SITE survey. APP

SITE SURVEY REPORT

Calibration and Verification Record

Prepared for	Castlefield Gear Systems Ltd
Date	25 Sep 2026
Site	Stonebridge works, Telford
Prepared by	H. Brennan

FORM

Calibration and Verification Record

1. Record details and scope

Project	Stonebridge works, Telford: torque wrench verification
Client or organisation	Castlefield Gear Systems Ltd
Site or premises address	Unit 9, Stonebridge Business Park, Telford TF7
Record date	25 Sep 2026
Person completing the record	H. Brennan

This records calibration evidence and internal verification. It does not generate traceability, calculate measurement uncertainty or confer UKAS accreditation.

UKAS assesses calibration laboratories for competence within their accredited scope. Check the relevant scope and issued certificate. An internal record linking results is not itself an accredited calibration certificate. ISO/IEC 17025:2017 sets the competence requirements for calibration laboratories. Where the organisation works to ISO 9001:2015, clause 7.1.5 (monitoring and measuring resources) requires measuring equipment to be calibrated or verified at set intervals against standards traceable to international or national standards, identified to show its status, and protected from adjustments; when equipment is found unfit, the validity of earlier results must be checked.

2. Instrument and method

Instrument ID, model and serial number	TW-014, click-type torque wrench, 20 to 100 N m, serial 7731-B
Measurement range and intended use	20 to 100 N m, clockwise. Used for gearbox cover bolts set at 95 N m on line 2.
Calibration or verification method reference	Workshop verification procedure QP-17 rev 3, on bench torque tester BT-02
Provider and relevant accreditation scope reference	In-house verification. Bench tester calibrated externally by Ashdown Calibration Services, scope ref ACS-SCOPE-112

3. Evidence and results

Issued certificate, date and revision	Internal verification record CV-TW014-2609, 25/09/2026, rev 0
Reference standard and traceability record	Bench torque tester BT-02, certificate ACS-24918 issued 12/03/2026
Environmental conditions and method limitations	Workshop at 20 °C, dry. Clockwise only, matching use on the line. Three readings at each point, mean recorded.

Measurement point 1: 20 N m set, clockwise

Measurement point and parameter	20 N m set, clockwise
Actual result and unit	20.5 N m mean (+2.5%)
Acceptance criterion and source	±4% of set value, QP-17 table 2
Instrument and calibration reference	BT-02, cert ACS-24918
Comparison	Within criterion

Measurement point 2: 60 N m set, clockwise

Measurement point and parameter	60 N m set, clockwise
Actual result and unit	61.2 N m mean (+2.0%)
Acceptance criterion and source	±4% of set value, QP-17 table 2
Instrument and calibration reference	BT-02, cert ACS-24918
Comparison	Within criterion

Measurement point 3: 100 N m set, clockwise

Measurement point and parameter	100 N m set, clockwise
Actual result and unit	104.8 N m mean (+4.8%)
Acceptance criterion and source	±4% of set value, QP-17 table 2
Instrument and calibration reference	BT-02, cert ACS-24918
Comparison	Outside criterion
Exception and response	Wrench reads high at the top of its range. Taken off line 2 and quarantined. Sent for adjustment on PO 30561.
Points recorded	3
Outside criterion	1
Unable to assess	0
Reported uncertainty and certificate reference	±1.0% of reading (k=2), from BT-02 certificate ACS-24918

4. Disposition

Instrument disposition	Quarantined

Out-of-tolerance impact, affected prior measurements and action	TW-014 was last verified on 26/06/2026 and used on line 2 since. Bolts may have been tightened above the 95 N m setting. NCR-0918 raised for quality to review the 14 batches built since then.
Acceptance basis and decision rule	Accept only if the mean at every point is within ±4% of set value. No guard band applied.
Next review or calibration due date	Re-verify after adjustment, before return to use. Then quarterly, next by 2026-12-31.
Status label and responsible owner	Red QUARANTINE label fitted, owner H. Brennan
Days to next calibration or review	98

5. Actions and review

Are further actions required?	Yes

Further action 1: Issue spare wrench TW-019 to line 2 after verification.

Action and evidence reference	Issue spare wrench TW-019 to line 2 after verification.
Person responsible	H. Brennan
Target date	25 Sep 2026
Action status	Completed
Completion evidence	TW-019 verified 25/09/2026, record CV-TW019-2609, all points within ±4%.

Further action 2: Review batches built with TW-014 since 26 June under NCR-0918 and decide whether rework is needed.

Action and evidence reference	Review batches built with TW-014 since 26 June under NCR-0918 and decide whether rework is needed.
Person responsible	P. Nair, quality engineer
Target date	7 Oct 2026
Action status	In progress

Further action 3: Send TW-014 for adjustment and calibration, PO 30561, then re-verify before use.

Action and evidence reference	Send TW-014 for adjustment and calibration, PO 30561, then re-verify before use.
Person responsible	H. Brennan
Target date	9 Oct 2026

Action status	Open
Outstanding limitations and information to pass on	Impact on earlier batches not yet decided, see NCR-0918.
Record status	Further work needed
Reviewed by	P. Nair
Review date	26 Sep 2026
Author signature	

Signing records the information entered. It does not itself certify legal compliance, remove a limitation or authorise unsafe work.