



The Myers high-speed rubber cutter and dissolver.

Since 1955 more and more manufacturers of adhesives, sealants and caulking compounds have been increasing production and reducing costs by using the patented Myers rubber dissolving unit.

A high-speed serrated cutter with rugged angular teeth rotates from 1500 to 5000 feet per minute tip speed inside a stator that also has large keen-edged teeth. The rotating teeth are set in a right angle plane to the stationary teeth.

Opposing Teeth

Chunks or strips of rubber are reduced to crumb by the intense action of the opposing teeth and are quickly dissolved in the solvent by the high speed impelling action of the revolving cutter. Dissolving is fast because in shredding the rubber to crumb in the presence of solvents, more surface is exposed for rapid cutting action.

Butyl has been cut into hexane in two hours! Two to three hour cycle time is common for neoprenes, **HYPALONS***, SBR, styrenes and most other rubbers!

For light to medium viscous products the Myers patented rubber cutter is used on a Myers 775 or 800 Series single shaft disperser.

High Viscosity Products

For high viscosity materials the rubber-cutting unit is used on a Myers 550 dual shaft disperser. A large slow speed open impeller, with sweeps, starts the material flowing, and then moves it into the high-speed cutter-impeller and stator for cutting and dispersion. The speed of the large open impeller can be independently controlled for maximum versatility with all viscosities.



Both the rotor and stator have sharp rugged teeth to cut the rubber. The high-speed rotor then dissolves the rubber in the solvent.

*Registered trademark of E. I. du Pont de Nemours and Company.



Rubber cutting in action



For high viscosity products the rubber cutter is mounted on a Myers 550 Series dual shaft disperser. The slow speed sweep mounted on the shaft in foreground starts the viscous material flowing and moves it into the high-speed cutter.



On tank mounted models the stator is welded to a plate that is bolted in turn to a flange on the tank bottom. All parts can be removed and no one needs to enter the tank for servicing. Note that the stator bars do not extend above the stator.

Low Temperatures

Most rubber cutting should be done at the lowest temperature possible. This is easily accomplished with the Myers 550 Series dual shaft disperser. When the sweeps on the slow speed impeller are equipped with scrapers the sides of the tank can be kept clean.

If the rubber compound builds up on the walls, it prevents heat transfer so that the batch becomes overheated with excessive loss of solvent and resulting increase in viscosity, less dispersion and an increase in power requirements. This cleaning of tank walls through the use of scrapers is especially desirable when the tank is water jacketed for cooling the batch.

Lift or Tank Mounts

These 775, 800 or 550 Series dispersers can be lift-mounted and used with change cans. They can also be permanently mounted on tanks. On lift-mounted machines the rubber cutting rotor and stator can be quickly replaced by a standard Myers impeller for processing other products.

For batches larger than 500 gallons the Myers rubber cutter is usually used on tank mounted dispersers. The tank bottom has a large flange. To this flange is bolted a mating cover plate that holds the stator cutter with an outlet fitting below. All parts of the stator can thus be removed and serviced without a man entering the tank. By having the stator bolted to the bottom of the tank, the three stator bars (needed on change can models) are below the stator itself permitting still greater dispersion action.

Large Batches Possible

1,000 gallon batches are common with tank mounted Myers rubber cutters. Even 2,000 gallon tanks or larger are available. Tanks can be fully enclosed and water-jacketed if required. The covers on top of tanks can be jacketed for reflux condensers.

MYERS ENGINEERING, in business over 55 years, will study your needs and recommend exactly the right size and type of rubber cutter to step up your production and cut your costs.

Our technical department likes to know the type of rubber, viscosity, volume, temperature tolerance and as much other information as possible. This helps us determine the right cutter design. Small samples of your product are also very helpful.