




# Quality Manual

## BS EN ISO/IEC ISO 17020:2012

The Quality Manual (QM) is structured around the UKAS “*Coordinated Assessment Framework*” and is designed to demonstrate how the Quality Management System (QMS) of Gilbert Engineering & Inspection Services fulfil the requirements of:

**BS EN ISO/IEC 17020:2012** (ISO17020): “*Conformity assessment - Requirements for the operation of various types of bodies performing inspection*”.

The Quality Manual also references:

<b>Document</b>	ISO17020 Quality Manual	<b>Document</b>	QM1
<b>Prepared by</b>	Matthew Gilbert	<b>Issue/Ref</b>	005
<b>Authorised by</b>	Matthew Gilbert	<b>Date of Original issue</b>	06/12/2021
<b>Signature</b>		<b>Date</b>	15/06/2024

### Change Control Record

Date	Person (initials)	Short description of changes made	Revision number
06/12/21	MG	Initial draft	001
01/12/22	MG	Review	002
04/07/23	MG	LEAPs included on page 7	
		Watermark added (All Pages)	
		Links added to all procedures and standards	003
24/10/23	MG	4.3 Paragraph 7 reworded to include fastfield app	004
10/03/24	MG	Re-written Draft	005
15/06/24	MG	Re-Written Draft - New layout "QMS24"	006

**CONTENTS OF QUALITY MANUAL & CROSS REFERENCE TO ISO17020 CLAUSE  
USING UKAS COORDINATED ASSESSMENT FRAMEWORK**

**SCOPE**

	<b>Subject</b>	<b>ISO17020 Clause</b>	<b>Purpose</b>
<b>1.1</b>	Scope	5.1.3 Annex A	Define ADIPS/LEAPS (or UKAS) scope to be displayed on UKAS and/or Company website and record within the QM.
<b>1.2</b>	Definitions	3	Confirm independence type A, B or C and how “impartiality” is demonstrated. Define any words or terms specific to the industry.

**ORGANISATION**

	<b>Subject</b>	<b>ISO17020 Clause</b>	<b>Purpose</b>
<b>2.1</b>	Organisation/ structure	5.1.2, 5.2.2, 5.2.3, 5.2.4	Organogram showing the structure of the organisation, any related companies and the location of the IB within that organisation. The technical backup within the IB structure including the positions of Technical and Quality Manager and their respective deputies.
<b>2.2</b>	Roles, responsibility & authority	5.2.3, 5.2.5, 5.2.6, 5.2.7, 6.1.4, 8.2.3	Technical Manager(s) and their required qualifications; Designated Quality Manager and their required qualifications, deputies, confirm they are permanent employees or contracted. Roles and responsibilities and job descriptions defined for each member of the inspection team.
<b>2.3</b>	Legal Status	5.1.1	Legally identifiable body– definition of the legal entity and how it appears on Companies House website, company name, registered office, contact details and number.
<b>2.4</b>	Liability cover and insurance (levels)	5.1.4	Professional indemnity, public liability, employer’s liability insurance with whom and how adequacy of insurance has been assessed.
<b>2.5</b>	Resources	5.2.2, 6.1.2, 6.3.1	Sufficient staff (in-house) to fulfil commitments of the IB. All contracted work should be via a written contractual agreement with the contractor. Subcontracting should be rare but if it is used the sub-contractor must be disclosed and acceptable to the customer.

## **MANAGEMENT**

	<b>Subject</b>	<b>ISO17020 Clause</b>	<b>Purpose</b>
<b>3.1</b>	QMS, policies & procedures	5.1.3, 6.1.1, 8.1, 8.2	Scope documented in QMS along with items in 8.1.2. Quality system QM, statements, policies and objectives up to date. How is policy communicated to all levels of the IB.
<b>3.2</b>	Documents control and record keeping	7.1.4, 7.4.5 7.1.9, 7.3.1, 8.3, 8.4	Document change authorisation, controlled document availability of work procedures and safe systems of work at the point of inspection, supersession, retention of previous versions. Defined retention method and time for all types of quality record. Control of reference material and availability of latest versions.
<b>3.3</b>	Supervision & monitoring of staff	6.1.8, 6.1.9	Monitoring of staff, on-site supervision. Monitoring programme, frequency and content to ensure competence is assessed and maintained.
<b>3.4</b>	Management of subcontractors/ purchases	6.2.11, 6.3, 7.1.6	Evaluation of suppliers, suitability, competence evaluation to what standard, records of checks, audit and decision process.
<b>3.5</b>	Internal audit and management review	8.5, 8.6, 8.7	Frequency, competency of auditors, content, plan, audit report, minutes, agenda, quorate, quality objectives review.
<b>3.6</b>	NCR/complaints/ appeals/disputes/ corrective, preventive action	7.5, 7.6, 8.7, 8.8, 6.2.14	Feedback, customer complaints, non-conformance, appeals.

## **INSPECTION PROCESSES**

	<b>Subject</b>	<b>ISO17020 Clause</b>	<b>Purpose</b>
<b>4.1</b>	Design & development	7.1.1, 7.1.3	Non-standard methods, documentation and integrity.
<b>4.2</b>	Enquiries, tenders, contracts	5.1.5, 7.1.5	Terms of business and contract documents determining scope of work to be inspected and how it will be done, recording of enquiries and matching of competence to enquiry.
<b>4.3</b>	Inspection (Examining)	7.1.1, 7.1.2, 7.1.4, 7.1.7, 7.1.8, 7.1.9, 7.2	Planning inspections, standards worked to, access to documented inspection procedures at point of use, inspection quality checking by senior staff, time deadlines for reports (28 days etc). Retention of site notes. Correct ID on samples, valid sample size, preparation of items, damage to client's equipment, safe systems of work.
<b>4.4</b>	Reports/ certificates	7.3.2, 7.4 Annex B	Typical content of an inspection report Report checking.

## **TECHNICAL COMPETENCE**

	<b>Subject</b>	<b>ISO17020 Clause</b>	<b>Purpose</b>
	Personnel/ training/ competence	6.1.1, 6.1.3, 6.1.5, 6.1.6, 6.1.7, 6.1.10	Job descriptions, employment contract, documented training system, qualifications, training records and authorisation. Monitoring/auditing of Inspectors and monitoring plan. Behaviour, code of conduct.
<b>5.2</b>	Facilities/ equipment/ environmental conditions/ tools/ instruments/ calibration/ verification	6.2.1, 6.2.2, 6.2.3, 6.2.4, 6.2.5, 6.2.6, 6.2.7, 6.2.8, 6.2.9, 6.2.10, 6.2.12, 6.2.13, 6.2.15	Equipment list, unique identification, documented maintenance, calibration and/or verification plan, issue and authorisation of user. Workshops, equipment and facilities suitable for scope of inspection. Computer equipment and software up to date.

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## **IMPARTIALITY AND INTEGRITY**

	<b>Subject</b>	<b>ISO17020 Clause</b>	<b>Purpose</b>
<b>6.1</b>	Independence/ impartiality/ integrity	4.1, 5.2.1, 6.1.11, 6.1.12, 7.6.4 Annex A	Confirm type of Inspection Body, confirm document and justify impartiality of inspection activities, financial independence for Inspectors (documented in a procedure).
<b>6.2</b>	Confidentiality	4.2, 6.1.13 8.4	Statement in QMS on confidentiality. Non-disclosure clauses, control on issue of reports, secure software, archiving and protection of intellectual property.

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## 1. SCOPE

### 1.1 Scope of Accreditation

Gilbert Engineering & Inspection Services pre-use and in-service annual inspections of fairground and amusement park devices under the Amusement Device Inspection Procedures Scheme (ADIPS). The scope of ADIPS/LEAPS registration is as follows (Insert **X** as appropriate):

	<b>Design Review</b>	<b>Assessment of Conformity to Design</b>	<b>Initial Test</b>	<b>In-Service Annual Inspection</b>
<b>Mechanical</b>				<b>X</b>
<b>Structural</b>				<b>X</b>
<b>Machine Dynamics</b>				
<b>Electrical</b>				
<b>Control Systems</b>				<b>X</b>
<b>Hydraulic</b>				<b>X</b>
<b>Pneumatic</b>				<b>X</b>
<b>Civil</b>				
<b>NDT</b>	<b>X</b>			

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All systems, processes and procedures are operated within the requirements of BS EN ISO/IEC 17020:2012 “*Conformity assessment - Requirements for the operation of various types of bodies performing inspection*”.

Gilbert Engineering & Inspection Services fulfils the organisational and independence criteria of a type A Inspection Body as defined in Annex A of ISO 17020:2012 The inspection body and its personnel shall not engage in any activities that may conflict with their independence of judgement and integrity in relation to their inspection activities. In particular, they shall not be engaged in the design, manufacture, supply, installation, purchase, ownership, use or maintenance of the items inspected.

## **1.2 Terms and Definitions**

In this application of the ISO17020 Standard:

ADIPS/LEAPS shall mean The Amusement Device Inspection Procedures Scheme

NAFLIC shall mean The National Association For Leisure Industry Certification

HSG 175 shall mean HSG 175: Fairgrounds and amusement parks – Guidance on safe practice

Further definitions are as found in HSG 175: Fairgrounds and amusement parks – Guidance on safe practice. Glossary, pp. 62 – 64.

## **2. ORGANISATION**

### **2.1 Organisation/Structure**

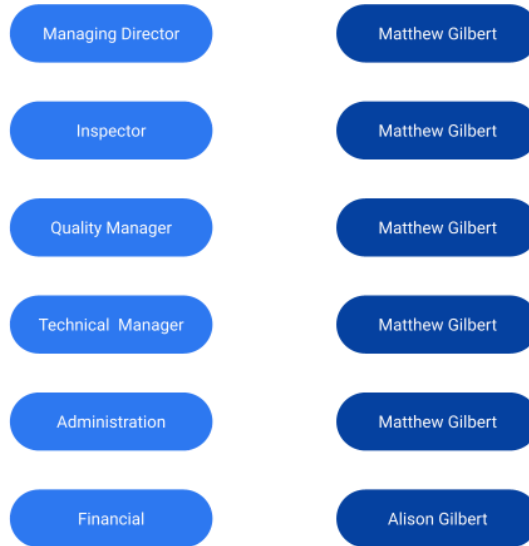
Gilbert Engineering & Inspection Services is a sole trader that was formed in 2021 by Matthew Gilbert. Its sole purpose is to perform mechanical inspection and issue certification for amusement devices under ADIPS & LEAPS.

The main organisation chart for Gilbert Engineering & Inspection Services is available within the quality documentation as organisation chart 1



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## Organisation Chart 1 – Gilbert Engineering & Inspection Services (Typical type A body)



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## 2.2 Roles and Responsibilities

### Technical and Quality Manager

The person responsible for the Technical Manager and Quality Manager roles within Gilbert Engineering & Inspection Services shall be the Managing Director. He shall be responsible for ensuring the QMS of Gilbert Engineering & Inspection Services remains current and relevant. Their responsibility as Quality Manager and the necessary, experience, qualifications, education and knowledge are defined within that person's job description

### Technical Manager

The role of Technical Manager role for Gilbert Engineering & Inspection Services is carried out by the Managing Director

The responsibility as Technical Manager and the necessary experience, qualifications, education and knowledge will be defined within that persons' job description.

### Deputies

Gilbert Engineering & Inspection Services is a sole trader organisation and therefore a deputy role can not be performed. In the absence of the Managing Director, no work will be undertaken.

## 2.3 Legal Status

Gilbert Engineering & Inspection Services (sole trader) and is 'Site Based'

Gilbert Engineering & Inspection Services  
5 Hillside  
Great Barugh  
Malton  
North Yorkshire  
Yo176uz  
Telephone no: 07814416211  
E-mail address: [info@gilbert-engineering.co.uk](mailto:info@gilbert-engineering.co.uk)  
Website: [www.gilbertengineeringservices.com](http://www.gilbertengineeringservices.com)

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## 2.4 Insurances

The company carries professional indemnity insurance of £2million (£2 million per claim), public liability of £5 million, and employers' liability of £10 million.

Insurance levels have been discussed and agreed with Markel Direct and are deemed suitable for the level of business risk applicable to the company's activities.

Up to date copies of [insurance certificates](#) and [Employers Liability](#) are displayed on the [Company Website](#) and stored in the Gilbert Engineering Google Drive, these are available from the technical manager upon request.

## 2.5 Resources

The company is a sole trader organisation and therefore operates with only one Inspector and generally undertakes all inspection work itself, In the absence of this inspector no work shall be undertaken

Gilbert Engineering & Inspection Services has sufficient competence and resource in-house to ensure they have the ability to make professional judgements and conduct competently the type, range and volume of inspections required by their customers.

## 3. MANAGEMENT

### 3.1 Quality System, policy and procedures

This QM describes how Gilbert Engineering & Inspection Services fulfils the requirements of BS EN ISO/IEC 17020:2012. The manual describes where relevant documentation may be found to support the quality and management systems of Gilbert Engineering & Inspection Services All documentation within the organisation is available to all employees in google drive and memory stick form.

The Quality Policy [OP005A](#) is available in the QMS. The suitability and relevance of the quality policy shall be reviewed annually as part of the Management Review.

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Gilbert Engineering & Inspection Services have an on-going commitment to continuous improvement which is driven by a series of quality objectives. The business and quality objectives are agreed annually and constantly reviewed, objectives are Specific Measurable, Achievable, Time Related and Realistic (SMART). The relevant objectives for this financial year, along with the current progress towards those objectives, may be found on the Company Drive

### **3.2 Document Control and Record Keeping**

The way that Gilbert Engineering & Inspection Services controls all documentation is defined in [OP002](#) and control of records is defined in [OP003](#).

### **3.3 Supervision and Monitoring of Staff**

Gilbert Engineering & Inspection Services is a sole trader organisation. Inspections are only undertaken by the Managing Director (as Inspector/ Technical Manager). Therefore no supervision or monitoring of staff is undertaken.

If, at a later period, Gilbert Engineering & Inspection Services employs additional inspectors, they shall be monitored and supervised as per specific ADIPS, LEAPS procedures and guidance at the time.

### **3.4 Purchasing and contracted services or supply**

All services or supply provided by third parties likely to have an impact on inspection integrity for the IB's customers are subject to competency and quality review according to procedure [OP004](#). Customers are informed at the point of order placement where there is an intention to subcontract any part of an inspection.

### **3.5 Internal Audit and Management review**

Gilbert Engineering & Inspection Services is a sole trader organisation and therefore it is difficult to effectively perform internal audits. Therefore the company policy is the ADIPS / LEAPS external QMS audit shall act as the internal audit function for the company according to procedure [OP005](#)

Gilbert Engineering & Inspection Services is a sole trader organisation and therefore a management review minute cannot be undertaken. However, the MD sets out a policy and objectives [OP005A](#) each year based on a review of the last 12 months activities.

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### 3.6 Corrective and Preventive action

Gilbert Engineering & Inspection Services records all non-conformances identified as a result of internal/external audit, internally identified non-conformance during normal activities, customer feedback and complaints received, using a common reporting structure. Actions to rectify non-conformance from all routes is documented and handled in accordance with procedure [OP007](#).

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## **4 INSPECTION PROCESSES**

### **4.1 Design and development of non-standard inspection procedures**

Where inspection requirements are defined in Regulations, Standards, inspection schemes or contracts, those requirements always take precedence over all others. If an inspection procedure is not available as a published international, regional or national Standard; has not been developed by a reputable industry body or derived from scientific text or journal; then Gilbert Engineering & Inspection Services have the competence in-house and/or have worked with an industry body to develop their own appropriate procedures and have fully documented them. Should Gilbert Engineering & Inspection Services deem that any inspection procedures developed by others are inappropriate; they will not proceed and inform the customer immediately.

Gilbert Engineering & Inspection Services bespoke inspection procedures are located in the QMS and are maintained up to date by periodic review.

Much of the fairground and amusement park industry is made up of non-standard or bespoke equipment for which national or international inspection Standards do not exist. The main guidance documents for this type of equipment are:

[HSG175 “Fairground and amusement parks – Guidance on Safe Practise”](#)  
[EN 13814:2004 “Fairground and amusement park machinery and structures – Safety”](#)  
[ADIPS “Safety of Amusement Devices: Non-Destructive Testing” \(2012\)](#)  
[ADSC “Safety of Amusement Devices: Part 1 Inspection - In Service Annual Inspection” \(2008\)](#)  
[ADSC “Safety of Amusement Devices: Design”, second edition \(2006\)](#)

### **4.2 Enquiries**

All enquiries for inspection work are recorded initially in the Outlook Calendar. The exact requirements of the customer is recorded, timescales and technical expertise agreed and relevant reference to Statutory and Regulatory requirements are also added to the Outlook Calendar.

Unless a longer term contract has been agreed with a customer, Gilbert Engineering & Inspection Services provides the customer with a copy of their Standard terms and conditions within which the IB conducts its business. When a purchase order or inspection request has been received, the enquiry is vetted whereupon the technical competence required is considered utilising the competency matrix [OP008](#). Work is only allocated to an authorised Inspector with the correct competence.

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### 4.3 Inspection

Where inspection requirements are defined in Regulation, Standards, inspection schemes or contracts, those requirements always take precedence over all others. Gilbert Engineering & Inspection Services ensure that inspection procedures are kept up to date in the light of changes to Standards, technical bulletins, guidance or safety related updates issued by industry bodies. (Further guidance may be found in HSG175 Clauses 140 to 143 and 146 to 148 and at the ADIPS / LEAPS website).

The latest versions of inspection procedures are strictly controlled in accordance with procedure [OP002](#) and made available to all Inspectors at the point of use via Paper, Internet, Smartphone or flash drive.

Inspection procedures are risk assessed and likely hazards for the specific equipment identified. Suitable control measures and safe systems of work have been developed and are included as an Appendix to the inspection procedures/documented separately. Further guidance may be found in HSG 175 Section B and appendices 1, 4 and 6.

When conducting Tests (NDT, electrical etc.) on customer's fixed or mobile equipment, methods and procedures comply with industry Standards (where available) and/or are agreed in advance with the customer. Further guidance is available from HSG175, Appendix 5 and Safety of Amusement Devices: Part 1 Inspection - In Service Annual Inspection.

Gilbert Engineering & Inspection Services prefers that preparation of customer's equipment for inspection or test is completed by the customer to avoid potential liability for damage to customer's property during preparation. Should the customer request Gilbert Engineering & Inspection Services to carry out preparation, the terms of that preparation are agreed and documented during the enquiry process prior to any work proceeding. Further guidance may be found in HSG175 clauses 136 to 139.

When carrying out sampling of multiple items, Gilbert Engineering & Inspection Services use sound statistical techniques to ensure a representative sample is taken except when conducting NDT work, when the documented NDT schedule for the equipment is followed. Items/sub-assemblies supplied to Gilbert Engineering & Inspection Services for testing or inspection are uniquely identified and stored so as to prevent damage or deterioration. Further information may be found in HSG175 Clauses 144 and 145.

Inspection observations are recorded on the previous inspection report/the Inspector's notebook/FastField app (signal depending). Inspection notes collected during the inspection are transferred promptly by manually copying the observations onto the clients report and then will be stored in the clients device folder.

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Data (photographs, dictation, video, results, readings etc.) gathered automatically or via instrumentation is transferred/downloaded promptly to a secure storage location google drive to prevent loss and checked for integrity following transfer.

#### **4.4. Preparation of reports and Issuing the DOC**

For the majority of customers, Gilbert Engineering & Inspection Services produces a written report using the required ADIPS / LEAPS template. However, the nature of Gilbert Engineering & Inspection Services business is such that bespoke reports are common. All reports reflect the exact customer's requirements and that of ADIPS / LEAPS. Gilbert Engineering & Inspection Services has a "house" style and format that is followed by all Inspectors and includes the mandatory requirements of ISO17020 clause 7.4.2 and the relevant elements of ISO17020 Annex B. Further information is available from HSG175 Clauses 149 to 151.

Gilbert Engineering & Inspection Services often fulfils the responsibility of Appointed Inspection Body (AIB) as defined in HSG175 Clause 126. There are times when the ride owner may employ Inspectors from other IBs to conduct different disciplines of the overall inspection. However, ISO17020 requires that the overall responsibility remains with the IB issuing the report (and in this application of the Standard, this means the DOC). Therefore, if Gilbert Engineering & Inspection Services is the AIB, Gilbert Engineering & Inspection Services confirms that other IBs are ADIPS / LEAPS registered before relying on inspection reports from that contractor during production of the DOC and/or verifies the competence of non-ADIPS/LEAPS contractors irrespective of the body instructing that contractor, using procedure [OP004](#) (Appendix 1).

### **5 TECHNICAL COMPETENCE**

#### **5.1 Personnel competence and training**

Gilbert Engineering & Inspection Services is a sole trader and has a structure designed to encourage Continued Professional Development (CPD). Job descriptions are defined and include the requirements for education, training, qualifications and experience relevant to each role and the ADIPS/LEAPS group at which they are registered. Roles and responsibilities for each type of job are similarly defined.

Records of education, training, qualifications and experience are retained for each individual within the QMS in personal files.

Detailed CVs are kept current for the sole Inspector. A competency matrix is maintained on the ADIPS/LEAPS website. A combination of current CVs and the competency matrix are used by the Inspector when assessing the technical requirements of an enquiry to match the Inspector to the technical competence required.



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Periodic review of the established Inspector shall be recorded, with agreed objectives documented by ADIPS/LEAPS. Inspectors are only authorised to conduct inspections once ADIPS/LEAPS has confirmed the competence of the Inspector and issued them with an Authorisation Certificate documenting the extent of his authorisation and any limitations to that authorisation.

The IB's commitment to training and development is defined in the Quality Policy with training and competence assessment fully defined in [OP008](#) (Appendix 1).

## **5.2 Facilities, equipment and infrastructure**

Equipment and facilities are suitable for inspections to be carried out in a competent and safe manner.

The company shall maintain a home office at the company address for permanent staff that meets the requirements of the Workplace (Health, Safety and Welfare) Regulations 1992.

Work equipment provided for use by employees shall be supplied, maintained and inspected according to the requirements of The Provision and Use of Work Equipment Regulations 1998 (PUWER).

Lifting equipment provided for use by employees shall be supplied, maintained and inspected according to the requirements of The Lifting Operations and Lifting Equipment Regulations 1998 (LOLER).

Personal protective equipment (PPE) shall be provided to meet the requirements of The Personal Protective Equipment Regulations 2002.

Measurement equipment and tools shall be uniquely identified, purchased, stored, maintained, inspected, verified and (where appropriate) calibrated according to procedure [OP009](#).

## **6 CONFIDENTIALITY, IMPARTIALITY AND INTEGRITY**

### **6.1 Impartiality and Integrity**

The IB policy on impartiality is defined in [OP001](#) (Appendix 1). All inspectors are bound by their respective Institution's Code of Ethics and agree to abide by that code. The IB has further clarified its expectations concerning the independence, impartiality and integrity of any advice, report or information provided by the IB employees within the "Employee Code Of Conduct". [OP001A](#) This defines all key policies and codes of conduct for IB employees.

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## 6.2 Confidentiality

All third party information gathered as a result of the IB's inspection activities is held secure (flash drive/cloud) and in confidence according to procedure [OP003](#) (Appendix 1) except where disclosure is enforced via legal privilege.

Information or complaints received from third parties concerning the IB's customers shall be held in strict confidence.