REPLACEMENT PART EQUIVALENCE REVIEW / ILLUSTRATIVE CASE

Is this substitute part suitable for our application?

The management decision

Check mandatory characteristics individually. A high number of matching features can hide one mismatch that makes the proposed part unusable at the site.

A replacement part can look identical on a catalogue page and still have a different temperature limit, connection or material. If the original part is obsolete or delayed, it can be tempting to buy the closest match. This review helps the equipment owner identify which differences matter before ordering or installing a substitute. That is especially useful when a late delivery is already putting the schedule under pressure.

Worked example

Of 12 relevant part characteristics, nine match, two lack evidence and one differs. The owner needs to understand the difference and the unknowns before deciding whether the substitute is suitable.

Example figure	What it represents
9	Confirmed matches
2	Unconfirmed
1	Confirmed difference

What changes the answer

If the mismatch concerns a mandatory temperature limit, even eleven otherwise favourable checks would not establish suitability. Record the exact evidence or local decision required.

Replacement part equivalence review

What to commission

Compare one original part with one proposed substitute against the actual operating conditions and mandatory limits.

We compare the information available for both parts and record each requirement as matched, different or unconfirmed. We identify which differences could make the part unsuitable and what evidence a supplier or site specialist should provide.

How to judge the result

Each critical characteristic has supporting evidence, a recorded difference or a question for the supplier or site owner.

Compare availability and commercial terms after resolving the technical decision. The equipment owner and appointed specialists retain responsibility for final acceptance.

Decision worksheet

Project detail	Starting point for your team
Decision owner	Equipment owner and procurement lead. Name the person who will approve the next step.
Records to gather	Information on both parts, where the replacement would be used and the required operating limits.
Agreed output	A comparison matrix, recorded differences and a set of evidence requests.
Decision date	Record the deadline, any unresolved assumption and who will confirm it.

Discuss this case

Tell us which original part you cannot source and which alternative you are considering. Describe its role in the equipment and any urgent procurement deadline. Mention a mismatch you have already spotted so we can discuss what documentation or local check would help resolve it.

Email info@oxetc.co.uk and mention ENG-20. All figures in the worked example are illustrative.