Tough economic times call for greater cost control in every avenue of manufacturing, and this is certainly true for the aluminum extrusion industry. One component of controlling costs is to ensure that you have the best possible tools to get the job done. There are many reasons to invest in top quality handling equipment for extruded aluminum profiles, and at the top of the list include product quality, reduction of waste, and improvements in efficiency.

Recently, Sapa at Cressona, PA, was looking for an alternative to the standard rollers and roller covers that they had been using for extruding rounded pipe. Their roller covers were lasting on average 1.5-2 months, which resulted in significant downtime for roller cover replacement as well as decreased product quality. At the ET '08 Exposition in Orlando, FL, Sapa found the solution they were looking for. Albarrie from Ontario, Canada, a manufacturer of quality, custom designed roller products, had on display a new roller designed for this very process and the results of its use have exceeded all expectations.

Albarrie developed a concave designed roller composed of extremely high density Kevlar (pictured)—a modification of their highly successful Fullback roller system—allowing for full support of the extruded pipe as it is transported along the table. This full support eliminates the chance of the pipe rolling from side to side as happens with a standard surface roller. This high density Kevlar roller offers extreme service life when compared to any of the common roller cover options on the market. After four months of service and an estimated 5 million pounds of aluminum pushed across them, the concave Fullback rollers show little sign of wear—a significant improvement from the less than two month life span of their previous roller covers.

Bob McCaffrey, Extrusion Process Leader at Sapa, one of the largest soft alloy extruders in the world, quickly realized the cost efficiency of these premium rollers and has indicated that he would not be surprised to see over a year of service life, which will result in Sapa realizing an increase in efficiency, a significant reduction of waste, and less down time. McCaffrey also stated that an added benefit for Sapa has been the ability to greatly reduce the amount of carbon used in their plant, thus reducing a significant operating cost. The Fullback rollers can also be fitted with bearings, or manufactured in a straight shaft design, allowing the extruder flexibility for their specific table design.

In an era when everyone is attempting to reduce costs and increase production output, while at the same time working toward becoming better stewards of the environment, waste reduction and increased efficiency equals reduced energy usage and lower raw material consumption. This translates into both financial savings and less environmental impact.