

New Product Control Flow Chart

PTO - Product Take Over

Product Development with Marketing direction present product to company. Product model available unless otherwise agreed. Official start to commit company resources.

PPA - Project Plan Approval

Meeting headed by Engineer and Designer assigned to project. Held to present development plan for product to involved departments.

ENG. REV. - Engineering Review

Meeting headed by Engineer/Designer assigned to project. All departments having the opportunity to verify that concerns presented at PPA have been incorporated into design. After meeting detailed drawings and patterns/sculptures started.

ENG. REL. - Engineering Release

Meeting headed by Engineer to provide management the opportunity to make a final evaluation of design, cost, and schedule of product before tool start. Generally, hard copies and/or patterns and release drawings are complete at this point.

Pattern/Hard Copy Sign Off

Occurs after patterns or hard copies have been dimensionally inspected and approved.

Start Patterns/Sculpting

Marked the day that work begins on patterns or sculpting. If above combined milestone is applied to a project having both sculpting and patterns, the earlier start date is recorded.

Wax Sign-Off

Occurs when the sculpting is approved.

Pattern/Hard Copy Complete

Marks the day that the last pattern or hard copy is completed.

Quote Drawing Distribution

Drafting releases part drawings and Bill of Materials for quoting purposes.

Release Drawing Distribution

Drafting issues part drawings and final Bill of Materials for production.

Photo Sample to Packaging

The day that the sample for packaging and catalog photography has been signed off by all parties and is turned over to packaging.

New Product Control Flow Chart (Cont.)

Tool Start

The date that a tool maker receives all of the input that he requires from TKP in order to begin tools.

First Shots

The day that the limiting mold has run at the tool site. (Generally, a two hour run.) Parts should meet TKP prints and should be good enough to make dimensional inspection effective.

First Build

Performed by Engineering (or offshore counterpart) with first shot parts. 55 toys are built and submitted to Quality Assurance for evaluation (abuse, life, and aging). Engineer will also submit units to his own battery of tests. The purpose of First Build is to form a basis upon which to write E.C.O.'s to correct unforeseen function, reliability, and safety problems.

Release Packaging Film

Completion and sign-off of positives and chomalins needed by vendors to produce printed packages.

Greige Goods EP

The day 20 sewn samples are submitted to Q.A. for evaluation. Samples must be sewn from fabrics which are of same construction as production. This pilot confirms that fabric and design are sound.

EP (Engineering Pilot)

Conducted by Engineering and Manufacturing Engineering with other team members on prototype of a production line. First Engineering Pilot occurs after first round of E.C.O.'s are incorporated into tools. Full submission of 65 toys are given to Q.A. Additional Engineering Pilots will be run and submitted until Product Integrity (PI) and Manufacturing Engineering requirements are met.

EP Sign-off

Engineering Pilot Sign-off (EPSO) occurs after a successful "First Engineering Pilot" ("FEP") is achieved. Minor problems may exist, but none that require design changes. Major responsibility for product line shifts from Engineering to Operations and Liaison Engineering. Product is considered approved for production quantities of parts to be released, ordered, and molding begun.

PP (Production Planning)

Debugs assembly line process, trains production personnel, and ensures product integrity is maintained under production conditions. Allows Operations a final check that product is ready for production before getting more manpower.

New Product Control Flow Chart (Cont.)

PS (Production Start)

Continuous assembly of finished product on production line.

OBS (On Board Ship)

Day first shipment occurs.

DOA (Date of Arrival)

Date shipment arrives at TKP facility.

Packout Start

Beginning of packout of an assortment.

Available to Ship

Day at least 5,000 units released to finished goods inventory.

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