ENGINEERING CHANGE IMPACT REVIEW / ILLUSTRATIVE CASE

How far does this equipment change reach?

The management decision

Trace the change to every affected equipment reference before approval. A single drawing can influence spare parts and local decisions across several installed units.

A design change may look small on one drawing but affect spare parts, operating instructions or several installed units. Finding those links early gives the project team time to plan updates and ask the right people for decisions. It also helps avoid a change being approved with incomplete information. The findings can also help maintenance and procurement plan for the parts and instructions they will need after the change.

Worked example

A change touches six drawings and three parts lists. Two drawings refer to one shared assembly. Count affected documents separately from physical components so teams can plan each part of the work.

Example figure	What it represents
6	Drawings affected
3	Parts lists affected
Reference	Shared assembly

What changes the answer

If one shared reference applies to four installed units, a single drawing change requires four local decisions. Check the affected population before estimating the implementation effort.

Engineering change impact review

What to commission

Trace one proposed equipment modification through its drawings, parts lists and affected installed units.

We follow associated components, operating assumptions and references across the files. We identify where the change could affect fit, operation or maintenance and note which consequences the responsible site specialists need to confirm.

How to judge the result

The change owner has a list of records to revise and site decisions to verify, with shared components identified.

Estimate document revision work and physical implementation separately. Include the teams that maintain shared parts and instructions when assigning follow-up.

Decision worksheet

Project detail	Starting point for your team
Decision owner	Engineering change owner. Name the person who will approve the next step.
Records to gather	The proposed change, drawings and parts lists, and any operating requirements it could affect.
Agreed output	A list of affected equipment and documents, with decisions and owners identified.
Decision date	Record the deadline, any unresolved assumption and who will confirm it.

Discuss this case

Tell us what is changing, what prompted it and when it needs approval. Identify any shared part or similar installation you already know about. Mention whether the change is still being considered or already has a proposed drawing or supplier solution.

Email info@oxetc.co.uk and mention ENG-07. All figures in the worked example are illustrative.