

Das Know-how.

# Work- and Process Organisation

Seminars and Training Programmes  
for Effective Production Management

- REFA Basic Training in Work Organisation -

REFA – Germany's leading association in

Work Design

Industrial Organisation

Company Development

## Work- and Process Organisation

We provide training, further education, consulting and coaching for skilled personnel, especially middle management, in all areas of production, administration and service industries. Our courses are held in English, German, Spanish, French and many other languages.

Our training material consists of over 300 modules. Our modular concept enables us to react very flexibly to customer requirements.

Our **regular training courses** are internationally standardized. Thus it is ensured that all participants of our standard training courses master the same contents, apply the same methods and use a common terminology.

Apart from our standard training courses we also develop and implement **tailor-made training courses** for all topics related to performance and productivity improvement in production, administration and the service industries.

**We offer in-house training courses on site for our customers worldwide.**



In-house seminars are organised in many countries worldwide through REFA-International or our local cooperation partners.

### What is the REFA Methodology ?

- The REFA methodology is a collection of methods and tools to achieve improved work organisation.
- REFA methods focus on work design and on the collection and evaluation of company data (as applied in work organisation, remuneration, cost accounting, quality management, etc.).
- REFA methods make systematic and holistic contemplation of work organisation and process management possible.
- The outstanding feature about the collection of REFA methods is that the individual methods complement each other so that the entire value added chain of an organisation can be analysed and improved in many aspects. The entire process chain can be organized more efficiently when REFA methods are applied.

REFA methods are subject of the REFA Basic Training.

# REFA Basic Training in Work Organisation

## Providing a solid basis for your success

Optimally designed work systems, process orientated work organisation as well as the handling of production data are crucial conditions for a company to remain competitive. To reach this goal a company needs qualified, competent and motivated staff.

REFA Basic Training in Work Organisation provides your staff with the necessary know-how. Apart from the classical methods in work design and data determination the training also includes process design, process cost calculation, Continuous Improvement Process CIP and quality management.

Your staff will acquire comprehensive, methodological knowledge and the necessary practical skills to design or improve work systems and processes. Your staff will also be trained to apply the right methods for production data capturing and to work with existing data for the evaluation and optimisation of work processes.

### Benefits

Participants of REFA Basic Training in Work Organisation can:

- analyse and design work places under ergonomic and economic viewpoints
- analyse business processes
- design efficient process-orientated work organisation
- apply methods of process optimisation
- actively participate in the improvement of business processes
- determine data for planning, control and cost calculation
- conduct cost calculations
- participate in the design of remuneration systems.

### Who should attend?

- Skilled workers (craftsmen)
- Supervisors
- Production engineers
- Members of the company management  
who want to obtain knowledge about methods to design work systems and business processes.

### Our training methods

The courses are held by certified REFA trainers who are experienced in the practical work processes of companies. The training consists of lessons, group work and case studies. It includes practical examples from different sectors of industry as well as practice-related training to make the participants capable of applying the methods.

### Structure of the Training Programme

REFA Basic Training in Work Organisation consists of the following two courses:  
Work System and Process Design and Process Data Management.

Seminar Work System- and Process Design	REFA Certificate
Seminar Process Data Management	REFA Certificate
<b>= REFA Basic Training Degree in Work Organisation</b>	<b>REFA Basic Degree in Work Organisation</b>

### Certificate

At the end of each course the participants do a test and receive the respective REFA certificate when passing. After the successful completion of both courses, the participants are awarded the **REFA Basic Degree in Work Organisation**.

## REFA Basic Training, part 1

### Seminar Work System- and Process Design

Participants obtain the necessary know-how to design work systems and business processes. This knowledge is also essential to conduct tasks in planning and controlling within process-orientated work organisation of a company.

The objective of this course is to train the participant in practical methods applied within process-orientated work organisation to optimize the co-operation between man, business means, work piece and information. Elements of a process-orientated work organisation such as work systems, structure organisation, process organisation, business process organisation, quality management, etc. are included in individual training sections of the course.

#### Benefits

Participants acquire comprehensive training in methods of designing work systems and business processes and solid insight into business organisation. They are able to use methods of work study, business organisation and ergonomics as daily tools to foster process-orientated work organisation within their company.

The company benefits from well-trained staff able to participate in the organisation of value-creating business processes and to improve productivity by applying humane and efficient work design methods.

#### Duration of training

Normal seminar duration: 120 lessons.

Condensed seminar duration (for college/university graduates): 80 lessons.

#### Exam / Certificate

The course ends with a final test and successful participants receive the REFA Certificate Work System and Process Design.

## Training contents of the REFA Basic Training, part 1

### 1<sup>st</sup> training unit

#### Work System – basics and processes

- The REFA work system
- Organisation of work processes
  - Key terms in organisation
  - Structure organisation
  - Process organisation
- Systematic approach
- Determination of process data and time data (analysis and synthesis)
  - Data types
  - Process types
  - Time types
  - Throughput- and process times
- Task analysis and task evaluation
  - Task division
  - Task analysis
  - ABC analysis

### 2<sup>nd</sup> training unit

#### Process Design

- Process structures and process presentations
  - Presentation of processes
  - Calculation of times
- Processes within an enterprise
  - Process organisation in an enterprise
  - Process analysis and process design - systematic way of proceeding
- Introduction to Quality Management
- Continuous Improvement Process
- Costing
  - Basic terms of cost accounting
  - Calculation
  - Cost comparison calculation
- Costing based on process costs

### 3<sup>rd</sup> training unit

#### Work System Design

- Labour protection and occupational safety
- Design of human-appropriate work
  - Concept for assessment of human-appropriate work
- Work load and stress
  - Human performance and its dispersion
  - Recording and assessment of stress
  - Consequences of stress
- Determination of admissible forces
- Work load due to work tasks and work organisation
- Viewpoints of work design (anthropometry, information techniques)
  - Body dimensions and body posture
  - Dimensions of the workplace
  - Indicators and control elements
- Work environment
  - Noise, vibration
  - Climate, lighting
  - Harmful substances
- Case study: computer work station

### REFA Basic Training, part 1

- final test

## REFA Basic Training, part 2

### Seminar Process Data Management

The “time” factor plays a leading role in the success of a company. Time data are used for preliminary calculations, capacity planning and scheduling as well as for remuneration design. Successful companies keep on using the classical REFA methods of time study complemented by further methods that were developed to determine times for process chains (throughput times).

The objective of this course is the practical transfer of methods to determine, apply and use work related time and process data. The participants obtain a comprehensive overview of all REFA methods in data determination. Furthermore they will be able to apply the right methods to evaluate and optimise company processes as well as to address questions about remuneration management.

#### Benefits

Participants acquire the knowledge necessary to understand the interaction between elements of a work system and to describe them, to determine system data, to evaluate them and to analyze a work system with a view to introducing a remuneration system. They acquire the methodology to design work processes. The ability to act independently is emphasized in this course.

Companies obtain personnel with capabilities in the areas of data capture, information processing, data analysis and analysis of remuneration management and achieving results.

#### Duration of training

Normal seminar duration: 120 lessons

Condensed seminar duration (for college/university graduates): 80 lessons

#### Condition for Participation (recommended)

Successful completion of the seminar Work System and Process Design.

#### Exam / Certificate

The course ends with a final test. Successful participants receive the REFA Certificate Process Data Management.

After the successful completion of both training courses, Work System and Process Design as well as Process Data Management, participants are awarded the **REFA Basic Degree in Work Organisation**.

## Training contents of the REFA Basic Training, part 2

### 1<sup>st</sup> training unit

#### Data determination I

- Introduction to process data management
- Determination of time data
  - REFA standard programme time study
  - Time study techniques
  - Time measurement instruments
  - Sequence of work process sections
  - Time study sheets
- Performance rating
- Time study and evaluation
  - REFA standard programme “Evaluation of time studies”
  - Statistical evaluation
  - Exercises in measurement and evaluation
- Allowance time study
  - Execution and evaluation of allowance time studies (REFA standard programme)
  - Calculation of allowance time percentage
- Recovery time
- Group work (time data)
- Multiple position work (time data)

### 2<sup>nd</sup> training unit

#### Data determination II

- Activity sampling
  - Execution and evaluation of activity sampling (REFA standard programme)
  - Fields of application
  - Exercises
- Comparing and estimating
- Interviewing and self-registration
- Predetermined time systems
- Standard times
  - REFA standard programme “Standard Time Determination”
  - Representing standard times in tables
  - Statistical verification of influencing factors
- Production data recording
- Process evaluation and key numbers

### 3<sup>rd</sup> training unit

#### Working time and remuneration

- Flexible working- and business times
  - Fundamental approaches of working time design
  - Selected working time models
- Determination of job requirements
  - Summary procedure to determine job requirements
  - Analytical procedure to determine job requirements
  - REFA standard programme “Requirement determination” (work evaluation)
  - Methods for the quantification of requirements (work evaluation methods)
- Flexible remuneration management
  - Remuneration principles
  - Methods for performance-related remuneration differentiation
- Group work and team work
- Work pedagogic and qualification

#### Applied process and data engineering

- Material flow and simulation
  - Systematic approach towards planning and design of material systems
  - Exercise on the meaning of simulation for tasks in planning and design

REFA Basic Training, part 2

- final test