



DIETSMANN QUALIFICATION COLLEGE

TRAINING PROGRAMS & QUALIFICATIONS

www.dietsmann.com

Operation & Maintenance skills provider
for the oil & gas, conventional & nuclear power
generation industries

SMART MAINTENANCE SOLUTIONS START WITH KNOWLEDGE AND SKILLS

Dietsmann
Maintaining Energy



Photo courtesy of Cybernetix TechnipFMC

ABOUT **DIETSMANN TECHNOLOGIES**

Dietsmann Technologies is an operating company of Dietsmann, the leading independent specialist in Operation & Maintenance services and Maintenance Engineering & Inspection for continuous production plant in the oil & gas, conventional & nuclear power generation industries, and works in accordance with good practices and Dietsmann's Quality Management System.

Dietsmann Technologies is Headquartered in a 24,000m² engineering and construction facility in Salies du Salat in south-west France and works closely with Dietsmann's 1,500m² maintenance and inspection engineering Technical Support Center in nearby Toulouse. Dietsmann Technologies also has permanent satellite facilities in Gabon, the Republic of Congo and Angola from where it works on substantial projects with energy company clients and contractor partners. Its engineers and technicians are ready to be mobilized for turnkey projects anywhere in the world.

The Dietsmann Qualification College, located in Boussens, 5 kilometers from Salies du Salat, provides customized training programs and qualifications to the oil and gas,

power generation industries as well as other industries, technical and engineering establishments. The total training area of 1,000m² includes a 500m² workshop. This workshop contains examples of equipment that needs to be maintained at sites including rotary machines, pumps, alternative and centrifugal compressors and sets of the most frequently used spare parts. Metrology training takes place in a dedicated, fully equipped room that replicates the metrology rooms found on site. The training area also includes two classrooms, an electrical workshop and an e-learning room.

The College benefits from easy access to the highway and rail networks and Toulouse airport.

3 TECHNICAL SITES IN FRANCE

SALIES-DU-SALAT

Training, E&I Engineering Construction - A 24,000m² Engineering and Construction facility including an HVAC bench for factory acceptance tests

TOULOUSE

Training, Technical Support Centre - A 1,500m² Technical Support Centre providing Maintenance Engineering & Inspection (MEI) support to Dietsmann sites

DIETSMANN QUALIFICATION COLLEGE SALIES-DU-SALAT & TOULOUSE

Dietsmann Qualification College - A 1,000m² facility providing Maintenance training & certification with:

- Mechanical , electrical, instrumentation, HVAC and metrology workshops/rooms
- HV / LV electrical accreditation room
- Instrumentation benches (gas & fluid loop)
- HVAC bench
- An E-learning room, 2 classrooms and a 500m² workshop

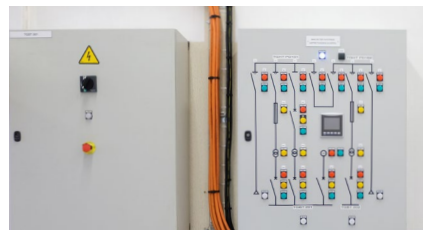
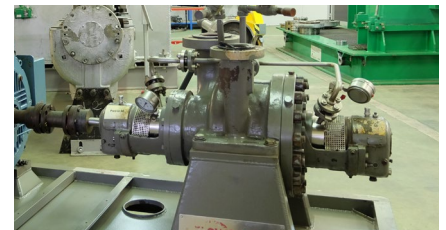


THE PHILOSOPHY - A TAILOR-MADE SOLUTION

TRAINING THAT GUARANTEES QUALITY AND EXPERTISE

AND INDUSTRIAL FIELD COMPETENCIES

- Mechanical
- Instrumentation
- Electrical
- Heating, ventilation and air conditioning
- Maintenance engineering courses



TRAINING CUSTOMIZED TO YOUR OPERATIONAL NEEDS

The Dietsmann Qualification College, with its extensive experience in mechanical engineering, electrical engineering, instrumentation, HVAC and Maintenance Engineering as well as regulatory technical training (electrical qualifications, ATEX), is the expert in field maintenance. Qualification courses and programs are customized to answer your needs. Even if trainees have no previous experience the College will take them all the way through from an initiation course to the required qualification. The College can also offer an All-In training program package that incorporates and encompasses all your specific requirements.

THE COLLEGE'S TRAINING COURSES AND PROGRAMS COVER A WIDE SPECTRUM OF MAINTENANCE-RELATED SKILLS:



MECHANICAL

Training courses & qualifications

- Coupling between pipes or components (selection and execution)
- Flange sealing (the various sealing systems and metal gasket fitting)
- Metrology
- Vibration measurement
- Endoscopy

For

- Centrifugal / Volumetric compressors
- Pumps & compressors

ATEX certifications (INERIS)

- Mechanical staff levels 0 to 2



INSTRUMENTATION

Training courses & qualifications

- HART protocol
- Regulation loop:
 - Gas loop / Liquid loop mounting
- Program Logic Controller set-up
- Fire Gas Security
- Vibration monitoring
- Instrumentation calibration:
 - Level / Flow / Temperature / Pressure

ATEX certifications (INERIS)

- Electrical/instrumentation staff levels 0 to 2



ELECTRICAL

Training courses & qualifications

- Introduction to electrical schematics
- Protection relays - Operator / Supervisor level
- Thermography
- Interlock consignment

Electrical Accreditations

- Low and High voltage
- Work on batteries under tension
- For electrician and non-electrician
- Refresher programs

ATEX certifications (INERIS)

- Electrical staff levels 0 to 2



HEATING, VENTILATION & AIR CONDITIONING

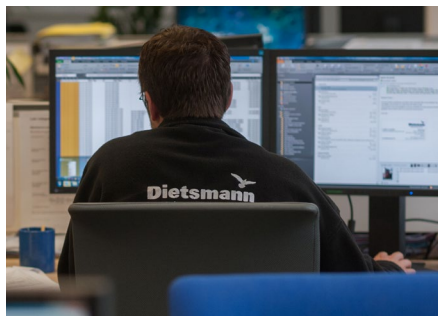
Training courses & qualifications

Junior

- Air evolution - Psychometric chart
- Principle of refrigeration & air conditioning installations
- HVAC technologies/components

Senior expert

- Basics of fluid handling, gas charge & discharge in accordance with regulations
- Air conditioning system trouble shooting and failure diagnostics training
- HVAC integrated system & Human Machine Interface (HMI) exploitation



MAINTENANCE ENGINEERING

Training courses & qualifications

Introduction to Maintenance Engineering

- Hierarchy breakdown
- Criticality study
- Lubrication study
- Failure mode, effect & criticality analysis
- Rotating permutation plan & maintenance planning studies



GTIS JOINTING CERTIFICATION

Training courses & certifications

- Level 1 and 2
- Bolt torquing
- Flange sealing (the various sealing systems and metal gasket fitting)

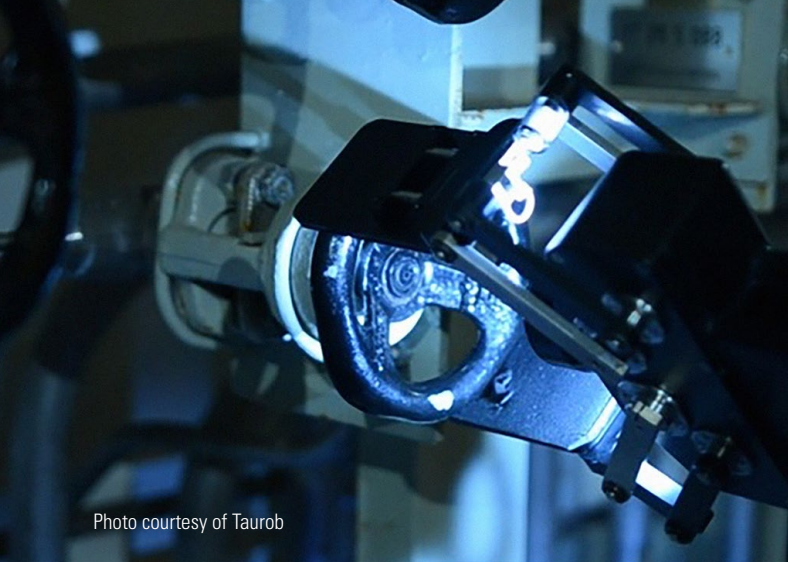


Photo courtesy of Taurob



Total/Ben Mullay

NEW: ROBOTICS EXPERIMENTATION FACILITIES IN BOUSSENS

In addition to the 'conventional' training and education applications for which the Qualification College was designed and is being used, the facilities also offer ample opportunities for the testing of robotic technologies.

The deployment of robots for certain operation & maintenance related tasks is expected to become the norm within the foreseeable future. Developers of this new technology are currently focusing their attention on the industrial/ petrochemical applications for (semi-) autonomous robots.

These applications include, e.g., Non Destructive Testing (NDT)-tasks during the regular inspections of installations such as pressure vessels, storage tanks and larger diameter piping. Or the cleaning of equipment at difficult accessible locations.

As robots can be controlled remotely and maneuver 'independently' they could also be used to perform certain (standard and non-standard) tasks on unmanned platforms or in specific circumstances.

Other applications for robots include using drones for inspections of larger vessels and heat exchangers, flare systems or piping. The oil and gas industry is focusing continuously on working more efficiently and effectively and the utilization of robots will play a role in achieving this.

Developments in the area of Augmented Reality (AR) and Virtual Reality (VR) are now being implemented within the industry. The new training tools they are providing help operators and maintenance staff achieve the required quality level.

Operations and maintenance activities at high-capital industrial sites must be adapted to take into account changing circumstances and increasing demands in the area of Health, Safety, Social, Security, Environment and Quality (HSEQ). 'New Technologies' can be of great assistance when it comes to such challenges. Before adaptations are implemented in 'real-life' situations they must be tested, not only from a technical point of view, but also in respect of the 'human-interaction and (social) acceptance aspects.

Augmented Reality (AR) and Virtual Reality (VR) are prime examples of technology that supports changes in the day-to-day working environment and in particular in staff training. Developments in these evolving technologies are now being implemented within the industry. The new training tools they are providing can help operators and maintenance staff achieve the required quality level.

Facilities and opportunities, such as those available in the Dietsmann Qualification College, not only enable the use of robotics and other new technologies in mechanical, instrumentation and/or electrical applications to be tested on realistic industrial equipment, they also enable technicians to acquire the required competencies and qualifications related to these technological developments.



A REFERENCE PARTNER

ADDED VALUE AND STRENGTHS

Heavy operational machines

- Practical training in using the operational equipment found on site, such as reciprocating and centrifugal compressors and centrifugal pumps

Simulated operating conditions

- Testing benches equipped with fluid and gas loops simulate operating conditions
- Theoretical training is consolidated through practical exercises and tests
- 500m² practice area

Experts with a disciplined approach

- Trainers selected on the basis of their expertise and knowledge acquired on Dietsmann sites around the world and their teaching skills

Training packages customized to your needs

- Training courses and programs configured to the client's needs
- Qualifications customized to meet the client's operational needs

OUR COMMITMENT

THE DIETSMANN QUALIFICATION COLLEGE IS COMMITTED TO

- Providing a high standard of training and training facilities and creating a pleasant atmosphere that is conducive to learning
- Providing training courses and programs that meet clients' target specifications
- Providing trainees with constant support throughout their training
- Respecting AFNOR certifications (Training courses comply with AFNOR norms: 9001 & 14001; OHSAS 18001)

OUR TRAINERS

ALL DIETSMANN QUALIFICATION COLLEGE TRAINERS

- Are experienced professionals in their particular discipline
- Have considerable in-the-field experience gained working on operating sites around the world
- Are skilled teachers and communicators

OVERVIEW OF REFERENCES WORLDWIDE

contact-DQC@dietsmann.com

www.dietsmann.com/qualification-college

DIETSMANN QUALIFICATION COLLEGE THE INDUSTRIAL **MAINTENANCE SKILLS** PROVIDER

FEEL FREE TO CONTACT US

Salies du Salat

Zone Industrielle
31260 Salies du Salat, France
tel: +33 (0) 5 61 98 46 70

THE NETHERLANDS (GROUP HOLDING)

Wilhelminasingel, 19
4818 AC Breda, The Netherlands
tel: +31 76 530 19 88
fax: +31 76 521 63 88

MONACO (GLOBAL SUPPORT & COORDINATION OFFICE)

Gildo Pastor Center
7, rue du Gabian
MC 98000 Monaco
tel: +377 93 10 10 10
fax: +377 93 10 10 11

UNITED ARAB EMIRATES (SUPPORT & COORDINATION OFFICE)

Office 4002, JBC-1 Tower
Cluster G, JLT, DMCC
P.O. Box 450171
Dubai, UAE
tel: +971 (0)4 458 1662

ANGOLA

Sonadiets Limitada
Rua Augusto Silverino Ferreira
10/12 - 1º Andar
Maculusso, Luanda, Angola
tel: +244 222 440 657

BOLIVIA

Calle M. Terrazas, 14
Barrio Equipetrol
Santa Cruz de la Sierra, Bolivia
tel: +591 3 3705115

BULGARIA

Dietsmann

Correspondence address

„Flora Panorama“
8000 city of Burgas, h.d. Lazur
11 Veliko Tarnovo Street
floor 1, Office 4/5, Bulgaria
tel: +359 888 98 06 06
+359 28 13 35 77
fax: +359 28 13 35 06

CONGO (THE REPUBLIC OF)

Avenue de Loango
Boite Postale 1775
Pointe Noire
The Republic of Congo
tel: +242 22 294 44 71
fax: +242 22 294 43 50

CYPRUS

Krambis Building, Office 201
Stasikratous Street 20
1065 Nicosia, Cyprus
tel: +357 222 50 446

FRANCE

Salies du Salat

Zone Industrielle
31260 Salies du Salat
France
tel: +33 5 61 98 46 70
fax: +33 5 61 97 48 43

Toulouse

8, rue Paul Mesplé
31100 Toulouse
France
tel: +33 5 61 43 81 10
fax: +33 5 61 43 81 12

GABON

Base Industrielle BP 1138
Port Gentil
Gabon
tel: +241 77 17 08 80

ITALY

Via Abruzzi nr 25
00187 Roma
Italy
tel: +39 06 42020452
fax: +39 06 42010196

KAZAKHSTAN

Atyrau

Kanysh Satpayev Street
Building, 17B
060012 Atyrau, Atyrau Oblast
Republic of Kazakhstan
tel: +7 7122 586 349/50
fax: +7 7122 586 348

Aksai

Druzhba Narodov Street
2nd floor 27/2, 090300 Aksai
West Kazakhstan Region
Republic of Kazakhstan
tel: +7 71133 75 5 98
+7 71133 75 5 97

KUWAIT

Al-Sharq Area - Block 5
Jaber Al-Mubarak Street Plot 11
Al-Shorouq Tower 2 - Floor 12
Kuwait City, Kuwait
tel: +965 222 54 290

LIBYA

Dietsmann Libya
Ahmed Ben Yazeed Street
Hay Al Andalus No.2, Tripoli
P.O. Box 93446 Tripoli Tower, Libya
tel: +218 21 4782813/4/5
fax: +218 21 4782816

MOZAMBIQUE

Rua Zedequias Manganhela, 267
Kampfumu, Maputo
Mozambique
tel: +258 84 3232750

NIGERIA

NetcoDietsmann

NDPHC Building (Nigeria Delta
Power Holding Company)
First Floor, Plot 1490
Samuel Ademulegun Street
Central Business District
FCT Abuja, Nigeria
tel: +234 (0)80 988 855 32
+234 (0)80 988 855 31

QATAR

Al Jazi Tower, 15th floor West Wing
P.O. Box: 24781, Doha, State of Qatar
tel: +974 44065111

ROMANIA

Cubic Center, 1B Pipera Boulevard
Jud. Ilfov, 077190 Oras Voluntari
Romania

RUSSIA

BC "GlassHouse"
Lyusinovskaya, 36/1
Moscow, 115093, Russia
tel: +7 495 287 84 75

SOUTH SUDAN

Juba Regency Hotel, Kololo Road
Kololo - Central Equatoria State
Juba, Republic of South Sudan
tel: +211 (0)920 010 292

SWITZERLAND

7, rue des Alpes
1201 Geneva, Switzerland
tel: +41 22 73 83 591
fax: +41 22 73 83 59

DQC registration number

76 31 0815831

(issued by DIRECCTE)

Qualiopi
processus certifié

REPUBLIQUE FRANÇAISE
La certification qualité a été délivrée au
titre de la catégorie d'action suivante :
Action de formation



Dietsmann
Maintaining Energy