Revision A : 15.10.2010

Manual of checking the propellers of type family Klassic, Winglet, Effic, Propuls AF,

CHECKINGS AND REVISIONS

A. Periodical checking of propellers.

1. Checking of propeller after 50 hours of operation.
2. Checking of propeller on 200 hours of operation and following after each next 150 hours of operation.
3. Checking of propeller after 1100 hours of operation.
4. Checking of propeller on 1250 hours of operation and following after each next 150 hours of operation.
5. Checking of propeller after 2000 hours of operation.

B. The prescribed checking acts:

1. Propeller checking after 50 hours of operation

    a. Optical checking of propeller surface – propeller must not have apparent damages, breakings and deformations
    b. Tightening the fixing bolts M8 by moment 22Nm.

c. Tightening the bolts M6 on spokes of the hub by moment 10 Nm.

2. Checking of propeller on 200 hours of operation and following after each next 150 hours of operation

a) Dismantling of the propeller and checking the grip. Grip of the composite shank in propeller hub must be with interference 0,25mm (diameter of shank of propeller blade must be by 0,25 mm higher than diameter of the hole in the hub. Measuring is to be done perpendicular to the plane of dividing the hub (se fig. examples of measurement). If there is not grim prescribed, both halves of hub must be changed on the prescribed manner, in order to reach the grim 0,25 mm (see fig. Change of the grim).
Ring on the propeller shank must not be damaged.

Fig. Examples of measument

Diameter 44,75 mm (measured by micrometer)

Diameter 44,75 mm (measured by slide calliper)

Revision A : 15.10.2010

Diameter 45,00 mm (measured by micrometer)

Diameter 45,00 mm (measured by slide calliper)

Fig Change of interference:

Change of interference by chamfering the surfaces (example of chamfering by grinding paper on steel plate)

b) Checking the surface of propeller blade. The blades must not exhibit traces of damage, cracks and deformations. As a damage It is not mentioned the usual operational wear (by friction, operation, washing etc.). In case of necessity can be exchanged the protection of inlet edges – PU protective strips.
c) Checking of the propeller hub is done in optical way – the hub must not exhibit the traces of damage, cracks, crackings and deformations.
d) Checking of propeller balancing. Checking of the propeller balancing is done with a propeller assembled, with blades set on angle of incidence and it is done on the balancing stand. Process of balancing is done by putting – injecting the small

amounts of balancing resin into the hollow of blades in position – balanced blade is down. The resin must be initiated and cannot be injected more than 1,5 ccm at once, until full hardening. After balancing the propeller must not be turned on the stand in any position.

Fig. Propeller balancing

3. Checking of propeller after 1100 hours of operation is done at producer plant
Address: WOODCOMP, Vodolska 4, 250 70 Odolena Voda, Czech Republic.
4. Checking of propeller on 1250 hours of operation and following after each next 150 hours of operation – see points II.B.2 a) – c).
5. Checking of propeller after 2000 hours of operation is done at producer plant.
Address: WOODCOMP, Vodolska 4, 250 70 Odolena Voda, Czech Republic.