

## Client

**Ball Corporation**  
Saratoga Springs, NY



## Reroofing an existing Single Ply Roof

*Proven Performance Since 1950*

### Existing Roof

34,000 SF Mechanically Attached  
EPDM Roof System

### Problem

As part of their Metal Beverage Packaging Division, Ball's Saratoga Springs, NY plant is one of the most modern in the country, turning out literally millions of metal beverage containers per day.

One thing that management could not tolerate was roof leaks over their highly sophisticated, automated production lines. When leaks started to develop in their main manufacturing area, primarily around roof top penetrations, it was time to act.



### Solution

Seamless Spray-Applied Polyurethane Foam (SPF) Roofing System.

### Application

Having used seamless SPF roofing at other facilities throughout the country, management was keenly aware of the unique features and benefits of the system. Particularly for this roof, with its many stacks, curbs and ductwork, the totally seamless, self-flashing nature of the system was most appealing.

Realizing that SPF roofing is an applicator-sensitive system, Ball selected S. D. Carruthers for the project, based in large part on their experience and track record with installations dating back to the 1970's.

Once the project was underway, the first order of business was to remove the thousands of plastic caps used to mechanically attach the existing EPDM rubber membrane. A one-inch layer of polyisocyanurate insulation was then mechanically fastened to the underlying metal deck, providing an acceptable substrate for the new spray-applied foam insulation. One and one-half inches of seamless polyurethane foam insulation was then applied, followed by two layers of silicone protective membrane coating, with ceramic granules for enhanced durability and a non-skid surface.

## Results

The completed installation provided exactly what they were seeking, namely protection of their critical production equipment from damaging and costly roof leaks. With a seamless blanket of insulation and coating extending up and around all penetrations, the SPF system easily handled the roof's many and varied flashing details.

Furthermore, the new SPF system added minimal weight to the structure, while providing a system that is easier to maintain and is "renewable."

### BEFORE & AFTER



Old mechanically-attached EPDM roof system



New Seamless, Self-Flashing Spray-Foam roof system



**S. D. Carruthers Sons, Inc.**  
1065 Rt. 197 Argyle NY 12809  
Phone: 800-244-3545 / 518-638-8277  
[www.sdcaruthers.com](http://www.sdcaruthers.com) / [info@sdcaruthers.com](mailto:info@sdcaruthers.com)