

Helpful Hints for Project Management Planning

PROJECT STEPS (required to some extent for every new product, be it simple or complex, potentially much more than the below for a very complex project; in some cases the order may need to be adjusted):

- SALES
 - identify the need for a new product development project (typically upon sale of a new die/product or package of dies/products)
 - communicate the new opportunity to management
 - notify Project Manager of details
Quote review with purchase order. Resolve any discrepancies.
Anything with price implication or serious capability question needs to be covered as soon as possible. Unfortunately, this can be missed in quote/purchase order review and may not be determined until QA approval of BOM/Router.
 - make entries into item master and price list
 - enter sales orders
Just prior to this step would be our intention to accept the order, although we may acknowledge receipt but request some change or clarification.
On new customer projects we should add credit check and any other administrative details not covered in purchase order.
 - *[throughout]* stay abreast of progress and keep all parties, most especially the customer, fully informed

 - PROJECT MANAGER
 - determine the scope of the project and work with managers to name the project team (typically sales, QA, engineering and, if appropriate, machining; may have more for complex task)
 - ensure that all verbal agreements made to this point by sales are clearly recorded
 - see that proper personnel visit with customer (preferably at their plant)
 - quickly establish a plan with a timeline (clearly stating activities, responsibilities, deliverables and milestone dates)
 - identify the job orders required, including the interactions between them
 - *[throughout, working with clerical help]* closely monitor the timeline and address anything that puts that timeline in jeopardy, if necessary adjusting project timeline and/or taking corrective action
 - *[throughout]* ensure that all parties, most especially the customer, remain fully informed
On any question affecting timeline and requiring customer input.
 - *[end of project]* conduct after-action review of the project

 - QA MANAGER
 - initiate communication with customer QA
 - identify and solicit any information needed from customer
 - perform formal risk identification
 - Define risks: Product-related risk? Credit-related risk? Risk of our failure?"
 - develop the quality plan
 - *[when completed by quality engineering, forging engineering and machining engineering]* review and approve standard job order(s), including BOM(s), router(s) and possibly spec-ID(s)
 - *[upon completion of first article run]* coordinate with customer QA regarding first articles and take appropriate action
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- **QUALITY ENGINEERING**
 - review specs and determine necessary process steps
 - identify the need for any subcontract suppliers and solicit quotations
Product (part) subcontract requirements should have been addressed during quote phase.
 - press for completion and review/approval of standard JOs, including BOMs, routers and spec-IDs
This is one of the most important steps, maybe the most important. Scheduling, consequently our commitment and pricing implications are determined in this step.

- **FORGING ENGINEERING**
 - model development
 - simulation
 - prints
 - provide weights, rates, etc. for standard job order(s), including BOM(s), router(s) and possibly spec-ID(s)
 - Initiate standard BOM(s), router(s) and possibly spec-ID(s)

- **MACHINING ENGINEERING**
 - provide machining weights, rates, etc. for standard job order(s), including BOM(s), router(s) and possibly spec-ID(s)
 - programming
 - machining simulation
 - fixture design

- **TOOL MANUFACTURE**
 - acquire necessary materials
 - dies
 - hot tooling
 - cold tooling
 - fixtures

- **SCHEDULING AND MANUFACTURING**
 - process first article and production job order(s), being sensitive to possibility of possible errors in sequence (i.e., delay between first article and production JOs)