

Comprehensive Description of Industrial Design

Industrial design is the profession that determines the form of a manufactured product, shaping it to fit the people who use it and the industrial processes that will produce it. Industrial designers work to make our lives more comfortable, pleasurable and efficient. By studying people at work, at home and in motion, they create products like office chairs that promote proper posture; kitchen tools that are more comfortable for even elderly hands; and toys that provide safe play and learning for all children. In particular, industrial designers deal with the parts of the product that humans interact with, striving to give universal access to products that are ecologically responsible and safe. And always they give a product that distinctive elegance that makes us want to use it.

The industrial designer's work goes beyond products to include packaging, exhibits, interface design, environments and in some cases corporate identity. Moreover, with information technology becoming increasingly complex, industrial designers are working to make the software driving so many products easier to use.

Industrial designers look for innovative and better ways to do things. They approach their work as problem solving asking, "How do people want to travel." rather than. "Let's build another car." To answer such questions, industrial designers explore a broad range of alternatives through drawings and models, steadily refining their designs as they test them against the user's needs and manufacturer's capabilities.

The term, "industrial design", was coined early in the 20th century to describe for mass produced goods the creative role previously performed by the artisan. In keeping with the complexity of mass production, industrial designers work with the full range of other professions that are involved in conceiving, developing and manufacturing products, including experts in marketing, mechanical, design and manufacturing engineers, and software programmers, to name a few. Together with human factors specialists, industrial designers conduct usability testing to ensure that a product meets user needs, wants and expectations, and they often rearrange internal components in order to make products more efficient to manufacture and easy to assemble, service and recycle.

Preparation for practicing industrial design requires a Baccalaureate degree in that field. Industrial design links knowledge about technology and the visual arts with knowledge about people. In addition to a thorough understanding of the physical sciences, engineering principles, ergonomics, aesthetics and industrial materials and processes, industrial designers should be well grounded in the social sciences, such as psychology, sociology, and anthropology, and the communication arts, such as speech, photography, video, print and electronic media.

Through extensive publicity about the role industrial design plays in market success, and though the examples of companies like Braun, Samsung, Apple, Starbucks and Target, the industrial design profession has grown dramatically. Business Week magazine annually publishes IDSA's Industrial Design Excellence Awards (IDEA) in some depth and newspapers like the Wall Street Journal, New York Times and Washington Post have increased the frequency of their coverage of industrial design. In fact, a reputation for industrial design excellence, fueled by Business Week's annual list of companies that have won the most IDEA's, has become an enviable measure of corporate success. It reflects the fast-growing awareness that products must be well designed in order to compete successfully and earn customer satisfaction and loyalty.