

CONCEPT Design to Dispose (D2D) is a process engineering approach that aims to optimize the entire lifecycle of a product, from its initial design to its final disposal. This approach involves considering the entire lifecycle of a product during the design phase, with the goal of minimizing environmental impact, reducing waste and energy consumption, and maximizing resource efficiency. Ultimately, the goal of D2D is to create products that are sustainable, efficient, and environmentally responsible throughout their entire lifecycle.

BACKGROUND

Design to Dispose (D2D) is a relatively recent concept, emerging in the 1990s as a response to growing concerns about the environmental impact of products and manufacturing processes. Today, D2D is an important part of many engineering approaches and is recognized as an essential component of sustainable manufacturing and product design.



REAL WORLD CONNECTIONS

One example of Design to Dispose (D2D) is the University of Nebraska-Lincoln's (UNL) efforts to incorporate sustainability principles into the design and construction of their buildings. UNL has implemented several strategies to reduce the environmental impact of their buildings. These include designing for energy efficiency, reducing water consumption, and minimizing waste generation during construction.

The new UNL College of Business building was designed with sustainability in mind from the beginning. The building features energy-efficient technologies, such as a geothermal heating and cooling system, efficient lighting, and a building automation system that optimizes energy use. The building also incorporates sustainable materials and construction practices, such as using locally sourced materials and reducing waste during construction.