

Polyurethane chain drives outperform a gear drive, V-belts, and conventional roller chains.

Benefits:

- excellent dynamic properties
- improved wear resistance
- dependability
- superior chemical resistance
- reduced noise level
- lower cost
- dimensional stability

An expensive gear transmission in an oil field hydraulic pumping system was replaced with a simplified gear drive using a polyurethane chain. The conversion resulted in lower costs for over-all operation and repairs.

In another application, a single polyurethane chain provided improved performance over a conventional 4-strand V- belt drive in a limb chopper. The polyurethane material retained dimensional integrity under rigorous operating conditions; eliminating the need for frequent re-tightening, reducing belt change-overs and generally improving machine performance and operating performance.

In a third case, after 18 months exposure to abrasive foundry sands, a high-performance, aramid-cord-reinforced polyurethane belt was still performing well. Previously used metal roller chains required four change-overs a year in addition to frequent lubrications and re-tensioning. This large foundry has cut costs in tooling, downtime and labor. In addition, noise level has been greatly reduced.