

## Application Profile





### Highlights

### Ameridrives

**3000 Series U-Joint** Features peak torque of

4,890,000 lb. in. (553 KNm)

### TB Wood's

**Ultra-V Sheaves** Constructed of fine grain, high tensile cast iron

### TB Wood's

**Premium V-Belts** Handle over twice the horsepower of standard V-Belts

#### Wichita Clutch

**Standard Vent Clutch** Feature high torque, low inertia design



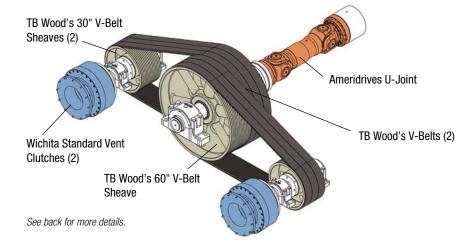
# Clutches, U-Joints, Sheaves, and Belts

### **Metal Shredder**

In this application, the shredder is powered by natural gas engines; however, the most common shredder drive is an electric motor. In the case of an electric motor drive, the motor is coupled directly to the shredder via the universal joints. Belts, sheaves and/or clutches required in this application would not be necessary with an electric motor configuration.

Ameridrives packaged its Americardan Series 3000 universal joint with sheaves from TB Wood's and clutches from Wichita Clutch to become a single-source supplier for a scrap metal processor operating a rotary hammer car shredder powered by two natural gas engines.

The universal joint, two 30-inch sheaves, one 60-inch sheave and two clutches were provided to the customer who acted as his own general contractor and OEM on the project.





# **Application** Profile



The photo above shows a Wichita clutch (left), TB Wood's sheaves and belts (center, under grated guards), and an Ameridrives U-Joint (far right).

### Ameridrives Americardan 3000 Series U-Joint

The Model U3440 universal joint functions as the main drive shaft for the shredder rotor. It is designed to be serviced by the user, with wear components such as clutch plates able to be replaced in a single shift. The Model U3440 uses three rows of roller bearings. Includes replaceable inner races in the bearing assemblies. Bearing caps are retained by large snap rings. Lube fittings are in each bearing cap.

### **TB Wood's Ultra-V Sheaves**

TB Wood's Narrow (Ultra-V) sheaves are constructed of fine grain, high tensile cast iron and have been carefully engineered to assure maximum performance over a long life span. This application utilizes (2) 30" sheaves and (1) 60" sheave.

### **TB Wood's Premium V-Belts**

TB Wood's Premium V-belts can handle 1.4 to 2.2 times more horsepower than the equivalent size standard V-belt. They're ideal for use on problem drives requiring high-impact strength and load-carrying power. Premium banded belts replace several belts with the strength of a single belt. Banded belts feature a multiple layer tie band that provides excellent lateral rigidity to prevent belts from turning over or from coming off of the drive.

### Wichita Clutch Standard Vent Clutch

For this application, a special 427 Standard Vent (SV) Clutch was built utilizing Wichita's high energy, high temperature friction linings. The SV clutch is designed for heavy duty and general clutching duties and is suitable for through-shaft or in-line, shaft-to-shaft mounting. Best suited as a coupling clutch to connect two shafts. The SV features a large friction area for high energy smooth controlled start-up.

### Contact Ameridrives

US (Customer Service) 1-920-593-2444 www.ameridrives.com Europe +44 (0) 1924 460801 **Contact TB Wood's** 

US (Application Assistance) 1-888-829-6637 press #7 tbwoods.com **Contact Wichita Clutch** 

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