fp propeller
AIRCRAFT AND UAV PROPELLERS

USER GUIDE

DIGITAL PROTRACTOR FOR PROPELLER HIGH PRECISION PITCH MEASUREMENT [DGT-PRT]

Package Contents

- Digital level with magnetic base
- Blade Mounting bracket
- digital level user guide
- Digital protractor user guide

figure 1

Operating procedure for the measurement of the angle of the blades.

1) Conventionally the measure of the angle of a blade is performed at three-quarters of the length of the propeller (i.e. for 90 cm propeller, measurement have to be made at 22.5 cm from the tip of the blade)
In order to guarantee the maximum precision in measurement, it is appropriate to apply beforehand a piece of paper tape around three quarters of the length of the propeller, then go to carefully mark the point at which to perform the measurement
(See Figure 2)

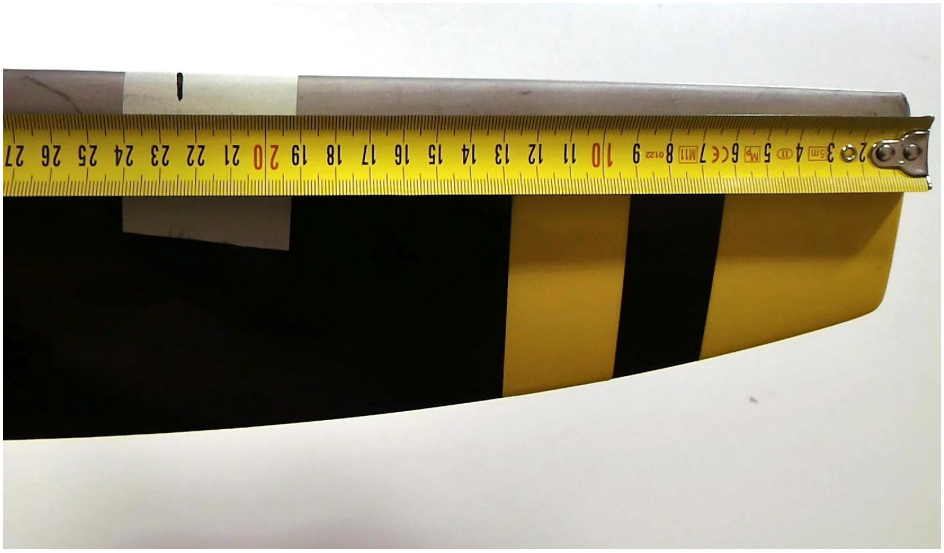

figura 2

2) Apply the supplied bracket ensuring that it is in good contact with the surface of infradosso of the blade as shown in figure 3. In the bracket are provided a set of holes, this allow to adapt the bracket to all types of blades.
It is advisable to apply the paper tape over the entire length of the bracket.

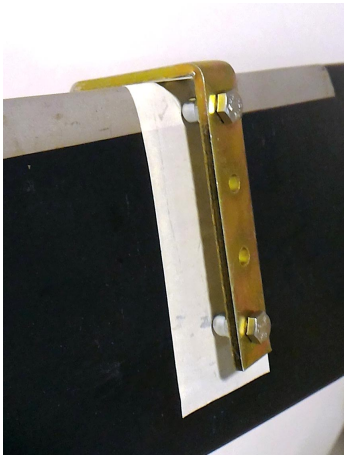

figure 3

figure 4

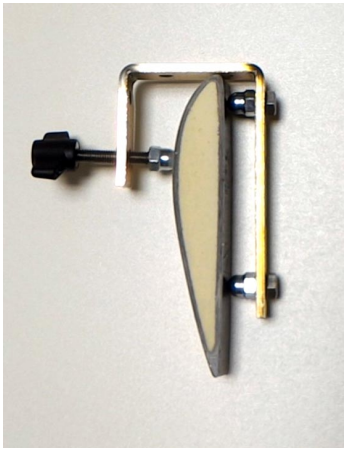

figure 5

3) Adjust the wing nut and tighten it without using excessive force.
The upper part of the bracket must be in contact with the edge of attack of the blade.
(Figure 4)
Figure 5 show the correct positioning of the bracket (in section)

4) Place the bracket at the previously marked point (Figure 6)

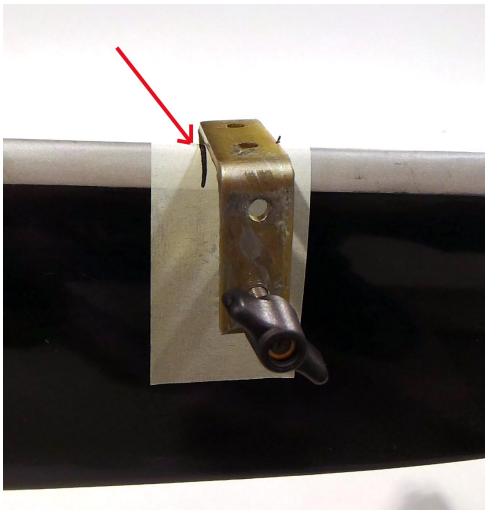

figura 6

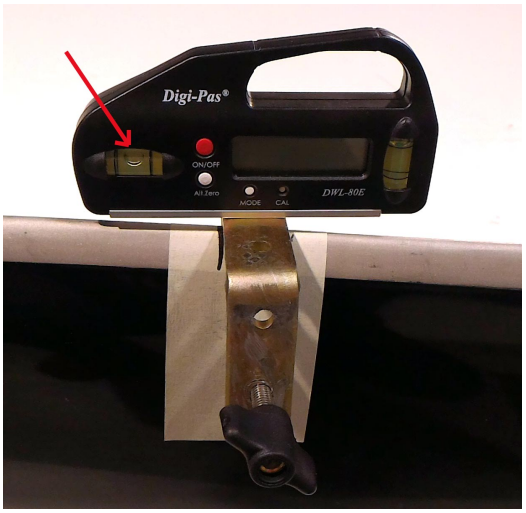

figura 7

5) placing the digital protractor as shown in Figure 8, use the bubble or read the instrument to be sure to be as flat as possible.
This in order to not alter the subsequent measurement of angle.

6) Place the digital protractor as shown in Figure 8, press the ON / OFF button to turn on the level meter and read the angle.
The instrument has an accuracy of 0.1 degrees.

figure 8

Repeat steps 1 through 6 for all the propeller blades

Warnings:

- The measurement should be taken with the hub at 90 °, check with the digital protractor and add or subtract the difference from the measurement obtained.

figure 9

In the example of Figure 9, the instrument indicates that the hub is 88.8 ° with the arrow point down.
In this case add 1,2 ° to the measurement obtained (in the example of Figure 7, the measurement would become 21.3 + 1.2 = 22.5 °)
If the arrow of the instrument point up, subtract 1.2 °.
ALWAYS PUT THE TOOL IN THE SENSE INDICATED IN FIGURE 9

- On the first use, it should be removed protection tab of batteries: unscrew the screw of the battery compartment and remove the plastic tab. (Figures 10 and 11)

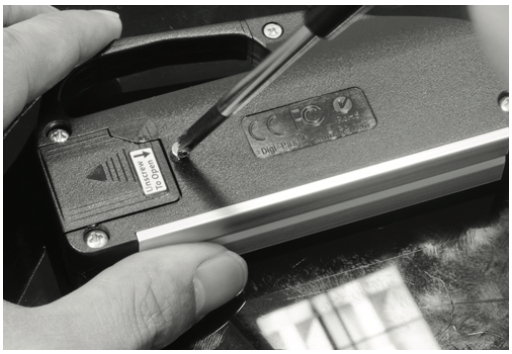
figure 10


figure 11

FP-propeller srl
Via C. Colombo, 37/E - CASSANA (PMI)
44124 Ferrara (FE)
P.IVA : 01836830388
REA: FE – 202286
+390532732470 +393207663820
fppropellersrl@gmail.com
www.fp-propeller.com

fp propeller
AIRCRAFT AND UAV PROPELLERS