TDI
A KRATOS COMPANY

# TDI-J45 TURBOJET



**High-Reliability Turbojet Engines**
**for Military UAS and Tactical Missiles**
**kratosdefense.com**

PROUDLY MADE IN THE USA

THE SPARTAN TDI-J45



# TDI-J45 Turbojet Engine

## PRODUCT FACTS

The TDI-J45 turbojet engine is designed to deliver affordable military-grade performance in compact form. TDI engines are tested for reliability and survivability on airborne platforms.

### Engine Specifications

| Parameter | TDI-J45 |
|---|---|
| Uninstalled Maximum Thrust at Sea-Level Static | 30 $lb_f$ (13.3 daN) |
| Overall Length (with minimum reference nozzle) | 9.1 in (231 mm) |
| Nominal Engine Case Diameter | 4.5 in (114 mm) |
| Uninstalled Engine Weight | 9 $lb_m$ (4 kg) |
| Maximum Operating Altitude / Mach Number | 35,000+ ft (10,668 m) / 0.85+ |
| Maximum Continuous Power Generation | 1.2 kW |
| Approximate Maximum EGT | 1,600 °F (871 °C) |
| Proven Starting Methods | Pyrotechnic, Windmill |
| Fuel Compatibility | JP-10, JP-8, JP-5, JET-A, JET-A1 |

### Compact and Power-Dense

- 4.5” O.D., 9” length
- Modular exhaust nozzles adaptable to any installation
- Thrust up to 30 $lb_f$ sea-level static
- Best-in-class TSFC from state-of-the-art turbomachinery
- Integral generator delivers up to 1.2 kW of continuous power

### Established ‘Turn-Key’ Propulsion Solutions

- Nearly 40 years of development experience with major defense primes
- 100% designed and produced in the USA
- Scalable production capacity up to 10,000 engines/year
- Fuel and explosives handling/storage and support
- Integration testing, flight test, and full lifecycle support

### Simple, Robust Architecture & Subsystems

- Engine and subsystems tested for survivability on air-launched platforms
- Able to withstand high acceleration from ground-launched applications
- Reliable start and operability validated via multiple captive-carriage flight tests

**High-Performance, Low-cost Propulsion for Military UAS and Tactical Missiles**

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