FLIGHT & SAFETY DESIGN

ECO1

Efficient flight dynamics

Experience **ECO1**.

Large cumulus clouds lie next to you, like a string of pearls. You lower the nose and feel the immediate acceleration. When the speed is 300 km/h, you pull the stick towards you and the g-forces press you gently into the ergonomically shaped seat. At 180 km/h, the nose points vertically, and the cumulus clouds lie 90 degrees in direction of travel. You apply coordinated aileron and rudder. The response is instant and you are now almost weightless, as the plane follows a ballistic trajectory, like an arrow. The spacious canopy and the optimised interior make you feel at one with the aircraft. The speed builds up swiftly. After a few more adventuos dives, you level out under the clouds with exhilarating ease.

"The flight sensation is fantastic. Only small rudder movements are needed to get a quick and precise response. I feel this plane is excellent for advanced flying. The view is fantastic, making it enjoyable looking at the surroundings as well as flying."

Rolf Björkman, KSAK Royal Swedish Aero Club, secretary-general

"ECO 1 is an appealing aeroplane, very stable and responsive. Take-off run is short and climb rate is impressive. The reclined seating is very comfortable and the canopy provides a panoramic view. ECO1 is an excellent aircraft for travelling."

Harald Ahlberg, former SAS captain and military fighter pilot

"Our aircraft combines the pleasure of flying with an attractive environmental profile. The optimised aerodynamics make travelling competitive to modern cars, at three times the speed."

Niklas Anderberg, Flight and Safety Design project leader

"When I saw ECO1 for the first time it looked beautiful - and beautiful planes tend to fly well. The test flight proved me more than right."

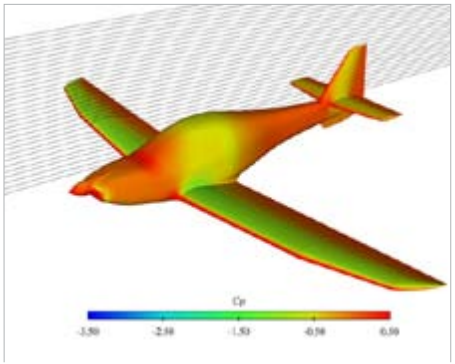
Mikael Carlson, Airshow pilot

"The flight evaluation left me with a very good impression that this aircraft should have a bright future as a fast and economic aircraft for not only travel and fun, but also as a good trainer. The stability around the three axes is excellent and manoeuvring is just a joy."

Ove Dalén, professional test pilot


Flight & Safety Design
Advanced
Gliding through the sky.
Even at low speed, ECO1 has a very high glide ratio. An extremely aerodynamic design, in combination with a fuel efficient engine, has resulted in an overall outstanding performance.

aerodynamic design.



Fuselage

The geometry is based on hundreds of hours of wind tunnel testing, at the Royal Institute of Technology in Stockholm.

After 2,5 years of intense flight testing, the high aerodynamic aims have successfully been verified.

Unique wing

The unique wing has extremely low drag and optimised lift. The back-swept tapered wing performs well in crosswind landings and increases stability.

The laminar airfoil is specially developed for the ECO1 platform and is the key to the nice flight characteristics. The high aspect ratio wing performs perfectly with the fuel efficient engine.

Constantly in progress…

In order to make our plane even better we are working to improve the cabin and engine installation.

"**This is the engine I've been waiting for all my life.** I have been using the 700E. From this experience, I know that HKS engines are the personification of fuel economy.

The 700T, with the benefit of electric fuel injection, is reporting fuel burn at least as good as it's 60 hp little brother.

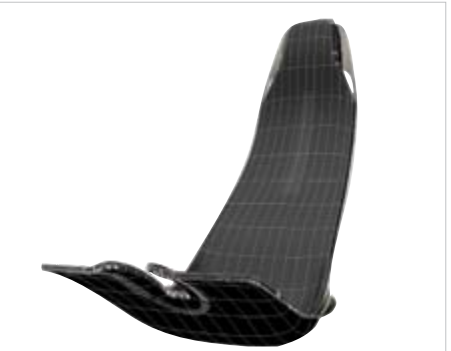
From a performance standpoint, the benefit of the turbo is enormous at density altitude above zero. "

Lars Rönne, Flight and Safety Design mechanic

Engine

The Aircraft is extremely quiet with the fuel efficient HKS 700T.

In contrast to the competitors, this engine also runs on unleaded gasoline and is furthermore going to be offered with a catalytic converter.



Cabin

Higher comfort and elegant functionality. The ergonomically shaped lightweight, carbon fibre seats with adjustable positions provide maximum comfort.

The use of modern Electronic Flight Instrumentation Systems creates a very clean panel and improves the safety.

Personalise

Standard Equipment

Firewall forward

HKS 700T (80hp)

Woodcomp ground adjustable propeller

Odyssey battery

Noise reduction muffler

Interior

12V power supply socket

Lockable canopy

Headset plug connectors

Centre control stick

Other

Fuel tank (50l)

Electrical flaps and trim with indicators

Avionics

MGL Enigma incl.:

- Electronic compass
- Attitude and Heading reference system
- Engine monitor
- Fuel indicator

MGL Avionics V10 radio (with intercom)

ELT Artex 406 MHz

Analog instruments:

-Air speed indicator

-Altimeter

-Compass

Exterior

3-wheel landing gear

White acrylic paint

Lights Package

Registration marking

Safety

Fire extinguisher

First aid kit

Tow bar

4-point safety belts

Baggage harness

2 individually operated disk brakes

your aircraft.

Examples from the option list

Firewall forward

Woodcomp in flight adjustable propeller

Catalytic converter

Interior

Dual control stick

Adjustable seat

Carbon fibre sport seats

Leather interior

Cabin heat (defroster)

Other

Wing fuel tanks (2 x 50l)

Electrical wing fuel gauge

Canopy cover

Avionics

Filser ATR500 radio

Filser TRT800

MGL Voyager EFIS

Internal transponder antenna

Internal VHF antenna

Constant speed controller CSC-1/G

Autopilot

Exterior

Wheel pants

Wheel covers

Mylar speed kit

Canopy vent

Foot step

Safety

Ballistic parachute*

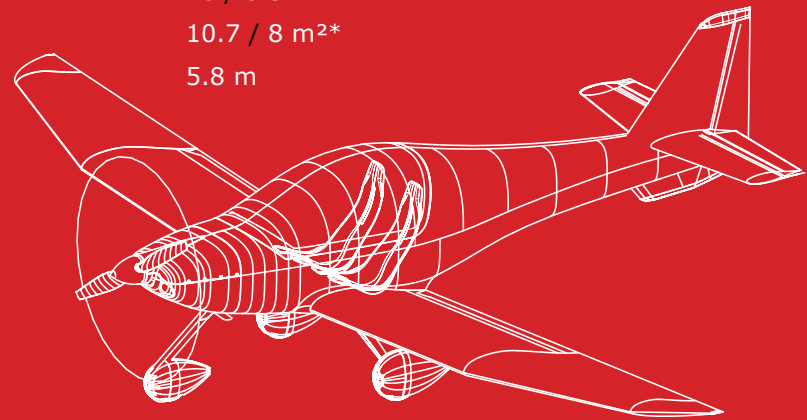
Seat belt air bag

**Parachute rescue system for the whole aircraft*
www.galaxysky.cz


Flight & Safety Design

Specifications for the ECO1 - LSA / VLA*

	Imperial	Metric
Never Exceed Speed:	160 kts	300 km/h
Cruise Speed:	130 / 140 kts*	240 / 260 km/h* (80 hp at SL)
Stall Speed:	44 kts	82 km/h / (clean / flaps down*)
Range:	650 nm	1200 km (no reserve)
Takeoff Distance:	1000 ft	300 m (15 m obstacle)
Landing Distance:	1000 ft	300 m (15 m obstacle)
Climb Rate:	900 ft/min	4.5 m/s
Best Climb Angle:	54 kts	100 km/h
Max. Takeoff Weight:	1320 lbs	600 kg
Empty Weight:	660 lbs	300 Kg
Wingspan:	33 / 28 ft*	10 / 8.5 m*
Wing Area:	115 / 86 ft²*	10.7 / 8 m²*
Length:	19 ft	5.8 m
Load Factors:	+4.4, -2.2	



IDEON Science Park
Scheelevägen 15
223 70 Lund

Tel: +46 (0)46 286 58 50
E-post: info@fsdint.com
www.fsdint.com