

# DIN EN 45560:2025-04 (E)

## Method to achieve circular designs of products

---

<b>Contents</b>		<b>Page</b>
European foreword .....		3
Introduction .....		4
1	Scope .....	6
2	Normative references .....	6
3	Terms, definitions and abbreviated terms .....	6
3.1	Terms and definitions relating to circular product design .....	6
3.2	Terms and definitions relating to environment .....	8
3.3	Terms and definitions relating to product and resource .....	9
3.4	Terms and definitions relating to recycling .....	10
3.5	Terms and definitions relating to durability .....	11
3.6	Terms and definitions relating to lifetime extension .....	12
3.7	Abbreviated terms .....	13
4	Principles and concepts in support of circular product design .....	14
4.1	Circular product design core principles .....	14
4.2	Design principles for narrowing, slowing, and closing material flows .....	14
4.3	Material value hierarchy .....	16
4.4	EN 4555X-4556X series of standards and the material value hierarchy .....	18
5	Transition by an organization towards circularity .....	20
5.1	Circular economy as part of the vision, mission, and strategy .....	20
5.2	Circular goals of the organization .....	20
5.3	Measuring the organization's transition towards circularity .....	21
6	Circular product design requirements and guidance .....	22
6.1	Circular product design implementation process .....	22
6.2	Circular targets of the organization .....	23
6.3	Circular product attributes .....	27
6.4	Building a circular product design matrix .....	29
6.5	Trade-offs considerations in circular product design .....	32
6.6	Circular product design requirements .....	35
7	Communication .....	45
7.1	Communication of the circular goals of the organization .....	45
7.2	User information and guidance on circular aspects of the product .....	45
Annex A (informative) Background information .....		46
A.1	Considerations of sustainable development goals .....	46
A.2	Circular product design extends environmentally conscious design .....	46
Annex B (informative) Strategies contributing to slowing, narrowing and closing material flows .....		48
B.1	Examples of strategies for narrowing material flows .....	48
B.2	Examples of strategies for slowing material flows .....	49
B.3	Examples of strategies for closing material flows .....	51
Annex C (informative) Circular product attributes explained .....		53

<b>C.1</b>	<b>Circular product attribute groups, rationale and objectives .....</b>	<b>53</b>
	<b>Bibliography .....</b>	<b>56</b>