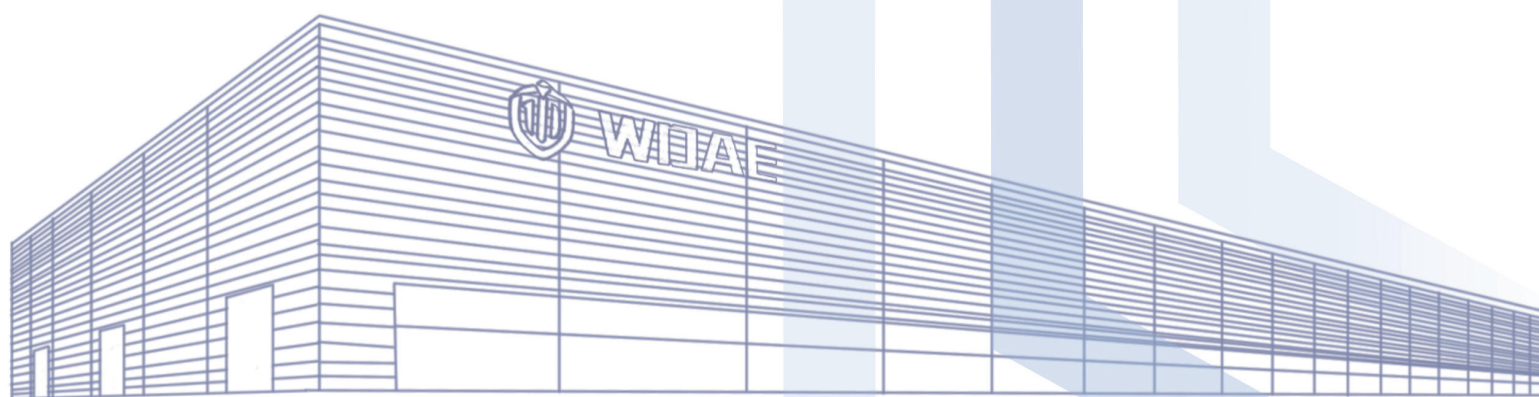




WD AE
芜湖钻石航空发动机



➤ 研制通航业的“中国心”



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Zone of Wanzhi District, Wuhu City, Anhui Province
电话Tel: +86-0553-5699282

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微信公众号



官网二维码

About us

关于我们

芜湖钻石航空发动机有限公司坐落于国家发改委批复的26个通用航空产业综合示范区—安徽芜湖航空产业园，公司紧邻芜宣机场、芜湖三元通用机场，具有得天独厚的空域和地域优势。

公司是集航空发动机研发、制造、销售、维修及相关技术服务于一体的技术主导型企业，公司以“敬畏生命、敬畏规章、敬畏职责”为精神内核，致力于为客户，为社会提供安全、可靠、放心的产品与服务。

Wuhu Diamond Aeroengine Co., Ltd. (WDAE) is situated in the Wuhu Aviation Industrial Park in Anhui Province, one of the 26 comprehensive general aviation industry demonstration zones approved by the National Development and Reform Commission. The company enjoys a prime location near Wuhu Xuanzhou Airport and Wuhu Sanyuan General Airport, boasting unique airspace and geographical advantages.

WDAE is a technology-driven enterprise that specializes in the research and development, manufacturing, sales, maintenance, and related technical services of aircraft engines. Upholding the core values of "respect for life, regulations and responsibilities," the company is dedicated to providing safe, reliable, and trustworthy products and services for its customers and society.

企业使命：研制通航业的“中国心”

企业愿景：做通航活塞发动机的领航者

企业精神：实事求是、精益求精、追求卓越、开拓进取

Enterprise Mission: Develop the "Chinese Heart" of the general aviation industry

Enterprise Vision: Become the leader of piston engines for aviation

Enterprise Spirit: Seek truth from facts. Strive for excellence. Pursue excellence and forging ahead.

公司生产制造及质量管控

Manufacturing and Quality Control

- 公司取得了AS9100D质量体系认证，全程“保姆式”质量管控，实现生产全过程记录及追溯。

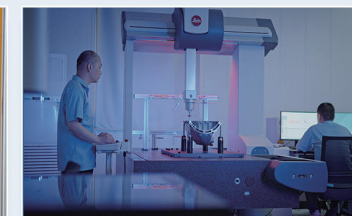
WDAE has obtained AS9100D quality system certification, implementing strict quality control throughout the entire process, and achieving full-process production records and traceability.

- 公司生产体系按照CCAR-21取得生产许可证（PC证）。

The company's production system has obtained the Production Certificate (PC) in accordance with CCAR-21.

- AEC2.0L发动机按CCAR-33取得型号合格证（TC证），自动化生产，采用先进的MES系统进行控制，高效、高质量生产。

AEC2.0L piston engine has obtained Type Certificate (TC) in accordance with CCAR-33, with an automated production line controlled by an advanced MES system to ensure high efficiency and quality production.



公司研发能力

R & D Capability



➤ **作为唯一工业方代表，参与CCAR-33部活塞发动机相关规章修订。**

As the only industry representative, participated in the revision of CCAR-33 regulations related to piston engines.

➤ **具备活塞发动机设计研发能力，自研产品已交付客户。**

Equipped with the capability to design and develop piston engines, with self-developed products already delivered to customers.

➤ **具备活塞发动机飞发匹配集成设计能力，完成多项搭载、试飞任务。**

Possesses the ability for integrated design of piston engines for flight and engine matching, having completed multiple assembly tasks and test flight missions.

➤ **具备活塞发动机生产制造、试验验证能力。**

Demonstrates capability in the manufacture and testing of piston engines.

➤ **具备活塞发动机适航验证能力及实践经验，适航团队完成全部适航工作并取得国内首款航空重油活塞发动机型号合格证（TC）。**

Holds both the capability and practical experience for airworthiness verification of piston engines. The airworthiness team has completed all necessary tasks and acquired the Type Certificate (TC) for the first domestically produced heavy fuel piston engine.

➤ **具备成熟的航空发动机初始适航及持续适航体系。**

Has a mature and comprehensive system for both initial and continued airworthiness verification of aircraft engines.

➤ **培养了符合CCAR-183规章的工程委任代表（DER）8名，制造检查代表（DMIR）2名。**

Has developed 8 Delegated Engineering Representatives (DER) and 2 Delegated Manufacturing Inspection Representatives (DMIR), in accordance with CCAR-183 regulations.



公司技术服务业务

Technical Services



可提供发动机相关适航及集成搭载技术服务：
Technical Services Related to Airworthiness and Integrated Carriage:

- ✓ 发动机开发及适航取证技术服务；
Engine development and airworthiness technical services
- ✓ 控制系统开发及其适航技术服务；
Control system development and related airworthiness technical services
- ✓ 发动机适航相关试验验证技术服务；
Engine airworthiness-related tests technical services
- ✓ 动力系统集成匹配技术服务；
Power system integration and matching technical services

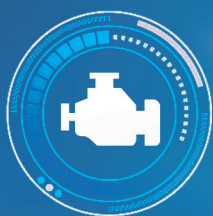


AEC2.0L 航空活塞发动机



AEC2.0L Piston Engine

按照CCAR-33取得型号合格证 (TC证)
Obtained Type Certificate (TC) in Accordance with CCAR-33



高功重比

High Power-to-Weight Ratio



可靠性高

Reliable



高空特性优越

Excellent Performance



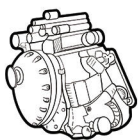
经济性优

Economic



适应性强

Compatible



研制通航业的“中国心”

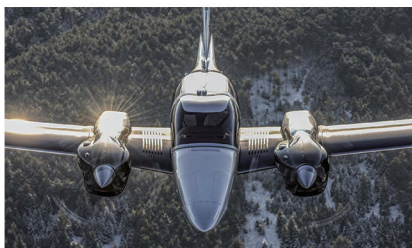
Develop the "Chinese Heart" of the general aviation industry

产品参数 Product parameters

排量/Displacement:	2.0 L
起飞功率/MTOP:	123.5/132.5 kw
最大持续功率/MCP:	123.5/132.5 kw
燃料类型/Fuel type:	3号喷气燃料 3#
最低比油耗/Min.SFC	200 g/kw · h
重量/Weight:	<180 kg
外形尺寸/Dimension:	724 × 854 × 572 mm
大修间隔/TBO:	2000 h
适用机型/Applicability:	DA40/DA42/CA42/无人机 (UAV)

应用场景 展示

Application cases Display

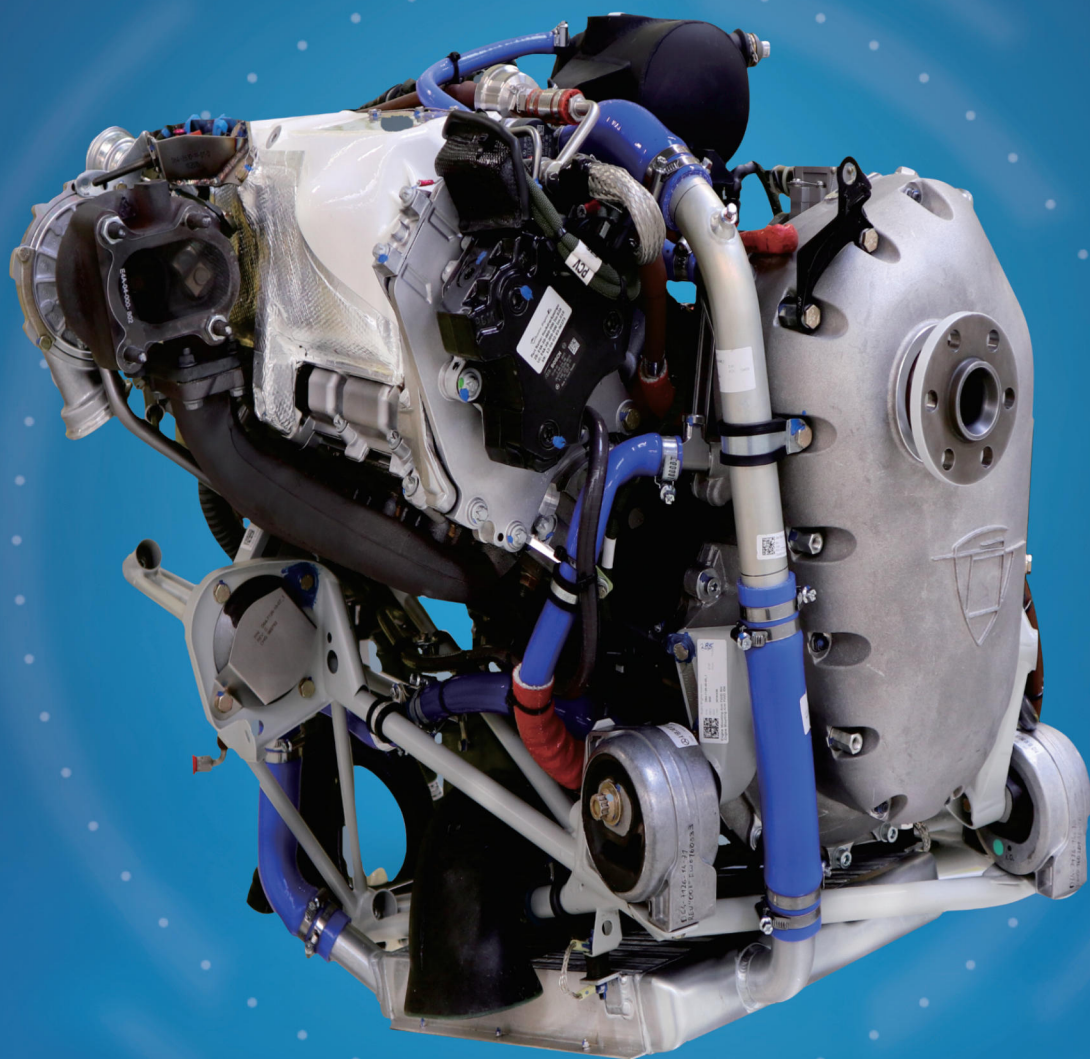


AE300航空活塞发动机



AE300 Piston Engine

按照CCAR-21取得生产许可证 (PC证)
Obtained Production Certificate (PC) in Accordance with CCAR-21





研制通航业的“中国心”

Develop the "Chinese Heart" of the general aviation industry

产品参数 Product parameters

排量/Displacement:	1.991 L
起飞功率/MTOP:	123.5 kw
最大持续功率/MCP:	123.5 kw
燃料类型/Fuel type:	3号喷气燃料 3#
最低比油耗/Min.SFC	200 g/kw · h
重量/Weight:	185 kg
外形尺寸/Dimension:	767 × 854 × 575 mm
大修间隔/TBO:	1800 h
适用机型/Applicability:	DA40/DA42

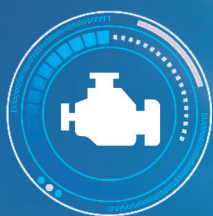
AEC1.8L 航空活塞发动机



AEC1.8L Piston Engine

高功重比 军民两用

High Power-to-Weight Ratio, Military & Civilian Dual Use



性能优越
Excellent Performance



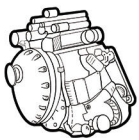
节能可靠
Economic & Reliable



适应性广
Flexible



自主可控
Independent & Controllable



研制通航业的“中国心”

Develop the "Chinese Heart" of the general aviation industry

产品参数 Product parameters

排量/Displacement:	1.8 L
起飞功率/MTOP:	105 kw
最大持续功率/MCP:	95.5 kw
燃料类型/Fuel type:	3号喷气燃料 3#
最低比油耗/Min.SFC	200 g/kw · h
重量/Weight:	80 kg
外形尺寸/Dimension:	645 × 800 × 450 mm
大修间隔/TBO:	1800 h
适用机型/Applicability:	无人机、轻型运动类 UAV, Light Sport Aircraft

应用场景 展示

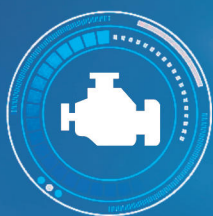
Application cases Display



■ AEC2.0L 航空活塞发动机高功率版



AEC2.0L Piston Engine High Power Version



动力强劲
Powerful



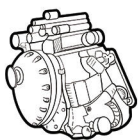
可靠性高
Reliable



经济性优
Economic



适应性强
Compatible



研制通航业的“中国心”

Develop the "Chinese Heart" of the general aviation industry

产品参数 Product parameters

排量/Displacement:	2.0 L
起飞功率/MTOP:	150 kw
最大持续功率/MCP:	147 kw
燃料类型/Fuel type:	3号喷气燃料3#
最低比油耗/Min.SFC	200 g/kw · h
重量/Weight:	< 150 kg
外形尺寸/Dimension:	724 × 854 × 572 mm
大修间隔/TBO:	1500 h
适用机型/Applicability:	无人机 (UAV)



WDAE
芜湖钻石航空发动机


AEC50

技术参数			
形式	水平对置四缸二冲程发动机	排量	550 cc
燃油类型	92号及以上汽油、燃油机油 体积比为40:1预混油	最大功率	36 kW@7000 r/min (48 hp)
外形尺寸	392 x 384 x 444 mm	整机干重	19.8 kg
供油方式	化油器/电喷	巡航工况燃油消耗量	8.3 kg/h
冷却方式	风冷	起动方式	电机起动
大修时间	1000 h	适用机型	固定翼无人机 (200–450 kg级)、旋翼、直升机 (100–160 kg级)

Technical Parameter			
Configuration	4 Cyl. Horizontally Opposed	Displacement	550 cc
Fuel Type	92# and Above Gasoline, Fuel Oil Volume Ratio of 40:1 Premix Oil	Max. Power	36 kW@7000 r/min (48 hp)
Dimension	392 x 384 x 444 mm	Dry Weight	19.8 kg
Fuel Delivery	Carburetor/Electric Injection	Fuel Consumption at Cruise	8.3 kg/h
Cooling Method	Air-cooled	Starting Conditions	Motor Starter
TBO	1000 h	Application	Fixed-Wing UAVs (200–450 kg class) Rotary Wing, Helicopter (100–160 kg class)

应用场景 Application


AEC100

技术参数			
形式	水平对置四缸四冲程发动机	排量	1352 cc
燃油类型	95号及以上汽油	最大功率	73.5 kW@5800 r/min (100 hp)
外形尺寸	670 x 580 x 420 mm	整机干重	61 kg
供油方式	化油器	巡航工况燃油消耗量	16 kg/h
冷却方式	缸体风冷+缸头水冷	起动方式	电机起动
大修时间	1000 h	适用机型	载人三角翼/固定翼、军用无人机、旋翼机

Technical Parameter			
Configuration	4 Cyl. Horizontally Opposed	Displacement	1352 cc
Fuel Type	95# and Above Gasoline	Max. Power	73.5 kW@5800 r/min (100 hp)
Dimension	670 x 580 x 420 mm	Dry Weight	61 kg
Fuel Delivery	Carburetor	Fuel Consumption at Cruise	16 kg/h
Cooling Method	Air-cooled Cylinder + Water -cooled Cylinder Head	Starting Conditions	Motor Starter
TBO	1000 h	Application	Manned Delta-Wing Aircraft/Fixed Wing Aircraft Military UAVs, Rotorcraft

应用场景 Application

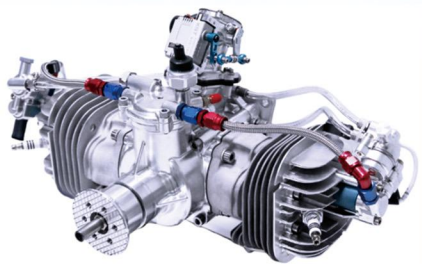

AEC150

技术参数			
形式	水平对置四缸四冲程发动机	排量	1417 cc
燃油类型	95号及以上汽油	最大功率	102 kW@5800 r/min (145 hp)
外形尺寸	750 x 580 x 570 mm	整机干重	80 kg
供油方式	化油器	巡航工况燃油消耗量	18 kg/h
冷却方式	水冷	起动方式	电机起动
大修时间	1000 h	适用机型	载人固定翼、军用无人机、混合动力

Technical Parameter			
Configuration	4 Cyl. Horizontally Opposed	Displacement	1417 cc
Fuel Type	95# and Above Gasoline	Max. Power	102 kW@5800 r/min (145 hp)
Dimension	750 x 580 x 570 mm	Dry Weight	80 kg
Fuel Delivery	Carburetor	Fuel Consumption at Cruise	18 kg/h
Cooling Method	Water-Cooled	Starting Conditions	Motor Starter
TBO	1000 h	Application	Manned Fixed-Wing Aircraft, Military UAVs, Hybrid Aircraft

应用场景 Application





AEC15

应用场景 Application



技术参数			
形式	水平对置双缸二冲程发动机	排量	170 cc
燃油类型	95号汽油/航煤 (可选)	最大功率	10.5 kW@7500 r/min (14 hp)
外形尺寸	197 x 375 x 265 mm	整机干重	6.8 kg
供油方式	化油器/电喷	巡航工况燃油消耗量	3.5 kg/h
冷却方式	风冷	起动方式	外置起动
大修时间	150 h	适用机型	无人机 (80 ~ 120 kg级) 航模动力 (30 ~ 60 kg级) 混合动力多旋翼 (8 kW级混合4旋翼飞机)

Technical Parameter			
Configuration	2 Cyl. Horizontally Opposed	Displacement	170 cc
Fuel Type	95# Gasoline/Jet Fuel (Optional)	Max. Power	10.5 kW@7500 r/min (14 hp)
Dimension	197 x 375 x 265 mm	Dry Weight	6.8 kg
Fuel Delivery	Carburetor/Electric Injection	Fuel Consumption at Cruise	3.5 kg/h
Cooling Method	Air-Cooled	Starting Conditions	External Starter
TBO	150 h	Application	UAV (80 ~ 120 kg Class) Model Plane (30 ~ 60 kg Class) Hybrid Multirotor Aircraft (8 kW Class) Hybrid 4-Rotor Aircraft



AEC30-1



AEC30-2

技术参数			
形式	水平对置双缸二冲程发动机	排量	340 cc
燃油类型	92号及以上汽油、燃油机油 体积比为40:1预混油	最大功率	20 kW@6800 r/min (25 hp)
外形尺寸	348 x 398 x 429 mm	整机干重	11.8 kg
供油方式	化油器/电喷	巡航工况燃油消耗量	4.6 kg/h
冷却方式	风冷/水冷 (可选)	起动方式	外置起动/电机起动 (可选)
大修时间	150 h	适用机型	无人机/巡飞弹/复合翼 (120 ~ 200 kg级) 动力伞 (单人/双人) 混合动力多旋翼 (18 kW级混合6旋翼飞机)

Technical Parameter			
Configuration	2 Cyl. Horizontally Opposed	Displacement	340 cc
Fuel Type	92# and Above Gasoline, Fuel Oil Volume Ratio of 40:1 Premix Oil	Max. Power	20 kW@6800 r/min (25 hp)
Dimension	348 x 398 x 429 mm	Dry Weight	11.8 kg
Fuel Delivery	Carburetor/Electric Injection	Fuel Consumption at Cruise	4.6 kg/h
Cooling Method	Air-Cooled/Water-Cooled (Optional)	Starting Conditions	External Starter/Motor Starter (Optional)
TBO	150 h	Application	Drones/Prototypes/Composite Wing Aircraft (120~200 kg Class) Powered Parachute (Single/Tandem) Hybrid Multi-Rotor (18 kW Class) Hybrid 6-Rotor Aircraft

应用场景 Application

