

REFA

German Vocational Training for Industry

presented by
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The origins of REFA

How REFA's core competences have developed since their

Foundation in 30 Sept 1924:

- Determination of working time (1936)
- Work studies (1977)
- Work studies and industrial organisation (1995)
- Work design, industrial organisation and company development (since 1995), including process orientation (since 2000)



Before a method is up-dated and published, the content is checked by the Confederation of German Employers' Associations and the German Confederation of Trade Unions thus ensuring its neutrality.

Who is behind REFA?

Principle ► the REFA team works mainly in an honorary capacity

- ❖ approx. 12.000 registered members
- ❖ over 1.500 trainers
- ❖ over 1.000 volunteers on an honorary basis
- ❖ approx. 100 employees
- ❖ 85 regional, district and local branch associations
- ❖ 11 members in the board of directors from the federal and regional associations
- ❖ 1 supervisory board
- ❖ 1 general members meeting

REFA-International

► REFA local cooperation partners worldwide

Argentina	Hungary	Russia
Austria	Italy	Slovenia
Belarus	Mexico	Switzerland
Bulgaria	Morocco	Tunisia
China	Poland	Turkey
Egypt	Portugal	Ukraine
Greece	Turkey	Uruguay



REFA Offers

- Methods of understanding individual operational data
- Ways of translating this data into the reality of running a company efficiently
- Technics for optimising operational procedures
- Understanding of work carried out by employees
- Systems for supporting employees for creating a most efficient workforce
- Methods and technics to make use of material and resources to the best optimum
- Support for international business operations

Course Program

Methods of Work Design and Data Determination

Your know-how basis in Industrial Engineering

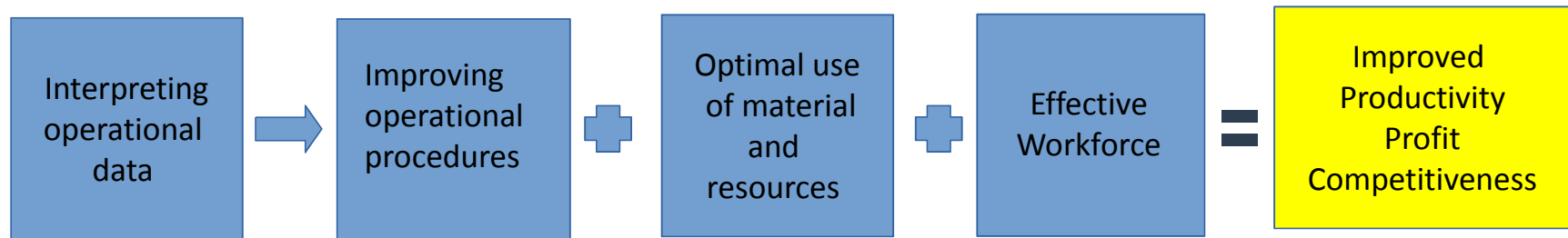
n°	Module name	Lessons (1 lesson = 45 minutes)
1	REFA Work System - Performance Unit and Process Element	4
2	Principles of Work Design	8
3	Task and Process - Structuring and Design	3
4	Work Data Management - Process and Time Types	16
5	Performance Rating	4
6	REFA Time Study - Execution and Evaluation	18
7	Setup Time - Determination and Optimization	3
8	Determination of Standard Data Elements	6
9	Contingency Allowance Determination	4
10	Activity Sampling	6
11	Utilization of Work Data for Cost Calculation	8
	Total lessons	80

The methodology is practical and hands as well as usable across all fields of industry

REFA Overview

The productivity and success of a company is dependent on the organisation of processes and work.

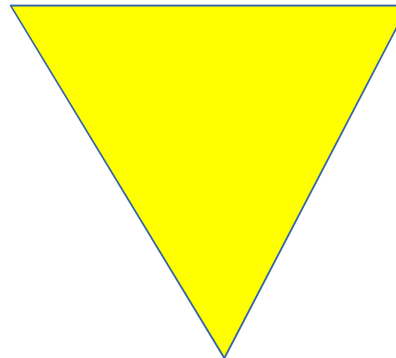
In order to achieve this company individual operational data needs to be professionally studied and understood, then transformed into the reality of running of a company so that the optimal operational potential can be achieved.



REFA in a Nutshell

Increased Efficiency

Increased Productivity



Decreased Cost

Leads to overall increased competitiveness
national and international

GETS and REFA experience in North Africa

REFA implementable across the whole spectrum of industry including textile, automotive, aviation

Practical and implementable it offers rapid success with a high impact.

GETS has implemented REFA introductory courses in collaboration with EJB Young Egyptian Businessman

GETS has successfully carried out a basic 10 day REFA certificate with a pre-training company analysis and post – training coaching for selected factory employees in Egypt from the fields of Textile, Car manufacturing, Chemical and even education system.

We are currently creating a training method for hotel managers which will include elements of REFA.



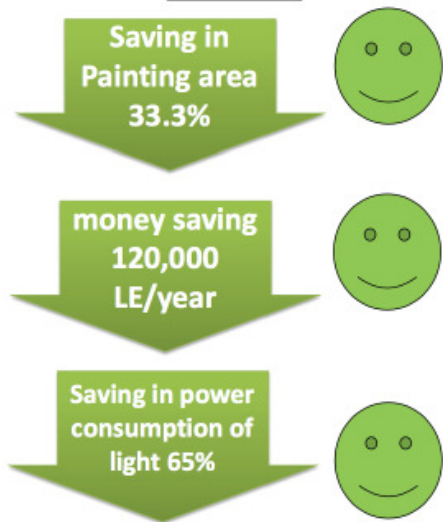
REFA Training Impact INDE Group, Egypt

Direct measurable results of the 10 day REFA Certificate in an Egyptian car part manufacturing company

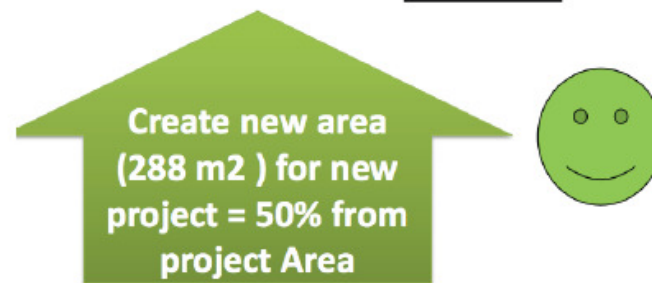
	Preparing Area (m2)	Polishing Area (m2)	Assembly Area (m2)	Painting cabin (m2)	Total Area (m2)
Before	288	144	144	288	864
	576				
After	288			288	576

REFA Training Impact INDE Group, Egypt

Results



Results



INDE Group, Egypt

Optimising workspace using flexible tools



Before



After

INDE Group, Egypt

Optimising workspace using flexible tools cont.



Before



After

REFA Qualification testimonial by participant Consultant and trainer in quality management

REFA helps to develop and expand business. It increase efficiency and production hereby reducing cost. It is focused on developing a spirit of belonging amongst the workers so the best quality and best price can be provided. All in all it helps turn the enterprise into a serious competitor in the global markets.

The qualification provides information, ideas and scientific methods to develop the enterprise. If implemented it leads to:

- - An organised workplace
- - A comfortable workplace for workers
- - An increased affiliation of each employee
- - A celebration of the quality and increase with development
- - Full control and control of all work routine - in the simplest way
- - Increased production and higher quality with lower cost
- - Ability to calculate each step with a high precision
- - Reduce wasted time lost
- - Reduce turnover of workers



REFA Qualification testimonial by Participant Hassan El Sherif

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THANK YOU

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