

DIAMOND® STANDARD SERIES CHAIN FOR FRUIT HARVESTING APPLICATION

CHALLENGE ▼

An original equipment manufacturer (OEM) was experiencing premature chain failure on its trunk shaker mechanism used to harvest fruit. The shaking motion was produced using a drive system powered by a competitor’s ANSI 60-2 roller chains with slip-fit center plate construction, generating 350-400 vibrations per minute. These vibrations and relatively high loads were absorbed by the competitor’s roller chains, contributing to link plate fatigue and premature chain failure.

SOLUTION ▼

To address the chain fatigue caused by the pulsation, Diamond recommended ANSI 60T-2 riveted roller chain with press-fit center plate construction. Unlike slip-fit plates which can accelerate fatigue failures due to flexibility, press-fit plates provide rigid support at each tension point.

RESULTS THAT MATTER ▼

Following the switch to press-fit construction, the manufacturer saw a significant increase in uptime—two to three times that of the competitor’s slip-fit style chain. In the first year, this amounted to a savings of approximately \$10,000 per line.



Uptime Increase
2-3X
First Year Savings
\$10,000 per line

