

MAINTENANCE AND ENGINEERING | COURSE BROCHURE

Pipeline Leak Detection and Repair

5 days | Classroom training | English

SMART HORIZON

info@smart-horizon.eu
Amsterdam
The Netherlands

Explore current programmes

https://smart-horizon.eu



Course content

Why attend

Pipeline leaks cause environmental damage, safety hazards and product losses. This course covers leak detection and repair: leak causes, detection methods including SCADA-based systems, acoustic and fibre-optic sensing, patrols and inspections, emergency response, repair techniques such as clamps, sleeves and hot tapping, and preventing recurrence.

Fast detection and correct repair minimise the impact of leaks. You will learn practical methods used by pipeline operators.

Professional Problems This Course Is Designed to Solve

- Difficulty translating subject knowledge into practical workplace decisions.
- Inconsistent approaches to the activities covered in the course outline.
- Lack of a structured plan for applying and reviewing new skills.

Course methodology

Technique briefings, case studies of pipeline incidents, repair method selection exercises and response planning.

Course objectives

By the end of this course, participants will be able to:

- Explain common causes of pipeline leaks
- Compare leak detection technologies
- Plan inspections and patrols
- Respond safely to leaks
- Select appropriate repair methods
- Prevent recurrence through integrity actions

Target audience

This course is suitable for:

- Pipeline engineers and operators
- Integrity and maintenance engineers
- HSE professionals
- Control room staff
- Pipeline contractors



Course content

Target competencies

Participants will develop competencies in:

- Leak detection
- Inspection planning
- Emergency response
- Repair selection
- Integrity improvement

Course outline

Day 1: Pipeline Leaks

09:00–10:08	Causes and consequences
10:08–11:00	Regulations
11:00–11:30	**Coffee break**
11:30–11:45	Regulations (continued)
11:45–12:53	Case studies
12:53–14:00	Exercise

Day 2: Detection

09:00–10:08	Computational and SCADA methods
10:08–11:00	Acoustic and fibre sensing
11:00–11:30	**Coffee break**
11:30–11:45	Acoustic and fibre sensing (continued)
11:45–12:53	Patrols
12:53–14:00	Workshop

Day 3: Response

09:00–10:08	Isolation
10:08–11:00	Safety
11:00–11:30	**Coffee break**



Course content

11:30–11:45	Safety (continued)
11:45–12:53	Environmental response
12:53–14:00	Exercise

Day 4: Repair

09:00–10:08	Clamps and sleeves
10:08–11:00	Hot tapping
11:00–11:30	**Coffee break**
11:30–11:45	Hot tapping (continued)
11:45–12:53	Welded repairs
12:53–14:00	Case study

Day 5: Prevention

09:00–10:08	Root causes
10:08–11:00	Integrity programmes
11:00–11:30	**Coffee break**
11:30–11:45	Integrity programmes (continued)
11:45–12:53	Monitoring
12:53–14:00	Action plan

The timings provided are estimates and may vary depending on the number of participants and the discussions taking place during the sessions. They are indicative only and do not constitute a binding commitment.



Course content

Dates, venues and fees

Current published course plans. Fees are per participant in EUR, excluding unconfirmed taxes.

Venue	Start date	End date	Fee (EUR)
Barcelona Confirmed dates	16 Nov 2026	20 Nov 2026	**€5,680.–**
Online Confirmed dates	16 Nov 2026	20 Nov 2026	**€1,250.–**
Paris Confirmed dates	30 Nov 2026	4 Dec 2026	**€5,720.–**
Online Confirmed dates	30 Nov 2026	4 Dec 2026	**€1,250.–**
Istanbul Confirmed dates	4 Jan 2027	8 Jan 2027	**€5,300.–**
Online Confirmed dates	4 Jan 2027	8 Jan 2027	**€1,250.–**
Vienna Confirmed dates	25 Jan 2027	29 Jan 2027	**€5,880.–**
Online Confirmed dates	25 Jan 2027	29 Jan 2027	**€1,250.–**
Cape Town Confirmed dates	15 Feb 2027	19 Feb 2027	**€3,780.–**



Course content

Dates, venues and fees (continued)

Venue	Start date	End date	Fee (EUR)
Online Confirmed dates	15 Feb 2027	19 Feb 2027	**€1,250.–**
Rome Confirmed dates	8 Mar 2027	12 Mar 2027	**€4,900.–**
Online Confirmed dates	8 Mar 2027	12 Mar 2027	**€1,250.–**
Vienna Confirmed dates	22 Mar 2027	26 Mar 2027	**€5,880.–**
Online Confirmed dates	22 Mar 2027	26 Mar 2027	**€1,250.–**
Dubai Confirmed dates	12 Apr 2027	16 Apr 2027	**€6,300.–**
Online Confirmed dates	12 Apr 2027	16 Apr 2027	**€1,250.–**
Cape Town Confirmed dates	3 May 2027	7 May 2027	**€3,780.–**
Online Confirmed dates	3 May 2027	7 May 2027	**€1,250.–**



Course content

Dates, venues and fees (continued)

Venue	Start date	End date	Fee (EUR)
Amsterdam Confirmed dates	24 May 2027	28 May 2027	**€5,080.-**
Online Confirmed dates	24 May 2027	28 May 2027	**€1,250.-**
Frankfurt Confirmed dates	14 Jun 2027	18 Jun 2027	**€5,300.-**
Online Confirmed dates	14 Jun 2027	18 Jun 2027	**€1,250.-**
London Confirmed dates	28 Jun 2027	2 Jul 2027	**€4,900.-**
Online Confirmed dates	28 Jun 2027	2 Jul 2027	**€1,250.-**
Kuala Lumpur Confirmed dates	19 Jul 2027	23 Jul 2027	**€2,900.-**
Online Confirmed dates	19 Jul 2027	23 Jul 2027	**€1,250.-**
Dubai Confirmed dates	9 Aug 2027	13 Aug 2027	**€6,300.-**



Course content

Dates, venues and fees (continued)

Venue	Start date	End date	Fee (EUR)
Online Confirmed dates	9 Aug 2027	13 Aug 2027	**€1,250.-**
Barcelona Confirmed dates	30 Aug 2027	3 Sept 2027	**€5,680.-**
Online Confirmed dates	30 Aug 2027	3 Sept 2027	**€1,250.-**
Cape Town Confirmed dates	20 Sept 2027	24 Sept 2027	**€3,780.-**
Online Confirmed dates	20 Sept 2027	24 Sept 2027	**€1,250.-**
Rome Confirmed dates	4 Oct 2027	8 Oct 2027	**€4,900.-**
Online Confirmed dates	4 Oct 2027	8 Oct 2027	**€1,250.-**
London Confirmed dates	25 Oct 2027	29 Oct 2027	**€4,900.-**
Online Confirmed dates	25 Oct 2027	29 Oct 2027	**€1,250.-**



Course content

Dates, venues and fees (continued)

Venue	Start date	End date	Fee (EUR)
Dubai Confirmed dates	15 Nov 2027	19 Nov 2027	**€6,300.-**
Online Confirmed dates	15 Nov 2027	19 Nov 2027	**€1,250.-**
Rome Confirmed dates	6 Dec 2027	10 Dec 2027	**€4,900.-**
Online Confirmed dates	6 Dec 2027	10 Dec 2027	**€1,250.-**

Plan your next step

Dates, availability, exact venue, taxes, inclusions and payment terms require written confirmation. This brochure is not a quotation, registration, booking confirmation or visa invitation. Participants receive a Smart Horizon certificate of attendance; programmes are not externally accredited and do not award a professional qualification or designation. Confirm arrangements before booking travel.

For group or in-house training, contact our learning team to discuss your objectives and delivery arrangements.

Contact Smart Horizon

info@smart-horizon.eu
Amsterdam
The Netherlands

View the latest course details online