CONSTRUCTION & HEAVY INDUSTRY

ROCK CRUSHER

MEGADYNE

CASE STUDY

CEMENT MIXER

INDUSTRY
CONSTRUCTION & HEAVY INDUSTRY

APPLICATION
ROCK CRUSHER

PRODUCT
OLEOSTATIC V-BELT

SITUATION/APPLICATION

Applications in Construction and Heavy industry often require power transmission drive belts that are able to withstand severe duty cycles. High torque and high power transmission requirements are common due to the sheer size of the applications.
A good example is the mineral and mining industry where belt-driven rock crushers are heavily used. These machines are designed to reduce large rocks into smaller rock, gravel or rock dust. The v-belts used in these applications experience some of the most severe drive conditions possible. They subjected to frequent peak torque shock loads and must be extremely durable

THE PROBLEM

The maintenance manager of a mining operation contacted Megadyne for help with the belt drives on their rock crushers. They were experiencing short belt life and frequent breakage from the v-belts supplied by a competitor. They needed to increase belt life and improve drive reliability.
On their highest horsepower units they also experienced problems with their banded v-belts. The tie bands that held the belts together were quickly coming apart and resulting in early belt failure. The drive was inspected to ensure there were no problems such as misalignment, contact with the belt guarding, insufficient tension, worn sheaves, etc. but no obvious problems seemed to exist. The quality of the banded belts used was just not good enough to survive this rugged application.
They were also unhappy with the inability of their supplier to deliver belts in a timely manner. They suffered an excessive amount of downtime each time belts failed as the supplier often did not have replacement belts readily available from their stock inventory.

MEGADYNE SOLUTION:

OLEOSTATIC V-BELT

Megadyne supplied their super tough Oleostatic single and Oleostatic banded Pluriband v-belts and solved the drive problems. The rubber CR/SBR blend belt body combined with high quality shock-absorbing polyester cord tensile members ensured the ability to withstand high shock loads. A special fabric belt cover protects the tensile member while increasing grip and wear resistance.
These features all combined to guarantee a more reliable drive with longer life on this demanding application.

THE RESULT

The reward for the customer is better-performing drives. The high quality and performance of Oleostatic v-belts now delivers longer belt life. The Oleostatic Pluriband banded v-belts, with an advanced, patented, banding process eliminated the tie band failure previously experienced. Delivery problems were resolved as Megadyne ensures product availability with an emphasis on ample inventory and quick delivery.

Contact our experts
to find out more