

CASE STUDY

Modified Universal Joints Solve Auto Shredder Production Problems



As seen on
CouplingTips.com
May, 2016



- Ameridrives
- Bauer Gear Motor
- Bibby Turboflex
- Boston Gear
- Delroyd Worm Gear
- Formsprag Clutch
- Guardian Couplings
- Huco
- Industrial Clutch
- Inertia Dynamics
- Kilian
- Lamiflex Couplings
- Marland Clutch
- Matrix
- Nuttall Gear
- Stieber
- Stromag
- Svendborg Brakes
- TB Wood's
- Twiflex
- Warner Electric
- Warner Linear
- Wichita Clutch

Modified Universal Joints Solve Auto Shredder Production Problems



A major international metals recycler was experiencing problems on their shredders due to universal joint damage caused by excessive torque generated during rotor jams. Repeated repair and replacement of the damaged universal joint cross and bearings required costly downtime.

When informed of the problem, Ameridrives application engineers went right to work on developing an overload protection solution. An Americarden Model U3440 universal joint was modified to incorporate a shear pin overload device. When a rotor jam occurs, the pins shear while protecting the drive system from expensive damage and lost production.

After clearing the jam, a maintenance crew can replace the pins and have the shredder operational in about an hour (compared to the previously required 2 days of downtime). The initial cost of the overload device was more than covered in the savings of downtime during the first overload.

The success with the installation of the first modified U3440 unit led to additional universal joint orders for use on shredders at the company's other locations. These follow-on universal joints featured driven and driver hubs manufactured with Ameriloc® shaft locking devices to secure adaptors to the shaft. The locking devices eliminate the need for a replacement hub when a motor is repaired or installed.



US (Customer Service)

1-814-480-5000 (Universal Joints, Driveshafts)
1-888-449-9439 (Small Industrial Driveshafts)
1-219-874-5248 (Irrigation Universal Driveshafts)
www.ameridrives.com

For a complete list of our
global sales offices visit:
altramotion.com/contactus