

# DEKRA Insight

## Science At The Heart of Safety



Alberto Stefani  
DEKRA Insight – Chilworth

# DEKRA SE provides sustainable safety, quality and environmental protection in more than 50 countries worldwide

## International subsidiaries

- DEKRA Automotive in 28 countries
- DEKRA Industrial in 25 countries
- DEKRA Personnel in 11 countries

Active in Europe as well as in North America, South America, Asia, South Africa, North Africa, Israel



# DEKRA SE

## 3 Business Units with 12 strategic business fields



### AUTOMOTIVE

Vehicle Inspection

Expertise

Used Car Management

Homologation & Type Approval

Claims Services



### INDUSTRIAL

Industrial & Construction Inspection

Material Testing & Inspection

Product Testing & Certification

Systems Certification

Consulting



### PERSONNEL

Training & Education

Temporary Work

## DEKRA SE

Revenues (cons.) in millions of EUR	2013	2014	2015
DEKRA SE	2,310.9	2,509.8	<b>2,720</b>
DEKRA Automotive	1,225.3	1,328	<b>1,575</b>
DEKRA Industrial	674.2	702	<b>681</b>
DEKRA Personnel	390.3	456	<b>464</b>
Employees (as of Dec. 31)	32,591	35,021	<b>36,680</b>

# DEKRA Italia

- Headquarters in Cinisello Balsamo (MI) and Rome
- 12 service lines in the sectors Automotive, Industrial e Personnel
- Turnover of 46 Mil. euro
- More than 500 people



## DEKRA Insight

DEKRA INSIGHT IS THE GLOBAL LEADER IN SAFETY AT WORK. WE GUIDE CLIENTS IN TRANSFORMING THEIR ORGANIZATIONAL CULTURE AND THEIR OPERATIONAL ENVIRONMENT.

# DEKRA Insight represents the collective expertise of our legacy, each an institution in safety

- BST
- Chilworth
- RCI Safety
- Optimus Seventh Generation
- RoundTheClock Resources
- Russell Consulting



**Chilworth**

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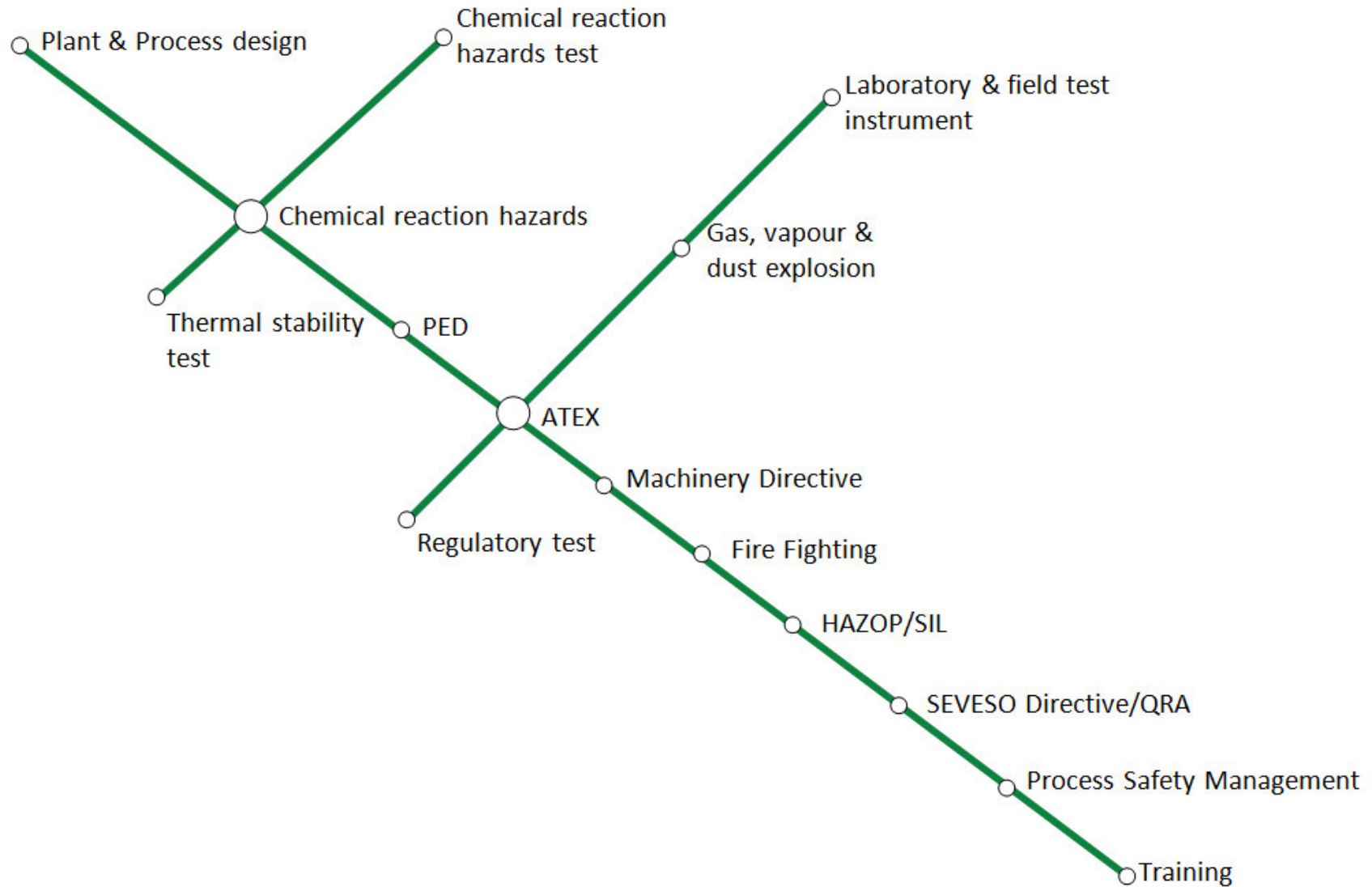
**Process Safety  
Management  
&  
Engineering**

**Laboratory Testing  
Services  
& Instruments**

**Academy:  
Training  
& Services**



# Our Services



# Chilworth Services

 **DEKRA** Insight

Consulting

# Fire and Explosion Hazards

- Dust, gas and vapor flammability hazards
  - Explosion and flammability characteristics
  - Ignition sources and electrostatics
- ATEX 95 and 137 compliance
  - Hazardous Area Classification (HAC)
  - Electrical and mechanical inspection and risk analysis
  - Explosion Protection Document (EPD)
- Lightning risk analysis
- Electrostatic hazards
  - Ignition sources and sparks
- Explosion protection: venting, suppression ...

# Safe Process Design

- Chemical reaction hazards and risk assessment
- Emergency release systems – PED & DIERS
  - PSV design and verification
  - Blow down design and verification
- Safe process design
  - Feasibility studies
  - Basic process design (Layouts, P&ID, equipment, SOP...)
- Design and verification of fire fighting plants according to UNI, API, NFPA ...

# Process Hazard Analysis and Risk Analysis

- In EMEA a team of 20+ experienced facilitators of Process Hazard Analysis HAZID, FMEA, What-If, HAZOP, LOPA, FTA/Bow-Tie
- SIL Assignment and Verification for new and existing plant
- With in-depth process safety expertise
- In all process industry sectors : Chemicals, Pharma Oil & Gas, Food Industry, Energy ...
- In most major languages : English, Spanish, German, French, Italian, Hindi, Chinese...
- Using dedicated software

# QRA, Consequence Modelling

- Quantitative Risk Analysis (QRA)
- Experience in consequence modelling using PHAST and EFFECTS:
  - Explosion simulation and blast effects: VCE, BLEVE, ...
  - Physical effects and energetic consequences (e.g. blast resistance)
  - Thermal radiation effects: pool and jet fires, ...
- Toxic release dispersion modelling in air
- Toxic release dispersion modelling in water and ground with dedicated software

For Regulatory compliance: Preparation of Seveso safety reports for Authorities, Risk analysis and mitigation measures, Land-use planning, Incident investigation

# Chilworth Services

 **DEKRA** Insight

## Competence Development

# Process Safety Excellence



Competence is made up of 3 elements:

The **Chilworth Process Safety Academy** helps you in developing competence in Process Safety:

- **Knowledge** → set of fundamentals of a discipline →
- **Practice** → knowledge implementation →
- **Expertise** → set of practical experiences →
- **Training** → traditional classroom education, scheduled and tailored according your needs and levels of audience
- **Workshop** and **on site practical sessions**, with a tutorial support
- **Mentoring** during the implementation of knowledge and practice acquired during trainings and workshops



# 4 core elements



# Open training solutions

- Relevant for individuals or small numbers of staff
- Opportunity to share experience with other companies, across sectors
- Cost effective for small numbers

Training + ...

- Proficiency tests
- Follow-up webinar
- Consulting support by phone



**DEKRA Insight**  
Sviluppo delle competenze e formazione per la Sicurezza di Processo 2016



The Global Experts in Explosion & Process Safety  
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# Competence development programs

- Tailored to your processes, sector and process safety programs in place
- Global consistency (global delivery, multilingual capability, all based on a core, agreed syllabus)
- Confidential
- Cost effective for larger numbers
- Gateway to process safety support 'on demand'



- » The Chilworth Process Safety Academy
- Assists in bringing competence to organizations in Process Safety
- Provides a global platform for consistent education, according to established syllabi, in all core elements of Process Safety.



## Training + ...

- Competence development programs
- On-site training
- Tutoring and mentoring
- Proficiency test
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# Chilworth Services

 **DEKRA** Insight

## Testing

# Laboratory Services

Over 300 Standard and Non-Standard Tests:

- Flammability/combustibility properties of dusts, gases, vapours, mists and hybrid atmospheres
- Chemical reaction hazards and chemical process optimization
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- Fire testing of materials
- Special ad-hoc testing

# Laboratory Services & Instruments

World Leader of  
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Acquisition

GLP and ISO 17025  
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Handling toxic  
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# They trust us



The logo for DEKRA Insight, featuring a green play button icon followed by the text "DEKRA Insight" in a bold, sans-serif font.

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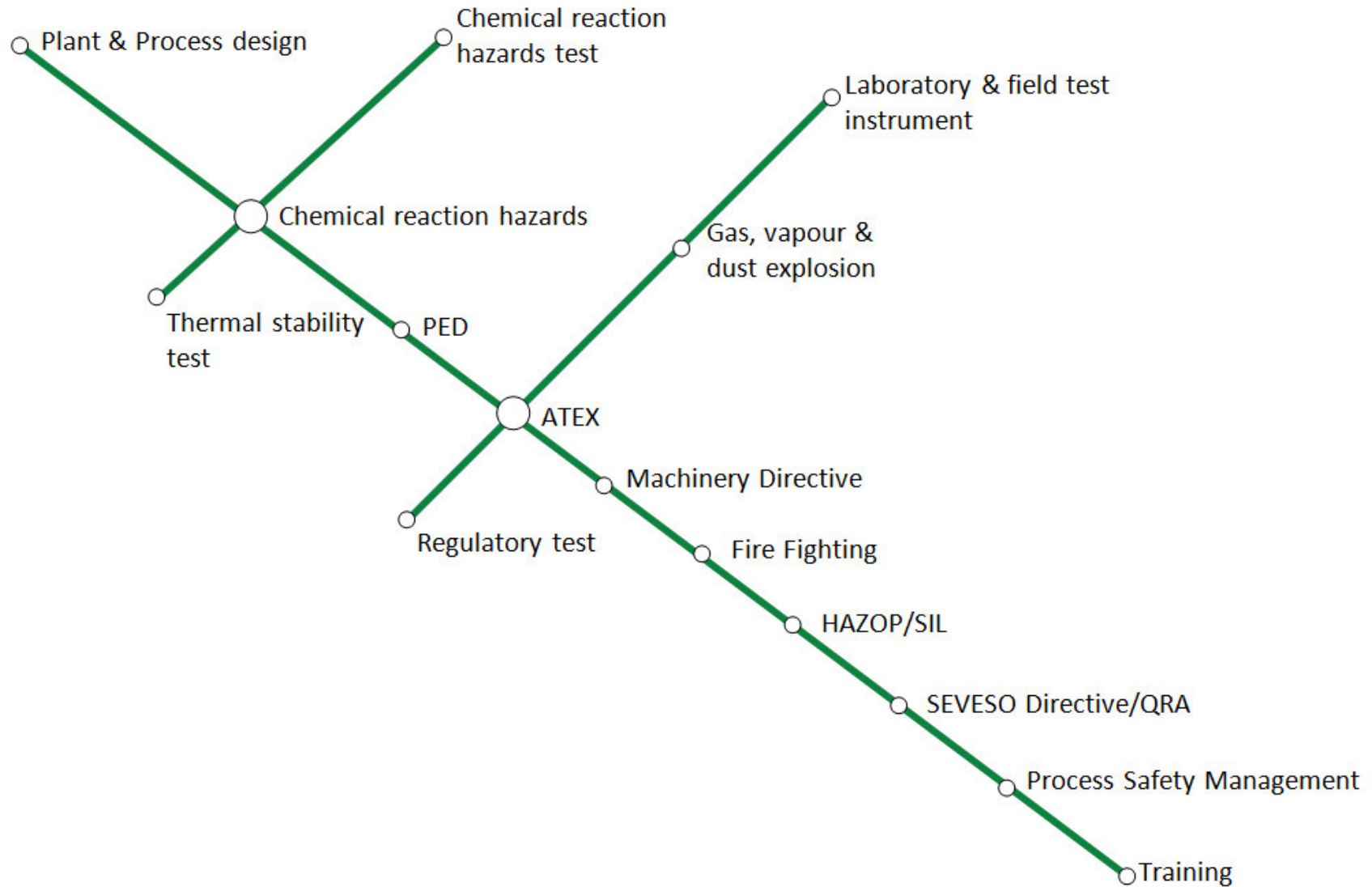
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