

The Products of Tomorrow

MAGNET (Manufacturing Advocacy & Growth Network) is committed to elevating the presence, strength and future of manufacturing at the local and regional levels. It attracts and promotes “I wish I’d thought of that” manufacturing concepts and finds ways to make them happen. It does this by encouraging the spirit of innovation, finding funding for new products and exploring means and methods for global market distribution. Plus, MAGNET acts as an incubator that gives birth to new and vibrant companies with thought-provoking ideas. The organization serves as the voice for area manufacturers and is a major Northeast Ohio entrepreneurial attraction. Here are five products MAGNET’s Product Design and Development Group has helped introduce.

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Swiss+Tech BodyGard 7-in-1 Platinum Edition

Brookstone and the Home Shopping Network agree this 1.5-ounce, battery-operated lifesaver is one of those “gotta-have-it” items that qualifies as an affordable gadget and a great stocking stuffer. And while we admit that the word “gadget” might lead some to believe this is a guys-only tech toy, we think even the ladies will love the Swiss + Tech BodyGard 7-in-1 Platinum Edition.

Here are seven very good reasons why everyone needs these emergency preparedness tools:



1. A Seat Belt Cutter. You’re trapped in your car after a crash and there’s no way out. Sure, there’s a chance you might have scissors or a nail file with you, but isn’t it easier to reach for the keychain?

2. Digital Pressure Gauge. With today’s gas prices, anyone who knows anything about cars will tell you that maintaining proper tire pressure is a cost-saving must, plus it’s digital so it’s easy to read.

3. Emergency Alarm. So many reasons, so little space. Let’s just say that this one is a no-brainer.

4. LED Flashlight. This is a not-just-for-cars item. Whether you’re reading maps on a dark road, finding keys or tripping over the kids’ dropped toys, this is an essential.

5. Glass Breaker. The doors are jammed and you’re stuck inside! Never fear, the glass breaker is here.

6. Emergency Flasher. We know we’re supposed to carry these in our trunk, but ... This is the ultimate safety tool, especially for problems on the highway.

7. Thermometer. We wouldn’t have thought of this, but it would certainly come in handy if the radiator is overheating.

and development of technical products being developed across Ohio. MAGNET was awarded \$1.3 million.

Creating a team. MAGNET provided engineering expertise, patented the design and developed working prototypes, the University of Toledo’s Department of Bioengineering developed the optical system and the UT College of Medicine conducted clinical trials. Valtronic Technologies USA, a company specializing in medical and high-quality industrial products, handled commercialization, manufacture and distribution.

Licensing a local company to sell it. One hundred units have been sold to date. MAGNET is currently seeking a national distributor.

Valtronic Advanced Photobiotherapy Device

Not many of us know that 1.8 million Americans suffer from bed sores (aka pressure ulcers) or that \$1.3 billion a year is dedicated toward their treatment. MAGNET reduced the spending and relieved the pain of millions of people by creating a product from scratch, finding the money for research and development and ultimately producing the Valtronic Advanced Photobiotherapy Device. Home care clinics and nursing homes can now afford this portable device at \$20,000 a unit, where its predecessor’s \$70,000 price tag put sore treatment out of reach.

Obtaining funding. MAGNET competed for funding through the Ohio Department of Development’s Third Frontier Program. The program focuses on providing monies for research

FireGround Compass

Halcyon has just begun marketing the FireGround Compass and has already received orders from the Department of Homeland Security’s Tech Solutions Department. This potentially lifesaving product retails for \$99.50. Steve Nash, Halcyon COO and vice president of product development, has been in fire service for more than 25 years. He is a career battalion chief for the city of Solon’s Fire Department and holds a bachelor’s in fire and safety engineering technology. Here, he answers our questions.



Q: How did you come up with the concept for the FireGround Compass?

A: The methods currently being used have been in use for years. Typically, at a fire, the commander stays outside and the firefighters go inside. They often will become disoriented or have difficulty communicating. If they use the traditional method of following the hose, they might go the wrong way. They can’t use a GPS because there’s no satellite access. In more recent years, fire fighters might bring a compass with them or mark the outside of a building. We’ve created a device that orients them to where they are in the building.

Q: How does this work?

A: The firefighter calibrates the FireGround Compass before entering the building. They turn the knob to the A position, which gives them the location of the front of the building. They turn the knob to a second position so they have another location pinpointed. The FireGround Compass actually lights up; They stand behind the arrow, and they can find the front door and another exit point.

Q: Have you ever needed a product like this?

A: I myself have been lost in a burning building. It throws you into a panic. You have to calm yourself down and keep your wits about you.



Personal Snow Plow

Make your winter more relaxing: Clean your driveway while exerting limited effort with the Personal Snow Plow.

Designer/entrepreneur and Northeast Ohio native Matt Freeman’s invention, which works with nearly 15 different makes and models of cars, easily installs on the nose of your car with simple bungee-like cords. The two-part design uses recycled, low-density polyethylene and an easy-to-remove, replaceable blade made of durable ABS.

Freeman succeeded at building this plow only after numerous — and sometimes wacky — attempts, such as attaching his wife’s ironing board to the front of his car. Freeman obtained funding for the project through low-interest loans obtained from the County Department of Development.

The plow is ideal in Cleveland, where snowfall averages range from four to six inches. Then simply fold up the Personal Snow Plow after each use and store it in your garage or shed.



Accessmount Removable Fixture Mounting System

Even if you had three electricians on hand, one to change the bulb and two to hold the ladder, the Accessmount Removable Fixture Mounting System is still one honey of a tool. Now casinos, hotels, dorms, commercial buildings — literally any place with high ceilings — have easy access to overhead surface-mounted

light fixtures, making maintenance a breeze. The application is incredibly simple: The fixture is removed with a pole, the bulb or fluorescent light is easily replaced and, thanks to four magnets, just as easily returned to its high perch. The product works so well and has become so popular that Accessmount is currently de-

veloping a second product for track lighting installations. Inventor/entrepreneur Nelson Pitlor admits the final product wasn’t exactly what he had in mind when he presented his concept to Magnet PPD. “At one point, I thought we would go one way and the guys at PDD pushed very hard to have it go a completely different di-

rection. In hindsight, they were completely right.” While on the market for only two years, the Removable Fixture Mounting System has won *Building Magazine’s* Editor’s Choice Award, *Design Journal Magazine’s* Platinum ADEX Award and recognition from the Illuminating Engineering Society of North America.