

CREATING A PROTOTYPE – PHYSICAL GOODS

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Types of Prototypes

Focused

(reflect just one or a few dimensions of performance)

Test rigs

Mock-ups

Comprehensive

(fully functioning product)

1. Proof of concept
2. Alpha
3. Beta
4. Pre-production

Source:

Karl T. Ulrich and Steven D. Eppinger, Product Design and Development, McGraw-Hill, Sixth Edition, 2015.

Why build prototypes?

For you:

- Learn, solve problems, answer questions.

For others:

- Prove that your solution works technically.
- Prove that “the dogs will eat the dog food.”
- Communicate what you are doing.
- Demonstrate you can implement. It’s not “just an idea.”



BLEND 8

Moisturizer M1

Compare to Creme de La Mer

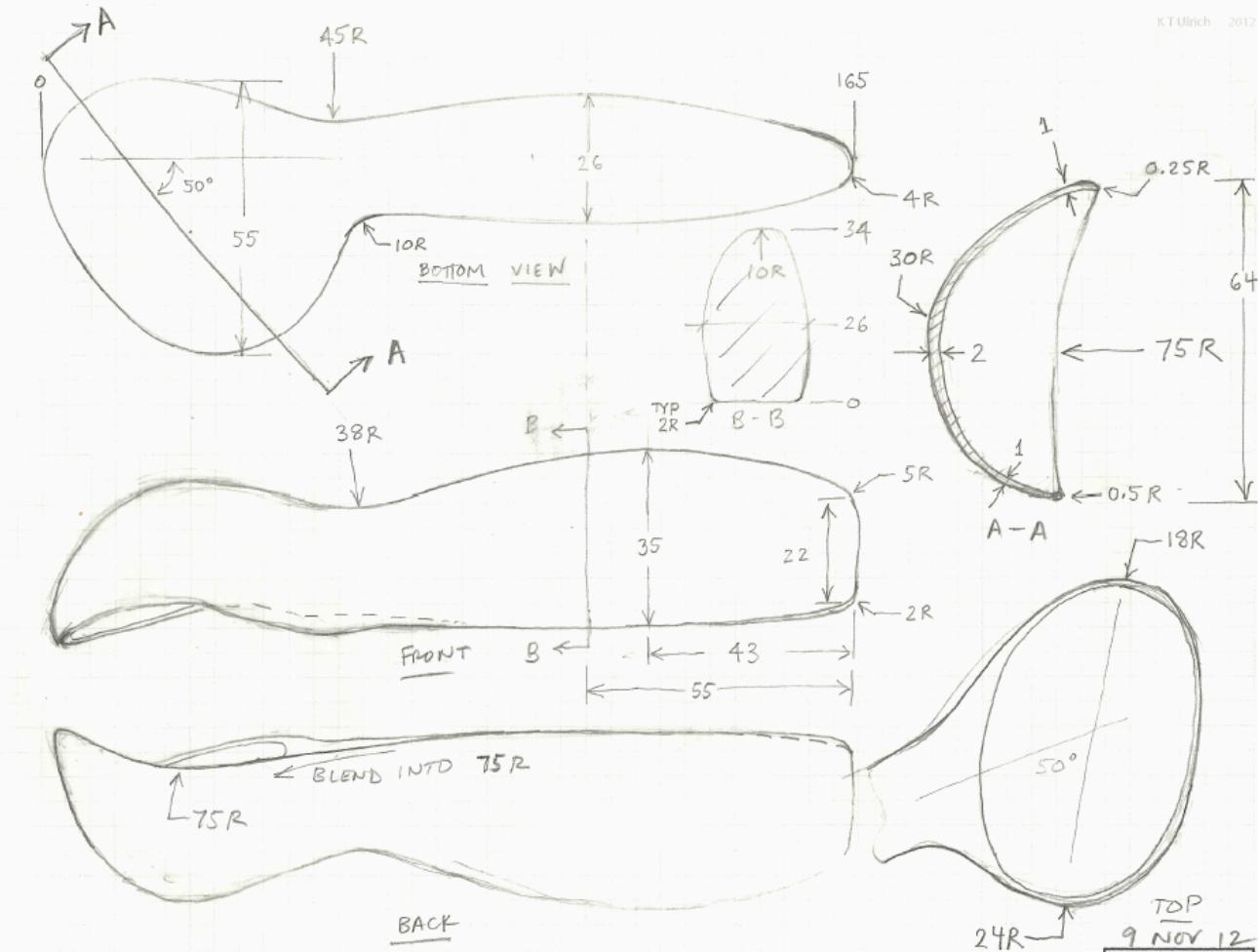
2.0 oz (48ml)

Creme de La Mer is a trademark of La Mer Technology, Inc.











Actual creation of prototype by
3D Printing (Shapeways, Inc.)





Final product produced and sold by Belle-V.





Working with a Supplier for Prototypes

- Two basic approaches:
 1. ODM (“original design manufacturer”)
 - The factory has the know-how.
 - Their staff create a design based on your requirements.
 - Advantage is that they know how to design for efficient production.
 - Design work is often “free.”
 - Disadvantage is that you have nothing proprietary.
 2. Factory producing to your proprietary design.
 - Does your enterprise’s advantage come from a unique, proprietary design?
 - If yes, then you have to own your design.
 - Design should be in-house (or possibly with close partnership with a consulting firm). Then work with a factory to produce your proprietary design



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