

# **PUMPING NEWS**

Giant Industries Newsletter June 2018

## **Application Spotlight:**

## Hydroforming

One application where customers use our high pressure water pumps is hydroforming. In this process, a high pressure pump is used to press the material into shape. The material can be metals such as brass, aluminum or steel or polymers like rubber.

A die is used for the material to be pressed into shape. The material blank is placed on the press to be shaped. The high pressure fluid will fill the mold or tube pressing the material into the shape of the die. When the pressure is released the final product is created.

Industries that use this process include the automotive industry for lightweight car panels and the bicycle industry where they create tubes for the frame.

Giant Industries
looks forward to
developing a
partnership with
you that will help
you achieve your
goals.

- Ed Simon, President

### In This Issue

- Application Spotlight: Hydroforming
- 10 years and counting
- Giant Spotlight: Moistwipe's New Look



Forging Presses (photos Phoenix 3D Metaal and Kamat respectively)

# 10 years and counting...

## **Extrusion Press Pumps Going Strong**

In October 2008, Giant approached a potential customer to introduce them to our pumps.

The company manufactures rubber soles for high-end hiking boots and performance footwear for the military. As it turned out they were having problems with their existing pumps and were looking for a change.

The fluid in the system is a 95 percent water and 5 percent lubricant mix that is commonly called "ninety five five". The pump system is designed to fill a large nitrogen or air charged accumulator to a desired pressure and in this case 2700 PSI. The pump flow is then unloaded back to the supply reservoir using a solenoid operated valve. The now filled and pressurized accumulator releases flow to the rubber presses to perform the work. After the rubber is pressed into shape, the pump flow is directed back to fill and pressurize the accumulator to be ready for another press cycle. This is known as a water hydraulic accumulator circuit.

(continued on next page)





Hiking boots showing an example of what can be hydroformed.



Giant GP8055 Pump

## **Extrusion Press Pumps Going Strong**

(continued from page 1)

The benefit is that a large flowrate is achieved quickly without utilizing high flow pumps. In this case 80 gallons in 2 seconds or an equivalent flow rate of 2400 GPM. The press cycle is every three minutes. So instead of having pumps set up to achieve 2400 GPM, a 45 GPM pump is diligently pumping during the three minute dwell time recharging the accumulator. When the accumulator valve is opened for the press cycle, a burst of flow provides the 2400 GPM equivalent flow rate but is needed to squish a bunch of rubber sole imprints. Giant provided the customer with two pump/motor skids containing GP8055 pumps driven by 100 HP/1200 RPM electric motors. One skid was the main operating skid and the other was a "running spare" completely piped and ready to be used during maintenance of the main pump.

Fast forward to 2018. The Giant pumps have been working flawlessly for nearly a decade with **over 50,000 hours** on the main pump and nearly **30,000 hours** on the spare. Basic oil changes, packing and valve replacement is all that has been required. The original bearings are still in the gear end.

The rubber industry is not the only area where the water hydraulic accumulator circuit is utilized. Steel, aluminum, copper and other alloys manufactured with forging presses or extrusion presses commonly employ this type of system. Look for those presses and give us a call to help design and quote a new system.

# Moistwipe's New Look

After hours of questions and meetings, three tandem polls and feedback from our customers Giant is excited to unveil the new Moistwipe package. The new packaging is expected to start printing on June 29th.

Moistwipe is the original window cleaning towel. It has evolved into a one-step pre -moistened cloth-like towel. Versatile enough to be used for a variety of applications and surfaces the Moistwipe is also strong and durable enough for scrubbing large areas. Formulated not to freeze even outside in vending machines.





### **Contact Us**

Give us a call for more information about our services and products

Giant Industries, Inc. 900 N. Westwood Ave Toledo, OH 43607

P: (419) 531-4600

F: (419) 531-6836

sales@giantpumps.com

Visit us on the web at www.giantpumps.com

**Giant Industries' New Moistwipe Package** 



#### **Giant Industries**

900 Westwood Ave Toledo, OH 43607 www.giantpumps.com Phone: 419-531-4600

Fax: 419-531-6836