

ROTO, MAAK

BY: TEMAAK

MAKE ONE TO MAKE MANY

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FOR IMMEDIATE RELEASE

INTRODUCING: The RotoMAAK

Rotational Casting, also known as Rotocasting or Hollow Casting, is a molding process for creating many kinds of items, mostly hollow in form and typically made of plastic. The RotoMAAK rotocaster was born out of the desire to have a process by which Makers could scale up production of parts using rotational casting technology when 3D printing a small production run becomes cost and time prohibitive.



HOW DOES IT WORK?

The RotoMAAK rotational caster consists of a hollow mold and a rotational device that spins the mold in a uniform motion. The hollow mold is filled with a charge or shot weight of air cure resin. It is then inserted into the RotoMAAK where it is slowly rotated (usually around two perpendicular axes) causing the liquid resin to uniformly disperse and stick to the walls of the mold where it slowly cures over time into the shape of the part. In order to maintain an even thickness throughout the part, the mold continues to rotate at all times during casting phase and curing phase. The continuous rotation of the mold also avoids sagging or part deformation.

The rotocasting process was applied to plastics in the 1940's, but in its early years was rarely used due to a slow process and restriction to a small number of plastics. Over the past two decades, improvements in process control and developments with air cure resin and plastic powders have resulted in a significant increase in its usage for part production.



View The **KICKSTARTER** At:

<https://www.kickstarter.com/projects/rotomaak>

Website: www.rotomaak.com

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I have been inventing and building projects for as long as I can remember. If there was a need, I would create a solution. Throughout high school I was always in shop class, building trades, 4-H Club and Boy Scouts. Being an Eagle Scout requires you to complete a community service project. For that project, I organized and scheduled the replacement of steps along the side of the scout cabin that had become deteriorated. This was the first project I had full control of and it taught me a lot. I am a 10 year 4-H member and during those 10 years I have completed wood working projects, rocketry projects, and model building projects. Since graduation I have been heavily involved in computer design, CNC machining, stone carving, and construction.

The Maker movement has reignited my passion to create. With the RepRap 3D printing availability, I have supplied local businesses with samples of thier product prototypes. A particular project with a local business, required multiple copies of the same part that was initially 3D oriented. The time involved to 3D print each copy would have made it impossible to meet the deadline. My skills and experience in the rotational molding industry with large plastic parts, led me to research "Desktop Rotational Machines" and soon I realized there was nothing viable on the market. This created the need for me to design and prototype the RotoMAAK and after successfully building and casting my parts, I realized I had the solution for rapid reproduction of parts on a desktop and affordable scale.