




**sneema**  
**SNECMA**  
 2, Blvd. du Général Martial-Valin  
 F-75724 Paris Cedex 15, France  
 Tel: (33-1) 4060-8080  
 Fax: (33-1) 4060-8102  
 www.sneema.com

**Employment:** 39,268

**Officers:**

**Sneema Chairman & CEO** Jean-Paul Béchat; **Sneema Executive Vice President & COO** Yves Bonnet; **Sneema Moteurs Chairman & CEO** Jean-Paul Herteman; **Sneema Services Chairman & CEO** Marc Ventre; **Turbomeca Chairman & CEO** Emeric d'Arcimoles; **Techspace Aero President & CEO** Jean-Lin Fourmureaux; **Sneema Propulsion Solide Chairman & CEO** Michel Laroche; **Hispano-Suiza Chairman & CEO** Pascal Sénéchal; **Hurel-Hispano Chairman & CEO** Christian Knapp; **Messier-Dowty Chairman & CEO** Louis Le Portz; **Messier-Bugatti Chairman & CEO** Yves Leclère; **Messier Serrvices Chairman & CEO** Benoit Gossett; **Labinal Chairman & CEO** Jean-Claude Lepage; **Cinch and Globe Motors Chairman & CEO** Jean-Claude Lepage; **Microturbo Chairman & CEO** Henri Sala

**Aerospace Organization/Products:**

**Equipment:**

**Cinch** (St. Quentin en Yvelines, France): Terminals, plastic housings and electronic connectors for the aerospace, automotive, military, telecom and business equipment markets. **Globe Motors** (Dayton, OH, USA): Electric DC motors and actuators for aeronautical, automotive, defense and industrial applications. **Hispano-Suiza** (Colombes, France): Engine equipment; control systems for aerospace engines, power transmission systems for both civil and military aircraft engines, and accessory gearboxes, drive shafts, power transmission gearboxes, reduction gears. **Hurel-Hispano** (Meudon la Forêt, France): Engine nacelles, thrust reversers, aerostructures and organic matrix composites for aerospace applications. Produces and repairs precision mechanical parts and manufactures ejection seats. **Labinal** (St. Quentin en Yvelines, France): Wiring and electrical harnesses and systems for the aerospace, marine, defense and railway industries. Provides engineering services. **Messier-Bugatti** (Vélizy, France): Manufactures wheels and carbon brakes, braking control systems (full brake-by-wire control systems, Tire Pressure Monitoring System (TPMS), Brake Pressure Monitoring System (BTMS) and steering systems), landing controls systems (sequencing of landing gear and gear doors, thrust reverser actuation systems, balance beam pitch trimmer), hydraulic and electrohydraulic actuation systems (EHA pumps), SEAS electrical seat actuation systems. **Messier-Dowty** (Vélizy, France): Designs, develops, manufactures and supports landing gears for commercial, regional and military aircraft, business jets and helicopters. **Messier Services** (Vélizy, France): International service, repair and overhaul network for all landing and braking systems. Operations in Asia, Europe and North America.

**Propulsion:**

**Microturbo** (Toulouse, France): Missile and drone propulsion systems; turbojet starting systems, military aircraft auxiliary power units. **Sneema Moteurs** (Paris, France): Manufactures engines and propulsion systems for both air and space applications. Products include: Atar 09K50 for Mirage 50 and Mirage F1; CFM56 aircraft engines (through CFM International, an equally owned joint venture of Sneema and General Electric) for Boeing 737 aircraft and military applications and Airbus transports; Larzac for Alpha Jet and MiG-AT trainers; M53 for Dassault Mirage 2000; M88 for Dassault Rafale; satellite, spacecraft and launch vehicle propulsion including: Ariane 4 and 5 propulsion (HM7B, Viking storable liquid propellant engines, Vinci and Vulcain 2 cryogenic engines). **Sneema Propulsion Solide** (Le Haillan, France): Designs and produces solid rocket motors (MPS for the Ariane 5 com-

mercial launcher (through Europropulsion, an equally owned joint venture of Sneema and FiatAvio), M45 and M51 strategic and tactical missiles propulsion, and thermostructural composite materials for aviation, space and industry. **Sneema Services** (Melun, France): Provides product support for commercial engines and MRO services for commercial and military engines. Customer support for CFM56 engines and distribution of spare parts. **Techspace Aero** (Herstal, Belgium): Equipment and low-pressure systems for aircraft engines and spacecraft. Low-pressure compressor modules, lubrication systems, space valves and test cell engineering. Engine depot maintenance, repair and test services. **Turbomeca** (Bordes, France): Turbohaft engines for helicopters. Current production includes 100% Turbomeca engines such as the Ardiden, Arriel, Arrius, Makila and TM333, and jointly produced engines such as MTR390 (with MTU and Rolls-Royce) and RTM322 (50/50 with Rolls-Royce). Service networks worldwide. Turbojet engines for training, support or liaison aircraft (Adour with Rolls-Royce, Larzac with Sneema Moteurs). Gas turbines for land and marine applications.

**Other Subsidiaries:**

**Propulsion Technology** (Miami, FL, USA): Provides repair and engineering services for aircraft engines. **Sneema Services Brussels** (Brussels, Belgium): Provides MRO services for commercial aircraft engines. **Sofrance** (Nexton, France): Manufactures filtration systems. **Techlam** (Cernay, France): Assembles elastomeric systems for motion control. **Technofan** (Blandac Cexdex, France): Builds ventilation systems for commercial and military aircraft and rotorcraft.

**Joint Ventures:**

**Ceramic Coating Center**, partner: MTU Aero Engines (Germany). **CFM International**, partner: General Electric (USA). **Europropulsion**, partner: FiatAvio (Italy). **International Compressor Technologies**, partner: Praxair Surface Technologies (USA). **MTR GmbH**, partners: Turbomeca (France), MTU Aero Engines (Germany) and Rolls-Royce (UK). **Rolls-Royce Sneema Ltd.**, partner: Rolls-Royce (UK). **Rolls-Royce Turbomeca Ltd.**, partner: Rolls-Royce (UK). **Sichuan Sneema Aero-engine Maintenance Co.**, partner: China Southwest Airlines (China). **Smartec**, partner: NPO Saturn (Russia). **Sneema Morocco Engine Services**, partner: Royal Air Maroc (Morocco).

**FINANCIALS (\$ MILLIONS)\*:**

	2000**†	2001	% Change
Operating Revenues	5,450	6,241	15%
Operating Expenses	4,709	5,396	15%
Net Profits	311	338	9%
Debt to Equity Ratio	35%	26%	(26%)

\*AW&ST conversion based on exchange rates available on 12/31/00 and 12/31/01.

\*\*Consolidated figures for 2000 include the Labinal businesses retained by Sneema, starting with the second half of the year, but do not include Hurel-Dubois, which was acquired at year's end. The company was merged with Hispano-Suiza Aerostructures (Sneema Group) in 2001 to create Hurel-Hispano.

†Values updated from 2002 Source Book.