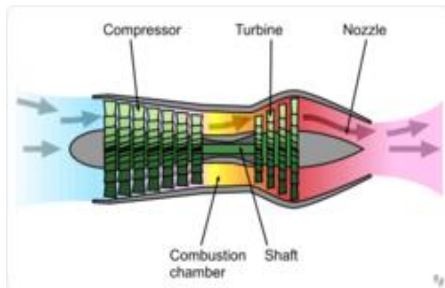




Data sheet Liberty Gasturbine Holland 11000 Turbojet.



Principle of a turbojet engine.
 The intake, a carefully shaped duct, facing the air intake side, guides the intake air towards the compressor. The compressor compresses the intake air to many times atmospheric pressure and forces the compressed air in a combustion chamber. At this point it is hot where fuel is injected and lit. Due to combustion the volume is increased drastically and combustion gases are guided further in the engine where they pass a turbine wheel, which is mounted on the compressor shaft. This turbine wheel drives the compressor, the more fuel is injected the faster the compressor turns, the more thrust is created. After this stage, the exhaust gas is guided to a nozzle, or jet pipe.

Technical specification of the LGH 11000 TurboJet engine;

Type; Straight flow Single shaft axial-flow turbojet

- Intake; annular intake casing. Variable inlet guide vanes
- Compressor; 15 stage axial flow, with slide type bleed valve.
- Rotor blades; Stainless steel, compression ratio 7.85 to 1 at 8000 rpm at sea level conditions.
- Combustion chamber; 8 annular type
- Turbine; Two stage axial flow type
- Jet pipe; Outer tapered casing and central cone connected by streamlined struts.
- Engine rotation speed; 2500 - 8400 RPM
- Airflow 152 lb/second at 8000 RPM
- Exhaust gas temperature; 625 C
- Fuel pressure 0.8 Bar
- Fuel consumption; max. 3500 l/h depending on altitude/circumstances
- Oil pressure; 1.8 Bar
- Oil; Shell Turbo 500 Oil reservoir is integrated in the engine
- Power electric starter motor, 10 X 12 V batteries 125 Amp. required
- Engine weight; 2883 Lb or 1298 kilo
- Engine length; 123 inch or 3.12 meter
- Engine width; 41.5 inch or 105 cm
- Engine performance; 47.3 kn (10650 lb) thrust at 8000 RPM
- Filters oil and fuel; all part of internal accessories.
- Start-up time to idle speed; 45 seconds
- Idle speed to full speed; 22 seconds. Idle speed 2600 R.P.M. Maximum speed 8000 R.P.M.



LGH 11000 TurboJet www.libertygasturbine.com