

Carbon Brake Disc Supplier EVALUATION CHECKLIST

A practical guide for procurement teams, engineering managers and OEM programme managers

Selecting the right manufacturing partner for carbon brake discs requires more than comparing prices. This checklist is designed to help you evaluate potential suppliers against the criteria that matter most for safety-critical applications, ensuring quality, reliability and long-term supply chain resilience.

Use this document during supplier audits, tender evaluations or as part of your procurement process.

1

Quality Management Systems

- Is the supplier certified to AS9100?
- Is the supplier certified to ISO 9001?
- Are quality management processes documented and regularly audited?
- Can they demonstrate continuous improvement initiatives?
- Are corrective and preventive action (CAPA) processes in place?

Notes

2

Carbon brake disc manufacturing capability

- Does the supplier have a dedicated carbon manufacturing facility?
- Do they have proven experience producing carbon brake discs for safety-critical applications?
- Can they manufacture both prototype and production quantities?
- Do they have the engineering expertise to support bespoke requirements?
- Can they provide technical guidance during product development?

Notes

3

Manufacturing processes

- Are manufacturing processes fully documented?
- Are process controls monitored throughout production?
- Are critical manufacturing stages validated?
- Does the supplier use specialist machining techniques, such as ultrasonic drilling, where required?
- Can they explain how process consistency is maintained between production batches?

Notes

4

Inspection and testing

- Are components inspected throughout the manufacturing process?
- Are dimensional inspections carried out using calibrated equipment?
- What non-destructive testing (NDT) methods are available?
- Can the supplier provide inspection reports with each batch?
- Are inspection records retained for future reference?

Notes

5

Material traceability

- Can the supplier provide full material traceability?
- Are components traceable throughout every stage of manufacture?
- Can complete sample traceability packs be supplied?
- Are production records securely maintained?
- Is batch identification clearly documented?

Notes

**6**

Supply chain resilience

- Is manufacturing based in the UK?
- Does the supplier have secure and reliable material sourcing?
- Can they offer realistic lead times?
- Are contingency plans in place to minimise supply disruption?
- Can they support ongoing production programmes?

Notes

**7**

Engineering support

- Is there direct access to experienced engineers?
- Can the supplier review specifications before manufacture?
- Are Design for Manufacture (DfM) recommendations offered where appropriate?
- Can they respond quickly to technical queries?
- Do they support collaborative product development?

Notes

**8**

Supplier audit questions

During your audit, ask the supplier:

- How do you control manufacturing consistency?
- What quality checks are performed throughout production?
- What non-destructive testing methods do you use?
- Can you provide a complete traceability pack for a sample component?
- How do you manage non-conforming products?
- How do you maintain consistency between prototype and production?
- How are process improvements identified and implemented?

Notes

Final supplier assessment

Evaluation Area

Rating (1-5)

Quality Management	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Manufacturing Capability	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Inspection & Testing	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Traceability	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Engineering Support	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Supply Chain Resilience	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

Overall comments

Recommended outcome

- ☐ **Approved supplier**
- ☐ **Approved subject to further review**
- ☐ **Further evidence required**
- ☐ **Not approved**

Need expert advice?

Selecting the right carbon brake disc manufacturing partner can significantly reduce programme risk and improve long-term performance.

If you would like an experienced engineering team to review your specification or discuss your requirements, get in touch with Wyken Engineering today.



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