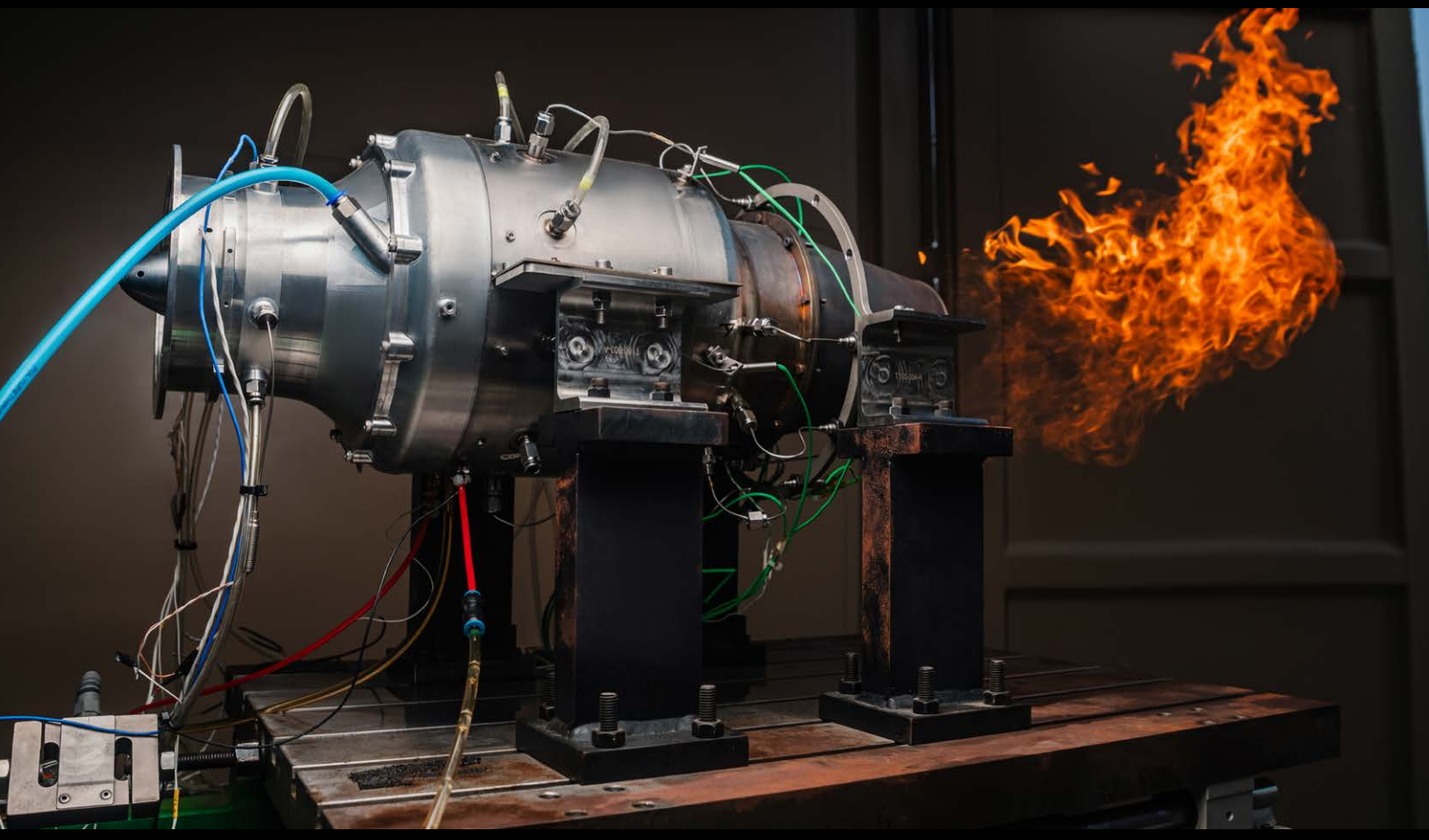
POWERTECH

POWERING MISSIONS WITH SUPERIOR PROPULSION.

POWERTECH is the regional expert in propulsion systems, specialising in the design, engineering, and manufacture of internal combustion, advanced turbojet, and medium- to large-sized turbofan engines.



ABOUT US

POWERTECH is a centre of excellence for dual-use propulsion technologies. We design, engineer, and manufacture mission-tested internal combustion, advanced turbojet and turbofan engines for aerospace, defence and autonomous applications, including fixed- and rotary-wing UAVs, and missile systems.

Propulsion procurement
Beyond our own portfolio, we qualify and procure high-quality, high-performance engines to meet diverse customer propulsion requirements across global markets.

Advanced engine testing
Our state-of-the-art engine test facility enables the development, validation and optimisation of cutting-edge propulsion technologies to meet evolving operational and industry needs.





PJ40

COMPACT POWER. FLEXIBLE INTEGRATION.



COMPACT TURBOJET ENGINE FOR MISSILES AND UAVS

The POWERTECH PJ40 is a short-life, expendable turbojet engine designed for missile and UAV applications. Suitable for both air- and ground-launched platforms, the engine is designed and produced in the UAE and is ITAR free.

Available with flexible qualification and configuration options, the PJ40 can be adapted to specific platform requirements. Adjustable mounting points, configurable exhaust nozzle lengths and advanced inlet optimisation support efficient integration across a wide range of applications.

SPECIFICATIONS

- Suitable for air- and ground-launched platforms
- ITAR free
- Flexible mounting and exhaust configurations
- Advanced engineering and integration support

TECHNICAL DATA

Performance	
Maximum Thrust	450 N ±10 N
Nominal Continuous Thrust	400 N ±10 N
Thrust Specific Fuel Consumption (TSFC)	≤40 g/kN·s
Maximum Operating Speed	93,000 rpm
Maximum Exhaust Gas Temperature (EGT)	760°C

PJ90

COST-EFFECTIVE POWER. FLEXIBLE INTEGRATION.



COMPACT 900 N TURBOJET ENGINE FOR MISSILES AND UAVS

The POWERTECH PJ90 is a short-life, expendable turbojet engine designed for missile and UAV applications. Suitable for both air- and ground-launched platforms, the engine is designed and produced in the UAE and is ITAR free.

Engineered for cost-effective performance, the PJ90 combines flexible mounting and exhaust configurations with advanced inlet optimisation. POWERTECH also provides engineering support and in-house testing capabilities to facilitate efficient integration across specific platform requirements.

SPECIFICATIONS

- Cost-effective expendable design
- Suitable for air- and ground-launched platforms
- ITAR free
- Flexible mounting and exhaust configurations

TECHNICAL DATA

Performance	
Maximum Thrust	1000 N ±10 N
Nominal Continuous Thrust	900 N ±10 N
Thrust Specific Fuel Consumption (TSFC)	<38 g/kN·s
Maximum Operating Speed	63,000 rpm
Maximum Exhaust Gas Temperature (EGT)	750°C

PJ110

RELIABLE THRUST. FLEXIBLE INTEGRATION.



COMPACT 1100 N TURBOJET ENGINE FOR MISSILES AND UAVS

The POWERTECH PJ110 is a short-life, expendable turbojet engine designed for missile and UAV applications. Suitable for both air- and ground-launched platforms, the engine is designed and produced in the UAE and is ITAR free.

Engineered for reliable, cost-effective performance, the PJ110 combines flexible mounting and exhaust configurations with advanced inlet optimisation. Optional onboard power generation and POWERTECH engineering support facilitate efficient integration across specific platform requirements.

SPECIFICATIONS

- Reliable, cost-effective expendable design
- Suitable for air- and ground-launched platforms
- ITAR free
- Optional onboard power generation

TECHNICAL DATA

Performance	
Maximum Thrust	1100 N ±10 N
Nominal Continuous Thrust	1000 N ±10 N
Thrust Specific Fuel Consumption (TSFC)	<38 g/kN·s
Maximum Operating Speed	59,000 rpm
Maximum Exhaust Gas Temperature (EGT)	750°C

PJ120

COMPACT SIZE. FUEL EFFICIENT.



SMALL 1200 N TURBOJET ENGINE FOR MISSILES AND UAVS

The POWERTECH PJ120 is a small 1200 N turbojet engine designed for missiles and UAVs. Indigenously designed in the UAE, thE engine is ITAR free.

With a class-leading thrust-to-weight ratio and class-leading fuel consumption, the PJ120 delivers lower operating costs. Its compact diameter facilitates integration, positively impacting production costs.

SPECIFICATIONS

- Cost-effective expendable design
- Suitable for air- and ground-launched platforms
- ITAR free
- Flexible mounting and exhaust configurations

TECHNICAL DATA

Performance	
Maximum Thrust	1400 N ±10 N
Nominal Continuous Thrust	1200 N ±10 N
Thrust Specific Fuel Consumption (TSFC)	<36 g/kN·s
Maximum Operating Speed	57,000 rpm
Maximum Exhaust Gas Temperature (EGT)	750°C

X550

POWER PACKED. COST COMPETITIVE.



5000 N TURBOJET ENGINE FOR MISSILES AND UAVS

The POWERTECH X550 is a 5000 N turbojet engine designed specifically for missiles and unmanned aerial vehicles. It provides those platforms and systems with a continuous thrust of 4700 N and a maximum thrust of 5000 N.

Indigenously developed in the UAE, this cost-competitive engine is ITAR-free, allowing for integration into diverse UAV and missile programs.

SPECIFICATIONS

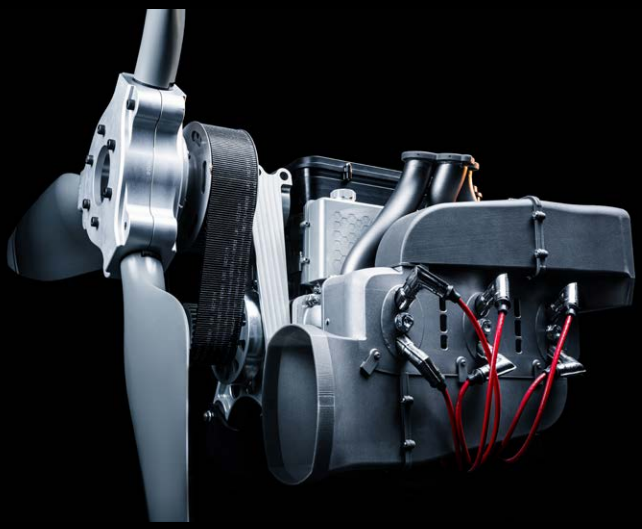
- ITAR free
- Cost competitive
- Maximum thrust of 5000 N

TECHNICAL DATA

Performance	
Engine Type	Low by-pass ratio turbofan
Bypass ratio (BPR)	0.7
Maximum Thrust	5000 N ±10 N
Nominal Continuous Thrust	4700 N ±10 N
Thrust Specific Fuel Consumption (TSFC)	<22 g/kN·s

P145I

MISSION RESILIENCE. LIFECYCLE EFFICIENT.



2-STROKE, FUEL-INJECTION 6-CYLINDER ENGINE FOR UAVS AND LIGHT AIRCRAFT

The POWERTECH P145i is a 2-stroke, 6-cylinder engine with a boxer configuration that enables a flat engine layout and a short and lighter crankshaft. The long-stroke engine with separated lubrication, delivers higher torque, a low RPM rate, and better fuel efficiency.

Ideal for medium-altitude, long-endurance UAVs and light aircraft, the low-maintenance P145i features more than 20 sensors and several function redundancies for mission resilience and operation in all weather conditions.

SPECIFICATIONS

- Low fuel consumption
- MTBO 1,000 hours
- 5 kW generator
- All weather conditions
- CANBUS communication protocol
- More than 20 sensors and several function redundancies

TECHNICAL DATA

Performance	
Type	2 strokes
Architecture	6 cylinders
Bore	72 mm
Stroke	76 mm
Displacement	1855 cm3
Compression ratio	9:1
Gear Reduction Ratio	2.4

Fuel Injection System	EFI
Min. BSFC	372 g/kW/hr
Alternator (Power/Voltage)	28 V
Cooling System	Air-cooled
Starter system	Starter Generator
Generator	5 kW
Max weight	65 kg

P80I

PISTON PERFECT. FUEL EFFICIENT.



FUEL-EFFICIENT, 2-STROKE, FOUR-CYLINDER PISTON ENGINE FOR MALE PLATFORMS

The POWERTECH P80i Boxer 2-stroke 4-cylinder piston engine with separated lubrication is configured in a flat form factor, allowing for easier, more effective and fuel-efficient platform by enabling a shorter and lighter crankshaft.

Ideal for medium-altitude, long-endurance platforms engaged in intelligence, surveillance and reconnaissance, the long-stroke engine delivers higher torque, a lower RPM rate, and better fuel efficiency.

SPECIFICATIONS

- Low fuel consumption
- Long service intervals (MTBO 1,000 hours)
- 5 kW generator
- Operates in all weather conditions
- CANBUS communication protocol
- More than 20 sensors and several function rvedundancies

TECHNICAL DATA

Performance	
Type	2-strokes
Architecture	4-cylinders
Bore	72 mm
Stroke	76 mm
Displacement	1250 cm3
Compression ratio	9:1
Gear Reduction Ratio	2.4

Fuel Injection System	EFI
Min. BSFC	372 g/kW/hr
Alternator (Power/Voltage)	5 kw @28 V
Cooling System	Air-cooled
Starter system	Starter Generator
Max weight	46 kg
Max weight	65 kg

P10I

SMALL FORM. FORMIDABLE SERVICE.



2-STROKE, FUEL-INJECTION 2-CYLINDER ENGINE FOR SMALL UAVS AND VTOLS

The POWERTECH P10i is a 2-stroke, 2-cylinder engine ideal for small ISR and VTOL platforms. Its engine features a boxer configuration that enables a flat layout and a short and lighter crankshaft.

Featuring a separated lubrication system for improved durability, the P10i can fly at least 1,000 hours between overhauls. With more than 15 sensors, multiple function redundancies, and all-weather operation, the engine offers superior mission resilience.

SPECIFICATIONS

- Low fuel consumption
- MTBO 1,000 hours
- 1 kW generator

- All weather conditions
- CANBUS communication protocol
- More than 15 sensors and several function redundancies

TECHNICAL DATA

Performance	
Type	2 strokes
Architecture	2 cylinders
Bore	46.2 mm
Stroke	46.2 mm
Displacement	155 cm3
Compression ratio	1:9
Gear Reduction Ratio	Direct drive

Fuel Injection System	EFI
Min. BSFC	~ 500 g/kWh
Alternator (Power/Voltage)	1.2 kW / 28.5 V
Cooling System	Air-cooled
Starter system	Starter Generator
Max weight	8 kg

POWERTECH

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