

*Transforming novel ideas  
into market-ready products,  
one solution at a time.*

**PRODUCT****LOGIC** Your  
Innovation  
Partner



**IF YOU ARE DEVELOPING A CONSUMER PRODUCT, A SPORTING GOODS PRODUCT OR MEDICAL DEVICE, PRODUCTLOGIC IS THE RESOURCE TO CONSIDER.**

**We provide product design, prototype fabrication and engineering refinement to companies of all sizes.** We have worked with inventors for more than 30 years bringing their product ideas to their full potential.

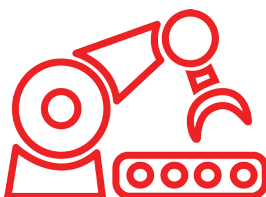
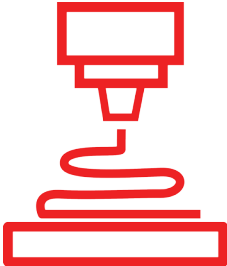
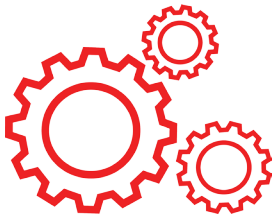
**Our services can meet you where you are in your development cycle,** whether you need a proof of concept model or are ready to explore manufacturing. We can assist with ideation, design refinement and engineering, create exploratory prototypes, and team with a patent attorney when you are ready. If manufacturing is your path we can source and cost production, and if you prefer to license your idea, we can help you develop your marketing and licensing materials.

*"ProductLogic has become an integral part of our team. They are researchers, designers, problem-solvers, and marketers all rolled up into one. They've got the 'big picture view,' plus an understanding of the entire design and manufacturing process. ProductLogic also saved us money."*

*—Sandra Perry  
Partner  
Allé Designs*

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# Our Process

**THE PROCESS OF DEVELOPING YOUR INVENTION INTO A MARKETABLE PRODUCT CAN BE OVERWHELMING, ESPECIALLY IF YOU ARE NEW TO IT.**

Therefore, we have created this guide to walk you through it, step by step, and to provide you a better understanding of how we will work with you to ensure your product is living up to its full potential.

The following pages provide a detailed description of our process, and one that is typical of the path to a successful product.

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# Market Research & Brainstorming

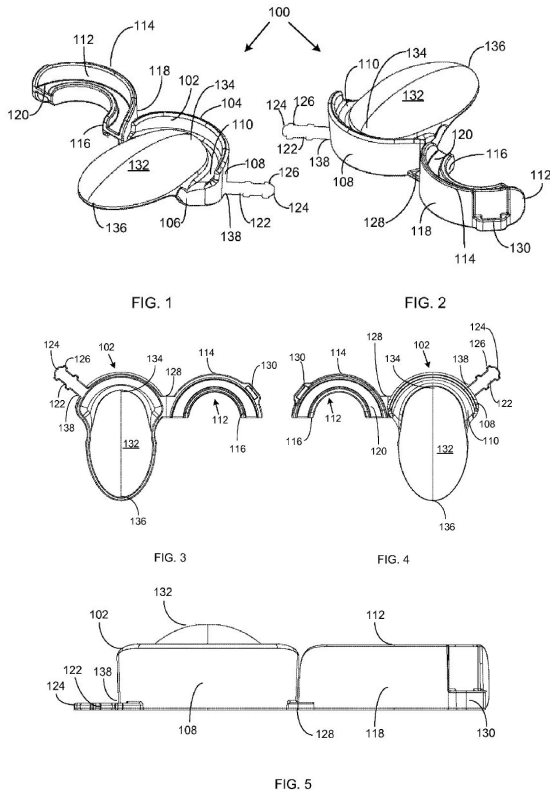
**THESE FIRST STEPS CAN MAKE OR BREAK A GREAT IDEA. WE START BY ASKING THE TOUGH QUESTIONS.**

How many people need and want this product? Is it greatly differentiated from others on the market?

**An assessment of related products** and a high level, keyword search will help to ensure you are not reinventing the wheel. We will refer you to a patent attorney if we have concerns. It can be quite disappointing to find out that your idea exists, but sometimes it leads to new variations or features, giving you a more novel product to move forward with.

Unfortunately not all product ideas make it past our research. We never want to deliver this message, but we do want you to be aware of the barriers to entry that you might face.

**Brainstorming** - This is where the fun begins! If we are clear to move forward we will analyze the functionality and usability of your concept, the customer profile and the opportunity for enhancement. If we can add other features or functions, we will improve its novelty and in turn, give it the differentiators your concept needs to be patentable and marketable.



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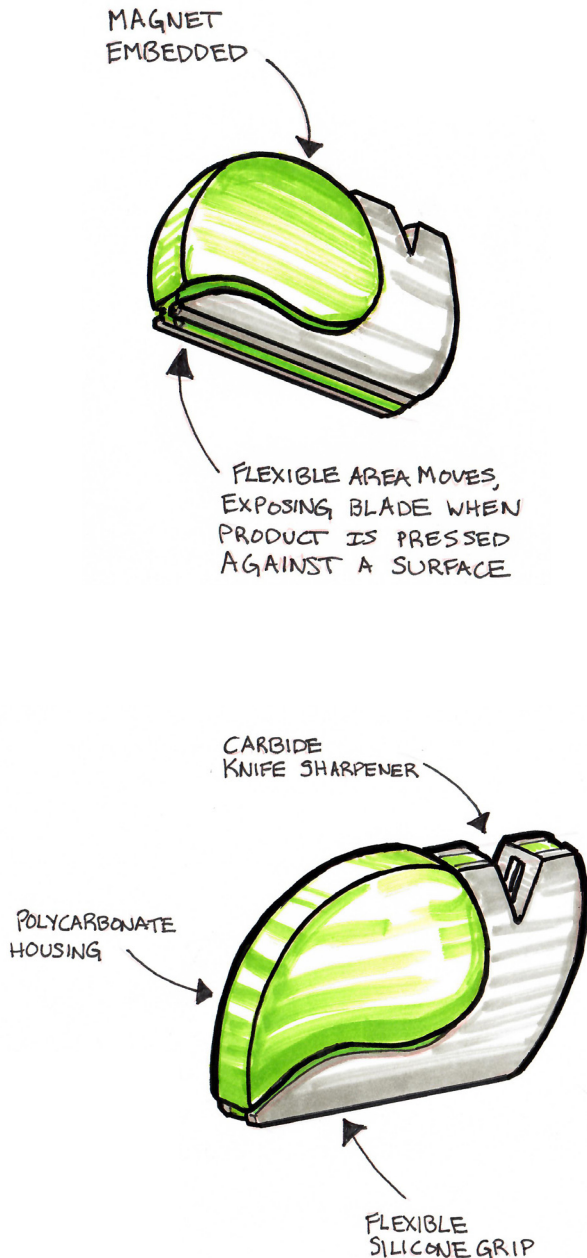
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# Concept Development

IN THIS STAGE, WE TAKE A DEEPER LOOK AT SOME OF THE IDEAS THAT HAVE EMERGED.

This is where we build on concepts that seem **a bit crazy** and figure out ways to make them real. Novelty and manufacturing efficiency are never far from our minds. Many of our initial ideas will be left behind as we refine your concept, but we will always share our thoughts, ask for yours and make sure your vision is carefully protected.

Besides novelty, features and production efficiency, we will focus on the User Experience, (UX) which is how a user naturally engages with the product and its ergonomics, or how the product is designed to meet the physical needs of the specific user. We will consider the form and function, the placement of visual icons, interactive features and how intuitive the product's use is. Let's not forget sustainability. By the end of this stage, we will have a strong product concept and probably a few rough prototypes to test usability and functionality.



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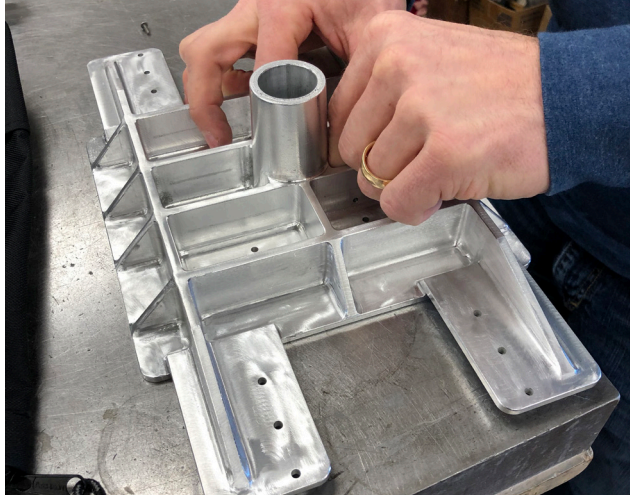
# Design Analysis

**IN THE DESIGN ANALYSIS STAGE, WE DEVELOP YOUR PRODUCT IN OUR 3D CAD SOFTWARE, SOLIDWORKS.**

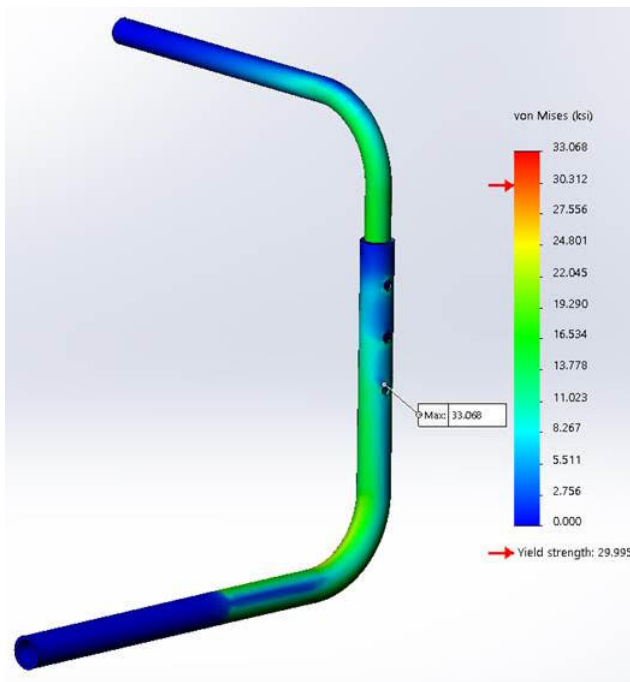
Sometimes this happens earlier in the process, but this is usually where we work out the function and mechanics necessary to create a working prototype.

We refine components, consider options for assembly and manufacturing efficiency, proper material usage, sustainability and of course cost effectiveness.

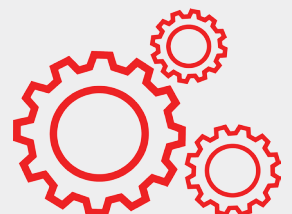
During this stage we take a deeper look at materials and we will start sourcing components for the prototype. We will do both Finite Element Analysis (FEA - virtual testing) and physical testing to confirm that the product is structurally sound. This helps mitigate future problems and liabilities, while also refining our material options. Down the road, this will save in production costs and optimize material selection.



*Assessing material options*



*Digital FEA Testing*



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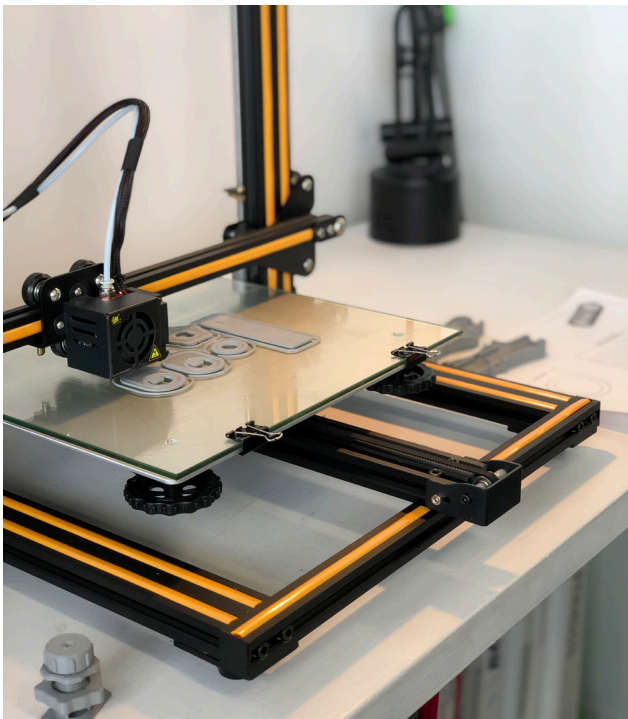
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# Proof of Concept Prototyping

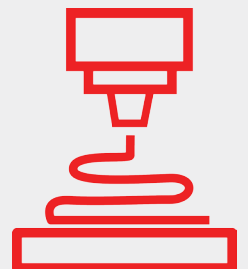
**THIS IS WHERE YOUR PRODUCT IDEAS BECOME VERY REAL AND TANGIBLE!**



**Custom parts will be made utilizing different prototyping methods**, including 3D printing, CNC machining, handmade parts, and purchased components. This process is iterative, and you will see multiple prototyped parts throughout the project while we work out problems from comfort to functionality and material usage. We would rather find problems early and pivot rather than fully build a prototype that does not meet all expectations. Typically at least 2 full versions of a product are built to work out all of the issues, test with users and to prepare for a successful product production.



**The first few prototypes will be built for functional assessment.** The surfaces may have the texture typical of a 3D print, and the electronics, if there are any, may not all be integrated. Later on your final prototype will be produced with surfaces and materials more similar to production, and with functioning features. These can be used for product photography and user evaluation.



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# Engineering Refinement

**IN THIS STAGE WE ARE MAKING THE FINAL REFINEMENTS TO THE PRODUCT SO THAT WE ARE PREPARED FOR PRODUCTION.**

**We evaluate every detail** to make sure the product works properly each time. The final prototype needs to meet all of your predefined requirements, such as regulatory standards, sustainability, user engagement and cost targets. These are all critical to the success of the product, regardless of whether you intend to produce it or license it.



*Assessing model for draft and moldability*



*Double checking dimensions and part fit*



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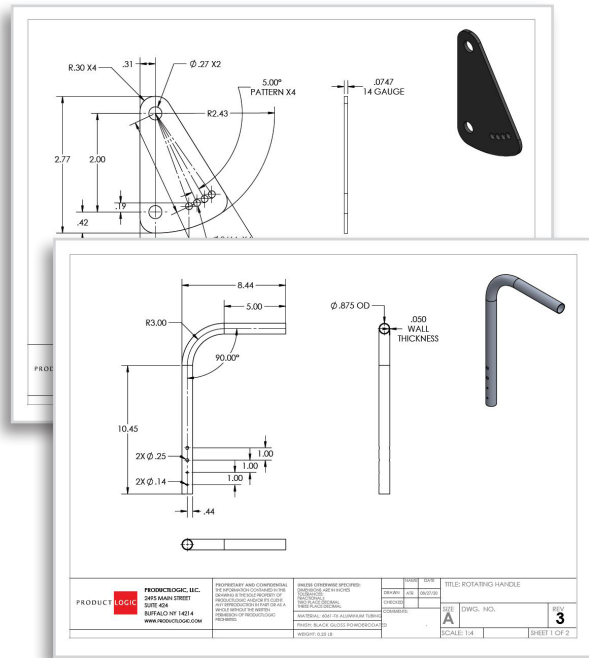
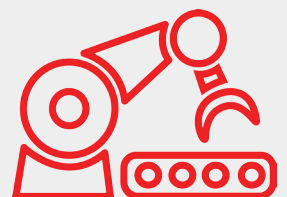
# Specifications & Production

**THIS IS THE FINAL STAGE, IN WHICH WE CREATE ALL THE NECESSARY SPECIFICATIONS AND TECHNICAL DRAWINGS TO PREPARE YOU FOR PRODUCTION.**

**A well defined set of specifications makes production run smoothly** and can also improve negotiations if you intend to sell or license your idea. We can identify appropriate manufacturers and will obtain production quotes if you prefer that we act on your behalf.

**Producing a product brings with it a whole set of other responsibilities** that may be new to the inventor. Marketing, packaging, regulatory testing and distribution are part of the process. ProductLogic will assist you in finding the local resources you need when the time comes.

**For those who decide they would rather license their product, we can help.** The CAD files we created for you can be used to create photorealistic images and can be combined with photography to beautifully depict the attributes of your product. Combined with the market research already conducted, a compelling promotional presentation or "pitch deck" can be created. If licensing ends up being your preferred path. We would be happy to show you examples.



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*"ProductLogic takes the time to understand what you are asking for and how it fits into the bigger picture. They always offer suggestions and solutions that you wouldn't think of. We couldn't do what we've done without them."*

—Brian Peterson  
VP/CTO  
Garwood Medical



## Final Thoughts

**AT THE BEGINNING OF A CONVERSATION ABOUT YOUR INVENTION, WE WILL ALWAYS ASK OUR CLIENTS WHAT THEIR END GOALS ARE.**

**What do you want as an outcome?** Do you want to start a business around your product idea? Do you have a company in mind that you would like to work with or sell the idea too? Or do you just want a prototype to evaluate next steps? These are all important questions and there are no wrong answers. They simply guide the design process and define how we can support you.

**We start with the end in mind**, which is a novel and cost-effective product with news-worthy features and happy end-users. You may not know what you want to do with the final product when the prototype process is finished, but whether it be the start of a new business, an addition to a product line or a product that will be licensed. We will treat the development of that product with the same care every step of the way.

**We invite any and all questions**, and always enjoy discussing the potential of an idea. Contact us to obtain an NDA (Non-Disclosure Agreement) and we can get the conversation started!

Our 1st 1-hour consultation is free of charge.

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# The Profile of a Successful Product

**THIS CHECKLIST SHOULD BE YOUR NORTH STAR, YOUR GUIDING SET OF PRINCIPLES.**

These important product features should be referred to regularly to keep you on track for a successful product launch!

## **A SUCCESSFUL PRODUCT. . .**

- Is Highly Differentiated / Unique / Novel
- Provides Value / Meets a need
- Communicates Instantly
- Contains Important Demonstrable Features
- Is Impactful & Newsworthy
- Possesses Significant Volume Potential
- Can Become a Product Line
- Has Brand Identity



## Notes

[illegible]

# Questionnaire

**BEFORE WE SPEAK, WE ASK THAT YOU TAKE TIME TO REVIEW THESE QUESTIONS.**

You do not need to have answers to all of these questions, or have anything written. These questions are examples of what we will ask in our initial consultation to determine where you are on your product development journey.

- Who is your target customer or user?
- Do you know your market size?
- How much do you think your product should cost at retail?
- What type of research have you performed?
- Do you plan on patenting this product?
- Have you had a patent search done?
- When did you start developing this product?
- Who have you shown this idea to, and when?
- If you have shown it, what kind of user feedback have you gotten on your concept?
- Do you have other ideas for this product? (other variations or line extensions?)
- Do you want to manufacture or license your idea?

**Contact us - we look forward to hearing from you!**