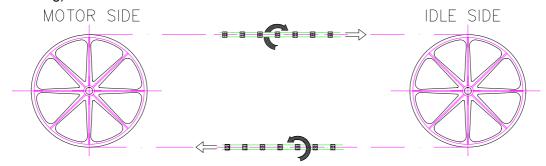


## **FLYWHEELS ALIGNMENT**

<u>During cutting phase</u> diamond wire should rotate on its own axis to allow a uniform wear of the diamond beads. Also, it is very important that rotation follows same direction both in upper and lower part (see drawing).



In case this does not happen, on machine type Diamantfil and Robotwire, it is necessary to modify flywheel alignment, setting them, at least at the beginning, as indicated by Pellegrini Meccanica spa.

Before modifying flywheel position it is very important to consider that flywheels should not be too disaligned each other (this causes a too fast wear of rubber ring on the flywheel itself), and that the position of guide-wheels influence diamond wire rotation, and therefore it could be possible to act only on the position of guide-wheel to obtain desired effect.

For both machine models it is necessary to have a "plumb line" and a piece of cable of about 10 m length to be horizontally tensioned in front of two flywheels (with protection flywheels door opened):

- distances between cable and flywheels must be made with diamond wire tensioned,
- regulation must be done with diamond wire de-tensioned.

## DIAMANTFIL 2000-2500-3000-3500, how to align main flywheels

If guide wheels remain installed, diamond wire rotation on his axis is easily checked acting on position of these guide-wheels.

If necessary, regulation of big flywheels can be made:

**A.** for figures (1), (2), (3) and (4) drawing 75/1945:

- 1. command descent of flywheel carriages until lower limit switch and then de-tension wire,
- 2. disconnect the machine from power supply,
- 3. properly support flywheel carriage in order to avoid movements when vertical slide wheels will be removed (E).
- 4. unscrew screws (D),
- 5. unscrew nuts (A),
- 6. remove flanges (B) and slowly extract the shaft (F) so that it is possible to take away spacers (C), as requested for regulation, and re-mount them on the opposite side,
- 7. re-install shaft, wheels, spacers and flanges following reverse order of dismantling,
- 8. regulate screws (D) so that all three wheels (E1-E2-E3) touch vertical column. PAY ATTENTION: do not excessively tighten the screws (D) to not damage the columns (a little play between wheels (E2) and column is allowed).

**B.** for figures (7) and (8) drawing 75/1945 on idle side, alignment is made acting on regulations (Z) of horizontal guide for diamond wire tensioning.

