PRO-RELIABILITY SOLUTIONS

Reliability Training Solutions

Quality cost effective training designed to increase individual and organisational productivity
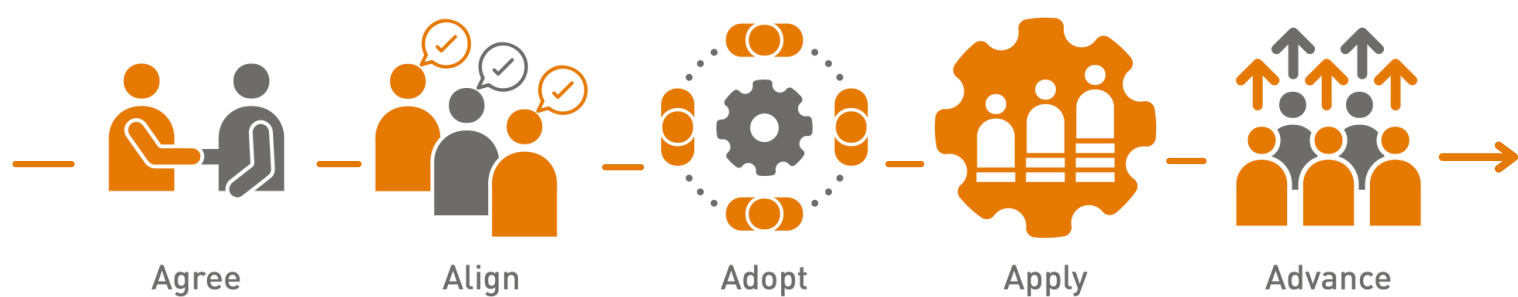
RELIABILITY FOCUS™

At Pro-Reliability Solutions we have set out to find ways to harness the power and potential of reliability to industry. Our mission is to support our clients to **reach their potential by embedding reliability as an intrinsic part of their corporate fabric and culture**.

To deliver and sustain this transformation we have developed a framework for achieving reliability success. This framework is called RELIABILITY FOCUS™.

The key benefits seen from implementing the elements of RELIABILITY FOCUS™ are increased plant availability and personnel engagement, which subsequently releases hidden plant profit.

Other benefits include:

- **Improved safety performance**
- **Increased operational performance**
- **Increased maintenance effectiveness**
- **Improved employee engagement and motivation**

Reliability in Design

Asset Strategy Optimisation

Reliability Leadership

Work Management

Defect Elimination

Agree — Align — Adopt — Apply — Advance

With RELIABILITY FOCUS™ everyone has a part to play. It supports the building of a Reliability focused **culture**. For organizations to make a positive impact with asset management and reliability improvement, then all departments need to be involved. Just like safety.

This does not mean every department needs to have its own reliability specialist but each does need to have a level of awareness and understanding of how they influence the reliability of an asset and ultimately the performance of the plant and the overall business.

We are happy to discuss your reliability training and personnel development needs to support your reliability improvement and culture development journey.

We offer training courses through on-site, public or remote delivery in the following subjects:

- Introduction to Reliability Basics
- Reliability Leadership
- Reliability in Design
- Root Cause Analysis (RCA)

- Failure Modes Effects and Criticality Analysis (FMECA)
- Reliability Centred Maintenance (RCM)
- RAMS Modelling
- Work Management

COURSE OUTLINES

Pro-Reliability Solutions are pleased to offer the following training courses. Courses are available for on-site, public or remote delivery as indicated.

Reliability Elements

Course - Introduction to Reliability Basics
Duration – one(1) day
Course Overview - This one day course works through the basics of Reliability and covers a range of topics including:

- Introduction to Reliability
- Lubrication Management
- Defect Elimination - Root Cause Analysis
- Threats and Vulnerabilities - Proactive Risk Management
- Design for Reliability
- Frontline Reliability Leadership
- Asset Strategy Optimization
- Condition Monitoring
- Work Management
- Reliability Maturity

Recommended Attendees – Reliability Managers, Reliability Engineers, Maintenance Managers, Maintenance Supervisors, Maintenance Technicians, Production Managers, Production Operations, Procurement Personnel, HR and IT.

On-Site	Public	Remote
☑	☑	☑
		2 x 3 hour sessions

Reliability Leadership

Course - Reliability Mindset
Duration – three(3) days (with optional coaching days as follow up)
Course Overview – Reliability outcomes are strongly influenced by mindsets and capabilities of the individuals and teams within an organization. A mindset refers to the underlying patterns of thought, feelings, assumptions, values, priorities and opinions which shape a person's perception and motivation. The objective of this program is to recognize the need for management commitment and active leadership throughout the reliability journey and to ensure common values are shared across the organization. The program starts with a three(3) day event followed by optional coaching support in the workplace (not available for public run courses).
Recommended Attendees – Senior Leadership Team, Senior Managers, Asset Managers, Reliability Managers.

On-Site	Public	Remote
☑	☑	**By Request Only**
	On-site coaching option not available for public or remote courses	

Reliability Leadership

Reliability in Design

Course – Reliability in Design Workshop
Duration – one(1) day
Course Overview – This one day workshop will look at what reliability techniques need to be considered during the project phases from initiation to close-out. We cover the nine deliverables of a Reliability in Design (RiD) process. Reliability in Design (RiD) is a concept for ensuring all elements of lifecycle cost are considered during the design phase of the Project Gate Process. The decision to address reliability and life cycle cost is best made during the design phase of a project. When these decisions regarding reliability are made later during the life cycle, the return on investment decreases as plant problems occur. This in turn reduces plant availability and capacity. The concept is to ensure there is no waste during start up and that a smooth transition from Project to Production occurs. The RiD process will ensure increased asset performance with reduced operating and maintenance costs.
Recommended Attendees – Project Managers, Project Designers, Reliability Managers, Reliability Engineers, Commissioning Managers and Engineers, Procurement and Supply Chain.

On-Site	Public	Remote
☑	☑	**By Request Only**

Reliability in Design

Root Cause Analysis (RCA)

Course 1 – Defect Elimination Introduction - one(1) day
Course 2 - Defect Elimination Masterclass - two(2) day (with optional coaching days as follow up)
Course Overview – Root cause analysis is a key tool for eliminating defects and identifying solutions to prevent re-occurrence. Our one(1) day introduction course covers the basics of RCA investigations from 5 Whys to Cause and Effect Analysis and is aimed at all persons who will be participating in onsite RCA investigations, or those seeking to gain an insight into structured problem solving. Our two(2) day masterclass is aimed at all persons who will be involved in leading or facilitating onsite RCA investigations and requires the participant to explore the investigation process in more detail and depth, which will support the participant when leading investigations and identifying solutions to prevent reoccurrence of problems and/or incidents. The training is interactive and incorporates exercises and demonstration of understanding, including a final group exercise where attendees get to utilize the knowledge learned during the course
Recommended Attendees – All staff members involved in participating / leading / facilitating incident investigation and problem-solving processes.

On-Site	Public	Remote
☑	☑	☑
	On-site coaching option not available for public or remote courses	Course 1: 2 x 3 hour sessions Course 2: 4 x 3 hour sessions

Defect Elimination

Failure Modes Effect and Criticality Analysis (FMECA)

Course – Asset Strategy Optimisation (1)

Duration – two(2) days

Course Overview - The objective of the course is to interactively teach participants how to conduct and facilitate their own asset/equipment FMECA's. The participants will explore the key elements Failure Modes Effects & Criticality Analysis and practice conducting their own analysis using the core facilitation skills and establishing FMECA facilitation ground rules. Many of the exercises will be performed in groups of 4 to 5. This course includes the following modules:

- Introduction to FMEA/FMECA
- Setting Up For FMECA
- The FMECA Process
- Functions
- Functional Failures
- Failure Modes and Causes
- Failure Severity and Effects
- Criticality Ranking
- Mitigating tasks
- Summary

Recommended Attendees – Reliability Managers, Reliability Engineers, Design Engineers, Maintenance Managers, Production Managers, Production Operators, Maintenance Technicians.

On-Site	Public	Remote
☑	☑	☑
		Shortened Version 2 x 3 hour sessions

Asset Strategy Optimisation

Reliability Centred Maintenance (RCM)

Course - Asset Strategy Optimization (2)

Duration – two(2) days

Course Overview - This two day course works through the elements of Asset Strategy optimisation, zero based maintenance budgets, resource optimization, spares optimization and is for anyone looking to improve the effectiveness of their existing maintenance strategies. It will consider the impact of both predictive and preventive maintenance plans on the overall business and show the comparison between your current and optimum strategy.

Recommended Attendees – Reliability Managers, Reliability Engineers, Design Engineers, Maintenance Managers, Production Managers, Production Operators, Maintenance Technicians.

On-Site	Public	Remote
☑	☑	By Request Only

Asset Strategy Optimisation

Reliability, Availability and Maintainability (RAM) Modelling

Course - Asset Strategy Optimization (3)

Duration – two(2) days

Course Overview - This course provides an understanding of Reliability, Availability and Maintainability (RAM) modelling as a methodology for evaluating and improving system performance using failure rate data and failure behaviour parameters. Participants will utilise Isograph AvSim+ reliability modelling software, and actual industry case data, to determine system level availability, plant capacity, meantime between failure (MTBF) and meantime to repair (MTTR). Participants will learn how to assess the impact of individual equipment reliability issues and maintenance actions on overall system performance through the modelling process.

Recommended Attendees – Project Managers, Project Design Engineers, Maintenance and Reliability Engineers, Production Engineers, Procurement and Supply Chain.

On-Site	Public	Remote
☑	☑	By Request Only

Asset Strategy Optimisation

Work Management

Course – Maintenance Planning and Scheduling

Duration – three(3) day

Course Overview – This course will identify the best practices and methods, the specific requirements and the systems that need to be in place (and in use) to get the most from planning and scheduling. Too much time, production and money can be lost if the preparation is not done well. Maintenance planning done correctly maximizes tool time, by ensuring jobs are ready (with all resources and information at-hand) so tradesmen walk from job to job uninterrupted, doing their work with 100% right-first-time quality. High quality planning leads to top quality performance.

Recommended Attendees – Reliability Managers, Reliability Engineers, Maintenance Managers, Maintenance Supervisors , Maintenance Technicians , Production Managers.

On-Site	Public	Remote
☑	☑	By Request Only

Work Management

Pricing for all training course offerings and a schedule of all public courses are available upon request.

"It comes down to a simple choice really - get busy improving reliability or get busy fixing failures."

Gary Tyne CMRP, CRL
(Founder and Director, PRS)

CUSTOM RELIABILITY AND MAINTENANCE TRAINING

Pro-Reliability Solutions are available to custom develop training courses to meet the specifics of your personnel development needs. All of our standard training courses can be customized to incorporate topics, elements or subjects specific to your facility. In addition, and in association with our partners, we can also provide training in the following areas:

Electric Motor Circuit Analysis Testing	Condition Monitoring	Lubrication Management	Industry 4.0	Steam Energy Systems

"The trainers experience and enthusiasm for the subject along with real case studies made this course a pleasure to attend. I will be recommending this to my colleagues"

HOW WE DELIVER

We believe that maintaining a flexible approach to the delivery of our course material is critical to meeting your training needs. PRS '**on-site**' training is available on a global basis where our trainer will come to your location to deliver the required training in your time and space. Where it's not possible to come to your location we offer '**remote on-line**' learning options. All of our on-line courses are delivered in person by our qualified training staff. We also offer our full range of courses in an open '**public**' setting, where participants from multiple organisations can come together for a joint learning experience with us. A schedule of our publicly available courses is available upon request.

WHO WE WORK WITH

PRS works across a range of industry verticals in the U.K., Ireland, Europe , Middle East and Asia Pacific regions. We work with business owners, facility operators and O.E.M's to help and support their businesses to achieve long term, sustainable reliability.

Food and Beverage	Chemicals	Pharmaceuticals	Manufacturing	Healthcare	Oil and Gas	Mining	Power Generation	Renewables	Distribution

CONTACT US

With offices in the U.K., and Ireland we are here to support your reliability journey and would be happy to discuss your training needs and requirements at any time.

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