Quality Management System
Version 4.2
Date of Issue Jan 2024

Process Number
QMS-01-2017

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Document Control

Document title: Quality Management System
Process Number: QMS01
Date of first issue: 01-12-2016

All versions of this document are managed and controlled by Andrew Ritchie. Andrew Ritchie is also the owner of the processes supporting this document and is responsible for maintaining this document.

Revision History

Revision #	Date	Revision Authors Name	Description	Next Scheduled Review
Vr1.0	January 2017	Malcolm Walters	First Release	January 2021
Vr2.0	January 2021	Malcolm Walters	Post premises move – review & update	January 2023
Vr3.0	May 2022	Malcolm Walters	Update Organizational roles, responsibilities, and authorities, Quality Objectives.	June 2023
Vr4.0	Jan 2023	Malcolm Walters	Update Organizational roles, responsibilities, and authorities.	Aug 2023
Vr4.1	Sep 2023	Andrew Ritchie	8.4 Updated	Sep 2023
Vr4.2	Jan 2024	Andrew Ritchie	Update Organizational roles, responsibilities, and authorities.	April 2024

Reviewers

Name	Position
Andrew Ritchie	Operations Manager
Malcolm Walters	Director
Beverly Walters	Director/Secretary

Contents

Quality Management System

The purpose of the Quality Management System at Cwm Engineering Ltd is to provide direction and guidance for everything that affects the way we carry out our business activities, including those specific to the aerospace sector. This system ensures compliance with all relevant statutory and regulatory requirements, including those specified in AS9100. Risk management principles are integrated into all key processes, aiming to standardise all activities to enable greater understanding of day-to-day activities and to provide a company philosophy that everyone buys into.

Processes are written for each main aspect of service delivery. They each have inputs required and outputs expected and have a process diagram to establish how the activities/events in the process fit together. Monitoring and measurement procedures are detailed in each process where relevant, and risk management measures are implemented in line with AS9100 requirements. The management of the resources required is clearly described.

All aspects of the individual processes will be subjected to regular planned internal audits to enable opportunity for evaluation of them and allow them to be updated as and when any regulation or requirement changes, or internal improvements and opportunities are identified. Customer satisfaction is continually monitored, and feedback loops are in place to ensure ongoing improvement in this area.

Background

Cwm Engineering Ltd is situated at Plot 4 Strategic Employment Site, Cross Hands East Industrial Estate, Heol Parc Mawr, Cross Hands, Carmarthenshire, Wales.

With staff members having over 20 years' experience in the general and precision engineering sector, it is the objective of the company to provide reliability, quality and turnaround, conforming to the specified requirements of its clients, thus satisfying and enlarging its customer base.

Cwm Engineering Ltd can undertake the manufacture of prototype machining, short batch milling and turning, small sub-assemblies; repetition turned and milled parts all from a wide range of materials.

Why Us?

Because we strive to achieve the best possible customer service, not only through product quality, but through expert support and performance. Our skill and investment in machinery allows us to provide engineering technology that is flexible to suit all of our customer's needs. Being only 10 minutes from JCT 48 of M4, we are ideally placed to serve our customers throughout South Wales and the rest of the UK with a fast turn-a-round service.

Registration to ISO 9001:2015 is an absolute necessity for us, because it gives our customers the peace of mind to know that their product is manufactured in a controlled environment where the following of process ensures that their finished item arrives on time, and exactly as they would expect to receive it.

4.1 Context of the Organisation

Cwm Engineering Ltd located in South Wales, recognizes various internal and external issues that are relevant to its purpose, strategic direction, and the aerospace sector in which it operates. These issues are crucial as they directly or indirectly affect our ability to achieve the intended results of our Quality Management System compliant with AS9100D. Risk management principles are applied to identify, evaluate, and, where appropriate, control or improve upon these issues. We commit to regularly monitor and review these identified issues on an annual basis to ensure ongoing compliance and improvement.

Both positive and negative factors are considered when identifying these issues, which influence the company's quality objectives and strategic direction, as outlined below:

Internal Issues

Planning
Communication
Organisational Growth
Training
Knowledge
Culture and Company Values
Staff Engagement & Relationship with Management Team
Infrastructure/Work Environment
Internal Processes
Failure of critical/key manufacturing machinery
Risk Management

External Issues

Legislation/Regulations, including aerospace-specific standards
Outsourced Processes
Payment Terms
Competitors
Economy
Neighbours
Industry Trends and Market Changes in Aerospace

Please see section 6.1 that addresses risks and opportunities associated with internal and external issues.

4.2 Needs and Expectations of Interested Parties

There are many parties interested in the ability of Cwm Engineering Ltd to satisfy its customers and meet applicable statutory, regulatory, and aerospace-specific requirements. This in turn fulfils the stated requirements of this system, contributing to the continued prosperity and regulatory compliance of the company.

The needs and expectations of each of these interested parties are diverse and complex. These are considered in detail across various facets of the organisation and this Quality Management System. By design, understanding and achieving these needs and expectations will be addressed in this manual and aim to comply with ISO 9001 and AS9100 standards.

The organization commits to monitoring and reviewing the needs and expectations of these interested parties on an annual basis.

Interested Parties	Needs and expectations
Customers	• Determination of requirements • Product quality and safety, including aerospace standards • Competitive prices • Service provision provided OTIF (On Time, In Full) • Invoice accuracy • Excellent customer service • Complaints process, including reporting and corrective action for aerospace non-conformities
Staff	• Safe working environment • Work-life balance • Continual professional development • Pay, benefits, and engagement • Aerospace compliance awareness
Suppliers	• Product quality and safety, including aerospace materials and components • On-time delivery • Ability to meet deadlines and comply with flow down customer requirements
Certificating Bodies	Meet certification requirements to maintain ISO 9001 and AS9100 certification
Neighbours/People Living Locally	• Excellent levels of housekeeping of all work areas • Providing jobs for local people • Ensuring safety of businesses/neighbours impacted by our work • Involvement with local charities

Please see section 6.1 that addresses risks and opportunities associated with the above interested parties.

4.3 Scope

"Precision CNC Milling and CNC Turning services for Aerospace and Defence industries.**"**

The Quality Management System of Cwm Engineering Ltd encompasses all business activities and processes, ensuring conformity with customer requirements, applicable statutory and regulatory requirements, and the needs and expectations of interested parties. This includes a commitment to risk management principles in line with AS9100D standards to uphold the highest quality of our precision CNC Milling and CNC Turning services for the Aerospace and Defence industries.

Exclusions:

- Design and development processes are not undertaken by the organization, which does not affect our ability to guarantee the conformity of our products and services or the enhancement of customer satisfaction.
- Section 8.5.3, Property Belonging to Customers or External Providers: Our business operations do not involve managing or handling customer or external provider property, and hence this section is excluded from the scope of our Quality Management System.

Core Services

Cwm Engineering Ltd specializes in precision CNC Milling and CNC Turning for the Aerospace, Defence, and other industries, delivering high-quality components that meet the detailed design specifications of our customers. Our services standards are provided in compliance with AS9100 D, and we aim to exceed aerospace industry requirements.

By leveraging state-of-the-art CNC technology, we maximise efficiency and repeatability and enable our skilled engineers to focus on value-added manual aspects of component production. This level of automation also allows us to deliver high-quality products on time and within budget, making Cwm Engineering Ltd a reliable component supplier for your business. Our commitment to customer satisfaction, safety, and continuous improvement serves as the backbone of our operations.

4.4 Quality management System Processes

A comprehensive list of Cwm Engineering Ltd's processes and sub processes, which align with customer and applicable statutory and regulatory quality management system requirements, is documented in the Quality Process Manual, referenced as CEL-015, CEL-016 and QPM-01-17-V2. These processes are supported by an interaction flowchart found within QPM-01-17-V2, providing visual clarification for each individual process.

Each process outlines meticulous requirements for inputs, expected outputs, and resources needed. Diagrams further detail the sequence and interaction of these activities and events. Monitoring and measurement procedures, including performance indicators, are explicitly detailed within each process along with clearly defined roles and responsibilities to ensure effective operation, control, and accountability.

In alignment with AS9100D standards, a risk-based approach to decision-making is integrated into each process. Risks and opportunities are addressed as determined in accordance with section 6.1. Internal audits are regularly conducted and designed to assess conformity, identify opportunities for improvement, and implement necessary updates stemming from changes in regulations, industry requirements, or internal evaluations.

Documented information to support the operation of these processes and to retain confidence that they are being carried out as planned is maintained and retained as per AS9100D requirements. Our focus on continuous improvement and risk management ensures that the Quality Management System is consistently effective and compliant with both ISO 9001:2015 and AS9100D standards.

5. Leadership and commitment

5.1.1 General

Malcolm and Beverley Walters strive to demonstrate leadership and commitment with respect to the quality management system by:

- Taking accountability for the system's effectiveness and alignment with ISO 9001 and AS9100 standards.
- Establishing and reviewing quality policy and objectives that align with the company's strategic direction and context.
- Integrating the Quality Management System requirements into Cwm Engineering Ltd's core business processes.
- Advocating the use of a process approach and risk-based thinking, key elements especially under AS9100 requirements.
- Allocating the requisite resources, both human and capital, for sustaining and improving the Quality Management System.
- Ensuring company-wide communication about the importance of quality management and statutory compliance.
- Confirming that the Quality Management System consistently achieves its intended results, through regular performance reviews.
- Engaging, directing, and supporting team members to effectively contribute to the system's goals.
- Encouraging a culture of continuous improvement, an integral part of maintaining AS9100 and ISO 9001 certifications.

5.1.2 Customer focus

Malcolm and Beverley Walters demonstrate leadership and commitment with respect to customer focus by:

- Comprehensively understanding customer and applicable statutory and regulatory requirements, ensuring they are consistently met as documented in QP/1.
- Identifying and addressing risks and opportunities affecting product/service conformity and customer satisfaction, regularly reviewing this information as outlined in section 6.
- Maintaining a customer-centric approach through tangible metrics such as repeat business, positive email feedback, and customer satisfaction scores.
- Ensuring that customer relations and feedback, both formal and informal, are integral parts of the management review process. This includes:
    - Discussing customer relations during management reviews, focusing on customer feedback, satisfaction levels, and strategies for improving customer relations.
    - Incorporating feedback received through various channels, including verbal agreements or discussions made during face-to-face interactions with customers, into the management review process.

- Evaluating the effectiveness of customer communication and feedback mechanisms regularly to ensure continuous improvement in customer service and satisfaction.
- Taking action based on customer feedback and discussions to enhance product and service quality, demonstrating an ongoing commitment to meeting and exceeding customer expectations.

5.2.1 Establishing the quality policy.

To guide the organization's quality assurance activities, Malcolm and Beverley Walters will:

- Establish, implement, and maintain a quality policy that is congruent with the organization’s purpose, context, and strategic objectives.
- Use this policy as a framework for setting and reviewing quality objectives.
- Commit to meeting all applicable requirements, whether customer-specific, regulatory, or standard-based like ISO 9001 and AS9100.
- Integrate a commitment to the continuous improvement of the Quality Management System into the policy.

Quality Policy

Cwm Engineering Ltd is steadfastly committed to delivering excellence in engineering solutions to our diverse customer base. We achieve this by rigorously maintaining a Quality Management System (QMS) that aligns with ISO 9001:2015 and AS9100 standards, as well as with Cyber Security Plus requirements for data protection and information integrity.

Commitments from Top Management

Conformity and Compliance:

- Satisfy all applicable requirements, whether they are customer-specific, regulatory, or defined by ISO 9001, AS9100, and Cyber Security Plus standards.

Quality and Customer Satisfaction:

- Uphold the highest standards of quality and customer satisfaction by regularly evaluating risks and opportunities that could affect our products, services, and customer experience.

Accountability and Objectives:

- Assume full accountability for the QMS's effectiveness.
- Establish and regularly review quality objectives that align with our strategic goals and compliance mandates.

Process and Resource Management:

- Advocate a process approach and risk-based thinking in decision-making and operations.
- Ensure availability of all necessary resources, including staff training, technical infrastructure, and financial assets.

Communication and Engagement:

- Stress the importance of adhering to QMS requirements through internal communication and training.
- Engage all team members to contribute actively to the QMS's success.

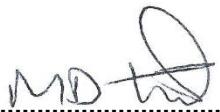
Continuous Improvement:

- Foster a culture of continual improvement across all functional areas.
- Collaborate closely with suppliers and other interested parties to enhance service quality and efficiency.

Review and Updates:

- Conduct an annual review of this policy, updating it as needed to adapt to changes in regulations, market conditions, or internal requirements.

This policy will be communicated to all employees and external organizations collaborating with us. Strict adherence to this policy is obligatory, ensuring that work is performed without risk to individuals or the environment.
This policy is subject to an annual review by top management and will be revised and reissued as deemed necessary.
This policy is available to relevant interested parties upon reasonable request.

Signed  **Date 26/01/2024**
Managing Director

5.2.2 Communicating the Quality Policy

The quality policy is an integral part of Cwm Engineering Ltd's Quality Management System and is maintained as such. To ensure a unified understanding and effective implementation, the policy is communicated through multiple channels:

Internal Communication:

- **Staff Notice Board:** The policy will be prominently displayed on the staff notice board located in common areas.
- **Initial Training:** New employees will be introduced to the quality policy as part of their orientation.
- **Periodic Reviews:** During internal audits and annual reviews, the quality policy will be revisited to ensure ongoing compliance and awareness.

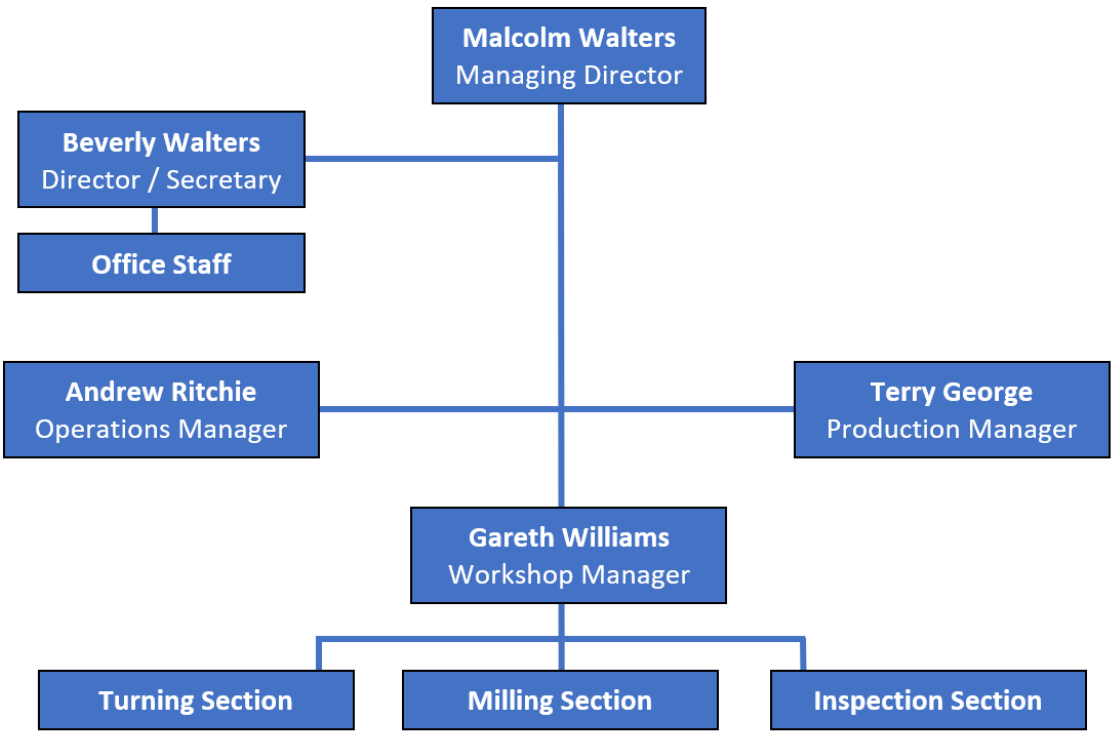
External Communication:

- **Client Meetings:** Upon request, a copy of the quality policy will be provided to clients during contractual discussions or reviews.
- **Accreditation Bodies:** The policy will be furnished to certifying bodies like BSI as part of the compliance documentation.

Frequency:

- The policy will be reviewed and re-communicated internally at least annually and whenever significant updates are made.

5.3 Organizational roles, responsibilities, and authorities



Directors

The Directors are responsible for ensuring that project tasks and activities are only assigned to staff qualified for that particular task or activity. This is on the basis of appropriate education, training and experience, in relation to staffing levels and CEL's current recruitment policy.

The Directors will identify the need for staff training to handle the expected workload where special techniques or items of equipment are involved.

The Directors are responsible for ensuring that appropriate training is carried out so as to ensure that all staff involved are aware of the requirements, rules and procedures to which they are to conform and against which they will be audited.

The Directors are also responsible for ensuring that tasks and activities are only assigned to staff qualified for that particular task or activity and that this is on the basis of appropriate education, training and experience.

The Directors will take accountability for the effectiveness of the QMS. Ensure the quality policy and quality objectives are established for the QMS and are compatible with the context and strategic direction of the Company.

The Directors will ensure that quality objectives have been set and are maintained as part monitoring and management review processes, in order to enhance customer satisfaction.
The Directors will:

- Promote the use of a process approach and risk-based thinking.
- Ensure that the resources needed for the QMS are available; including training, support and encouragement.
- Communicate the importance of effective quality management and of conforming to the QMS requirements.
- Ensuring that the QMS achieves its intended results.
- Engage, direct and support persons to contribute to the effectiveness of the QMS.
- Promote improvement.
- Support other relevant management roles to demonstrate their leadership as it applies to their areas of responsibility.
- Establish partnerships with suppliers and interested parties to provide an improved service
- Ensure effective planning is undertaken

Secretary

The secretary will:

- Ensure customer requirements are communicated, determined and reviewed.
- Ensure that they follow company HSE and production processes.
- Ensure that communication is established effectively with regard to internal and external issues, plus interested parties.
- Customer satisfaction is captured.
- Control of externally provided processes, products and services is adhered to.
- Be responsible for all procurement activities.

Engineers
Engineers will:

- Ensure that they follow company HSE and production processes.
- Be aware of how to access the quality management system and where to locate the quality policy and quality objectives.
- Report any quality issues during production.
- Communicate with top management.

Office Staff
Office staff will:

- Ensure that they follow company HSE and production processes.
- Be aware of how to access the quality management system and where to locate the quality policy and quality objectives.
- Report any quality issues during processing.
- Communicate with top management.
- Goods receiving and inspection

Production Manager
Production Manager will:

- Ensure that they follow company HSE and production processes.
- Be aware of how to access the quality management system and where to locate the quality policy and quality objectives.
- Ensure that communication is established effectively regarding internal and external issues, plus interested parties.
- Report any quality issues during processing, record and investigate NC reports.
- Communicate with top management.
- Goods receiving and inspection.

Workshop Manager
Workshop Manager will:

- Ensure that they follow company HSE and production processes.
- Be aware of how to access the quality management system and where to locate the quality policy and quality objectives.
- Ensure that communication is established effectively with regard to internal and external issues, plus interested parties.
- Report any quality issues during processing, record and investigate NC reports.
- Communicate with top management.
- Schedule Jobs.
- Assist and assign work to the workshop.
- Goods receiving and inspection.

Operations Manager
Operations Manager will:

- Ensure that they follow company HSE and production processes.
- Develop, manage and maintain all aspects of the HSE and preventative maintenance system.
- Develop, manage and maintain the digital management system.
- Ensure that the quality management system is maintained and updated appropriately.
- Ensure customer requirements are communicated, determined, and reviewed.
- Ensure that communication is established effectively regarding internal and external issues, plus interested parties.
- Manage supplier management and onboarding.
- Customer satisfaction is captured.
- Control of externally provided processes, products and services is adhered to.
- Ensure that they follow company processes.
- Report any quality issues during processing, record and investigate NC reports.
- Communicate with top management.
- Goods receiving and inspection.

6. Planning

6.1 Actions to address risks and opportunities

The organization has considered the issues referred to in 4.1 and the requirements referred to in 4.2 and have determined the risks and opportunities that need to be addressed below. Risk will be based/scored on high, medium and low ratings using the below Risk Map. The residual risk should always remain low following control measures.

Risk Map						
Likelihood	A -	Almost Certain	Medium	Medium	High	High
	B -	Certain	Medium	Medium	Medium	High
	C -	Likely	Low	Medium	Medium	Medium
	D -	Not Likely	Low	Low	Medium	Medium
			1- Insignificant	2- Low	2- Medium	2- High
			Impact			

Internal Issues

Issue	Risk	Initial Risk Rating (H,M,L)	Controls	Residual Risk Rating (H,M,L)	Opportunity
Planning	Loss of clients to competitors Inadequate resources Lack of contingency planning	M	Determine & review customer requirements at initial enquiry. Allow for adequate processes/ resources through operational planning and control processes Ensure contingency Planning.	L	Enhance customer satisfaction. Retain business. Open new business opportunities through recommendations and word of mouth. Business continuity.
Communication	Poor communication leading to loss of clients Nonconformities	M	Clear forms of communication to be established from top management to hands on operatives. Planned Meetings/management Review	L	Focused workforce. Positive quality culture Issues resolved quickly & efficiently.
Organizational growth	Destabilise company structure whilst growing	M	Plan and implement effective training and mentoring. Only use experienced and competent personnel. Effective planning (as above)	L	Grow organization/profitability
Training	Key staff being poached by other organizations	H	Ensure staff have adequate training requirements to cover resource requirements. New staff members to be	L	Retention of staff providing consistency to clients.

			trained by competent, experienced staff. Use of effective outsourced processes (sub-contractors)		Enhancement of customer satisfaction.
Knowledge	Experienced personnel nearing retirement age	H	Contingency planning for replacement of key staff of retirement age	L	Introduction of new staff with innovative ideas.

Culture and company values	Values become outdated with strategic business plan	M	Communication of all staff with policy and objectives. Provide suitable working conditions i.e. work environment/ infrastructure.	L	Convey message of strong company values to customers enhancing satisfaction. Retention of key staff.
Staff Engagement & Relationship with Management Team	Staff underperforming. Unhappy staff	H	Ensure company values are understood during recruitment/induction. Engagement with staff. Open door policy, work with/seek guidance from ELAS health & safety as & when required.	L	Stable/consistent workforce
Infrastructure/ Work Environment	Poor work conditions/ environment/ equipment/facilities	M	Provision of suitable work environment/ facilities /suitable work equipment.	L	Organization remains competitive. Reduction of stress and lost time from work.
Internal processes	Process failure/ Nonconformities/ Loss of clients/customers	H	Responsibility and authority of process defined. Competent personnel involved within internal processes. Effective means of communication. Process monitoring via internal audit and management review.	L	Continual improvement of internal processes. Enhancement of customer satisfaction.
Failure of critical/key manufacturing machinery	Customer deadlines not being met/ Loss of clients/customers	H	PM of key manufacturing equipment. Operatives to report any faults immediately.	L	Business continuity Retain business. Open new business opportunities through recommendations and word of mouth.

External Issues

Issue	Risk	Initial Risk Rating (H,M,L)	Controls	Residual Risk Rating (H,M,L)	Opportunity
Legislation/ regulations	Not meeting legal requirements. Loss of customers. Loss of accreditations.	H	Risk Assessments. Competent Staff. Induction Process. Quality management system. Effective Communication. Process.	L	Demonstrate best practice in industry

	Injuries.		Leadership.		
Outsourced Processes	Underperformance of outsourced service provision.	H	Evaluation and re-evaluation of outsourced process. Effective communication/ Participation with outsourced service providers.	L	Allow for business continuity, coverage of resource requirements due to growth.
Payment Terms	Debtors/ reduction of cash flow	H	Negotiate appropriate payment terms. Legal Contracts/SLA's.	L	Manage cash flow and reduce borrowing capacity.
Competitors/ Competition	Loss of clients	H	Maintain quality management system. Retain certifications/ Accreditations. Promote positive quality and safety culture. Follow process.	L	Gain new customers.
Economy	Brexit Fluctuating financial markets. Post Covid-19 Pandemic and residual effects	H	Ensure sufficient capital to mitigate against potential recession.	L	Business continuity/longevity.
Neighbours/ Members of public	Damage to neighbouring property Injuries to members of public	M	Ensure excellent levels of housekeeping. Maintain buildings, utilities, Equipment and workspace. Risk Assessment Competent personnel	L	Enhance customer satisfaction. Collaborative working

Interested Parties

Issue	Risk	Initial Risk Rating (H,M,L)	Controls	Residual Risk Rating (H,M,L)	Opportunity
Customers	Loss of customers	H	Maintain quality management system. Retain certifications/ Accreditations. Promote positive quality and safety culture. Follow process.	L	Gain new customers.
Staff	Key staff being poached by other organizations	H	Ensure staff have adequate training requirements to cover resource requirements. Provision of suitable work environment/ facilities /suitable work equipment. Promote positive quality and safety culture.	L	Retention of staff providing consistency to clients. Enhancement of customer satisfaction.

Suppliers	Please see outsourced processes				
Certificating Bodies	Loss of certification/ loss of clients	H	Implement and maintain a quality management system to meet the requirements of 9001:2015 and AS9100	L	Gain further certifications to remain competitive.
Neighbours/People living locally	Please see neighbours/ Members of public.				

6.2 Quality Objectives and planning to achieve them

Cwm Engineering Ltd establishes objectives at various functional levels, incorporating necessary processes for a compliant Quality Management System under both ISO 9001 and AS9100 standards. The Management Team, whenever feasible, will align measurable objectives and targets with both the strategic direction and broader company policy.
The objectives shall:

- a) Be tailored to the specific functional levels,
- b) Align with both ISO 9001 and AS9100 policies,
- c) Be measurable and timed, while also being sensitive to AS9100 requirements,
- d) Meet the conformity criteria for products and services to enhance customer satisfaction, as per AS9100,
- e) Be regularly monitored and audited,
- f) Be effectively communicated to all relevant stakeholders,
- g) Be reviewed and updated to remain aligned with evolving standards and customer requirements.

While setting these objectives, the company will take into account a range of factors including, but not limited to, internal and external issues, interested parties and their requirements, cost implications, technological solutions, and legalities.

Quality Objectives

Objective	Responsibility	Timescale	Status
Make transition to BS EN ISO 9001:2015	Malcolm Walters Beverley Walters	September 2018	Completed
Make transition to AS9100	Malcolm Walters Andrew Ritchie	June 2024	On-going
Maintain registration / Re-Certify to BS EN ISO 9001:2015	Malcolm Walters Andrew Ritchie	At annual review	On-going
On time delivery of goods – target of >95% OTIF	Malcolm Walters Gareth Williams	On-going	On-going
Customer Complaints, if received – to be investigated & closed out within 14 days	Malcolm Walters Andrew Ritchie	On-going	On-going
Customer NCRs – target 0 NCRs per year to be closed within 14 days. To be maintained and improved on.	Malcolm Walters Terry George Engineers	On-going	On-going
Staff Training Matrix – continue to identify requirements via Management Review Meeting to meet company and/or staff needs	Malcolm Walters Andrew Ritchie	On-going & yearly	On-going
Environmental Responsibility – Customer requirements reviewed to ensure compliance & compatibility	Malcolm Walters Beverley Walters	Bi- annual review (last dated 28.7.21, next due 6/23 or customer request)	On-going

6.3 Planning of changes

Should Cwm Engineering Ltd determine the need for changes to the management system, such changes will be executed following a planned, risk-based approach and systematic manner. Specifically, considerations will include:

- a) The purpose of the changes and their potential consequences, including impacts on product safety and risks related to counterfeit parts.
- b) The effects on the integrity of the management system, ensuring continued alignment with both ISO 9001 and AS9100 standards.
- c) The availability of resources, including any specialized capabilities needed to meet AS9100 requirements.
- d) The allocation or reallocation of responsibilities and authorities, ensuring compliance with AS9100 in addition to existing commitments.

Cwm Engineering Ltd has identified the processes required for the management system and their application throughout the organization, as depicted in the accompanying Process Map and Interactions of Processes. Changes to the quality management system will be assessed for effectiveness and compliance during scheduled management review processes.

7. Support

7.1 Resources

The Directors are ultimately responsible and accountable for the effective deployment of the Quality Management System (QMS) and commit to providing all necessary resources for its establishment, implementation, maintenance, and continual improvement. The organization will determine and maintain infrastructure, environment, and monitoring and measuring resources necessary for the operation of its processes and to achieve conformity of products and services.

7.1.1 General

In assessing resource needs, the company will evaluate the capabilities and limitations of current internal resources and identify what must be obtained from external providers. This strategic approach ensures that the QMS is applicable to the company's size and scope, meets customer requirements, and complies with all relevant legislation.

7.1.2 People

The company is dedicated to determining and providing competent personnel necessary for the operation and control of its processes, ensuring effective implementation of the QMS. This includes succession planning and the continual personal development of employees to fill key roles within the organization.

7.1.3 Infrastructure

Cwm Engineering Ltd. will determine, provide, and maintain the necessary infrastructure, which may include:

- Buildings and associated utilities
- Equipment, both hardware and software
- Transportation resources
- Information and communication technology

7.1.4 Environment for the Operation of Processes

The organization will determine, provide, and maintain a suitable environment for the operation of its processes, considering social, psychological, and physical factors that contribute to the wellbeing of personnel and the quality of processes and services.

7.1.5 Monitoring and Measuring Resources

7.1.5.1 General

The organization shall ensure the availability of resources for accurate and reliable monitoring and measuring to verify product and service conformity. Resources will be maintained to ensure their continued fitness for their intended purposes, with documented evidence of their efficacy.

7.1.5.2 Measurement Traceability

The company will maintain a register of monitoring and measurement equipment, ensuring calibration or verification against recognized standards, and will implement a recall process for such equipment when necessary. This ensures confidence in the validity of our measurement results.

7.1.6 Organizational Knowledge

The company acknowledges the importance of organizational knowledge and commits to maintaining and making it available as necessary. We will continually assess and update our knowledge base, incorporating both internal experiences and external sources to meet evolving needs and trends.

7.2 Competence and training

Employee selection is based on appropriate education, training and experience. Roles, responsibilities and identified competencies needed for employees to perform required tasks are documented as Job specifications or departmental protocols and procedures to ensure knowledge and skillsets requirements can be maintained and protected in the event of personnel changes.
As training needs are deemed necessary by assessment or identification, they will be planned and implemented.

Records of experience, competence, training, education, and qualifications are recorded in individual Training Records and are kept by the management team.

All personnel will receive training in aspects of Quality during the induction process on employment appointment, through general on-going training and awareness and through specific specialised training. All new, young, or inexperienced personnel will be under the control and supervision of a full-time experienced employee and will be considered the same as any other employee in the content of this management system.

The management team will consider any projected tasks, changes to its current operations or specialised activities specified by clients that may give rise to significant quality and environmental impacts and may therefore require further training, advice, or skills within the company to effectively manage.

7.3 Awareness

Employees will be made aware of this Management System, its policy and objectives and the implications of not conforming to the requirements as well as ensuring the product or service delivered meets the needs of the customer by the company intranet and is integral to the Induction process on appointment.
Any significant amendments or changes in the System, or identified risks being managed by the company, its procedures or any of its documents, including consequences of departures from the proscribed objectives and procedures will be communicated.

7.4 Communication

Cwm Engineering Ltd recognizes the critical role of both internal and external communications relevant to our Quality Management System, in alignment with AS9100 standards. This section provides a comprehensive guideline that addresses what, when, with whom, how, and who will communicate.

What to Communicate

- Legislative, industry-specific, and health, safety, quality & environmental updates
- Quality management system updates
- Non-conforming outputs
- Complaints and/or inquiries from clients or contractors
- New or amended risks and opportunities

When to Communicate

- Critical issues such as non-conforming outputs or safety incidents will trigger immediate communication.
- Regular intervals for updates, such as quarterly performance reviews and annual reports.

With Whom to Communicate

- Internal parties including employees at all levels and functions.
- External parties such as clients, contractors, and regulatory bodies.

How to Communicate

Methods for communication will be adapted depending on the topic, audience, and urgency and may include but are not limited to:

- External newsletters or bulletins
- Paid advertisements or public notices in newspapers, industry journals, or other publications
- Annual reports
- Letters, memos, and other correspondence
- Social media
- Electronic mail messages, faxes, etc.
- Company website

For internal communications:

- Training sessions
- Team meetings and briefings
- Display boards
- Minutes of meetings
- Letters, memos, and other correspondence
- Electronic mail messages, faxes, etc.
- Involvement in risk assessment and establishment of safe systems of work

Who Communicates

- The Directors are responsible for initiating and overseeing external communications, especially those pertaining to legislative, industry-specific, health, safety, quality, and environmental updates.
- All employees have the responsibility to communicate health, safety, quality, and environmental concerns, problems, or suggestions to the Directors.
- Specific personnel may be designated for certain types of communication as deemed necessary.

Approval Process

All communications, both internal and external, shall be approved by the Managing Director prior to release.

Suggestions and Feedback:

All employees are encouraged to report issues and offer suggestions on how to improve performance to the Directors.

External communication to Safety Critical contractors includes a Feedback and Suggestion section, including methods in which they can communicate their information.

7.5 Documentation

7.5.1 General

All documented information pertinent to the Management System, including but not limited to objectives, goals, responsibilities, ISO and AS9100 standards, and supporting documents, are either stored electronically within the company's secure servers or maintained as hard copies. The Management System is a controlled document, with its governance and periodic reviews overseen by the Management Team and Directors.

7.5.2 Creating and Updating

When creating or updating documented information, the following shall be ensured:

- **Identification and Description**: Every document will contain a title, date, author, and a unique reference number for tracking.
- **Format and Media**: All documentation will adhere to predefined formats, ensuring compatibility with current software versions and readable language.
- **Review and Approval**: All new or amended documents must be reviewed for suitability and adequacy by the designated authority before becoming part of the Management System.

7.5.3 Control of Documented Information

7.5.3.1 Availability and Protection

Documented information shall be:

- Made available and suitable for use, where and when it is needed.
- Adequately protected against loss of confidentiality, improper use, or loss of integrity.

7.5.3.2 Control Measures

For the control of documented information, the organization shall address:

- **Distribution, Access, Retrieval, and Use**: The Management Team and Directors control who has access to what documentation, how it can be retrieved, and its intended use.
- **Storage and Preservation**: Documented information shall be stored in a manner that preserves its legibility, format, and medium.

- **Control of Changes**: Any changes to the documents shall be version-controlled, with a record of what was changed, by whom, and when.
- **Retention and Disposition**: Documents shall be retained for a predefined period and disposed of in a secure manner, as per legislative and industry standards.
- **Prevention of Obsolete Information**: Any obsolete documentation shall be either removed from circulation or appropriately marked and restricted to prevent unintended use.

Please see QP/9.

8 Operation

8.1 Operational Planning and Control

Planning and control will be agreed upon by the management team to ensure clear procedures and directions are available for achieving agreed goals. These include:

- Determining the requirements for products and services by considering specific aspects such as personal and product safety, producibility and inspect ability, reliability, availability, and maintainability, suitability of parts and materials used, and other factors critical to quality and safety.
- Establishing criteria for the processes and acceptance of products and services.
- Determining the resources needed for conformity and on-time delivery.
- Maintaining and retaining documented information for demonstrating process control and product conformity.
- Processes and controls for managing critical items will be determined.
- Representatives from affected organizational functions will be engaged for planning and control.

Where action to meet agreed goals requires the participation, notification, or assistance of any 3rd party, including suppliers and contractors, details will be documented where appropriate. Planning will also consider work transfer impacts and risks as well as controls for nonconforming products and services.

8.1.1 Operational Risk Management

To effectively manage operational risks and meet applicable requirements, Cwm Engineering Ltd employs a systematic approach that integrates risk assessment into the early stages of the production lifecycle, specifically during the quotation process.

a. Assignment of Responsibilities

Responsibility for operational risk management during the quotation process is assigned to the Production Manager.

b. Risk Assessment Criteria

During the quotation process, the Quotation Team assesses risks based on predefined criteria that include, but are not limited to:

- Capability to meet the technical requirements
- Availability and lead times of raw materials
- Reliability of subcontractors
- Customer-imposed deadlines

c. Identification, Assessment, and Communication

Risks identified during the quotation process are documented and noted in the quotation system for easy reference and future evaluations. Any risks that cannot be mitigated are communicated back to the supplier for clarification. Furthermore, identified risks are communicated to the management team for further evaluation. Any third-party involvement, such as suppliers and subcontractors, is also considered at this stage.

d. Mitigation Actions
If risks exceed the company's defined risk acceptance criteria, mitigation actions are implemented. These may include:

- Seeking alternative material suppliers
- Adjusting production schedules
- Consulting with subcontractors for alternative solutions

e. Acceptance of Risks
The management team reviews the identified and mitigated risks. Any remaining risks are formally accepted before proceeding with the job. The decision to proceed is documented, and the responsible party for this decision is the Production Manager.

8.2 Requirements for Products & Services

The majority of the product produced by the company is contract/client-specific (bespoke), manufactured to specifications received at the tender stage. Where the specification is not stated, the company works to recognised industry norms regarding tolerance, quality, and finish.

8.2.1 Customer Communication

- **Primary Communication Methods:** Suitable methods of communicating all aspects of planning, manufacturing, and providing the product are made available. These may include telephone, letter, and email.
- **Product Information**: We provide detailed information on our products and services during client interactions, tenders, and contract negotiations.
- **Enquiries and Orders**: All enquiries, contracts, or orders, including changes, are documented and tracked through our ERP system.
- **Customer Feedback**: Customer feedback is actively sought and documented. A formal process for handling customer complaints is in place.
- **Customer Property**: Procedures are established for the handling or controlling of customer property, including any customer-owned material used in production.
- **Contingency Actions**: Contingency action requirements are determined and communicated with customers when relevant.

8.2.2 Determining Requirements for Products and Services

- **Resource Allocation**: Adequate processes are defined in the Quality Management System to ensure tooling, hardware, resources, and checking are made available to realise a product that conforms to industry norms.
- **Requirement Definition**: The requirements for products and services are clearly defined, including any applicable statutory and regulatory requirements, as well as those considered necessary by the organization including requirements for delivery and post-delivery activities.
- **Review of Requirements for Products and Services**: We ensure that the organization can meet the claims for the products and services it offers, through a review process before committing to supply products or services to the customer. This will occur as part of or during the quotation process and coordinated with applicable functions within the organization. If customer requirements can't be fully met, negotiation for a mutually acceptable requirement will occur.
- **Special Requirements:** Special requirements for products and services are identified during the contract review stage.
- **Operational Risks:** Operational risks, such as new technology adoption, production capacity, and delivery time frames, are identified and managed.

8.2.4 Changes to Requirements for Products and Services

- **Change Review Process**: Whenever there are changes to the requirements for products and services, a review process is initiated to assess the impact on quality, resources, and delivery schedules.
- **Document Amendment**: All relevant documented information is promptly updated to reflect the changed requirements. This includes work instructions, drawings, and customer contracts.
- **Team Communication**: Necessary amendments are communicated to all relevant personnel responsible for the delivery of the product or service. This ensures full awareness and effective implementation of the changes.
- **Customer Confirmation**: If the change affects the contract or order requirements, customer confirmation is obtained before implementing the changes.
- **ERP Update**: Our ERP system is updated to reflect the changes, and historical data is maintained for traceability and audit purposes.

8.3 Design and Development of Products and Services

Design and development activities are not applicable to Cwm Engineering Ltd, as we specialize solely in CNC machining based on customer-supplied designs and specifications. This exclusion is justified by our operational focus and does not impact our ability to meet customer or regulatory requirements. Documentation supporting this exclusion includes customer contracts and a defined QMS scope.

8.4 Control of Externally Provided Processes, Products & Services

8.4.1 General & 8.4.1.1

Risk Management for External Providers:

- Risks associated with external providers are formally evaluated using a Risk Assessment Matrix.
- High-risk suppliers undergo a more stringent approval and monitoring process.
- The scope and frequency of audits for external providers may vary based on the assessed risk level.

Register of Approval:

- Materials purchased for Cwm Engineering Ltd are sourced from a documented and maintained list of approved suppliers and sub-contractors. The establishment and modifications to this list are subject to documented criteria and approval processes.

Evaluation Criteria: The selection of suppliers for specific purchases is guided by the following evaluation criteria:

- Quality and Consistency: Ensuring the supplier consistently meets our specified requirements.
- Timelines: Adherence to agreed delivery or service timelines.
- Cost-Effectiveness: Providing value in relation to cost.
- Communication and Support: Effective and responsive communication during the procurement process.
- Reliability and Reputation: Historical performance and overall market reputation.

Key Performance Indicators (KPI):

- A key performance indicator for supplier evaluation will be the number of Non-Conformance Reports (NCRs) raised against them. Suppliers that exceed an established threshold of 3 NCRs within 12 months will undergo a trigger-based review to address and rectify performance issues.

8.4.2 Type and Extent of Control

- Key process suppliers will be reviewed periodically by designated personnel or appropriate authority within Cwm Engineering Ltd and recorded to ensure continuous alignment with our standards and expectations.
- The extent of control exerted over external providers is determined by their impact on the organization's ability to meet customer and regulatory requirements.

8.4.3 Information for External Providers

- Competence and Qualification: State the requirements for the competence and any required qualifications of persons involved in the provision of external services.
- Statutory and Regulatory Requirements: Clearly communicate any applicable statutory and regulatory requirements to external providers.

Procedures for Material Control:

- Materials are verified for conformance to the specifications, contract requirements, or quality plan before use.
- The extent of receiving verification for each delivery or batch is determined by:
    - The supplier’s evaluated capability.
    - Documented proof of consistent quality delivery.
    - Potential for material damage or deterioration.

Quarantine Measures:

- Materials are held in quarantine until approved for use. If there's a pressing need for uncleared or questionable material, it will be distinctly marked to allow for potential recall. Further details on this process can be found in QP/3.

Review and Approval:

- All Purchase Orders undergo a rigorous review and approval process to ensure they meet the required specifications. In exceptional cases where a telephone order is made, it shall be confirmed in writing without delay.

Customer Inspections:

- Cwm Engineering Ltd, when necessary, will facilitate inspections by a customer's representative at our premises. We request sufficient prior notice for such inspections to minimize disruptions and to ensure appropriate company representation.

8.5 Production and Service Provision

8.5.1 Control of Production and Service Provision

Service provision and production are executed under controlled conditions, subject to the following:

- **Documented Information:**
  - Work instructions, process flow charts, and control plans are documented.
  - Standards of workmanship are documented, which may include drawings, visual aids, and material and process specifications.
- **Monitoring and Measuring Resources:**
  - Suitable monitoring and measurement tools are identified and used.
- **Monitoring and Measurement Activities:**
  - QA checks are conducted at appropriate stages to verify process controls and product or service criteria.
  - Criteria for acceptance and rejection are documented.
  - Measurement results are retained, including an indication of acceptance or rejection.
- **Infrastructure and Environment:**
  - Special working environments and suitable infrastructure like jigs, fixtures, and software are utilized.
- **Competent Persons:**
  - All personnel are qualified and competent in their respective roles.
- **Validation and Revalidation:**
  - Processes whose outputs cannot be verified are validated and periodically revalidated.
- **Human Error Prevention:**
  - Actions to prevent human error are implemented and documented.
- **Release, Delivery, and Post-Delivery Activities:**
  - Procedures for release, delivery, and post-delivery activities are documented and implemented.
- **Workmanship Criteria:**
  - Criteria for workmanship are established, sometimes supplemented with visual aids.
- **Control of Equipment, Tools, and Software Programs:**
  - Equipment, tools, and software used for production are validated prior to release and maintained.
- **Special Processes:**
  - Cwm Engineering Ltd does not perform special processes (processes where the resulting output cannot be verified by subsequent monitoring or measurement) in-house. Instead, these processes are subcontracted to accredited and trusted external suppliers.
  - We ensure that all subcontracted special processes are carried out by suppliers who are rigorously evaluated and selected based on their capability to meet our quality requirements. This includes their qualifications, experience, and proven track record in handling such processes.
  - Our Quality Management System mandates the requirement for a Certificate of Conformity for all subcontracted special processes. This certificate serves as a validation of the quality and compliance of the work performed.
  - Goods received from subcontractors undergo a thorough inspection upon arrival to ensure conformity with our quality standards. This inspection process is part of our goods-inward procedure.
  - In cases where additional verification is required, we have arrangements with a designated supplier who is qualified to verify product conformity. This is part of our comprehensive supplier management system, ensuring that even subcontracted processes meet the high-quality standards expected by Cwm Engineering Ltd and our customers.

- **Production Process Verification:**
    - First Article Inspection (FAI) is performed to verify that production processes, documentation, and tooling meet requirements.

Please see QP/4.

8.5.2 Identification and Traceability

Suitable Identification Means:

- All components are identified by Part No., Drawing No., or other unique identifiers during storage, or if set aside during manufacturing or awaiting dispatch. This may include markings on the product or with suitable labels or documentation.

Configuration Identification:

- Service provision is executed under management controls, including documented work instructions and acceptable standards of workmanship, to maintain the identification of the configuration of products and services.

Monitoring and Measurement Status:

- Inspection or Quality Assurance checks are conducted during or after each operation. The status of outputs with respect to these checks is recorded and maintained.

Acceptance Authority Media Controls:

- When acceptance authority media are used, such as electronic signatures, controls are established. These controls include restricted access, logs, or multi-factor authentication.

Unique Identification for Traceability:

- Traceability procedures are documented and maintained for individual identification of product and associated special treatment when specified by the contract. Product certification will be made available if requested in the contract.

Controls for Customer-Supplied Material:

- Materials supplied by the customer are subject to receipt inspection for type and specification. Any shortages or defects are reported ASAP to the customer. Adequate identification prevents use on the wrong contract or unauthorized disposal.

Note on Work in Progress:

- For immediate work in progress, maintaining identification is deemed impractical and unnecessary, other than for traceable items.

Preservation and Storage:

- Due care is given to prevent damage or deterioration during storage, manufacture, or delivery. Procedures and instructions are documented for storage, handling, packing, and transportation.

8.5.3 Property Belonging to Customers or External Providers

Cwm Engineering Ltd hereby formally declares the exclusion of AS9100D standard's section 8.5.3, "Property Belonging to Customers or External Providers," from our Quality Management System. This exclusion is justified on the basis that our business operations do not involve the management, use, or handling of property belonging to customers or external providers. Our organizational processes and services are structured such that all operations are conducted using property owned, leased, or controlled by Cwm Engineering Ltd, without reliance on customer or external provider property.
We ensure that this exclusion does not affect our ability or responsibility to provide products and services that meet customer and applicable statutory and regulatory requirements. This statement of exclusion is aligned with the scope of our Quality Management System and reflects the specific nature of our business operations.

8.5.4 Preservation

General Preservation:

- The organization is committed to preserving outputs throughout production and service provision to ensure they conform to specified requirements. This preservation includes identification, handling, contamination control, packaging, storage, transmission or transportation, and protection.

Detailed Provisions:

- **a. Cleaning:**
- Procedures are in place for the proper cleaning of materials, components, and end-products to remove contaminants and ensure they meet quality and safety standards.
- **b. Foreign Objects:**
- Systems are implemented for the prevention, detection, and removal of foreign objects that could compromise product integrity or safety.
- **c. Sensitive Products:**
- Special handling and storage protocols are documented for sensitive products that require specific environmental or handling conditions to maintain their integrity.
- **d. Marking and Labeling:**
- All products are marked or labeled, as necessary, to include relevant safety warnings, cautions, and other identifiers to ensure they are used or applied as intended.
- **e. Shelf Life and Stock Rotation:**
- Products with a defined shelf life are clearly marked, and stock rotation procedures are in place to ensure that products are used or sold before their expiration.
- **f. Hazardous Materials:**
- Procedures for the handling and storage of hazardous materials are documented in compliance with applicable statutory and regulatory requirements.

8.5.5 Post-Delivery Activities

The organization shall fulfill all contractual post-delivery obligations as per the specific project requirements.

Key Components:

- **Regulatory Compliance**: Compliance with relevant statutory and regulatory requirements is ensured.
- **Customer Requirements**: All activities are guided by the specifications and terms defined by the customer at the time of contract agreement.

Issue Resolution:

- In the event of any issues detected after delivery, appropriate corrective actions are taken, and the customer is informed promptly.

8.5.6 Control of Changes

The organization will implement a structured yet agile approach for reviewing and controlling changes to production and service provision.

Key Components:

- **Change Review**: All proposed changes are reviewed for their impact on the conformity with requirements, irrespective of whether the work is repeat or unique in nature.
- **Authorized Personnel**: Personnel authorized to approve changes are clearly identified, with a focus on technical expertise and managerial oversight.

Documentation:

- **Change Logs**: Documented information is maintained to record the outcomes of changes to customer order processes, the personnel authorizing the changes, and any actions required.

This ensures that changes can be swiftly accommodated but in a manner that maintains high quality and compliance, crucial for both our AS9100 and ISO9001 certifications.

8.6 Release of Products & Services

Cwm Engineering Ltd will implement planned arrangements, at appropriate stages, to verify that the product and service requirements have been met. The release of products and services to the customer shall not proceed until planned arrangements have been satisfactorily completed, unless otherwise approved by a relevant authority and, as applicable, by the customer. The release of service will depend on contractual agreements and will vary for different customers (Refer to QP/4).

To ensure compliance with AS9100D standards, Cwm Engineering Ltd will retain documented information on the release of products and services. This documented information will include:
- Evidence of conformity with acceptance criteria.
- Traceability to the person(s) authorizing the release.

When required to demonstrate product qualification, Cwm Engineering Ltd shall ensure that retained documented information provides evidence that the products and services meet defined requirements.

Cwm Engineering Ltd shall also ensure that all documented information required to accompany the products and services is present at delivery. Please see QP/4.

8.7 Control of Non-conforming Products & Services

Cwm Engineering Ltd ensures that outputs that do not conform to their requirements are identified and controlled to prevent their unintended use or delivery. The responsibility and authority for reviewing and disposing of nonconforming outputs lie with [Designated Position], who has undergone the necessary approval process (Refer to QP/11).

Containment actions are taken to minimize the effect of the nonconformity on other processes, products, or services. Nonconformities affecting delivered products and services are reported to the customer and relevant interested parties in a timely manner.

Nonconforming outputs are dealt with in one or more of the following ways:
- Correction
- Segregation, containment, return, or suspension of provision of products and services
- Informing the customer
- Obtaining authorization for acceptance under concession by a relevant authority and, when applicable, by the customer

Products designated for scrap are conspicuously and permanently marked or positively controlled until rendered unusable. Counterfeit or suspect counterfeit parts are controlled to prevent re-entry into the supply chain.

Documented information is retained that describes the nonconformity, actions taken, any concessions obtained, and the authority deciding the action (Refer to QP/11).

9 Performance Evaluation

9.1.1 Monitoring, Measurement, Analysis, and Evaluation

The directors shall identify and agree on the key performance indicators (KPIs) that need to be monitored and measured. These KPIs will focus on areas critical to the quality of our products and services. Appropriate methods will be employed for monitoring, measurement, analysis, and evaluation to ensure valid results.

The timing for these activities will be agreed upon, with a specified frequency for each KPI, and methods for data analysis will also be determined. The results from the monitoring and measurement activities will be analysed and evaluated at [specified intervals] to evaluate the performance and effectiveness of the quality management system.

Quality and environmental criteria will be set to ensure adherence to legal compliance and to evaluate the effectiveness of measures put in place.

Documented information, such as reports and analysis documents, will be retained as evidence of the results of monitoring, measurement, analysis, and evaluation activities.

9.1.2 Customer Satisfaction

Customer satisfaction is measured against pre-contract expectation and/or the customers' expectations for performance against specification by way of informal and formal means as described in the operating processes.

Prior to hand-over, products will be inspected or tested following documented instructions, quality plans, contractual obligations, or as required by legislation. Contract amendments and specific marking, packing, addressing, and dispatch requirements will be duly noted and met.

Appropriate records, including test and inspection reports as well as results from any additional tests, are maintained. Procedures and instructions ensure the correct Inspection and Test status of materials and components is known.

To capture customer perceptions, the company will monitor customer retention, lost business analysis, and positive feedback. Customer complaints and corrective action requests will also be monitored and analyzed. Based on this evaluation, the organization will develop and implement plans to improve customer satisfaction, targeting identified deficiencies. The effectiveness of these plans will be assessed over time.

Survey Monkey will be utilized as an additional means of contacting customers and gaining further insights into their perceptions. Please see QP/10 for more details.

9.1.3 Analysis & Evaluation

Data collected through monitoring and measurement processes, as well as relevant external sources like industry alerts, are formally reviewed by the management team. These reviews occur at a minimum annually during Management Reviews and are supplemented by more frequent assessments as needed.

The analysis will be used to evaluate:
- Conformity of products and services.
- Degree of customer satisfaction.
- Performance and effectiveness of the Quality Management System.
- Effectiveness of actions taken to address risks and opportunities.
- Performance of external providers.

- Need for improvements to the Quality Management System.

The Directors will regularly review and analyse captured data to assess trends or potential risks and will consider proactive or corrective and preventative actions. These actions will be discussed during Monthly Management Meetings and communicated via email when urgent attention is required.

9.2 Internal Audit

9.2.1 General

A comprehensive system of planned and documented internal audits is carried out to verify that activities relating to quality meet both the organization's own requirements, including customer and applicable statutory and regulatory quality management system requirements, as well as AS9100D standards. All processes are vital to our success and are all included in the annual audit cycle.

Audit Criteria

Criteria assessed when performing internal audits include the organization's own quality management system requirements, risks and opportunities for improvement, compliance with ISO9001 and AS9100D standards, checks for effectiveness of operational processes, procedures, and controls, and past audit conformances/non-conformances. Performance indicators may be evaluated to determine system effectiveness.

Audit Conduct

The person carrying out the internal audit will be competent on auditing of management systems, including AS9100D, and will be independent of the department being assessed. Appropriate process monitoring and control methods will be used.

Director's Review

The Directors will conduct an annual internal audit of the entire Management System, including compliance with AS9100D and any current legislation associated with the company, review the results from previous audits, and assess the organization's performance in meeting the goals set within the system. Cwm Engineering Ltd's Director accountable for Quality matters will check and validate all internal audits performed.

Documentation

The Internal Audit Checklist and NCR Report Template, aligned with AS9100D requirements, will be used to document and manage actions against such audits. Findings will be submitted to the management team. Please see QP/8.

9.2.2 Internal Audit Programme

Audits are the responsibility of the Compliance Manager, who will plan, establish, implement, and maintain an audit program. The audit program will be conducted in accordance with the Internal Audit Schedule (Please see QP/8) and will include:

- **Frequency, Methods, and Planning**: Audits will be scheduled considering the importance of the processes concerned, changes affecting the organization, and results of previous audits.
- **Criteria and Scope**: Each audit will have defined criteria and scope, aligning with ISO9001 and AS9100D standards.
- **Auditor Selection**: Auditors will be selected to ensure objectivity and impartiality in the audit process.
- **Reporting**: The results of audits will be reported to relevant management, including the Director accountable for Quality matters.
- **Corrective Actions**: Appropriate corrective and corrective actions will be taken without undue delay upon discovering non-conformances or opportunities for improvement.
- **Documentation**: Documented information will be retained as evidence of the implementation of the audit program and the audit results.

9.3 Management Review

9.3.1 General

The company Directors and Production Manager will meet annually to review the organization's quality management system to ensure its continuing suitability, adequacy, effectiveness, and alignment with the strategic direction of Cwm Engineering Ltd. This review will pool for open discussion and formalize actions aimed at the betterment of the company, its products, services, and operating procedures. Please see QP/7.

9.3.2 Management Review Inputs

The review will be planned and carried out considering:

- The status of actions from previous management reviews.
- Changes in external and internal issues affecting the quality management system.
- Performance and effectiveness metrics, including customer satisfaction, quality objectives, process performance, product conformity, nonconformities, corrective actions, monitoring and measurement results, audit results, and on-time delivery performance.
- The adequacy of resources.
- The effectiveness of actions taken to address risks and opportunities.

9.3.3 Management Review Outputs

The outputs of the management review will include decisions and actions related to:

- Opportunities for improvement.
- Any need for changes to the quality management system.
- Resource needs.
- Identified risks.

Documented information will be retained as evidence of the results of management reviews.
Should Cwm Engineering Ltd determine the need for changes to the management system due to any internal and external issues or complaints from interested parties, such changes will be planned systematically. This planning will consider a) the purpose and potential consequences of the changes, b) effects on the integrity of the management system, c) availability of resources, and d) allocation or reallocation of responsibilities and authorities.

10 Improvement

10.1 General

Through the analysis of objectives, management system documentation, internal audits, Management Reviews, as well as Management meeting discussions and compliance review meetings, Cwm Engineering Ltd shall determine and select opportunities for improvement. These shall be aimed at meeting customer requirements and enhancing customer satisfaction.
The identified opportunities for improvement will include:

- Improving products and services to not only meet current requirements but also address future needs and expectations.
- Correcting, preventing, or reducing undesired effects.
- Improving the performance and effectiveness of the quality management system.

These opportunities will be recorded in the management meeting minutes, the corrective action section of the Internal Audit reports, and on the non-conformance register. The approach for each will be outlined in detail, covering initial corrective actions, root cause analysis, methods to prevent reoccurrence, and any required changes to procedures or management system documentation. If objectives and targets are to be set against any newly identified opportunity for improvement, they will be integrated into the Objectives document and utilized as an implementation and monitoring tool.

10.2 Nonconformity and Corrective Action

10.2.1 General Procedure

In the event of a significant deviation in quality delivery and service, as prescribed by our management systems, the Directors or responsible employees shall record the incident on the Non-Conformance Register (NCR). The Non-Conformance Register entry shall include:

- Nature of the nonconformity
- Immediate actions taken to control and correct it
- Consequences dealt with, if any

The Directors will initiate an investigation to:

1. Review and analyse the nature of the nonconformity.
2. Determine the root causes, considering human factors as applicable.
3. Ascertain if similar nonconformities exist or could potentially occur elsewhere in the organization.

10.2.2 Corrective Actions

Following the investigation, appropriate corrective actions will be implemented to:

- Eliminate the root causes of the nonconformity.
- Prevent recurrence or occurrence in other areas.

The effectiveness of these corrective actions will be reviewed, and if necessary:

- Risks and opportunities determined during planning will be updated.
- Quality Management System procedures may be revised.

If the nonconformity is determined to be the responsibility of an external provider, corrective action requirements will be flowed down to the provider. Failure to achieve timely and effective corrective actions will trigger specific remedial actions.

10.2.3 Documentation

Documented information will be retained as evidence of:

- The nature of the nonconformities and actions taken.
- The results of any corrective actions implemented.

Please refer to QP/11 for further details.

10.3 Continual Improvement

Cwm Engineering Ltd continuously monitors its quality management system and products to identify opportunities for corrective action and continual improvement. Adaptations are made to meet marketplace requirements, drawing upon methods such as innovation, re-organisation, and breakthrough changes.