Written by MARK JAEGER
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Petrol Pal designed in Belgium, produced by Saukville company

INVENTOR MICHAEL JACOBS posed with the Petrol Pal, a device he created to take the headache out of blending fuel for garden equipment. It earned a gold medal at a recent inventors' convention.

Photos by Mark Jaeger

If necessity is the mother of invention, frustration is at least its stepmother.

Just ask Michael Jacobs, inventor of the Petrol Pal.

"The idea for the Petrol Pal came to me as I was trimming my lawn for the last time in fall, and I ran out of gas with about 30 feet along the fenceline to cut," Jacobs said.

"I live out in the country, so I had to drive into town to get some more gas and fuel treatment. I only ended up using about a half-inch of gas, and thought, 'There has to be a better way.'"

Jacobs said he woke up the next morning with the inspiration for a device that would allow for

precise measurement of fuel for two-cycle and four-cycle engines.

“You can mix just the amount of fuel you need. There is no need for your garage or shed to be filled with multiple gas cans, and no more wasted or contaminated fuel,” he said.

On the surface, the Petrol Pal looks like a plastic half-gallon kitchen pitcher. Closer inspection shows precise calibrations on the container and spout.

The key to the invention is a tight-fitting divider that slides into the spout, covering the most common fuel-to-oil ratios from 16-to-one to 50-to-one.

Dreaming up the idea — along with considerable encouragement from friends — proved to be much easier than bringing it to market.

“We finally applied for the patent in 2002, which isn’t cheap, after being sure there wasn’t something like this already on the market. I got to know our patent attorney pretty well,” Jacobs said.

The patent was approved in 2004, the result of countless hours researching designs and materials and lots of roadblocks.

An early prototype looked great and worked fine when pouring water, but when gasoline was used, the fuel “just wouldn’t pour right,” Jacobs said.

Then there were the headaches about finding plastic that wouldn’t deteriorate when exposed to fuel.

“I worked closely with Mike Watry of Trimen Industries in Belgium, who came up with the design and figured out all the volumetrics,” Jacobs said.

Satisfied with the design, he took the product to Production Plastics in Saukville.

Retails units started coming from the plant in March 2010.

“Getting the production right was critical because the tolerances are so tight. If we had gone offshore for production, I don’t think we would ever have gotten it right,” Jacobs said.

The device is marketed through the Petrol Pal Web site and at select implement dealers, including Cedarburg Outdoor Power Equipment and Small Town Small Engines in Jackson.

“One of the dealers we work with said he is tired of having customers complain that their lawn mowers aren’t working when it is usually a case of bad fuel,” Jacobs said.

“These dealers just want to keep their customers satisfied and coming back. Once the retailer takes the time to explain how the Petrol Pal works, the customer is happy to by one.”

The device retails for $16.95.

A whole new world of customers may soon discover the Petrol Pal, which won the gold medal for best in show in the lawn and garden category at the June INPEX Invention Trade Show in Pittsburgh.

Jacobs, whose “day job” is in sales for Taylor Industrial Electronics in Milwaukee, isn’t quite ready to enjoy the life of luxury spurred by the invention.

“Who knows what is going to happen? It would be nice to be able to retire, but my partners and I would be happy if we are able to cover our expenses from the sales,” he said.

“Our patent attorney said he knew we were going to make it because we stuck with the idea. The process of marketing an invention can take so long, most people just give up.”