

# CASE STUDY: SOLAR POWERED WATER PURIFICATION

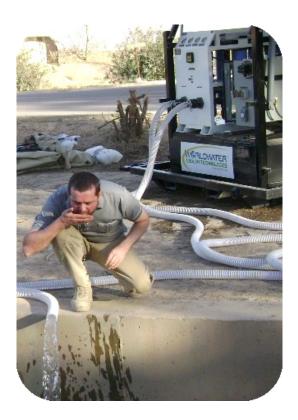
# **CHALLENGE:**

According to Water.org, close to 1 billion people across the world lack access to safe drinking water - that's approximately 1 in 9 people. Furthermore, more than 840,000 people die each year from a water related disease, which is more than the entire population of San Francisco. And experts predict that both population growth and global warming will likely boost these totals in future decades. Our company and WorldWater, an international Project Developer that focuses on various engineering technologies and products, believe one solution for this global issue could be found in combining solar power and filters. WorldWater wanted to create a water purification system to deliver reliable power and clean water where traditional sources are unavailable, compromised, too expensive or environmentally unfriendly. They designed a raw idea for the system, but needed a product that could be manufactured to meet both weight and size restrictions.

# **SOLUTION:**

In collaboration with WorldWater & Solar Technologies, we built two versions of this product. The first version produced 30,000 gallons of fresh drinking water per day, whereas the second, which was half the size of the first, produced 10,000-12,000 gallons per day. We provided all of the assistance in the manufacturability, including the software, electrical, and mechanical hardware.

We built the product line to the desired specifications of WorldWater. The product that resulted was The Mobile Max Pure® (MMP); a fully integrated, turnkey solar solution designed to pump, purify and desalinate water. The MMP provides auxiliary power and communications. It is a mobile, self-powered, off-grid system that does not require a connection to the electric grid nor a constant supply of diesel fuel. With the super storm and hurricane damage to water facilities, the system is a logical means to providing fresh, clean water with the use of the solar technology.











**EF**Group.com



### SERVICE DESCRIPTION:

Design, engineering, assembly, and fabrication. With our highly experienced design, electrical and manufacturing engineers, we have the ability to provide both initial design and/or concurrent engineering for either a new product or improvement to an existing product. We provide single components, software, hardware and complete custom machine assembly under one roof from our facilities in Willow Grove, PA



In this case, we were pleased to provide such an important product to the marketplace. Innovative design and development challenges are welcomed, and we are your go to partner to provide innovative solutions.

IT'S OUR GOAL TO PROVIDE CUSTOMERS WITH **EXCEPTIONAL SERVICE** FROM OUR EMPLOYEES, WHO EMBRACE OUR AXIOM, **"ATTITUDE IS EVERYTHING."** 

### DO YOU HAVE OUR NEXT CHALLENGE?

We utilize a unique approach that utilizes extreme customer collaboration and our 40+ years of expertise, offering creative solutions to the most challenging problems for the sole purpose of customer satisfaction. Customers trust us because we accomplish their projects with the highest levels of quality and integrity.

WE'D LOVE TO PROVE THAT TO YOU... LET'S TALK



EFGroup.com
in y
A CONSULTATIVE MANUFACTURING ORGANIZATION