



Partners for a changing landscape

AS9100 Series Overview Guide



What is the AS 9100 Series?

The aerospace industry - which spans aviation, space and defence - is arguably the most highly regulated sector in the world with businesses facing new challenges every day.

In order to satisfy regulators and customers alike, certification to the AS 9100 Series from LRQA delivers market access, compliance, reliability and a commitment to global supply chain safety and quality excellence.

The AS 9100 Series of standards is established by the International Aerospace Quality Group (IAQG) and it is based on the international Quality Management System (QMS) standard ISO 9001: 2015.

The Series incorporates additions and interpretations specific to the aviation, space and defence industries.



QMS requirements for aviation, space and defence organisations



QMS requirements for aviation maintenance organisations



QMS requirements for quality assurance in stockholding and distribution

The latest revision places more emphasis on risk-based thinking, ethics, supplier monitoring, the process approach, counterfeit parts protecting and the role of human factors in manufacturing quality. This approach ensures the ongoing safety, reliability and regulatory compliance for aerospace products worldwide.

The key requirements include:



Product safety



Counterfeit parts protection



Risk



Awareness of individual contribution to quality



Human factors



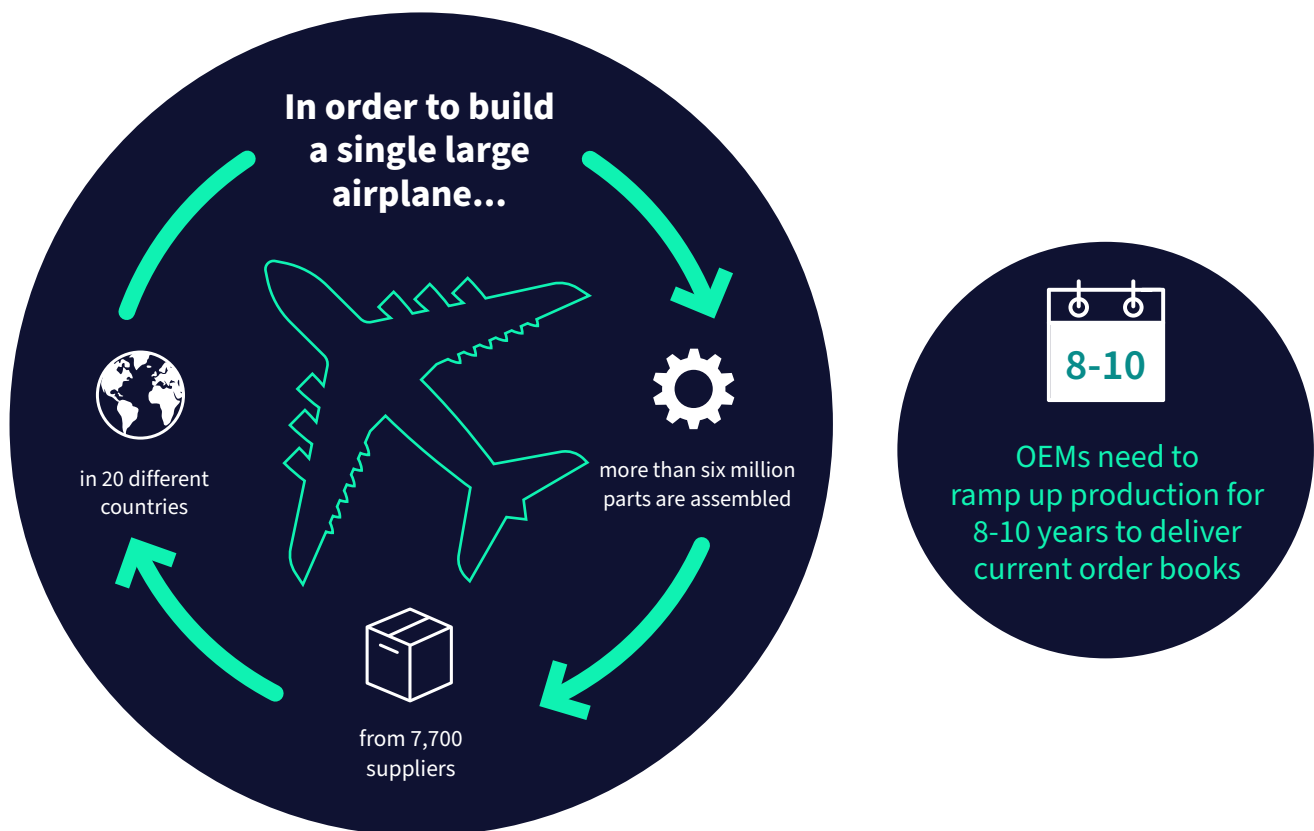
Configuration management

Top 4 challenges for the aerospace industry

Challenge 1

Demand for high-quality suppliers is increasing, but many aren't qualified to produce and sell aerospace parts.

In order to deliver against extensive order books, Original Equipment Manufacturers (OEMs) are expected to ramp up production for a number of years.



Source: EY¹

How AS 9100D certification can help

Whether you are currently certified to ISO 9001, or if you are just starting out on your aerospace certification journey, we can either help you migrate to or implement the specialist aerospace prerequisites of AS 9100D. When you achieve certification, your details will be entered into OASIS, the worldwide IAQG database, which can deliver market access and new business opportunities; it is used by OEMs and other specifiers to ensure both current and future aerospace suppliers are compliant with AS 9100D. At the same time, the volume of qualified suppliers is increased to support forecast production over the coming years.

Challenge 2

The demand for rapid product and service innovation continues to grow.

As the needs of customers continue to evolve, organisations across the aerospace supply chain face a constant need to develop increasingly complex products and services. Aside from satisfying customers, innovation carries benefits for the entire supply chain leading to cost limitation, increased efficiency and effective predictive maintenance.

\$22.1 Billion

spent annually by aerospace and defence companies on research and development



Source: PWC²

Key areas of innovation

1 Internet of Things



2 Big Data



3 Artificial Intelligence



4 Automated supply chains



5 Additive manufacturing



How AS 9100D certification can help

Certification against AS 9100D ensures your organisation has a quality framework in place which acts as a strong foundation for solving complex engineering and manufacturing problems, whilst supporting all types of innovation. Continual improvement sits at the heart of the AS 9100D standard – while this can take many forms, it often relies upon the development of innovative new processes and approaches to drive organisational change.

Challenge 3

The need for product safety is ever present.

Due to the high-risk, high-impact nature of the aerospace industry, quality and ultimately safety are non-negotiable at all levels of the supply chain and throughout the product lifecycle. Safety is, and will always be, an area where continual improvement must be sought and achieved.

Commercial aviation accident statistics (kms)



Aviation Safety Network³

How AS 9100D certification can help

Product safety was introduced as a separate clause within AS 9100D. These requirements focus on addressing safety considerations throughout the product lifecycle and manufacturing process. Successful compliance with the AS 9100D standard verifies your organisation has been through a rigorous process of addressing product safety requirements and has implemented a QMS that properly mitigates safety related risks.

Challenge 4

Mandatory compliance with an ever-changing list of regulations remains complex and non-compliance is punished severely.

Organisations operating in the aerospace industry face stringent regulation.

Such organisations must comply with a substantial number of laws and regulations relating, but not limited to:

Performance



Quality



Safety



Reliability



How AS 9100D certification can help

Regulations are crucial in keeping passengers and operators safe – they also ensure that OEMs and suppliers maintain very high quality standards in relation to their products and services. In order to comply with AS 9100D, your organisation must be able to demonstrate that applicable laws and regulations are identified and that processes are in place to ensure compliance.

Benefits of AS 9100 certification

The standard is an essential requirement for any organisation operating in the global aerospace supply chain.

Compliance and commitment to excellence

A prerequisite to trade, AS 9100 Series certification demonstrates a commitment to quality excellence, risk mitigation and defect prevention. Its' design promotes a culture of continual improvement and, most importantly, delivers regulatory and customer compliance.

Market access and new business opportunities

Once certification is awarded, your inclusion in OASIS delivers market access and new business opportunities with your potential for being included on any tender lists.

Brand reputation and competitive advantage

AS 9100 Series certification not only delivers market access but can help to deliver customer confidence thereby improving your brand reputation and competitive advantage in the global marketplace.

Act sustainably whilst mitigating risks and costs

The risk-based thinking approach outlined in the AS 9100 Series ensures resources are applied effectively to reduce waste and scrap costs across the supply chain.

This approach not only demonstrates your organisational commitment to acting in a sustainable way but can also help to mitigate overall risk and reduce any associated costs.

Why work with LRQA?

The aerospace industry is changing now at a faster rate than ever before and as a result, your business faces new challenges every day. That's why we go beyond compliance, diving deeper into your business to emerge with meaningful insights and smarter solutions.

Our assessors and trainers are industry experts who work with you to understand what helps your business operate at its optimum level. They create long-lasting value through collaboration, delivering a greater impact on your business, your people and your customers. The organisations we work with tell us that this is what makes us stand out from our competitors.

Our services

Gap analysis

We assess your existing QMS against AS 9100 requirements. We test your readiness for assessment by identifying any critical, high-risk or vulnerable areas to define the right certification plan for your organisation.

Certification and assessment

Our trained and qualified assessors have been authenticated by the aerospace industry and registered on the IAQG OASIS database. Assessments are conducted in accordance with AS 9104-001, the global IAQG certification scheme, which applies to aerospace products and services.

Training

Introduction to AS 9100D Series

This course is designed to give you a detailed understanding of the purpose and objectives of the IAQG, the format, scope, structure and the approaches which underpin them.

AS 9100D Series Internal Auditor

This course details the role and responsibilities of an internal QMS auditor, covering topics such as audit planning, gathering objective evidence and evaluation of findings.

Transfer your certification to LRQA

Transferring to LRQA is easier than you think, we can help you with a smooth, straightforward transfer. Our industry and technical experts are dedicated to assurance. That means a commitment to embracing new technology, and a deep-rooted desire to drive better performance. We consider our customers' needs with diligence and empathy, then use our expertise and over 250 years' experience to deliver smarter solutions that meet your unique requirements.

1 <https://www.ey.com/Publication/vwLUAssets/ey-top-10-risks-in-aerospace-and-defense/%24File/ey-top-10-risks-in-a&d.pdf>

2 <https://www.strategyand.pwc.com/media/file/2018-Aerospace-Defense-Trends.pdf>

3 <https://aviation-safety.net/database/record.php?id=20181029-0>





YOUR FUTURE. OUR FOCUS.

About LRQA:

By bringing together unrivalled expertise in certification, brand assurance, food safety, cybersecurity, inspection and training, we've become a leading global assurance provider.

We're proud of our heritage, but it's who we are today that really matters, because that's what shapes how we partner with our clients tomorrow. By combining strong values, decades of experience in risk management and mitigation and a keen focus on the future, we're here to support our clients as they build safer, more secure, more sustainable businesses.

From independent auditing, certification and training; to technical advisory services; to real-time assurance technology; to data-driven supply chain transformation, our innovative end-to-end solutions help our clients negotiate a rapidly changing risk landscape – making sure they're shaping their own future, rather than letting it shape them.

Get in touch

visit www.lrqa.com/in for more information



LRQA

Solitaire Corporate Park,
Building 12, 4th floor,
Andheri (East), Mumbai - 400 093
India.

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