

SPECIFICATION OF TECHNICAL REQUIREMENTS FOR CONTRACTING THE SUPPLY OF A FATIGUE ROTATING BENDING MACHINE.

AIM: SUPPLY OF A FATIGUE ROTATING BENDING MACHINE.

1. TECHNICAL CHARACTERISTICS.

The rotating bending fatigue test allows the fatigue strength of a material subjected to bending stresses to be obtained using a cylindrical specimen that rotates at high speed.

The following characteristics will be assessed:

- Rotational speed of the specimen: ≥ 4000 rpm.
- Bending moment on the specimen: ≥ 300 N·m.
- Diameter of the specimen: 6-16 mm.
- Length of the specimen: 700 mm - 1200 mm.
- Automatic cycle counter.
- Automatic stop when detecting the rupture of the specimen.
- Noise emissions <75 dB.

2. TRANSPORTATION AND INSTALLATION.

- The economic offer must include all the costs derived from the acquisition, including VAT, transport and assembly of the equipment (if necessary).
- If necessary, complete installation in the workplace (LADICIM, ETS de Ingenieros de Caminos, Canales y Puertos, Av/ Los Castros 44, Universidad de Cantabria, Santander), tuning and checking of proper functioning.

3. TRAINING.

Training course to be taught in person or online, with a minimum duration of 3 hours, on a date to be determined by the FLTQ.

4. MAINTENANCE.

Maintenance for 2 years, including displacement, labor, parts and any other expense to be covered by the manufacturer.

5. AWARD CRITERIA.

The tenderer will be selected according to the score obtained, between 0 and 100 points, according to the following criteria.

- Technical aspects:
 - Rotational speed of the specimen: ≥ 4000 rpm. **5 points.**
 - Bending moment on the specimen: ≥ 300 N·m. **10 points.**
 - Diameter of the specimen: 6-16 mm. **10 points.**
 - Length of the specimen: 700 mm - 1200 mm. **10 points.**
 - Automatic cycle counter. **10 points.**
 - Automatic stop when detecting the rupture of the specimen. **5 points.**
 - Noise emissions <75 dB. **5 puntos.**

- Economic proposal: **45 points**.

6. EXECUTION PERIOD.

16 weeks from the date of award of the contest.

7. PAYMENT MODE.

In consideration for the performance of the project, the FLTO undertakes to pay the bidder the corresponding amount, which will be effective in accordance with the following conditions:

- 33% at the beginning of the works.
- 33% in the half of the period of execution of the work, previous communication on the part of the bidder guaranteeing the fulfillment of the terms.
- 34% upon completion of the work and after delivery of the equipment.