



EUROTRANS GEAR TRAINING

GEOMETRY AND DESIGN
Munich (GE), 21 – 25 November 2016

A complete Gear Training Programme on Master Level (English spoken)

Although the power transmission engineering industry is an important industry branch, universities fail to develop appropriate courses. In Europe, a mechanical engineer gets on average 5 hours of gear training. This is far too less to be effective in industry. Moreover, gear trainers are becoming rare due to retirement and non replacement. Therefore, EUROTRANS identified the remaining top gear trainers and developed an extensive training on geometry and design (in collaboration with FVA). Addressing a European audience, this residential training is organised in Munich in close connection with the Laboratories of the Gear Research Centre (FZG) at the Technical University of Munich.

Geometry and Design 21 – 25 November 2016

Please find the detailed programme for this week below. If you wish to subscribe, please use the subscription form at the end of this folder.

- Accommodation? Room reservations should be made directly with the hotel using the separate reservation form. Accommodation is **not** included in the price.
- Social programme? The training package **includes** evening **dinners** and **social activities** such as a guided walk through the city centre of Munich and a visit of the Laboratories of the Gear Research Centre (FZG) at the Technical University of Munich. The social programme can be subject to change.

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Monday AM Travel				
Monday PM	GEAR GEOMETRY	Geometry of involute gearing	Spur and helical gears, basic definitions of single gear, gear pairs, mesh	Dr. Wirth
Tuesday AM	GEAR GEOMETRY	Variant gear Systems	“Special gears”: bevel gears, conical gears, worm gears, general kinematics, basic definitions Planetary gears: kinematics, powerflow, efficiency	Dr. Wirth
Tuesday PM	MATERIAL AND HEAT TREATMENT	Gear materials	Selection of gear materials, heat treatment, SN-curve, damage line, strength values	Dr. Michaelis
Wednesday AM	GEAR RATING	Basic rating practice	Introduction of gear rating, relevant stress parameters, rating of bending, pitting, scuffing, slow speed wear, micro pitting and flank breakage	Dr. Michaelis
Wednesday PM	TEST METHODS	Oil tests	Influence of lubricants on gear load capacity, test methods and test results, introduction of test results in gear rating practice	Dr. Michaelis
Thursday AM	GEAR GEOMETRY	Gear corrections	Profile and lead corrections, load distribution, vibration excitation	Dr. Wikidal
Thursday PM	GEAR RATING	Standard gear rating	Standardized gear methods in ISO, bending, pitting, scuffing, micropitting – examples	Dr. Wikidal
Friday AM	GEAR RATING	Program codes	Application of standard gear rating methods, examples	Dr. Wikidal
Friday PM Travel				

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INSCRIPTION FORM

>> Form to be returned at least **7 days before the start of the course** (or **30 days for early bookings**) to **Marleen Poelmans**, Diamant Building, bd A.Reyers ln 80, 1030 Brussels, by e-mail to marleen.poelmans@agoria.be

Mr./Mrs.

Function

Company

Address

E-mail

Tel. Fax

VAT Nr

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Participation fee

2000 € (vat excl.) per person for early bookings at least **30 days before** the start of the training

2200 € (vat excl.) per person for late bookings at least **7 days before** the start of the training

**2700 € (vat excl.) per person for organisations non-member of EUROTRANS associations
disregarding date of registration**

From the 2nd and consequent inscription from the same company a 100€ reduction will automatically be granted.

An invoice will be sent to you upon receipt of your registration from FVA.

Please note that the purchase order number (PO number) has to be linked to the supplier FVA and not to Agoria.

Invoice address if different from the above:

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Cancellation conditions

- > No charge if cancelled at least 30 days before the start of the course
- > For cancellations at least 7 days before the start of the course, 50% of the inscription fee will be refunded
- > No refund will be made for cancellations received after 7 days before the start of the course, however replacement of a registered person is possible
- > **In case of insufficient inscriptions the course will be cancelled and refunded**

Date and Signature:

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HOTEL INFORMATION

>> Please confirm your room reservation directly to the hotel preferably one month before the start of the course. Accommodation is **not** included in the price!

We recommend the following hotels:

❑ **Hotel König Ludwig II Garching**

Bürgerplatz 3
DE – 85748 Garching bei München
Tel: +49 (0) 89 329 310
Fax: +49 (0) 89 329 1510
Email: hotel@hkl.de

❑ **Hotel Ibis München Garching**

Daimler Strasse 5
DE - 85748 Garching
Tel: +49 (0) 89 32 38 40
Fax: +49 (0) 89 32 384 100
Email: h3679@accor.com

❑ **Hotel Ibis Budget**

Daimlerstrasse 3
DE - 85748 Garching
Tel: +49(0) 89 32 70 95 20
Fax: +49(0) 89 32 70 95 15
Email: H3089@accor.com