



# **COMPANY PROFILE**

Bet Shemesh Engines Ltd. (BSEL) was established in 1969 and has been traded on the Tel Aviv Stock Exchange since 1997.

**BSEL** combines four Divisions:

- Maintenance, Repair and Overhaul (MRO) Division
- Manufacturing Division
- Casting Division
- R&D Division

All the Divisions of Bet Shemesh Engines Ltd. are certified to ISO 9001:2008 & AS 9100, as well as the various Military Standards and OEM Standards.

Bet Shemesh Engines Ltd. is certified as Part 145 Repair Station by the Israeli Civil Aviation Authority (CAAI), by the FAA and by EASA, for Rolls-Royce (Allison) Model 250 engines and for Pratt & Whitney Model PT6 engines.

A. Maintenance, Repair and Overhaul Division overhauls and repairs the following engines and modules:

#### 1. Pratt and Whitney F100 Engines (applicable for F15 & F16 aircraft)

Under this program we upgrade the Israel Air Force F15 and F16 engines to a DPI configuration (more than 200 engines to date), as well as other air forces worldwide.

### 2. Pratt and Whitney F100-229

BSEL repair and overhaul the most advanced fighter engine which powers the recently bought Israel Air Force F15I and F16I aircraft.

### 3. Pratt & Whitney Canada PT6A series

Repair and overhaul of these engines for many civil and military applications, like Pilatus aircraft, Beechcraft aircraft, De Havilland aircraft, Bell helicopters and many more.

4. GE Aviation (Turboshaft) T700-700, -701, -701C, -701D, -401, -401C

Repair and overhaul of these engines for the Apache AH-64 and the UH-60/S-70 BlackHawk helicopters, as well as for SH-2G helicopters.

### 5. Rolls-Royce (Allison) Model 250 C20 series and C30 series, and C47 series

Repair and overhaul of these engines for many civil and military applications, like BELL 206, MBB BO-105, AGUSTA A-109, MD500 and many more.

6. Turbomeca Marboré II, VI

Repair and overhaul of these engines for the military applications of the Fouga Magister aircraft, as well as for some civil version of this same aircraft.

Major customers of this Division are the Israel Air Force and various European, Latin American and Asian Air Forces, as well as private operators (like regional airlines).

## B. Manufacturing Division has the following capabilities:

- Manufacturing of major rotating parts for civil aviation engines
- Turning, Grinding, Milling, Honing, Drilling, Broaching
- Plating, Coating, Sermetel
- Heat Treatment, Shot Peening
- Brazing, Welding, Plasma Spray, HVOF, Laser Drill
- NDT, CMM, EBM

### Main products of this Division are:

- Compressor and Turbine Disks (F100, J79, JT8D, JT9D, GE-TC, GE CF34, GE CF6-6, GE CF6-80, GE CFM 56, PWA GG8, PWA FT8, PWC 306, PWC 307, PWC 545)
- Compressor and Turbine Spacers and Housings (F100, J79, JT8D, JT9D, GE-TC)
- Turbine Nozzles and Liners (J79)
- Flame Holders (F100, J79)
- Combustors (M6, BS151)
- Frames (F100, J79)
- Machining of casting produced in the Casting Division

Most of the parts are manufactured for the OEMs (i.e. Pratt and Whitney, GE Aircraft Engines, Hamilton Sundstrand and MTU).

### C. Casting Division

This Division produces parts by the investment casting (lost wax) method. Parts are produced using methods of air casting and vacuum casting.

Main products of this Division are:

- Jet Engine Turbine Blades & Vanes (JT8D, PW-4000 J79, MARBORE VI, V2500, PWC 545, PWC 306 and PWC 307)
- Structural parts (F16)

Major customers of this Division are Pratt and Whitney, GE Aircraft Engines, U.S. Air Force, MTU, Samsung Aerospace, Hamilton Sundstrand, Israel Air Force. This Division also includes a Rapid Prototype Center.

### D. R&D Division

Developing and manufacturing of small turbojet engines for UAVs.

For certain programs BSEL delivers finished products or assemblies. For example, BSEL uses the casting capability of the Casting Division to cast turbine blades, the Manufacturing Division produces the turbine disks, and the M.R.O. Division assembles the blades and the disks, including balancing. BSEL ships the complete assembly to the customer.