

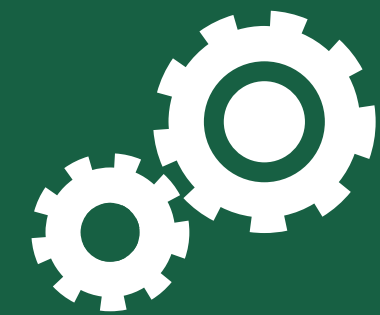


xSeriCon

Safety specialists & risk consultants

**YOUR
PREMIER
SAFETY
SOLUTION**





**TIMELY &
EFFECTIVE
SAFETY
SOLUTIONS**

“xSeriCon’s role is to provide assistance at every stage of the lifecycle of functional safety systems, from risk assessment to design, commissioning and operations.”

COMPANY OVERVIEW

ABOUT US

xSeriCon is an engineering consultancy specialising in the field of Functional Safety. This relates to the design and operation of automated safety systems that protect highly hazardous industrial installations from the risk of major accidents. Typical applications include oil and gas, petrochemical, energy and machinery.

xSeriCon's role is to provide assistance at every stage of the lifecycle of functional safety systems, from risk assessment to design, commissioning and operations. We also provide training, resources and software to support safety lifecycle activities.



In response to the industry's need for a more holistic approach, xSeriCon was founded in 2015 by Dr. Peter Clarke. xSeriCon's motto is 'Make it easier to do it right.'

MANAGING DIRECTOR

Dr Peter Clarke worked in biotech R&D for 5 years before spending 3 years in the UK fine chemicals and pharmaceutical industry in process and safety management roles. He subsequently moved into safety consultancy, where he has 14 years of experience in process risk management in the oil & gas, petrochemical, energy and semiconductor industries. He has directed a considerable number of HAZOP, SIL assessment, LOPA and alarm management studies, in addition to Functional Safety Assessment, Safety Case, Fault Tree, ALARP and HAZID. He is a frequent conference speaker and leads training workshops.



“I find the work you are doing excellent. I also have been listening to your CHAZOP webinar which is also very good.”

— Functional safety specialist, Canada

MANAGING DIRECTOR
DR. PETER CLARKE

CFSE CERTIFIED

NEBOSH CERTIFIED

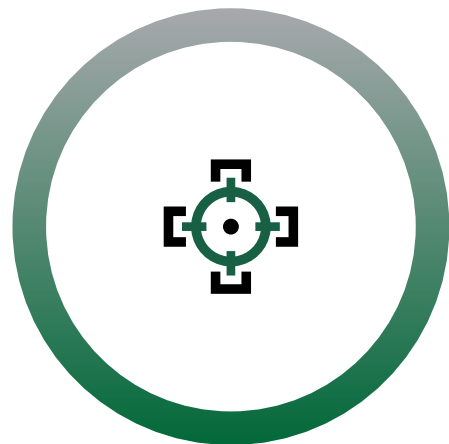
CHARTERED CHEMIST

INFO@XSERICON.WORLD

OUR CONSULTANCY SERVICES

xSeriCon provides facilitators for risk management workshops such as HAZOP, SIL assessment and Fault Tree Analysis. Our holistic approach provides added value for the whole life of the project, rather than

treating safety as a tick-box exercise. We can also facilitate SIS validation, develop risk assessment procedures, provide templates for key documents, and execute gap analysis to find opportunities for optimization.



PROCESS HAZARDS ANALYSIS

We have vast experience in facilitating HAZID, HAZOP, CHAZOP and ALARP demonstration workshops in a wide range of industry sectors.



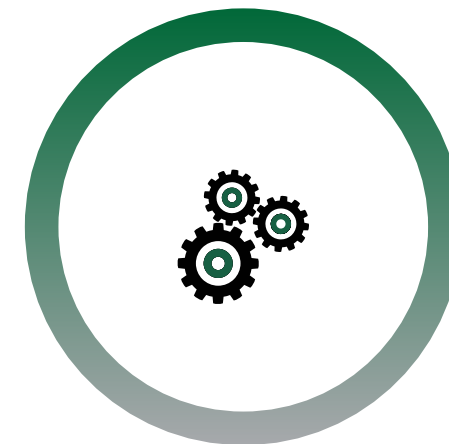
RISK QUANTIFICATION

We have the knowledge and tools to execute your SIL assessment, LOPA and Fault Tree Analysis study.



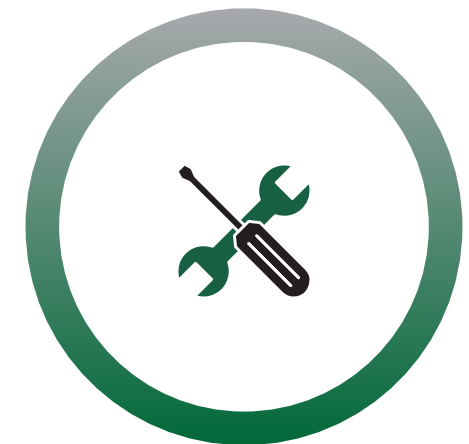
ALARM MANAGEMENT

We can support the full alarm management lifecycle, including the critical step of Alarm Rationalization. This ensures your alarm system provides the needed risk reduction.



FUNCTIONAL SAFETY

Functional Safety Management planning, Safety Requirements Specification development, verification, validation, Functional Safety Assessment—we handle it all.



OPTIMIZATION STUDY

We help you unlock the power of RAMS (Reliability, Availability, Maintainability Study) to optimize plant redundancy, preventive maintenance, spare parts inventory and manpower.

HIGH QUALITY TRAINING FROM XSERICON

“Everyone was satisfied with the level of knowledge transfer that you did. Understandable and to the point.”

— Umicore, Belgium

xSeriCon’s training team has an excellent reputation for clear, accurate and high quality teaching, developed over many years of service to the industry. All our courses reflect our belief that training should be cost-effective and focused on meeting the student’s specific objectives.

xSeriCon offers two modes of study:

Modular format for self-paced study

For students preferring to work at their own pace and avoid travel and accommodation costs, xSeriCon offers its most popular courses in an interactive modular format designed for self-study. Modules can be purchased individually or in a set. Self assessment exercises are included, supported by online access to an xSeriCon tutor.

Conventional Format

We offer in-house courses at your training facility, tailored for length and content to suit the topic and depth required. Courses can range from a single day up to two weeks. Alternatively, courses can be taught online by xSeriCon's tutor. Courses are presented in a highly engaging and interactive style, with many practical exercises and case studies. Assessments can be included if desired.

Our Course List

- I. Introduction to Process Hazards Analysis, including HAZID and HAZOP
- II. HAZOP for participants
- III. HAZOP for leaders
- IV. CHAZOP (Control Systems HAZOP)
- V. Fault Tree Analysis (FTA) and Event Tree Analysis (ETA)
- VI. LOPA (Layer Of Protection Analysis)
- VII. Introduction to Functional Safety
- VIII. How to build and implement a Functional Safety Management Plan (interactive workshop)
- IX. SIS basic engineering
- X. Alarm management per ISA 18.2 / IEC 62682
- XI. SIL verification per IEC 61508/61511
- XII. Safety Case development per COMAH
- XIII. Preparation for CFSP/CFSE examination

New courses are continually under development. Contact us if the course you require is not listed here.

OUR BUSINESS - SOFTWARE



SILability - SIL verification software
from xSeriCon

What is SILability?

SILability is a SIL verification tool from xSeriCon with a component database containing over 3,000 sets of failure rate data. From input data entered in an easy-to-use interface, it performs calculations to derive all parameters needed for successful SIL verification. SILability was designed and coded by functional safety experts with many years of experience of performing large, complex SIL verifications. SILability performs calculations to derive parameters needed for successful SIL verification in compliance with IEC 61508 and IEC 61511.

SILability effortlessly handles redundant architectures and complex subsystem structures with virtually no limits on the number of components included per SIF. Results are displayed instantly on-screen and can be exported to an attractive spreadsheet layout for easy transfer to your final report.

SILability software has been used on several projects over many years, for clients including major national oil and gas companies and leading engineering companies worldwide.



What can SILability do for you?

SILability performs calculations to derive all parameters needed for successful SIL Verification of a safety instrumented function, including:



- PFDavg (average probability of failure on demand) or PFH (probability of failure per hour)
- Maximum SIL achieved based on PFDavg/PFH
- Maximum SIL achieved based on architectural constraints
- Safe failure fraction
- Mean Time To Fail Spurious (MTTFS)

CONNECT WITH US



*“Safety knowhow, delivered.
Wherever you need it”*

CONTACT US

info@xsericon.world

www.xsericon.world

www.silability.com