

ASCALON

Carbon-Titanium Propeller Range ESR Effect
for Lycoming & Continental engines

PERFORMANCE MEASURED IN REAL-WORLD CONDITIONS

COMPARISON WITH A 2-BLADE WOODEN PROPELLER <i>Maximum weight and in hot weather conditions.</i>	ASCALON 3-BLADE <i>Pena Bilouis (O-360 180 cv)</i>	ASCALON 2-BLADE <i>Jodel DR1054 (O 320 150 cv) with exhaust muffler</i>
% gain		
Ground roll distance and 15-meter obstacle clearance	-25%	-20%
Rate of climb	+20%	+15%
Cruise speed	+6%	+7%
Fuel consumption at equal speed	-7%	-8%
Noise level	-4 dB/A	-6 dB/A

6-MONTH "SATISFIED OR REFUNDED" GUARANTEE
ASCALON CAN BE TESTED FOR 6 MONTHS IN REAL-WORLD CONDITIONS.

ESR EFFECT

ASCALON's specific airfoil profiles generate an ESR **Extended Speed range** effect, limiting the gap between static RPM and in-flight RPM.

Result: Strong thrust at takeoff and optimized efficiency across a wide range of speeds.

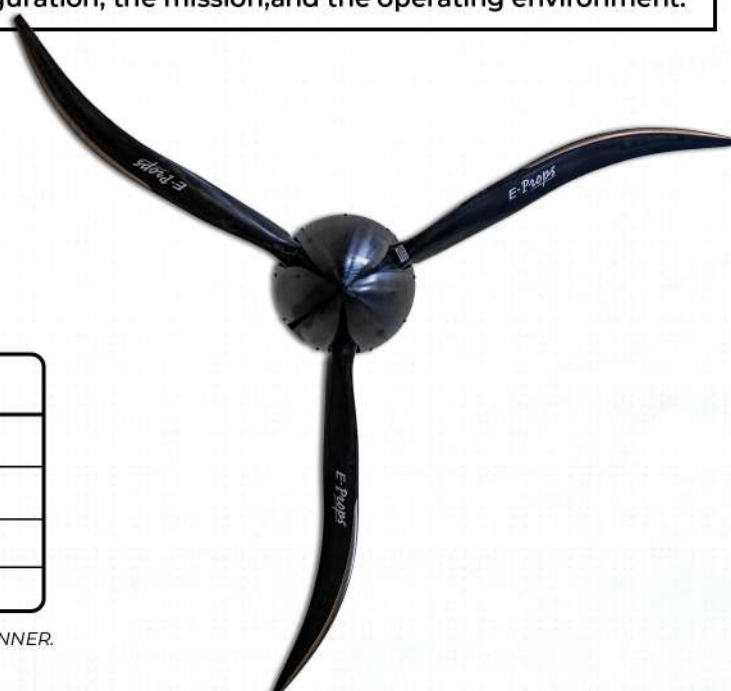
GROUND-ADJUSTABLE

Precise pitch adjustment allowing adaptation to the engine configuration, the mission, and the operating environment.

PAYLOAD GAIN

MODEL	WEIGHT
ALUMINIUM 2-BLADE (EX. SENSENICH)	18 KG
TRADITIONAL 2-BLADE WOODEN PROPELLER (EX. HOFFMANN)	11 KG
ASCALON 2- BLADE CARBON	6 KG
ASCALON 3-BLADE CARBON	7 KG

* PROPELLER WEIGHTS INCLUDING MOUNTING HARDWARE, WITHOUT SPINNER.
UP TO 12 KG OF ADDITIONAL PAYLOAD.



PROPELLERS DESIGNED TO LAST

- EXCEPTIONAL MECHANICAL STRENGTH, PARTICULARLY IN FATIGUE RESISTANCE
- TITANIUM LEADING-EDGE PROTECTION
- INSTRUMENTED VIBRATION CONTROL PROTECTING BOTH THE PROPELLER AND THE ENGINE
- UNLIMITED SERVICE LIFE / INSPECTION AT 2,500 HOURS
- COMPLIANT WITH EASA CS-P AND FAA 14 CFR PART 35 (CERTIFICATION IN PROGRESS)

INSTRUMENTED VALIDATION

- EXTENSIVE MECHANICAL TESTING (8 GROUND TEST BENCHES)
- INSTRUMENTED DYNAMIC STUDIES (ELIAS DAU)
- BIRD STRIKE IMPACT TESTING
- ALREADY VALIDATED IN REAL-WORLD OPERATION



TECHNICAL SPECIFICATIONS

GROUND-ADJUSTABLE CARBON PROPELLER RANGE 2- AND 3-BLADE MODELS

FOR DIRECT-DRIVE ENGINES IN TRACTOR CONFIGURATION:

- 4 CYLINDERS \leq 210 HP
- 6 CYLINDERS \leq 270 HP

DIAMETERS : 140 À 210 CM

MAXIMAL RPM : : 3300 RPM

DRILLING PATTERNS = SAE1 & SAE2

CARBON SPINNERS : \varnothing 260 À 380 MM

INTEGRATED CARBON SPACER : -15 À +230 MM



LAUNCH PRICING

EXCLUDING TAXES, WITH SPACER, WITHOUT SPINNER.

2-BLADE - 3 500€

3-BLADE - 4 500€

