

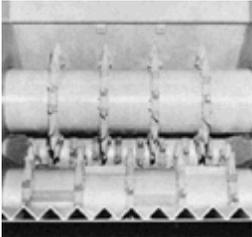
## **BloApCo Shredder Standard Features**

### **Pierce-and-Tear shredding action**

BloApCo shredders use a unique pierce-and-tear concept to obtain a highly efficient, single-pass shredding action.

The patented pierce-and-tear concept is produced by a series of multi-toothed ripping wheels mounted on three counter-rotating shafts. RPMs are low (below 40 in normal use) and each shaft revolves at a different speed.

Material is simultaneously pierced by the teeth of the wheels on two shafts and, due to the difference in shaft speeds, is literally torn apart. The low RPMs and extremely high torque provide three additional benefits. The low speed minimizes dust production and eliminates high velocity throw-out of shredded particles. The high torque minimizes stoppages even under full load conditions. Shreds are small and irregular in shape. they compact easily in closed or open containers.



#### **Ripping Wheels**

Ripper teeth are flame-hardened or cast-ductile iron depending on model. they do not ordinarily require sharpening. Equipment can be constructed with different wheel spacing to obtain desired degree of shredding. Flexible and thin materials might require more than the standard number of wheels. BloApCo design accommodates such special arrangements.

#### **Controls**

Shredders have a pre-wired control panel incorporating a reversing starter, a forward, job-reverse and a stop button. A zero speed detector is used to sense motion between forward and reverse modes. Shafts therefore must be stopped before direction of rotation is reversed.

An instantaneous overload relay stops the shredder in event of an overload. Machine then automatically jogs in reverse to release and reposition material causing the overload...and restarts forward. If several of these sequences fail to clear the machine, action will stop and a signal will alert the attendant.

Manual jobs can be made for additional control. Shredders may be equipped with a load-sensing control to regulate an in-feed conveyor so that it maintains the in-feed rate near the shredder's rated capacity.

120 volt controls include oil-tight, industrial push button in a NEMA 12 enclosure for mounting in a position convenient to the operator.

#### **Unobstructed feed openings**

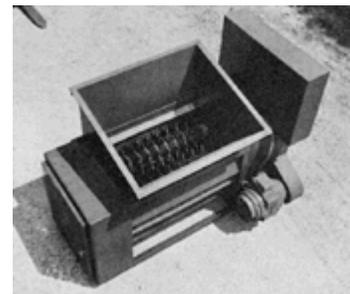
BloApCo pallet shredders have large unobstructed hoppers for efficient feed of waste material to the ripper mechanism.

#### **Bearings:**

Shafts are journaled in piloted, sealed, self-aligning, heavy-duty spherical roller bearings, mounted on machined hubs.

#### **Ripper wheel tip speed:**

Below 150 FPM in normal operation



**Installation:**

Shipped pre-wired and knocked down, ready for erection. Normally, two men with proper tools and equipment can install the shredder on a prepared base in about 16 hours.

**General:**

Drive parts, electrical components and bearings are standard components, readily available from local industrial supply sources. Tramp metal seldom causes damage, but can, on occasion, break a ripper tooth. A few broken teeth will not materially affect machine efficiency. Ripper wheels can be replaced. Slow operating speeds eliminate balancing and vibration problems.

**Unique Gear Drive**

To eliminate the use of long lengths of roller chain and idler shafts to drive the main shaft in an opposing direction, BloApCo engineers developed a unique chain gear drive. This was accomplished by fastening sections of roller chain directly to a wheel to form a roller-tooth gear. The result is a high-efficiency gear that can transmit the high-torque requirements without the wide face area and critical alignment problems of spur gears with equal capacity.