



CASE STUDY

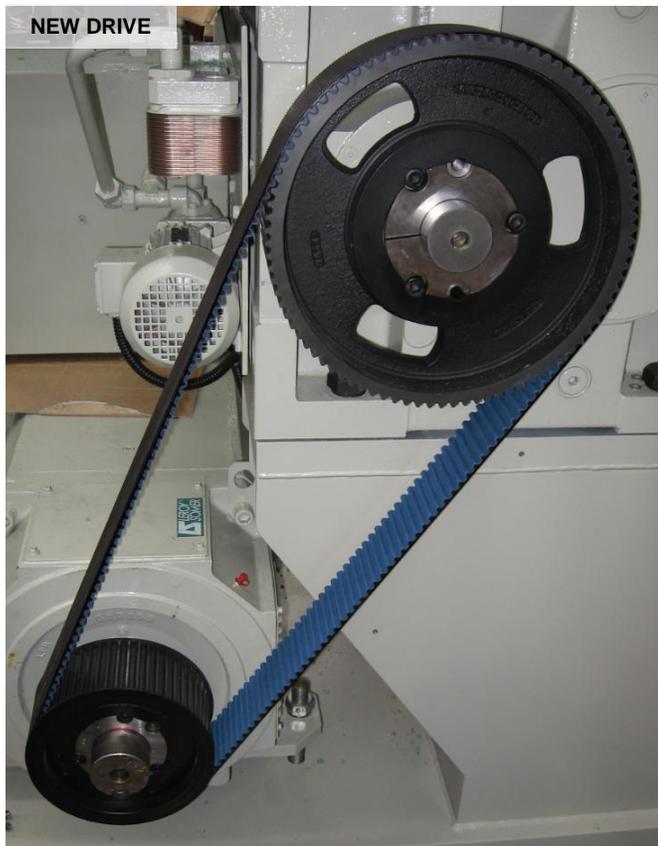
End Market Industry

Plastic Industry

Application

Plastic Extruder
150kW @ 990rpm

A high capacity belt drive was required for a high power plastic extruder. The challenge was to transmit this power, but only a very narrow space was available and the shaft lengths were quite short.



New Drive Challenge

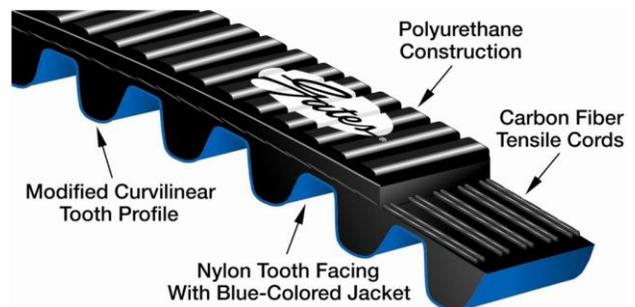
This application would require 30 standard SPB V-belts (586mm wide) with the same diameter pulleys as the final Poly Chain[®] GT[®] Carbon[™] solution (90mm wide).

Even a high performing HTD timing belt would need to be 170mm wide with sprockets twice the diameter to transmit this load.

An ultra-high power density belt drive was needed.

Solution Description

Belt = 14MGT-2660-90 Poly Chain[®] GT[®] Carbon[™]
 DriveR Sprocket = 38 Tooth
 DriveN Sprocket = 90 Tooth



Benefits of Gates Product

The Poly Chain[®] GT[®] Carbon[™] belt can transmit the 150kW in only 90mm wide, unlike any other product on the market.