



# Application Case Study

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Product	<b>Mechanical Pressure Switch</b>
Application	<b>Tire Press</b>

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## The Application

Tire producers use large automated tire press equipment to form individual tires in short time intervals. These are sophisticated and expensive pieces of capital equipment that must work through harsh environments. Tire producers will often rebuild their existing equipment instead of purchasing new.

A rubber bladder is used to press the band of rubber and belts into a heated mold. The bladder is not controlled by the pressure switches but the switches are needed for overpressure protection in order to ensure the safe operation of the press; once the bladder is inflated with air, steam fills the bladder so the rubber sandwich is heated and formed against the mold. A switch is used on the steam line for overpressure protection, once again to ensure safe operation. Then, when this process is complete, a vacuum is pulled on the bladder for it to deflate the finished tire, which is removed from the mold. A switch is installed for safety on the vacuum line.



One major tire manufacturer needed to rebuild its presses and hired a mechanical company to take on this project.

## The Solution

The mechanical company that rebuilt the presses has known SOR® products in other market applications. So, when it came time to identify a pressure switch that would last, afford a low cost of ownership and provide reliable safety, SOR was chosen.

SOR was chosen to supply a vacuum and pressure sensing switch because the switches lasted in several critical safety applications and the switches' versatility allowed for the customer to specify its specific needs.

## The Results

The mechanical company customer, and ultimately the major tire manufacturer, is extremely pleased with the longevity of the SOR pressure switch. Previous switches from other manufacturers would only last a few months and this application is critical for safety. Ultimately, the cost of ownership and safety features made the SOR pressure switch the best value for quality, versatility and safety.

## Ordering Information

54NN-A117-M1-C1A

Stainless steel, 1/4" NPT(F) process connection

3/4" NTP(F)

AC or DC service

-65 to 250°F (-54 to 120°C) ambient temperature limits for switching element