

Circular Design Evaluation Worksheet

Product Information

Field	Description
Product name	
Product category	
Product version / model	
Manufacturer	
Design team	
Evaluation date	
Evaluator(s)	

Product Architecture Overview

Question	Notes
What are the main product modules?	
What materials are used in each module?	
Which components are expected to wear out first?	
Which components are most valuable for reuse?	
Which components are most difficult to disassemble?	

Disassembly Scoring Assessment

Score each dimension from 0 to 5.

Dimension	Key Question	Score (0–5)	Observations
Fastener accessibility	Are fasteners easily accessible?		
Connection type	Are reversible connections used?		
Disassembly time	How quickly can main components be separated?		
Tool requirements	How complex are required tools?		
Component independence	Can modules be removed independently?		
Material separation	Are materials easily separable?		

Score Summary

Metric	Result
Total score (max 30)	
Disassembly score (0–100) ((total score/30)*100)	
Circular design level	

Suggested interpretation:

Score	Level
0–20	Poor disassembly performance
21–40	Limited circular design
41–60	Moderate circularity
61–80	Good circular design
81–100	Excellent circular design

Repairability Assessment

Question	Yes / No / Partially	Notes
Are key components replaceable?		
Are spare parts available or standardised?		
Are repair instructions available?		
Can repairs be performed without specialised tools?		
Are common failure points easily accessible?		

Refurbishment Potential

Question	Yes / No / Partially	Notes
Can aesthetic components be replaced?		
Can structural components be reused?		
Can the product be economically refurbished?		
Is refurbishment time reasonable?		
Can refurbished products re-enter the market?		

Material Recovery Assessment

Question	Yes / No / Partially	Notes
Are materials clearly identifiable?		
Are composite materials avoided where possible?		
Can materials be separated without destruction?		
Are recycling pathways available for key materials?		

Improvement Opportunities

Issue Identified	Design Improvement	Expected Impact

Recommended Design Actions

Priority	Action	Responsible
High		
Medium		
Low		

Integration with Circular Product Data

Information to document	Status
Material composition documented	
Disassembly instructions documented	
Spare parts catalog available	
Digital Product Passport compatibility	