



## NSF Exhibit Component Terminology

**Additive:** produced by addition - the act or process of adding; direct chemical combination of substances into a single product. *www.m-w.com*

**Assembly:** the fitting together of manufactured parts into a complete machine, structure, or unit of a machine; a collection of parts so assembled. *www.m-w.com*

**Deformation:** a change in shape due to an applied force. *en.wikipedia.org*

**Design:** the creative art of executing aesthetic or functional designs; to create, fashion, execute, or construct according to a plan. *www.m-w.com*

**Fastener:** a hardware device that mechanically joins or affixes two or more objects together.

**Industrial design:** an applied art whereby the aesthetics and usability of products may be improved. Design aspects specified by the industrial designer may include the overall shape of the object, the location of details with respect to one another, colors, texture, sounds, and aspects concerning the use of the product ergonomics.  
*en.wikipedia.org*

**Join:** to put or bring together so as to form a unit. *www.m-w.com*

**Manufacture:** to make into a product suitable for use; to make from raw materials by hand or by machinery. *www.m-w.com*

The transformation of raw materials into finished goods for sale. *en.wikipedia.org*

**Plastic:** capable of being molded or modeled; applies to substances soft enough to be molded yet capable of hardening into the desired fixed form. *www.m-w.com*

**Product:** anything that can be offered to a market that might satisfy a want or need.

*en.wikipedia.org*

**Subtractive:** constituting or involving subtraction; to take away by or as if by deducting; to take away (an amount) from a total. *www.m-w.com*

**Die:** (additive, deform, subtractive) a metal block that is used for forming materials like sheet plastic and sheet metal.

*en.wikipedia.org*

**Extrusion:** (deform) manufacturing process where a material is pushed and/or drawn through a profile die to create long objects of a fixed cross-section. Hollow sections are usually extruded by placing a pin or mandrel in the die. Extrusion may be continuous (producing indefinitely long material) or semi-continuous (repeatedly producing many shorter pieces). *en.wikipedia.org*

**Injection Molding:** (additive) a manufacturing technique for making parts from plastic material. Molten plastic is injected at high pressure into a mold, which is the inverse of the desired shape. The mould is made from metal, usually either steel or aluminum, and precision-machined to form the features of the desired part. *en.wikipedia.org*

The process of forcing melted plastic in to a mold cavity. *www.what-is-injection-molding.com*

**Mold:** (additive) a hollowed-out block that is filled with a liquid like plastic, glass or metal. The liquid hardens or sets inside the mold, adopting its shape. *en.wikipedia.org*

**Vacuum Forming:** (deform) a sheet of plastic is heated to a forming temperature, stretched onto or into a single-surface mold, and held against the mold by applying vacuum between the mold surface and the sheet. *en.wikipedia.org*