

DUC FC Windspoon PROPELLER

CHARACTERISTICS

PROPELLERS :



This propeller is available in :

- Two-bladed,
- Three-bladed.

Diameter :

ø 1727 mm

Weight

- Two-bladed : 2.380 kg
- Three-bladed : 3.115 kg

HUB :



The hub used is a carbon hub identical to DUC FC WINDSPOON propeller, made out of the **FORGED CARBON PROCESS** which makes it possible to obtain exceptional mechanical strength.

The DUC FC propeller with its revolutionary shape called WINDSPOON offers unrivalled performance. The best up to date techniques were used for its design : CAD studies, laser technology, etc.

The results of these developments are :

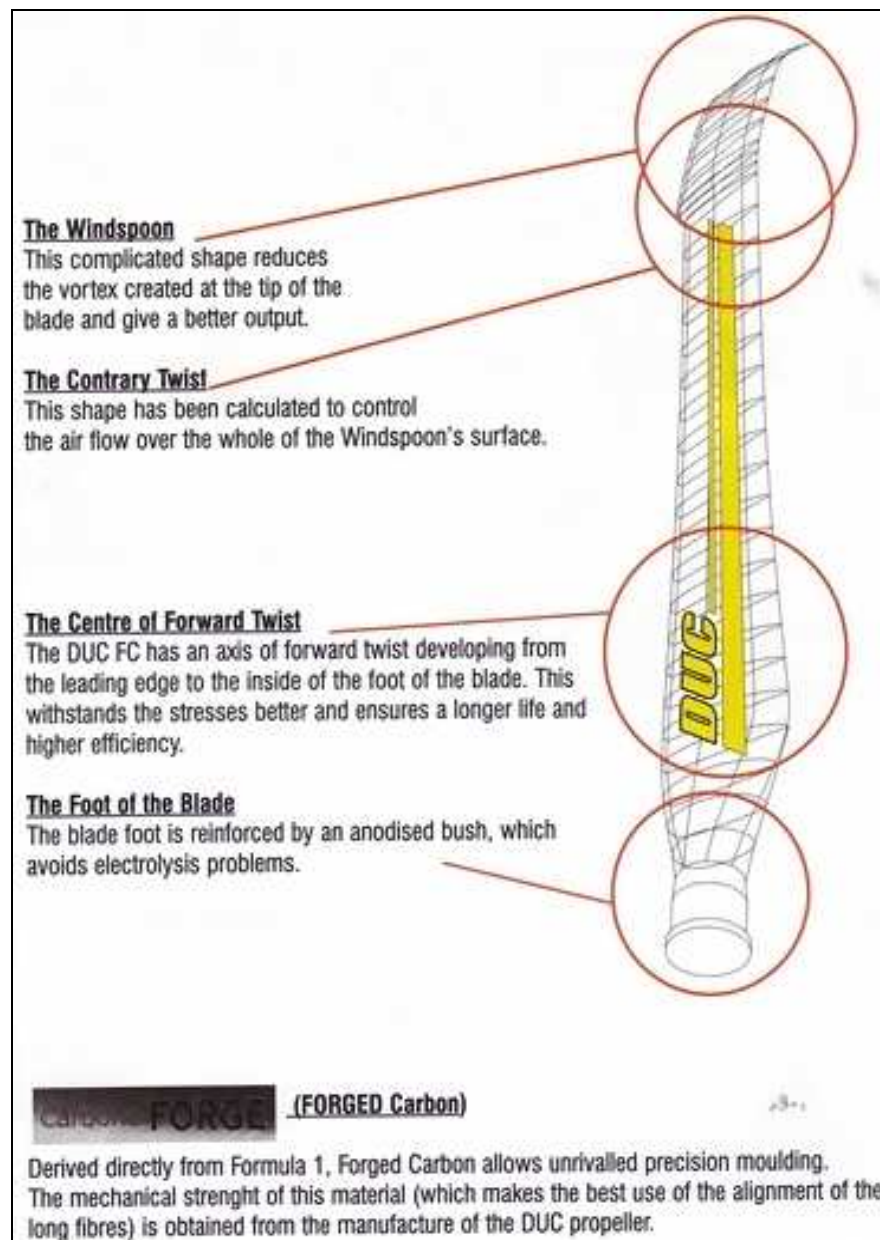
- Better performance,
- Lower fuel consumption,
- Less noise.

ADVANTAGES

The very special profile of the DUC FC blade has been calculated to control the flow of air over the whole surface of the WINDSPOON.

The center of the forward twist results in better reduction of friction and a longer life.

The DUC FC propellers are produced in accordance with the strictest standards of the industry, with equipment specially constructed to ensure the highest quality.



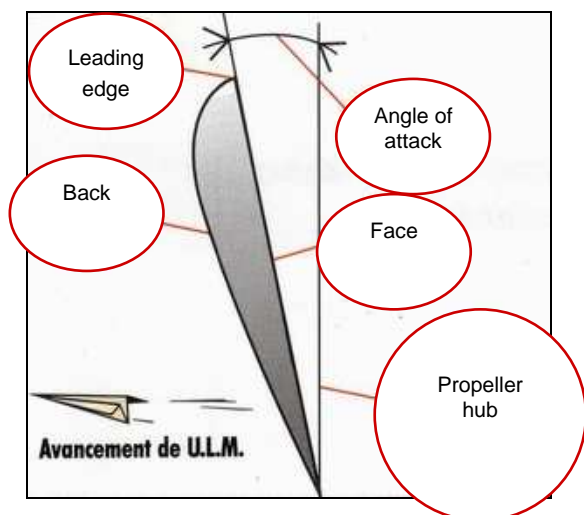
APPLICATIONS

Engine	type	Reducer	Recommended system	Blade diameter
TRACTOR				
ROTAX 912	4 strokes	2.27	Two-bladed DUC FC RIGHT tractor	ø 1727
ROTAX 912 S	4 strokes	2.48	Three-bladed DUC FC RIGHT tractor	ø 1727
ROTAX 503 / 582	4 strokes	2.58 / 2.62 / 3	Two-bladed DUC FC LEFT tractor	ø 1727
ROTAX 503 / 582	2 strokes	3.47 / 4	Three-bladed DUC FCLEFT tractor	ø 1727
PUSHER				
ROTAX 912	4 strokes	2.27	Two-bladed DUC FC LEFT pusher	ø 1727
ROTAX 912 S	4 strokes	2.48	Three-bladed DUC FC LEFT pusher	ø 1727
ROTAX 503 / 582	2 strokes	2.58 / 2.62 / 3	Two-bladed DUC FC RIGHT pusher	ø 1727
ROTAX 503 / 582	2 strokes	3.47 / 4	Three-bladed DUC FC RIGHT pusher	ø 1727
PENDULARS				
ROTAX 912	4 strokes	2.27	Three-bladed DUC FC LEFT propelling	ø 1727
ROTAX 912 S	4 strokes	2.48	Three-bladed DUC FC LEFT propelling	ø 1727
ROTAX 503 / 582	2 strokes	2.58 / 2.62 / 3	Two-bladed DUC FC RIGHT propelling	ø 1727
ROTAX 503 / 582	2 strokes	3.47 / 4	Three-bladed DUC FC RIGHT propelling	ø 1727

ADJUSTMENT

ANGLE OF ATTACK :

The values which follow are theoretical values and the number RPM engine in static must be checked.



TWO-BLADED

503	2.58	6°
582	2.58	8°
503	2.62	8°
582	2.62	11°
503	3.00	14°
582	3.00	17°
912	-	14°
912 S	-	15°

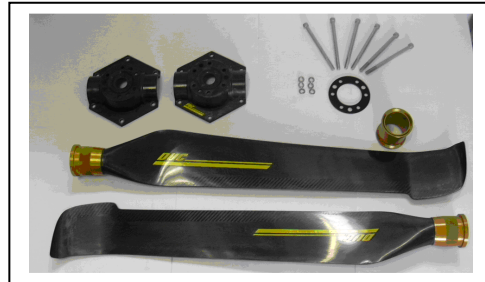
THREE-BLADED

912	-	11°
912 S	-	12°
503	3.47	15°
582	3.47	17°
503	4.00	17°
582	4.00	21°
914	-	14°

ASSEMBLY AND ADJUSTEMENT

Upon receipt of your package, make sure that all the parts are included !

- Blades
- Hub halves
- spacer
- Bolts (short and long)
- Nuts black washer and GROWER washer.



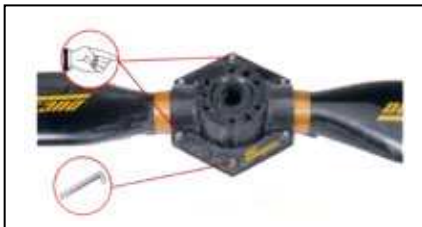
- Place one of the hub halves on a table.
- Put the spacer in the center of the hub half.



- Place the 2 or 3 blades in their slots.
- Make sure that the DUC logo is facing you.



- Put the 2nd hub half over the assembly.



- From the back of the hub insert the 6 assembly bolts.
- Put on the assembly nuts and tighten moderately.



- If assembling with the propeller spinner, include the back plate.



- Be careful you get the washers in the correct order: first the black washer and after the GROWER washer.



- Put the propeller on the reducer, tighten moderately.



- Position your microlight so that the propeller hub is completely vertical.
- Measure this with the level on the adjusting tool.



- Loosen the assembly bolts enough to enable you to turn each blade easily in its slot.



- Rotate the first blade horizontal.

14 cm



- Take the adjusting tool in your hand, press the lever, put the tool right at the end of the Windspoon.
- Make sure that the tool is flat and steady against the face of the blade, leading edge uppermost.
- Turn the wheel with your thumb to the designed angle of attack.



- Hold the foot of the blade and turn slowly until the bubble of the tool is completely in the middle and level. Wriggle the blade to get fine adjustment.

The tightening of the bolts on the propeller is carried out in 2 stages :

- 1st tighten the bolts moderately,
- 2nd tighten with a torque wrench.

Tightening 2.5 Kg/m 25 Nm

Attention

Retighten your propeller after 1 hour of use.

Essais	
<p>Les essais sont importants. Il est normal de devoir faire plusieurs réglages successifs en alternant essais au sols et en vols.</p>	
<p>Vérifier que les pales soient correctement orientées, que tous les boulons soient correctement serrés aux valeurs recommandées.</p>	
au SOL	en VOL
<p>Immobiliser votre appareil, freins bloqués, et avec une personne pour assurer qu'il ne puisse bouger. Respecter les recommandations du constructeur concernant la sécurité.</p> <p>Mettre le moteur en marche, laisser chauffer</p> <p>GAZA FOND le régime moteur doit se situer au moins à 85% du régime moteur maximal préconisé en vol par le constructeur.</p> <p>Si ce n'est pas le cas, AJUSTER LES PALES</p>	<p>Vérifier tous les serrages.</p> <p>Décoller et vous mettre en vol horizontal stabilisé, vario à zéro.</p> <p>GAZA FOND le régime moteur maximal préconisé par le constructeur doit être atteint, MAIS PAS DEPASSE.</p> <p>Si ce n'est pas le cas, AJUSTER LES PALES</p>
<p>Pression atmosphérique <input style="width: 50px;" type="text"/></p> <p>Température <input style="width: 50px;" type="text"/></p> <p>Humidité <input style="width: 50px;" type="text"/></p>	<p>Tours moteur au sol <input style="width: 50px;" type="text"/></p> <p>Tours moteur en vol <input style="width: 50px;" type="text"/></p> <p>Date <input style="width: 50px;" type="text"/></p>

If you note anomalies during assembly or operation, do not undertake flight and contact the DUC-HELICES company immediately.

The accessories and the DUC propeller must be assembled in accordance with the technical notes of the DUC company.

Any deviation from this data will release the DUC company from any responsibility.