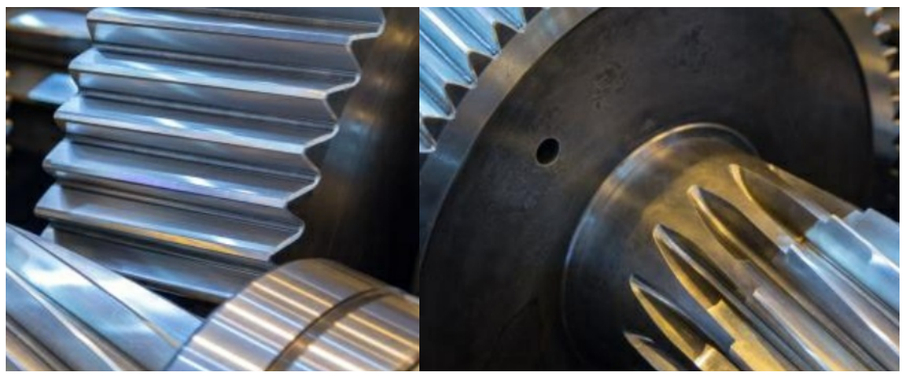
Cetim's services

MECHANICAL POWER TRANSMISSION CALCULATION



Design and calculation of mechanical power transmission components (gearboxes, gearboxes, gears, shafts, bearings, bearings, splines, racks, pulleys, cardan joints, etc.)

Your expectations

Mechanical transmission plays a crucial role in the distribution of power and movement in a mechanism. Proper and accurate sizing is essential to ensure correct operation.

The design of your transmissions must therefore guarantee performance (energy, vibration, acoustics, etc.), reliability and longevity with minimal maintenance

Our solutions

Our experts offer comprehensive support:

- **Preliminary sizing**
  - Identification of technical requirements
  - Feasibility study
  - Architecture selection
  - Proposal of different solution
- **Sizing**
  - Geometric definition
  - Tolerance and manufacturing precision
  - Materials and heat treatments
  - Lubrication
  - Calculation according to standard methods (ISO, AGMA, DIN, etc.)
- **Optimisation**
  - Load capacity
  - Geometry
  - Energy performance (efficiency, heat dissipation)
  - Vibroacoustics (vibration, noise, excitation, dynamics, acoustics)
- **Technical support**
  - Training
  - Document review (manufacturing specifications, manufacturing plans, assembly instructions)
  - Prototyping and qualification testing
  - Technical advice and recommendations
  - Failure analysis

CONTACT

Question and Answer Service

contact@cetim.fr **www.cetim.fr**

Your benefits

Cetim is an international engineering group that meets your innovation and competitiveness challenges.

It has unique R&D capabilities (more than 100 R&D partnerships and joint laboratories, 210 seats on standardisation committees, etc.).

With our multidisciplinary skills, we offer comprehensive support for the development of your transmissions, from design to validation and commissioning of your products.

This approach is based on Cetim's unique expertise and know-how in the field of mechanical power transmission, guaranteeing cutting-edge solutions and continuous innovation.

CONTACT

Question and Answer Service

contact@cetim.fr **www.cetim.fr**