



Institute of  
Quality & Reliability

# Institute of Quality and Reliability

(Established November 2005)

*Our Mission is to help organizations improve their processes significantly to achieve better customer satisfaction and breakthrough results!*

*We are proud of our association with our customers*



**Institute of Quality and Reliability (IQR)** was established in Nov. 2005, with primary objective to help Industries for improving their business performance. IQR also supports individuals aspiring to improve their knowledge and skills in Quality and Reliability.

After 28 years of rich industrial experience in the Industry, at Cummins India Ltd. (CIL), **Hemant Urdhwaresh** decided to establish IQR. So far we have trained about 3000 Black/Green Belts, 500 reliability engineers and more than 5200 professionals in the field of Quality and Reliability.

We provide Training and Consultancy services of the highest class in -

- Six Sigma approach
- Reliability Engineering
- Quality Engineering and Design of Experiments
- ASQ Certifications
- Statistical Techniques

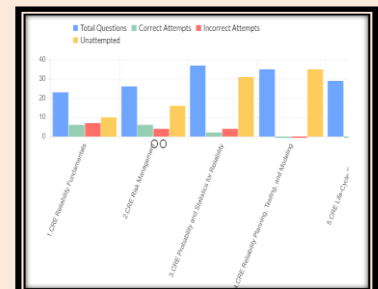
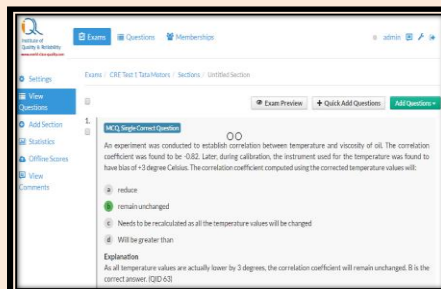
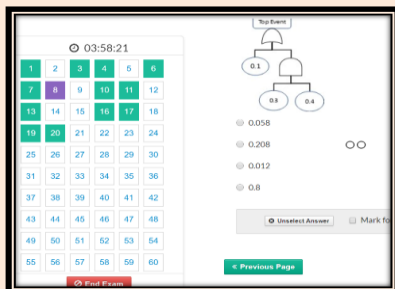
## Our Customers:

We have conducted many programs including Six Sigma Black Belt, Green Belt, Certified Reliability Engineer, Design of Experiments and Design for Six Sigma (DFSS), workshops for:

- American Society for Quality (India)
- Ashok Leyland
- Fleetguard India,
- Mahindra and Mahindra
- TACO,
- Alfa Laval,
- Menon Pistons,
- DGP Hinoday,
- Satyam Computers
- Eaton India
- Tata Motors,
- Thermax,
- Tata Johnson Controls,
- Behr India,
- Mirc Electronics
- Anchor Health and Beauty Care
- Semco Electronics
- Tetra Pak
- ARAI
- Sigma Electric Manufacturing Corporation (Semco)
- Suzlon Energy
- Madura Fashion and Lifestyle
- Sandvik Asia
- Dr.Reddy's Laboratories
- Bosch India
- Greaves Cotton
- Gallagher Service Center
- SAP Parts
- MRF
- Varroc Engineering
- TPI Composites

## On-line Simulated Exams:

We also conduct on-line simulated exams for Certified Six Sigma Black Belt, Green Belt, and Certified Reliability Engineer!



## Screenshots from IQR simulated exam

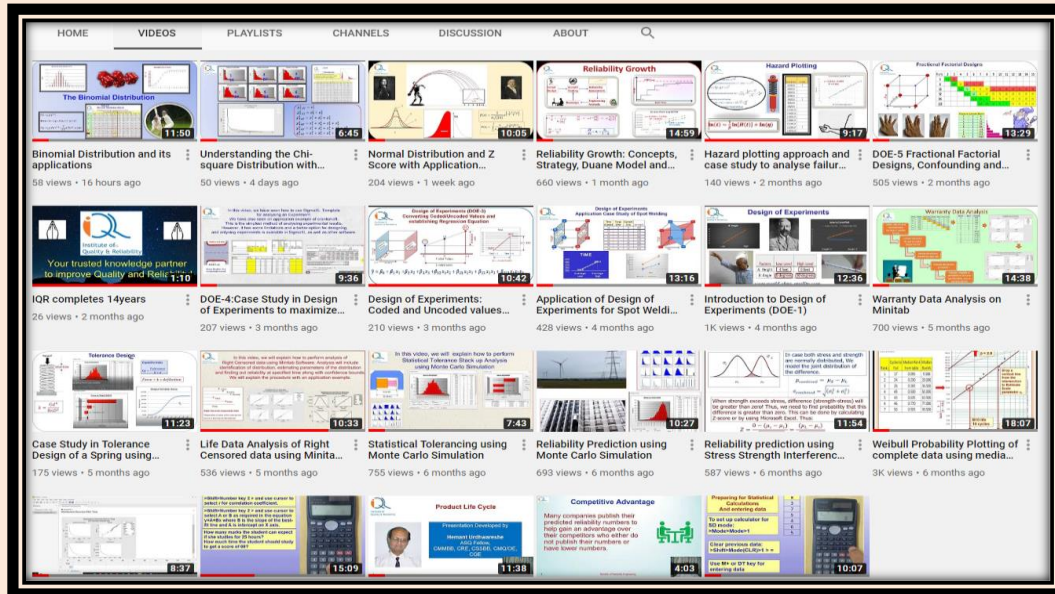
### Our Training Workshops:

	Workshop	Brief information about workshop	Duration
1	Six Sigma Green Belt	This 8-day open workshop is conducted as per ASQ Body of Knowledge (BOK). It is designed for engineers and managers who desire to bring in process improvements and/or wish to support Six Sigma black belts.	8-days (Or on-line 50 hours)
2	Six Sigma Black Belt	This 16-day open workshop is conducted as per ASQ Body of Knowledge (BOK). It is designed for managers and professionals who wish to apply Six Sigma tools for breakthrough in processes by taking up a Six Sigma Project. The workshop is especially designed for those aspiring to get certified from ASQ.	16 days (Or online 102 hours)
3	Design for Six Sigma Green Belt	This course prepares participants to lead DFSS projects using Define-Measure-Analyze-Design-Verify/Validate (DMADV) Roadmap. Participants can apply DFSS tools using Minitab Software for designing and developing robust products.	6 days
4	Design of experiments	Participants learn basic concepts and are able to apply DOE for process/product improvement and optimization.	2 days
5	FMEA	This workshop is designed for Design, Process and Quality Practitioners to understand and apply FMEA using AIAG Guidelines. Objective of FMEA is to identify potential and known failure modes, evaluate the risk associate with each failure mode and take action to reduce the risk.	1 day
6	Statistical Process Control	This course aims at learning basic concepts in Variation, SPC and process capability with hands on exercises in control charting and process capability calculation.	1 day
7	Sampling Plans	Statistical Sampling Plans have been used by quality professionals worldwide for effective control and monitoring of purchased parts. This course aims at learning basic concepts in understanding and administering sampling plans with hands on exercises in selection and interpretation of sampling plans.	1 day
8	Measurement Systems Analysis	In this workshop, participants learn basic concepts in MSA and are able to perform MSA for Variable and Attribute Measurement Systems.	1 day
9	Structured Problem Solving	Quality problems and field failures of products is one of the major concerns for senior management of most organizations. Structured problem solving workshop is designed to equip participants with a structured approach and investigation and problem solving tools. The primary objective of the workshop is learning to solve recurring field problems using relatively simple graphical and some of the basic quality tools. The course is usually conducted with Minitab Software (or equivalent).	2 days
10	Certified Quality Engineer (CQE)	CQE workshop is based on the body of knowledge specified by ASQ and is ideal for understanding basic concepts and techniques in Quality Engineering. Major topics covered include Quality Systems, Statistical Process Control, Sampling Plans, Statistical Hypothesis testing, Design of Experiments, Problem Solving, and Reliability Basics.	10 days
11	Reliability engineering Basics	Reliability Basics workshop is designed to provide understanding of basic concepts in reliability engineering. Primary objective of reliability engineering to measure, analyze and improve reliability.	2 days
12	Certified Reliability Engineer (CRE)	CRE workshop is designed to provide in-depth understanding of Reliability Engineering based on the body of knowledge published by ASQ. The workshop is ideal for engineers and managers who want to learn basic principles, methods, tools and techniques of reliability engineering and who aspire to get certified by ASQ as Reliability Engineer.	8 days Or 65 hours (online)

Note: The durations are typical but may vary to some extent depending on the participants profile, batch size etc.

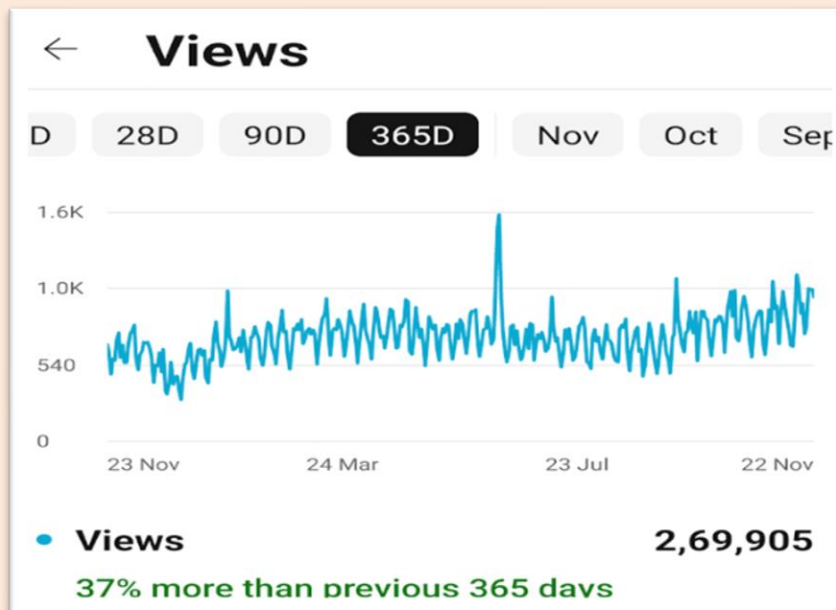
## Our YouTube Channel:

We are happy about our contribution in sharing knowledge through videos released in our YouTube channel with more than 11,000 subscribers from all over the world!  
(link <https://www.youtube.com/channel/UC9EZWioUA4xzTXT1BH7SFyg/videos>)



So far, we have created and released 97 videos on topics such as Design of Experiments, Reliability Engineering, warranty data analysis, probability distributions, preparation for ASQ Certification exams, Monte Carlo Simulation, Tolerance Design etc. The channel is completely free and is becoming popular with increasing subscriptions.

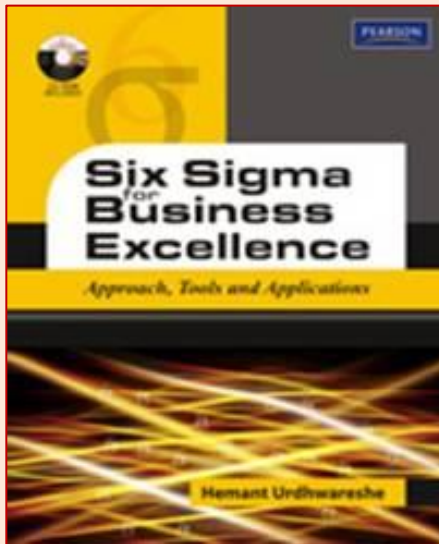
## Our channel statistics for the last 365 days:





### **Our Consultants:**

**Mr. Hemant Urdhwaresh**, is the Principal Consultant and Director Institute of Quality and Reliability (IQR). Hemant is a mechanical engineer and has total **45 years of experience in Manufacturing, Quality and Engineering at Cummins India Limited (CIL) and as a consultant at IQR.** As Head of Quality, Reliability and subsequently Engineering functions at CIL, Hemant was actively involved in driving Quality Improvement, Six Sigma and has led and sponsored many Improvement projects. He has applied various quality tools in improving processes and solving complex manufacturing and field problems. Hemant conducted many in-house training programmes on Leadership, Quality Engineering and management at CIL. He has also published many articles on Six Sigma and quality engineering.



At IQR, Hemant has conducted Black/Green Belt Programmes for companies including Ashok Leyland, Tata Motors, Fleetguard Filters, TACO, Alfa Laval, Menon Pistons and DGP Hinoday. He also conducted numerous Six Sigma Black/Green Belt open workshops. He was a panelist for the Lean Six Sigma Awards organized by Symbiosis Center for Management and Human Resource Development (SCMHRD). Hemant was a visiting faculty at Symbiosis

Institute of Business (SIBM) Management for Six Sigma and Business Statistics. He has authored a book 'Six Sigma for Business Excellence' which was published by Pearson Education in September 2010. He has also coauthored the book 'Total Quality Management' which has been published in October 2010 with his wife Rashmi. Hemant has also delivered guest lectures at reputed institutions like IIT Bombay.

He is:

- **Recipient of Quality Leadership Award at World Quality Congress 2021, QCI-D.L.Shah Quality Champion Silver Award winner-2018**
- **Fellow of American Society for Quality (ASQ) (2014)**
- **Recipient of Silver Standard 2003 award from Qimpro Foundation for outstanding Quality Manager in India**
- **He is the *first Six Sigma Master Black Belt in India certified by American Society for Quality (ASQ) as on 5 December 2010***
- The first ASQ Certified Quality Manager in India (1998)
- ASQ Certified Quality Engineer (1996) and
- ASQ Certified Reliability Engineer (2005)
- The first person in India with five or more certifications from ASQ
- Senior Member of ASQ, Fellow of IIPE and member of National Center for Quality Management. (NCQM).
- Qualified Lead Assessor

**Mr. Yashwant Mahakal** is a mechanical engineer from VJTI with rich experience in Automotive and Engineering Industries including TATA Motors, Fleet guard Filters (Cummins Group), Filtrum Tools, TACO Group, Veena Industries in the areas of Lean Manufacturing Systems / Quality Assurance / Quality Management Systems/ Product Development / Supplier Development and Costing. He has four years of consulting experience in the Areas of Lean Manufacturing and Quality Management Systems. He has successfully implemented many lean manufacturing projects.



He is **certified by American Society for Quality (ASQ)** as:

- **Six Sigma Master Black Belt (CMBB)**
- **Six Sigma Black Belt (CSSBB)**
- **Quality Engineer (CQE)**
- **Manager of Quality and Organizational Excellence (CMQ.OE) and**
- **Reliability Engineer.**

Yashwant is also certified as **Lead Assessor for**

- **Quality Management Systems (ISO9001:2008),**
- **Environmental Management Systems ISO14001:2008 and**
- **OHSAS18001:2007.**

**Dr. Vikas Garud** is a mechanical engineer from VJTI, Mumbai University. He completed post graduation– **M. E., with specialization in Machine Design**. His project in Robotics area was instrumental in development of full-fledged robotics and automation laboratory in VJTI. He was first in the batch, in Mumbai University. Combining professional experience and research work carried out for the Aeronautical R&D Board, Defense Ministry, Govt. of India, he successfully completed **Ph. D. in the area of Design Quality Assurance** from Mumbai University. Dr. Vikas Garud started his career in Quality Management in MIRC Electronics Ltd., makers of the Onida brand of home appliances. Dr. Garud has assisted many organizations in developing quality systems and preparing for Business Excellence Awards. He has conducted number of workshops on QFD, FMEA, SPC, MSA, Process Mapping, Quality Audits Problem Solving and Six Sigma. Dr. Garud has worked as **examiner/senior examiner for the IMC-Ramkrishna Bajaj National Quality Award** since its inception in 1997. Dr. Garud is a faculty for Six Sigma and DFSS programs. Dr. Garud is a **Certified Reliability Engineer** from ASQ.



**Nitin Thite: (B.E. Computer Science & Engineering)**

**Experience:**

- 22+ years of Multinational (US, UK, Taiwan & India) work experience
- Experienced trainer for ASQ Lean Six Sigma Black Belt Certification Program
- Lean & Six Sigma Implementation Consulting for 80+ projects across various organizations
- PMI Certified trainer for PMP and PMI-ACP • PMI – ATP (Authorized Training Partner)
- Managed multimillion dollar engagements
- Handled teams across the globe
- Designed & developed software systems and integrations

#### **CERTIFICATIONS**

- ASQ Certified Lean Six Sigma Black Belt
- PMI-ATP (Authorized Training Partner)
- PMI Certified Project Management Professional
- PMI Certified Agile Certified Practitioner



- Enabling the Facilitators
- Bullet Proof Manager
- SAP Certified ABAP & PI consultant
- Certified Internal Auditor IATF 16949:2016

**Mr.Ajay Marathe** is a mechanical Engineer from COEP, Pune (1986) with total industrial experience of 35 years at Cummins India, Eaton and as a consultant. He has following certifications:



- Certified Quality Engineer from ASQ
- Internal Auditor for ISO 9001
- Internal Auditor for TS 16949
- Internal Auditor for QS 9000
- Internal Auditor for EMS wrt ISO 14001
- Internal Auditor for OHSAS wrt ISO 18001
- Certified Six Sigma Green Belt
- Certified Six Sigma Sponsor

**Contact us:**

***Institute of Quality and Reliability,***

***Registered Office: Plot No.39, Shatiban Society, Kothrud, Pune 411038.***

***Email: [ioqr@workd-class-quality.com](mailto:ioqr@workd-class-quality.com)***

***Mobile: 9822014488 (Hemant Urdhwareshe)***

***Visit us at: [www.world-class-quality.com](http://www.world-class-quality.com)***

***YouTube Channel: <https://www.youtube.com/channel/UC9EZWioUA4xzTXT1BH7SFyg>***