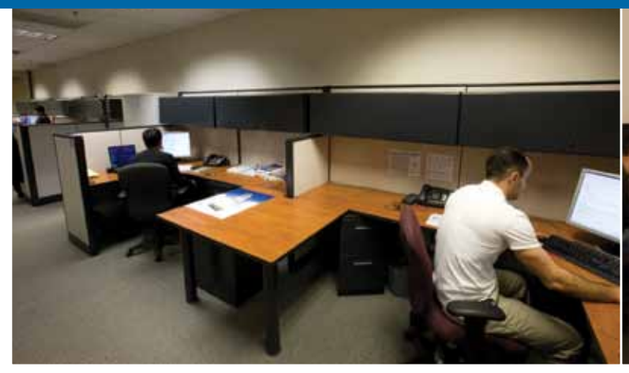
As part of Senior Aerospace, SSP can offer customers the financial stability of a large corporation with the attention, innovation and flexibility of a nimble company. We can also call on the unique talents of our fellow companies in support of customer requirements.

Customer Programs – System Level Supply - Airframe

- Bombardier GX – HP ducting system
- Bombardier CRJ-700/900/1000 – HP ducting system
- Bombardier C-Series & Learjet 85 – HP ducting system
- Nimrod MRA4 – HP ducting system
- Gulfstream G450/550 – HP ducting system
- Boeing F-15 – HP ducting system
- Lockheed Martin C-130 – HP ducting system

Customer Programs – System Level Supply - Nacelle

- F-35/F135 – IPP and bleed ducts
- A400/TP400 – Nacelle systems
- CRJ-700/900/CF34-8D – EBU duct system
- A340-600/Trent 500 – ECS and starter ducts



Engineering For Innovation

At SSP, our engineers combine in-depth knowledge with the broad experience necessary to handle any challenge our customers might face. Our engineers are multifaceted – they can deliver innovation in all of the areas that might be related to a ducting system.

For example, a customer needed a fireproof solution that would meet new FAA requirements. Because our engineers are well-acquainted with different composites, we were able to meet this customer's fireproofing needs with a composite material using a thin layer of metal foil. The composite is patentable and more importantly both fireproof and very light.

In a second case, another customer was struggling with the FAA's requirements for leak detection capabilities on any part of a system that is used near the cabin. Once again our engineers were able to implement a new bleed leak detection system to meet this challenge because of our air management systems knowledge.

In yet a third instance, our engineers working on a metallic APU system were able to meet the needs for strength, durability and light weight after the customer's in-house engineers believed the task unobtainable.

When customers bring us engineering challenges they know they can depend on us for innovative solutions – on-time, within budget and designed to meet their requirements.

We function as a customer's design partner – a full design house with the following capabilities:

- Experts on temperature and pressure
- Ability to design a complete air management system and integrate it with other aircraft systems
- The latest CAD and analysis tools
- An open and transparent approach to customer/in-house integration, including model and file transfer
- Co-location from joint definition through CDR

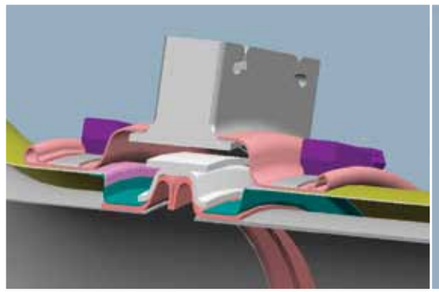
Getting the Most From the latest Engineering Tools

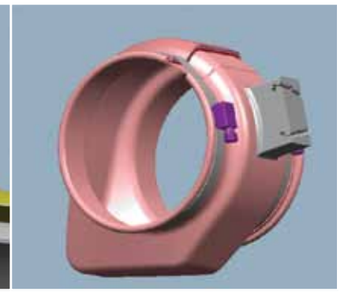
System level design and analysis:

- Finite Element Analysis (FEA) (Cosmos and Nastran)
- Load, thermal, and flow analysis (Flowmaster)
- CATIA V4 & V5, UNIGRAPHICS NXS workstations
- PC based ThinkDesign

CAD/CAM Data Transfer

- Mastercam
- SolidWorks
- ThinkDesign
- IGES, STEP, DXF





A History of Innovative Engineering for Our Markets

We provide system level design, engineering, manufacturing, fabricating, assembly and integration for customers engaged in:

Aerospace – both civil and military

- ECS Duct systems, wing anti-ice systems, APU inlet and exhaust systems, fuel ducting, complex fabrications
- Engines – bleed/starter ducting systems, inlet cowl and cowl anti-icing duct systems, integration of tubes, ducts, vents and related hardware, complex fabrications

Space

- Launch vehicle fluid transfer lines, feed and vent lines
- Payloads- fluid lines and hoses

Missiles

- Complex fabrication, hoses

Marine

- Engine bleed and anti-ice ducting

Turning Innovative Designs Into Highly Functional Systems

At SSP, there is no barrier between an innovative design and its production. Our engineering systems work directly with our manufacturing systems. Using 6 Sigma principles, and guided by our 6 Sigma manufacturing "blackbelts" on our shop floor, we move rapidly from design through forming, fabricating, test and production.

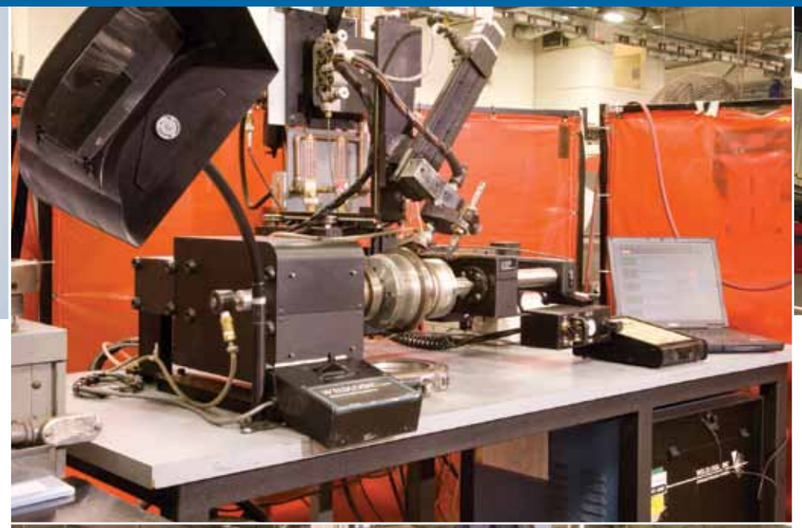
We take a systems approach to manufacturing with an MRP system, manufacturing cells, Just-In-Time processes, HOC metrics boards, Kaizen events and Kanban to keep our cells supplied in a timely manner. We handle the entire logistics necessary for the efficient and cost-effective manufacturing of advanced ducting systems – including keeping appropriate levels of safety stock.

Our background is in forming and fabricating—there are no "off-the-shelf" systems – each system and all its components are custom made for each customer program. We still bend our own tubes, using the latest in multiple bend, automatic equipment, as well as manual techniques. We make our own tools and design and build the appropriate joints and connections.

We are committed to manufacturing that is lean and green, and we can take each job all the way to kitted assembly for our customers. 90% of all the work done on any program is done in-house - giving SSP unprecedented control over the process.

Our manufacturing capabilities include:

- Sophisticated tube manufacturing and bending
- Hot, bulge, drop hammer and spin forming
- Bellows, gimbal joints, ball joints fabrication
- Piccolo and telescopic ducts
- TIG, plasma, chamber, and orbital welding
- Punching, shear, water jet
- Heat treating
- Cleaning, degreasing, descaling, pickling, passivation, ultrasonic
- Complete test capabilities- cryogenic, pressure and mechanical endurance, fireproof, vibration and shock
- Assembly – complete system assembly down to kitting to the customer's manufacturing floor



Innovative Materials For Unique Solutions

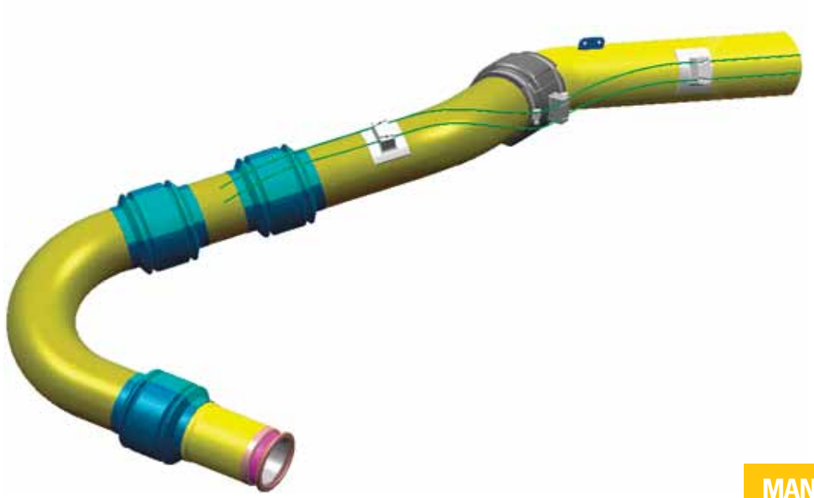
Our ability to work with new and exotic materials enables us to manufacture systems that can meet the ever present need for the lightest yet most durable construction. Our in-depth knowledge of composites not only delivers innovative new designs but also guarantees that these designs can be manufactured quickly and cost-effectively.

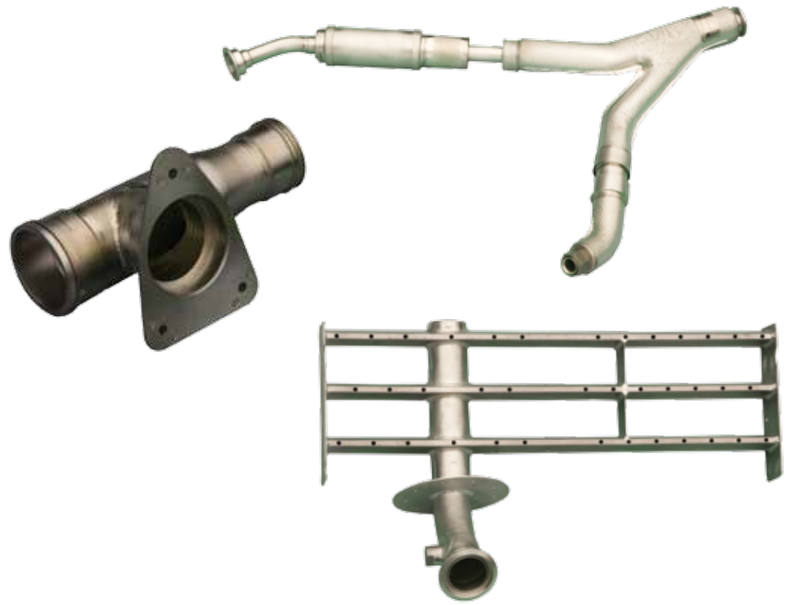
Materials we work with include:

- Inconel
- Stainless steel
- Titanium
- Hastelloy
- Composites

We provide extensive test capabilities, including:

- Cryogenic testing to 1100°F
- Pressure, mechanical endurance, vibration and shock
- Hot and ambient temperature proof and burst
- Mechanical vibration and shock
- In-house metallurgical lab





Committed To Quality and Customer Satisfaction

We take care of our customers by:

- Designing quality into every stage in the program
- Managing the program and keeping all shareholders – including the customer – up-to-date on every stage
- Providing access to support and service throughout the program and on through the aftermarket stage

We are committed to meeting all of the quality standards our customers might require:

- AS 9100, ISO 9001, PRI Nadcap – all to current levels
- 6 Sigma based processes
- Implementation of lean manufacturing principles
- ISO 14001, REACH standards and local environmental regulations
- Use of a MAPICS MRP system, JIT, Kaizen events

We build quality measurement into our design and manufacturing processes:

- Coordinate measurement machine (CMM)
- Fluorescent dye penetration inspection
- Real-time and conventional X-ray inspection
- Hydrostatic and pneumatic pressure testing
- Mass spectrometer helium leak detection

Open and straightforward communication with our customers creates a partnership atmosphere

Our commitment to ongoing customer support and service includes:

- Complete program management with a program manager as the focal point champion for the customer
- Integration with customers' web-based vendor portals – for the exchange of information
- The program manager keeps everyone involved in the program updated on relevant activities and milestones
- Extensive customer service and support from signing of a contract through the completion of the program
- 24/7, live-person AOG support – so customers have access to the information they need when they need it