

## QUALITY AND FAILURE

JUNE 11-15, 2018

University of Newcastle (Design Center), United Kingdom

During this course, students will learn more about the requirements for gear quality and the interpretation of test results. Furthermore, this training will treat topics such as:

- ⚙ Gear Quality: Gear measurement methods and analysis;
- ⚙ Tribology: Oil film formation, coatings, power losses;
- ⚙ Maintenance: Practices and Gear failure analysis.

## PRODUCTION OF GEARS

MARCH, 2019

(precise date and location to be confirmed)

This part of the training program covers the fundamentals of gear manufacturing. Consequently, students will learn about the different stages involved in the manufacturing of gears: gear hobbing, gear shaping, gear honing and gear finishing.

In addition, they will receive training in surface treatment from a specialized gear metallurgist and they will be provided with an overview of new ways of production, such as 5 axe production.

Want to know more about how trainings can hone your people's skills and expertise? Need more information about the EUROTRANS Drive Technology Training? You can send all of your questions to [marleen.poelmans@agoria.be](mailto:marleen.poelmans@agoria.be).

For more information about EUROTRANS, visit:

[WWW.EURO-TRANS.ORG](http://WWW.EURO-TRANS.ORG)



### EUROTRANS:

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# EUROPEAN DRIVE TECHNOLOGY

## EUROTRANS

European Industry Platform  
International Meetings  
Trainings on Drive Technology

## EUROTRANS, YOUR NETWORKING PLATFORM FOR DRIVE TECHNOLOGY

### European drive technology is number 1 in the world

As network platform and a non-registered federation, the European Committee of Associations of Manufacturers of Gears and Transmission Parts (**EUROTRANS**) is a non-profit organization that represents the interests of the European Drive Technology industry. It informs and supports more than 600 enterprises within Europe, which account for an annual production of more than 40 billion euro.

Europe is the leading region worldwide in terms of innovation and experience in the power transmission sector. Companies in this industry employ no less than 160,000 people. Consequently, **EUROTRANS** takes its task of representing these people and enterprises, in line with national needs, very seriously.

### WHAT WE DO AT EUROTRANS:

- ⚙ Offer a European and international networking platform.
- ⚙ Define common issues and discuss possible strategies and solutions.
- ⚙ Unify enterprises within this industry into one European voice.
- ⚙ Act as a lobbyist within European legislation.
- ⚙ Assist in motivating and educating people for our industry by offering specific training courses.
- ⚙ Functioning as a single point of contact for companies and associations worldwide.
- ⚙ Collect and present figures and forecasts about the European industry.
- ⚙ Foster and market the European leading area for power transmission.

## A QUALITATIVE DRIVE TECHNOLOGY TRAINING PROGRAM

(Master level, taught in English)

Although the Drive Technology sector is an important industry branch, universities often fail to offer adequate, high-level courses. For example gears and gear boxes are key products in our industry. In Europe, a mechanical engineer receives only five hours of gear training on average. This is insufficient to become an effective and valuable asset to the industry. Moreover, the number of available gear trainers is steadily declining due to retirements and a lack of replacement.

That is why in a first step **EUROTRANS** has developed an extensive and all-encompassing modular Gear Training Program. Provided by top gear trainers, the training covers every possible aspect in their domain – from geometry and design, through production, to quality control and failure analysis. For the future we are also planning trainings for other product groups. As this residential trainings addresses a European audience, it will take place in several locations that are close proximity to well-known gear laboratories.

### Who should attend?

Not only technical specialists, but also employees who are getting acquainted with the design, production, engineering and sales of gears and transmissions will benefit from this training program. This course is a must for anyone who is active in the gears sector in Europe.

### International and intercultural dimension

Since the training is open to participants from all European countries, this is an opportunity to meet your peers from across Europe, exchanging ideas and stimulating your technological know-how. Undeniably, this is a key asset of this training course.

## INTERNATIONAL NETWORKING

### European Drive Technology Conference

FIRST HALF 2018

Belgium

This conference on Drive Technology takes place in different European countries every 2 years (in combination with the general assembly of **EUROTRANS**).

### 5th International Drive Technology Meeting

MARCH 31, 2019

Hanover, Germany

This International Meeting takes place every 2 years and is linked to Hanover Fair.

## TRAINING PROGRAM

### Geometry and Design

NOVEMBER 13-17, 2017

University of Munich, Germany

This part of the training program explores a wide range of topics, including:

- ⚙ Gear geometry for spur and helical gears;
- ⚙ Basic definitions of concepts such as single gear, gear pairs, mesh and special gears, and planetary gears;
- ⚙ An introduction to gear rating, relevant stress parameters, rating of bending, pitting, scuffing, slow speed wear, micropitting and flank breakage;
- ⚙ Standardized gear methods in ISO, bending, pitting, scuffing and micropitting.

The entire subject matter is extensively illustrated with examples and best practices.