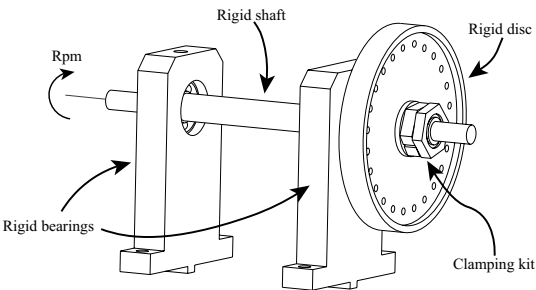


Appendix A.

Experimental test rig for the REBs defects.



Data acquisition.



Experimental test rig was used in this study.

Specification of the experimental test rig

Rigid shaft	Bearings
Material: 1.7034 nickel-plated	Grooved ball bearing
Diameter: 20 mm (g6)	Type: 6004-2ZR d = 20, D = 42, l = 12
Length: 300mm	Diameter of the pitch circle: 31 mm
Weight: 670g	Diameter of the balls: 6.35 mm
	Number of balls: 9

The body of revolution in the rigid rotor is composed of:

- Weight of the rigid disc (which represents a constant load applied to the bearing): 1.675 kg
- Clamping kit: 0.162 kg
- Weight of the rigid shaft: 0.670 kg

References

[1] Gunt, “PT 500.12 Roller bearing faults kit.” <https://www.gunt.de/en/products/mechatronics/machinery-diagnosis/roller-bearing-faults-kit/052.50012/pt500-12/glct-1:pa-148:ca-77:pr-1030> (accessed Apr. 30, 2020).