



REDUCER and REDUCER RATIO



The reducer is a system which allows to have a rotation speed of the propeller different from the rotation speed of the engine

A propeller which turns slowly has a better efficiency and generates fewer noise. It is very easy to reach the speed of sound in extremity of blades, what is not interesting.

There are several types of reducers, in particular for the aeronautics: reducers with belt, with gearings, and more rarely with chain.



belt reducer



gearing reducer

REDUCER RATIO

The reducer ratio is the relation between the RPM of the engine and the RPM of the propeller.

It is possible to measure it :

- on a belt reducer : by measuring the diameter of both pulleys and by making the report between both.
- on a gearing or chain reducer : by counting the teeth number of every pinion and by making the report between both.