

Rev:
7/02/06

Engineering Specifications

Project: _____ Tracking No: _____ Date: _____

1. Is a sketch, drawing or 3D model attached? Yes ☐ No ☐

Reference Drawing: _____

2. Was a mock-up built? Yes ☐ No ☐

3. *Theoretical costing sheet to be attached. Costing sheet to be in Engineering's standardized format (Excel).*

Does costing sheet include the following?

BOM Yes ☐ No ☐Material Cost Yes ☐ No ☐Labor Cost Yes ☐ No ☐Capital Cost Yes ☐ No ☐Cost for Special Handling Yes ☐ No ☐

4. List consideration required for the following:

Design for Manufacturability

Design for Serviceability

Design for Installation

5. Attach Issues List
6. Attach Gantt Chart / Project Schedule

Completed by _____ Date: _____

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Define

Date:

Product Costing

Total

Freight In at 5%

Material, Labor, & Burden:

Development Cost:

Research Supplies:

Engineering Time:

Other:

10

Development Cost + Capital: \$0

2

3

Issues List

Project: _____ **Tracking No:** _____ **Date:** _____

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

Completed by _____ **Date:** _____

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Feasibility

Project: _____ Tracking No: _____ Date: _____

1. Do we have the manufacturing capability to produce product?
If No, why? Yes ☐ No ☐
- _____

2. What are the capacity limitations for the product?
List each process and additional capacity product requirements.

Process	Requirements
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____
6. _____	_____
7. _____	_____
8. _____	_____

3. Will additional manufacturing space be needed? Yes ☐ No ☐

4. Do we have the skill and technology to design and produce?
If No, why? Yes ☐ No ☐
- _____

5. Any special environmental or safety requirements?
If Yes, what? Yes ☐ No ☐
- _____

6. Should this be a **Make** or **Buy** item? _____
7. Overall Feasibility Assessment? (1,2,3,4) (1 = low, 4 = high) _____

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Resource Plan

Project: _____ Tracking No: _____ Date: _____

Design

1. Product Engineering Hours _____
2. Tooling Engineering Hours _____
3. Prototype Testing Hours _____
4. Machine Design Hours _____
5. Industrial Engineering Hours _____
6. Packaging Engineering Hours _____
7. Patent Hours _____

Build

1. Tooling Build Hours _____
2. Machine Build Hours _____
3. Product Testing Hours _____

Implement

1. Engineering Hours _____
 2. Programming Hours _____
 3. Equipment Set-Up Hours _____
 4. Manufacturing Hours _____
- List Equipment Needed _____
- List People Needed _____

Completed by _____ Date: _____

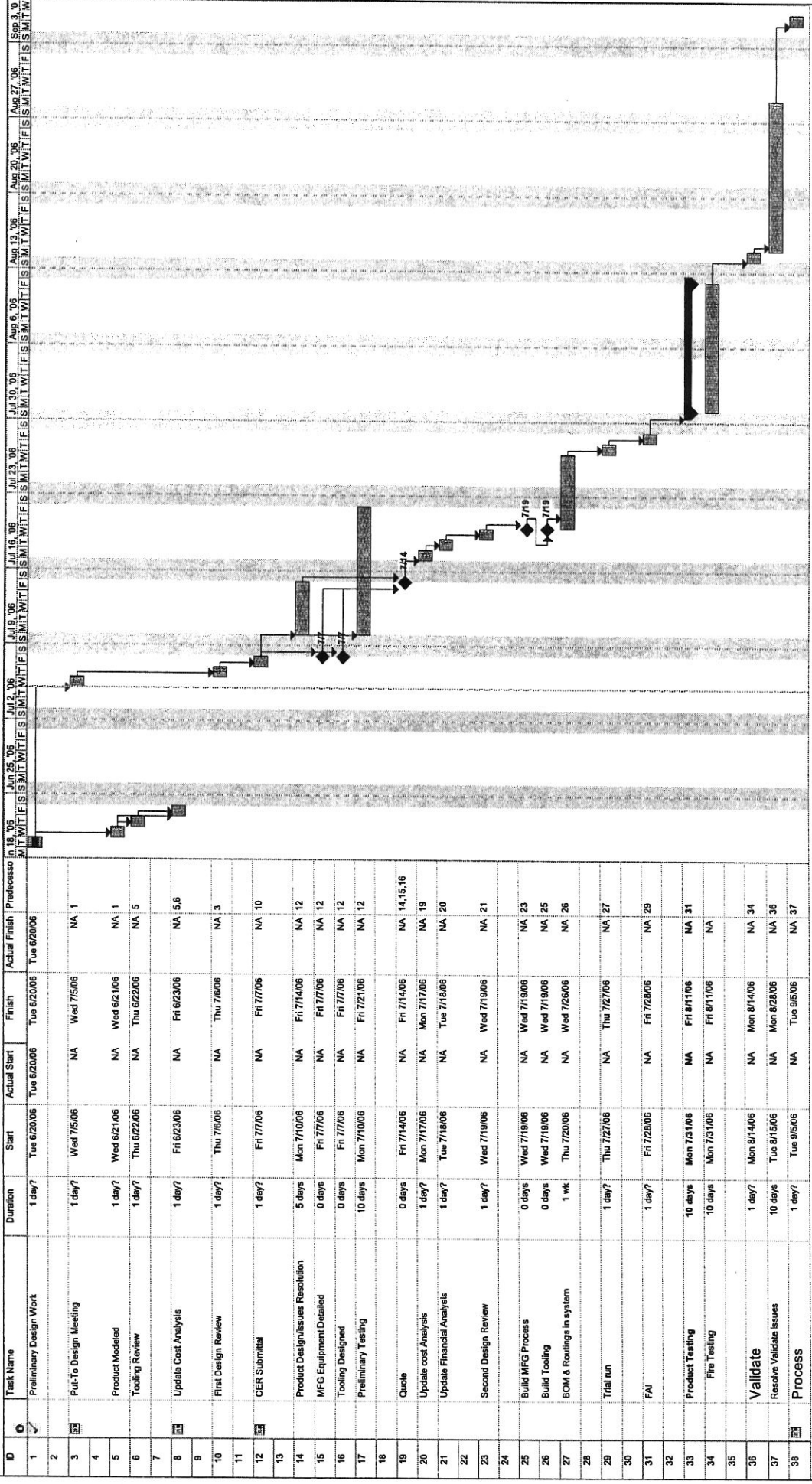
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ID	Task Name	Duration	Start	Actual Start	Finish	Actual Finish	Predcessor
1	Preliminary Design Work	1 day?	Tue 6/20/06	Tue 6/20/06	Tue 6/20/06	Tue 6/20/06	
2	Put-To Design Meeting	1 day?	Wed 7/5/06	NA	Wed 7/5/06	NA 1	
3	Product Modelled	1 day?	Wed 6/21/06	NA	Wed 6/21/06	NA 1	
4	Tooling Review	1 day?	Thu 6/22/06	NA	Thu 6/22/06	NA 5	
5	Update Cost Analysis	1 day?	Fri 6/23/06	NA	Fri 6/23/06	NA 5,6	
6	First Design Review	1 day?	Thu 7/6/06	NA	Thu 7/6/06	NA 3	
7	CER Submittal	1 day?	Fri 7/7/06	NA	Fri 7/7/06	NA 10	
8	Product Design/Issues Resolution	5 days	Mon 7/10/06	NA	Fri 7/14/06	NA 12	
9	MFG Equipment Detailed	0 days	Fri 7/7/06	NA	Fri 7/7/06	NA 12	
10	Tooling Designed	0 days	Fri 7/7/06	NA	Fri 7/7/06	NA 12	
11	Preliminary Testing	10 days	Mon 7/10/06	NA	Fri 7/21/06	NA 12	
12	Quote	0 days	Fri 7/14/06	NA	Fri 7/14/06	NA 14,15,16	
13	Update cost Analysis	1 day?	Mon 7/17/06	NA	Mon 7/17/06	NA 19	
14	Update Financial Analysis	1 day?	Tue 7/18/06	NA	Tue 7/18/06	NA 20	
15	Second Design Review	1 day?	Wed 7/19/06	NA	Wed 7/19/06	NA 21	
16	Build MFG Process	0 days	Wed 7/19/06	NA	Wed 7/19/06	NA 23	
17	Build Tooling	0 days	Wed 7/19/06	NA	Wed 7/19/06	NA 25	
18	BOM & Routings in system	1 wk	Thu 7/20/06	NA	Wed 7/26/06	NA 26	
19	Trial run	1 day?	Thu 7/27/06	NA	Thu 7/27/06	NA 27	
20	FAI	1 day?	Fri 7/28/06	NA	Fri 7/28/06	NA 29	
21	Product Testing	10 days	Mon 7/31/06	NA	Fri 8/11/06	NA 31	
22	Final Testing	10 days	Mon 7/31/06	NA	Fri 8/11/06	NA	
23	Validate	1 day?	Mon 8/14/06	NA	Mon 8/14/06	NA 34	
24	Resolve/Validate Issues	10 days	Tue 8/15/06	NA	Mon 8/28/06	NA 36	
25	PROGRESS	1 day?	Tue 9/5/06	NA	Tue 9/5/06	NA 37	

Marketing Analysis with Key Customers

Project: _____ Tracking No: _____ Date: _____

1. Key customer or prospect _____
 - a. Are customers known? Yes ☐ No ☐
 - b. If customers are known, complete "If Yes" section.
 - c. Not known, complete "If No" section".
2. Is the key customer a current customer? (see below) Yes ☐ No ☐
3. **If YES:**
 - a. What are the total current sales to customer from Dunbarton's existing products? _____
 - b. What is the % of current sales from Dunbarton versus the potential sales? (sales we could gain) _____
 - c. What is the % of current sales from Dunbarton risking cannibalization? (sales transferred to new product) _____
 - d. What is the % of current sales we risk losing if new / improved product is not implemented? _____
4. **If NO:**
 - a. From who does the potential customer currently purchase this or similar products? _____
 - b. How much of this product or similar products does this potential customer purchase? _____
 - c. What is the % of these existing sales to other companies we could acquire by offering this product for sale? _____

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Put to Design (PTDS) Meeting (chaired by Director of Technology)

Project: _____ Tracking No: _____ Date: _____

Required Attendees:

Dir. of Technology _____ VP Sales and Mktg _____
 CFO _____ Project Manager _____

Agenda and Required Documents
VP Sales and Marketing Document Review:

Updated Market Analysis Yes ☐ No ☐
 Updated Competitive and Risk Analysis Yes ☐ No ☐

CFO Review:

Updated Financial Analysis Yes ☐ No ☐

Director of Technology Review of Current Backlog Status and Priority:

Product Specification Yes ☐ No ☐
 Design Backlog Yes ☐ No ☐
 Prioritized Backlog based on updated FOM Yes ☐ No ☐

General Discussion

Review updated Market and Financial Analysis
 Review Product Specification
 Review anticipated completion dates against the Market Requirement
 Issues outstanding

Recommendation

Pass ☐ Fail ☐

Estimated Start

Estimated Pilot

Design Date: _____

Run date: _____

Director of Technology: Initial below and submit a copy to Project Manager.

I accept the project and have the information required to move forward. _____ Init.

I do not have the required information to move Forward. Explain below _____ Init.

I conditionally have the required information to move Forward. Explain below _____ Init.

Explanation of decision to conditionally or not move forward

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