

Field Ready

Disaster Relief + Humanitarian Aid

The Mission

Field Ready makes aid supplies in disaster zones, getting around bottle-necked global supply chains. They meet humanitarian aid and reconstruction needs by transforming logistics through technology, design, and engaging people in new ways.

Field Ready works with local manufacturers to make useful items when and where they are needed, while also working to increase disaster resilience by strengthening local manufacturing, innovation hubs, and makerspaces.

The Work

Field Ready is pioneering innovative approaches to the toughest challenges, regardless of the sector. The impact of this is dramatically improved efficiency, which makes aid faster, cheaper, and better. Examples of their work in the field include 3D printed umbilical cord clamps in the Haiti earthquake recovery, heavy-lift airbags for search and rescue within collapsed buildings in Syria, and rotomoulded toilets for cyclone recovery in Vanuatu.

Other examples include training refugees in Jordan to make items, like wheel chair cushions and grab rails, to help others with disabilities and making soap bars with toys inside to help form hand-washing habits for children in Bangladesh refugee camps.

Open Challenge

Fluid Warmer:

A fluid warmer is a medical device used in healthcare facilities to warm intravenous fluids. The liquids are brought to body temperature levels in order to prevent hypothermia. Commercial fluid warmers are either cost prohibitive in many contexts or are not available for purchase.

A low-cost reliable fluid warmer made out of easily sourced parts can be implemented around the world in many contexts that lack access to safe fluid warming technology.

This challenge seeks designs that focus on improving the overall safety and ease of the electronics control system for fluid warmers by making them easily constructible for those with limited components or knowledge of electrical systems.

Versatile UV Wand for curing UV adhesive:

UV Cure Adhesives are an incredibly powerful tool for fabrication and prototyping that cure within seconds of UV-A exposure. The technology is commonly used in at-scale production of medical devices, automotives, and in aerospace applications. Standard benchtop UV cure stations cost more than a 1,000 USD. Traditional technologies for UV curing do not take advantage of LED light, as affordable UV LED technology has only matured in recent years.

This challenge seeks designs for an open source, cost effective, and energy efficient UV curing tool that can easily be fabricated in remote areas. Cheap, easily built manufacturing tools open Field Ready to more modes of manufacturing, which can increase efficiency and quality and allow them to provide better aid.



Open Challenge

Versatile Heat Sealer and Welder:

Heat sealing or heat welding plastics is a powerful technology that opens up many doors for prototyping and manufacturing. With this capability, Field Ready could seal plastic wrap for packaging of items to deliver, heat weld sheet Polyethylene for manufacturing and prototyping, or manufacture textile goods without sewing (which is key for any textile implementation that needs a fluid barrier).

This challenge seeks designs for an open source, cost effective, and energy efficient heat sealer and/or welder device that can easily be fabricated in remote areas. Cheap, easily built manufacturing tools open Field Ready to more modes of manufacturing, which can increase efficiency and quality and allow them to provide better aid.

