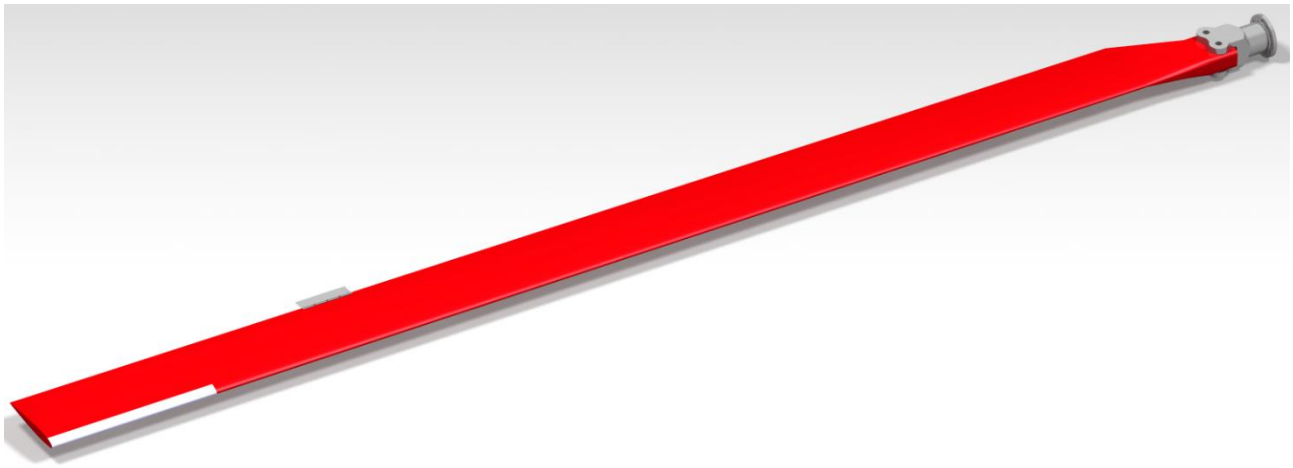
NUOVAHELYBLU S.r.l.
progettazione e realizzazione
pale per elicottero in composito

Blade manual and performance charts

(Model:r22mr-type3)



Evaluated on Robinson R22 helicopters

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Model:r22mr-type3

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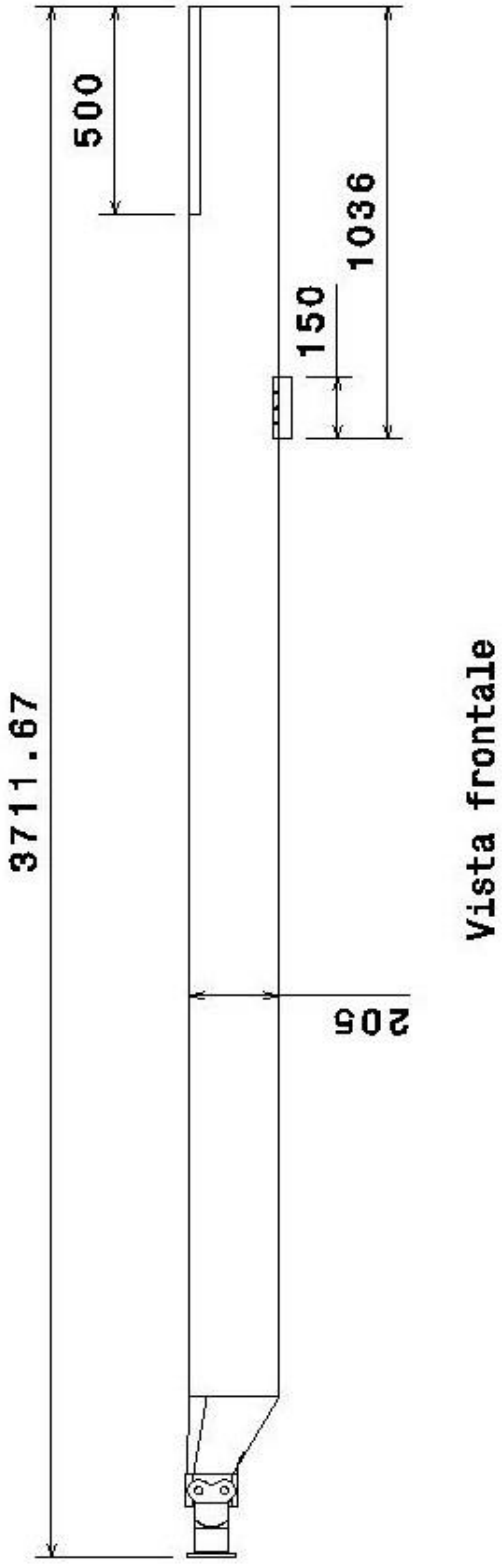
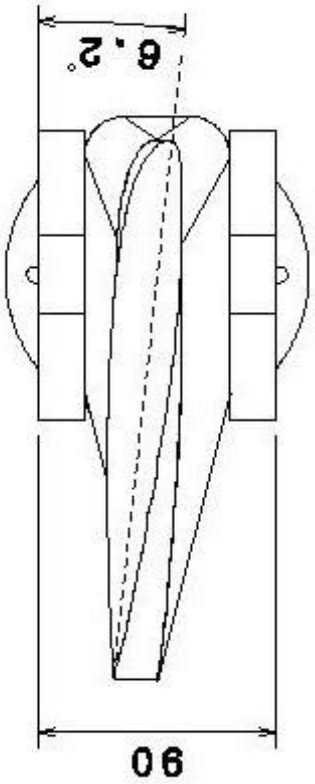
Model:r22mr-type3

GENERAL DIMENSIONS AND PARAMETERS

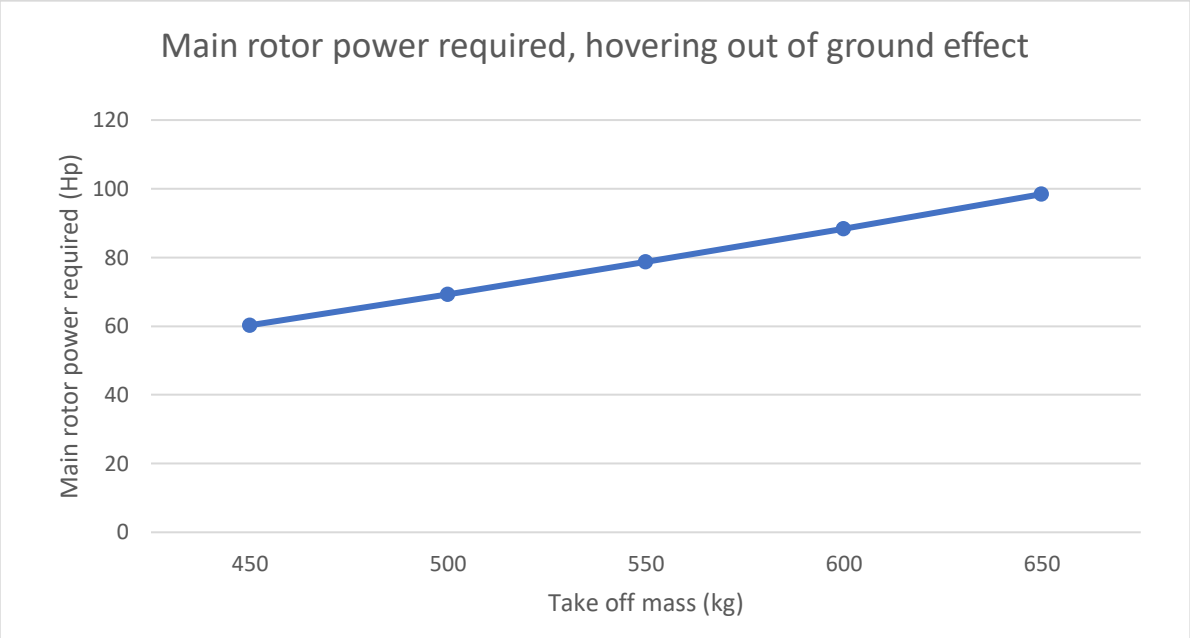


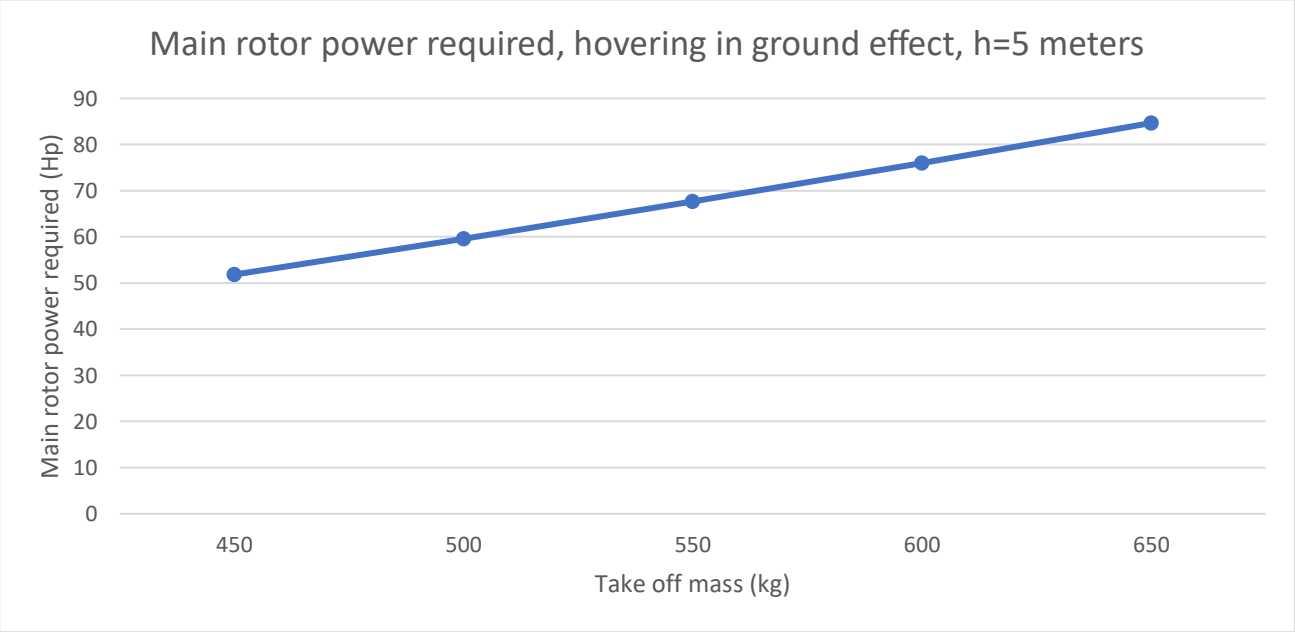
Vista frontale



Vista da destra

PERFORMANCE CHARTS IN HOVERING





Maximum take off mass, density altitude and Indicated Air Speed (IAS) limits:

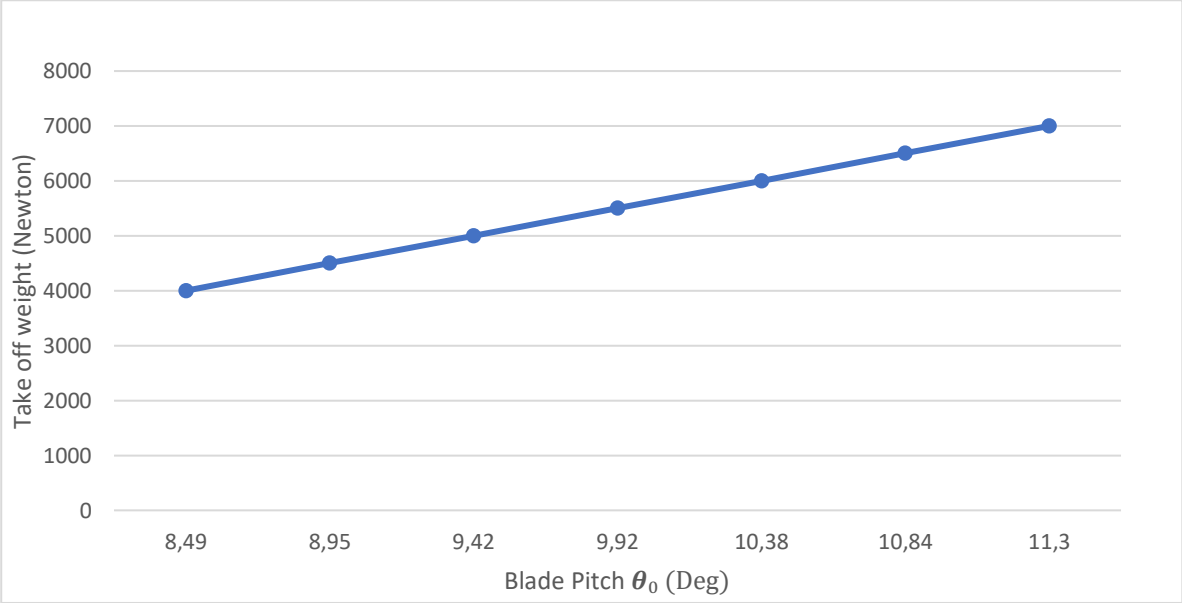
Take off mass	density altitude	Vne (kts)
622 kg	0 meters	102
563 kg	1000 meters	92

At max. density altitude: 4000 meters
Max. take off mass: 521 kg
Vne: 85 kts

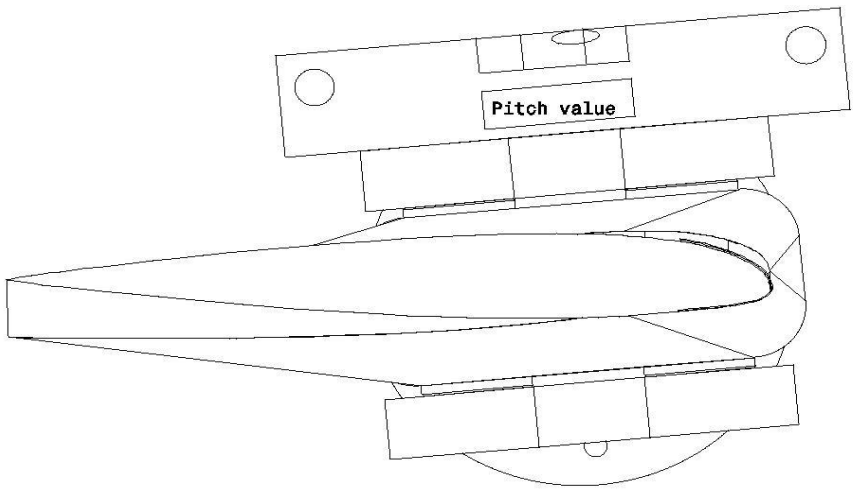
ROTOR ANGULAR SPEED LIMITS:

For this parameter, the maximum rotor angular speed is indicated on the original helicopter flight manual.

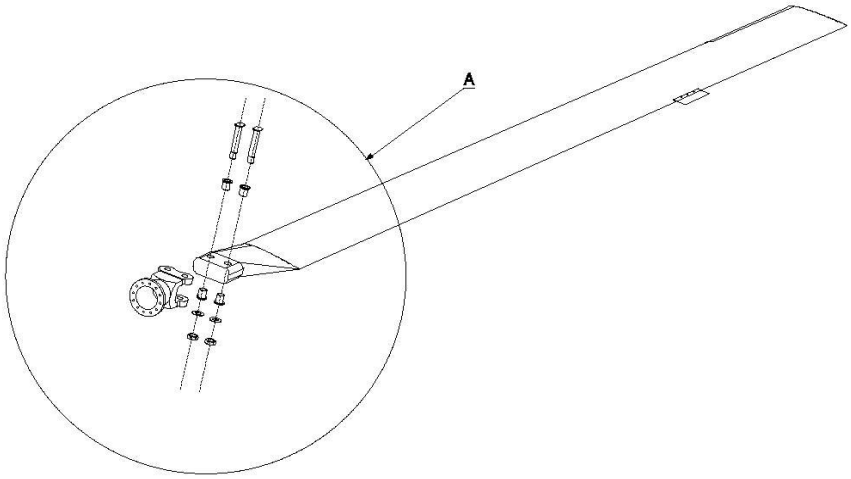
The minimum rotor angular speed that guarantees the rotor lift with a take off mass of 622kg is 326RPM (RPM at 64%)

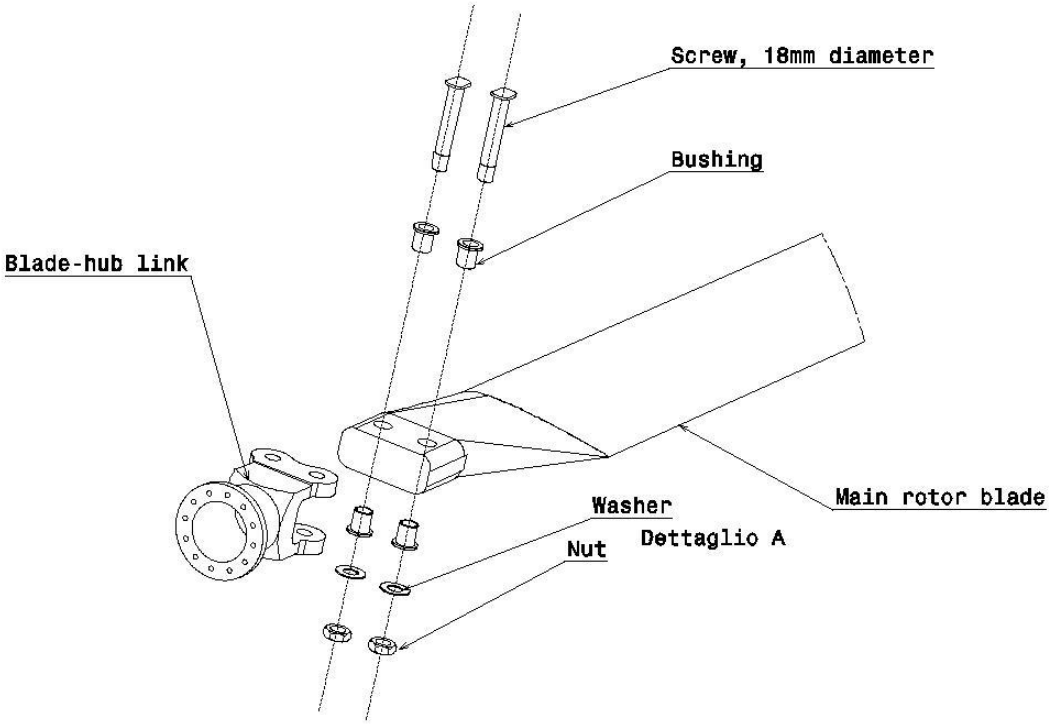


BLADE PITCH EVALUATIONS:



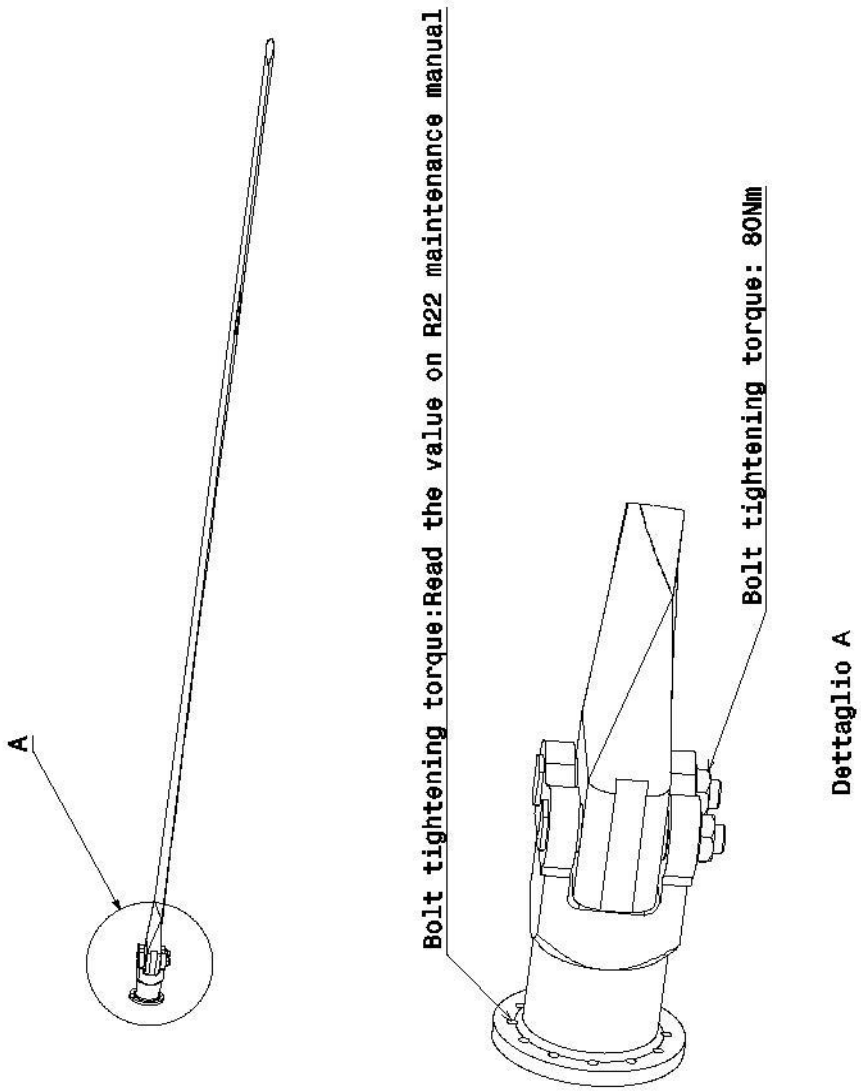
ASSEMBLY INSTRUCTIONS





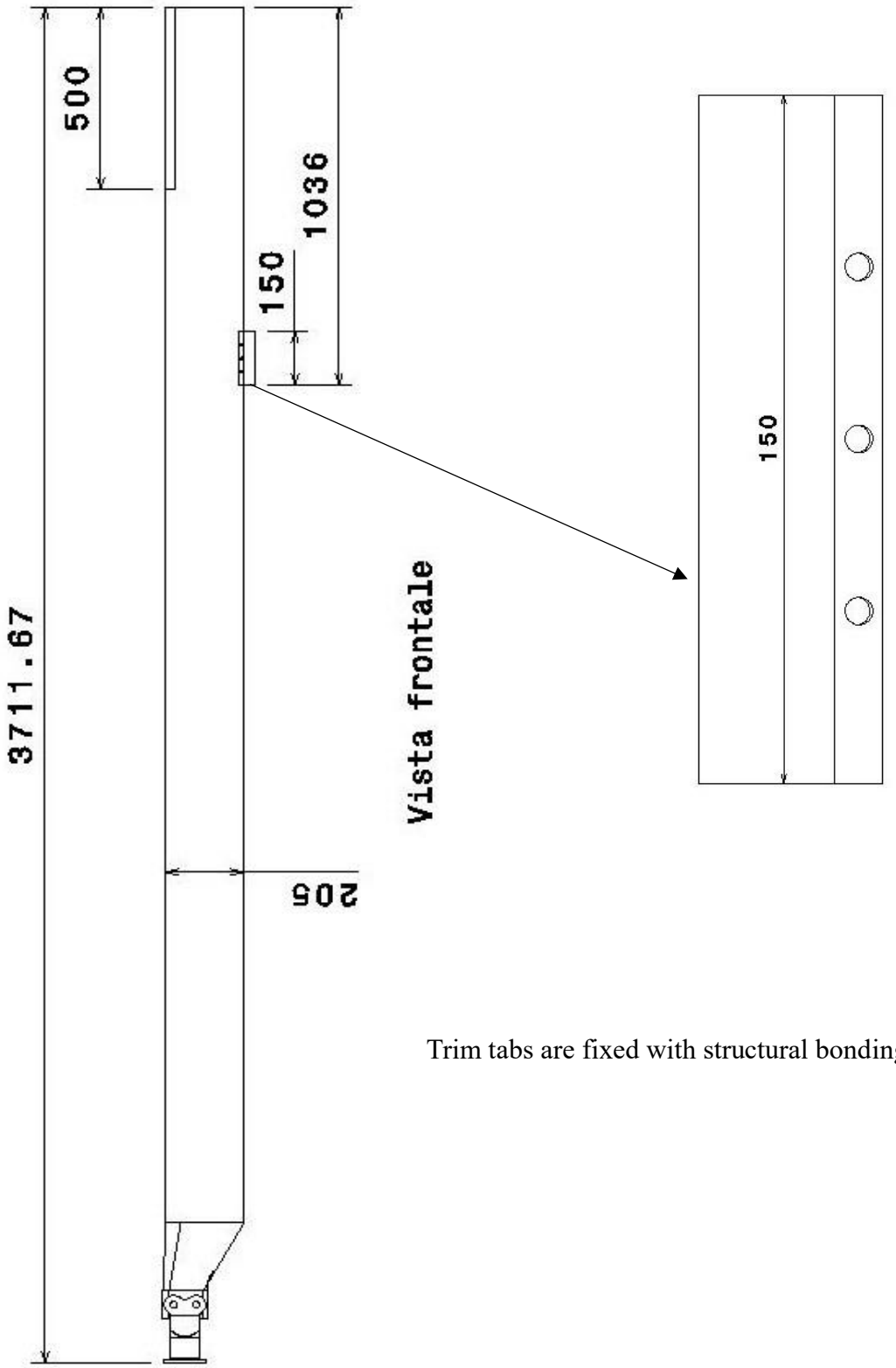
This rotor blades are ready to flight and they are part of a kit given by Nuovahelyblu S.r.l. .

This kit consists of : *blade-rotor hub links and associated hardware, trim tabs and leading edge anti-wear, balancing masses, balancing masses housing closures, blade-rotor hub links bushings.*



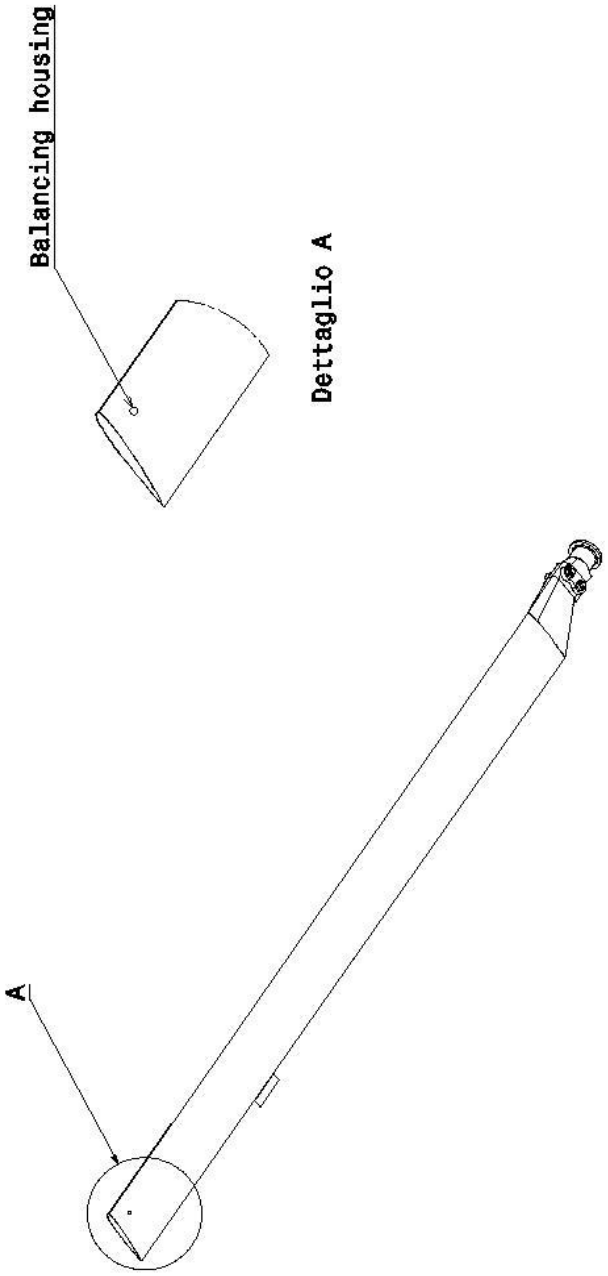
NOTE: The use of split pins is also mandatory

TRIM TABS SETTING:



Trim tabs are fixed with structural bonding and rivets

BALANCING HOUSING POSITION



SAFETY NOTES:

1) In case of FOD, check the leading edge anti-wear condition, and analyze the condition of the bonding of the aforementioned with the blade.

2) It is forbidden to make holes on the blade; this operation involves structural damage.

3) Before the flight, the kit needs a static and dynamic balance, in case of instability and vibrations check the blade trak-and-balance. (Blade tracking)

4) In the event of long periods of non-operation, the rotor may require re-balancing and blade tracking.

5) In case of impact of the blades during hangar operations, check that there is no blade structural damage.

6) Check the blades condition at the end of each flight.

7) Apply the anti-abrasion tape on the blade, and check it at the end of each flight.

8) The anti-abrasion tape is provided by our company or by our dealers.

9) Do not use balancing masses other than those supplied

GENERAL NOTES:

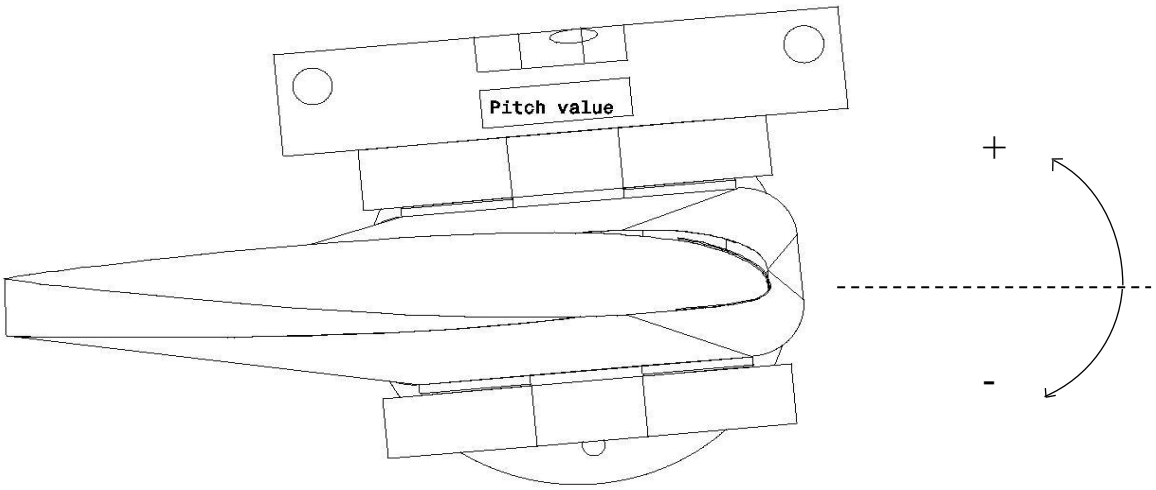
- In case of any problems and doubts during blades assembly and setting, contact our company for info.

BLADE PITCH SETTING

Before flight, check the blade pitch setting to avoid limit switches on flight controls.

This check consists in measuring the angle between the blade-hub link and the horizontal plane.

Example:



Set a blade pitch of +4,1° when the collective lever is full down and check that cyclic control lever or in general the cyclic is neutral (so check that the blade pitch is the same in both blades when you are setting this parameter).