Thrust you can trust

Founded in 2007, Austro Engine offers innovative solutions in Jet Fuel piston engines, AE300/AE330 (E4-Series) for civilian and non-civilian customers worldwide and a proven line of rotary engines, AE50R-Series, for UAV applications.

With the E4-Series of heavy fuel piston engines, Austro Engine is the leading Jet Fuel piston engine producer in General Aviation. Utilized in the state of the art Diamond Aircraft DA40, DA42 and DA62 type aircraft. Safe and reliable global operations with more than 1 million flight hours from more than 1,500 engines.

“Thrust you can trust” Engines

AE300
AE330
AE50R

“Austro Engine products have proven their outstanding capabilities in versatile operation profiles all over the globe, generating countless stories of success for our partners. On a retrospective view, we are certainly proud of having set entirely new standards in engine reliability, quality and operational efficiency for our customers, whose appreciated involvement in continuous product and service improvements have been vital and the key to success. Being energized by achievements, we are striving to further enhance operator’s experiences.”

Jürgen Heinrich, Managing Director of Austro Engine and Diamond Aircraft
Innovation and industry leadership mean saying "no" to doing things the way it’s been done before. With Diamond's proprietary Austro Engine Jet Fuel piston engines, that means no manual mixture control, no magneto ignition, no manual priming, no prop control lever, no hard starting – hot or cold, no manual runup tests, no shock cooling, no cowl flaps, no power calculations based on rpm and manifold pressure, in short, less work and zero guesswork – more efficiency in every regard.

The redundant full authority digital engine control of Austro engines takes the guesswork out of power-plant management and offers simplified operation, on the ground and in the air. There is only one power lever per engine and actual power is displayed in percent power on the fully integrated Garmin G1000. Annunciations are clear and accurate with resettable and recorded audio and visual cautions and warnings that let you focus outside.

Maintenance on Austro engines is performed much the same as with most modern engines today, by connecting a computer and downloading recorded data including any present fault codes. Pre-emptive diagnostics detect issues before they develop into problems and that enhances safety and gives more peace of mind.

On top of all that, Austro’s engines burn much less fuel, have extended maintenance intervals, use unleaded as well as cheaper and globally available Jet Fuel and run smoother and quieter.
Reliability
State of the art technology ensure highest levels of safety and minimal fuel costs. Modern common rail technology provides the highest levels of reliability. With a redundant EECU system the engine is failsafe.

Multi-Fuel Use
Given that the AE300 is multi-fuel certified, easy worldwide operability is not a problem unlike Avgas engines, because in certain regions of the world Avgas is hard to get and often at multiple the price of Jet Fuel.

Overhaul
In comparison to our competitors our engines are overhauled instead of being replaced, which makes the AE300/ AE330 the most cost efficient engine on the market.

Performance
The AE300 produces 123.5 kW and the AE330 132 kW for take off and maximum cruise power. The low vibration level and the single power lever design improve the engine operation comfort and take a lot of workload from the pilot. This makes the engine the ideal powerplant for flight schools, private pilots and even special mission aircraft.
AE300 Facts & Specifications

**General**
The AE300 is a four cylinder two liter piston engine, burning various kinds of Jet Fuel and developing 123.5 kW. The engine is controlled by an active electronic system with integrated single power lever design. Current TBO is 1,800 hrs.

**Scope of Supply**
- Core Engine
- Gearbox
- High Pressure Fuel Pump
- Power Lever Sensors
- Fly Wheel
- Generator
- Voltage Regulator
- EECU
- Starter
- Glow Plug Control Unit
- Engine Harness

**Specifications**
- Max. take off power: 123.5 kW (168 hp)
- Max. continuous power: 123.5 kW (168 hp)
- Max. torque: 512 Nm
- Max. RPM: 2,300 min⁻¹
- Displacement: 1,991 cm³ (121.5 cu.in)
- Weight (dry): 186 kg (410 lb)
- Fuel: Kerosene and Diesel (EN590)
- Fuel consumption: at 100% power 35 l/h
- Fuel consumption: at 60% power 19 l/h

AE330 Facts & Specifications

**General**
The most powerful heavy fuel engine in its class. Based on the successful and reliable AE300, the next generation engine has evolved: the AE330. It provides more power than the AE300 at the same weight. Great fuel efficiency, reliability and easy operation make the AE330 the best aviation engine of today and the future.

**Scope of Supply**
- Core Engine
- Gearbox
- High Pressure Fuel Pump
- Power Lever Sensors
- Fly Wheel
- Generator
- Voltage Regulator
- EECU
- Starter
- Glow Plug Control Unit
- Engine Harness

**Specifications**
- Max. take off power: 132 kW (180 hp)
- Max. continuous power: 126 kW (171 hp)
- Max. torque: 550 Nm
- Max. RPM: 2,300 min⁻¹
- Displacement: 1,991 cm³ (121.5 cu.in)
- Weight (dry): 186 kg (410 lb)
- Fuel: Kerosene
- Fuel consumption: at 100% power 39 l/h
- Fuel consumption: at 60% power 21 l/h
Rotary Engine

The AE50R is a single stage rotary engine developing 41 kW and is the only rotary engine worldwide that is certified according to EASA Part 22 Subpart H on today’s market. The remarkable power-weight ratio (2 hp : 1 kg) makes it the ideal engine for unmanned vehicles. With more than 2,000 engines produced, the AE50R has proven its reliability in both, manned and unmanned applications.

AE50R Facts & Specifications

General

The AE50R is a 294 cm³ single stage rotary engine with liquid cooling plus forced air cooling for the rotor core, lubrication via metered oil pump directly to main bearing and rotor tips with partial oil recovery system, twin spark plugs, electric starter, 14 Volt/18 Amp alternator, electronic fuel injection and electronic control system.

Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Displacement</td>
<td>294 cm³ (17.94 cu.in)</td>
</tr>
<tr>
<td>Fuel</td>
<td>AVGas 100LL or RON 95 Unleaded</td>
</tr>
<tr>
<td>Engine Oil</td>
<td>approved synthetic</td>
</tr>
<tr>
<td>Coolant</td>
<td>50% glycol, water</td>
</tr>
<tr>
<td>Engine Control</td>
<td>ECU</td>
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<tr>
<td>Ignition Timing</td>
<td>variable</td>
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<tr>
<td>Spark Plug</td>
<td>surface discharge</td>
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<tr>
<td>Alternator</td>
<td>14 Volt / 18 Amp</td>
</tr>
<tr>
<td>Weight (dry)</td>
<td>24.5 kg / 54.0 lb</td>
</tr>
<tr>
<td>Performance at sea level</td>
<td>41 kW / 55 hp</td>
</tr>
<tr>
<td>Max. RPM</td>
<td>7,750 min⁻¹</td>
</tr>
<tr>
<td>Max. Torque</td>
<td>52.5 Nm</td>
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</tbody>
</table>

Dimensions

141 mm

208 mm

408 mm

433 mm
ELECTRONICS AND AVIONICS.

Engine Display Units
Display units for light aircraft with state of the art communication buses (e.g. CAN, ARINC).

Cable Harnesses
Development and production of aviation certified cable harnesses for aircraft and engines according to aviation or MIL standards. Through flexible production structures, we are able to efficiently produce prototypes and small batches.

Generator Regulator
Fully autonomous generator governors for 12V and 28V systems including extended error detection, error storage and automatic load balancing for up to four generators.

Engine Control Units
Engine control units for rotary and piston engines tailored to customer needs for special applications and light aircraft.

Datalogger and Diagnostic SW
Datalogger for simultaneous recording of engine operating data and flight profiles as well as diagnostic SW for analyses and troubleshooting.

More from Austro Engine

Special Engine Oil for Austro’s Piston Engines
The Liqui Moly Austro Engine AERO 5W-40 oil for the AE300 and AE330 series is the recommended engine oil from Austro Engine. This oil guarantees minimum abrasion and friction, optimized lubrication and higher engine cleanliness increasing the safety and lifetime of your aircraft.

Contact for orders:
MM aeronauteal & automotive affairs GmbH
Limbergweg 21, 5700 Zell am See, Austria
Phone: +43 6542 55394
Fax: +43 6542 55394-11
Email: office@liqui-moly-aero.com

EASA certified maintenance training
To make your engineers proficient with our state of the art engines, we offer EASA Part 147 maintenance trainings to all our customers.

Customer Support – We Keep You Flying
Wherever you are in the world, we are here to help you. Austro Engine’s high-class global network of authorized service centers assures quick help and spare parts supply to keep you flying. Meet our customer support team that is second to none in the general aviation industry under our 7 days a week AOG Hotline.
Reference Customers

Diamond Aircraft DA62

Diamond Aircraft DA42-VI

Diamond Aircraft DA42 MPP

Diamond Aircraft DA40 NG and DA40 Tundra Star

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Austro Engine is your single point of contact for all engine related matters. Take advantage of our state of the art technology and effectively reduce your operating costs.