



CASE STUDY

End Market Industry

Horse Racing

Application

A belt drive was required to transmit power to an underwater treadmill used for exercising race horses at one of Melbourne's elite racetracks.

7.5kW @ 240rpm



New Drive Challenge

One end of the drive needed to operate underwater; standard rubber timing belts and roller chain will perish rapidly if submerged in any liquid. The challenge was to select a product capable of withstanding this environment, yet still transmit the required power at various speeds and loads.

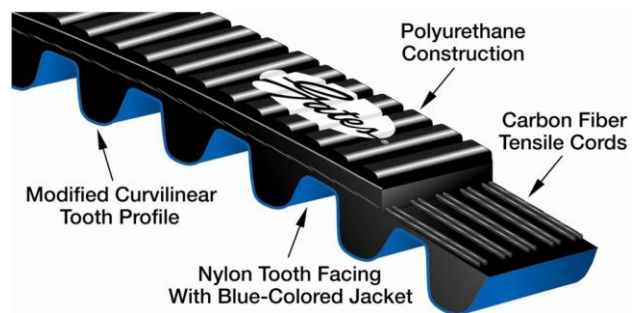
Sudden stops from horses while they are walking (scares) occur often, creating shock loads back through the drive system.

Solution Description

Belt = 14MGT-3920-37 Poly Chain[®] GT[®] Carbon[™]

DriveR Sprocket = 30 Tooth

DriveN Sprocket = 30 Tooth



Benefits of Gates Product

The Poly Chain[®] GT[®] Carbon[™] drive has successfully lasted the entire racing season without adjustment.

The Poly Chain[®] drive has resulted in:

- No maintenance or re-tensioning.
- No belt breakages due to shock loading.