



# TPU BELTS

THERMOPLASTIC POLYURETHANE

## SUPER FLEX™ POLAR

DEMANDING DRIVES – CONVEYING AT LOW TEMPERATURE

Our advancements in materials science, design engineering and processing technologies allow Gates to deliver highly flexible endless timing belts for applications operating at temperatures down to  $-30^{\circ}\text{C}$  /  $-22^{\circ}\text{F}$ .

Gates® SUPER Flex™ POLAR belts are truly endless extruded belts with helically wound steel cords designed for high flexibility with all Gates backing and profile options to create customized conveying and transportation solutions – including Nylon fabric for tooth side to reduce friction for improved efficiency and quieter operation.

Gates® SUPER Flex™ POLAR belts are the number one choice in polyurethane synchronous belts for high power transmission drives and heavy load conveying applications. Gates is a trusted drive partner delivering superior quality and reliability with optimal lead times worldwide.

### FEATURES + BENEFITS

- Ideal for applications working in temperatures down to  $-30^{\circ}\text{C}$  /  $-22^{\circ}\text{F}$
- Extensive range of sizes & widths – any length from 1.5 – 22.5m
- Optional nylon fabric on tooth side reduces friction for improved efficiency & quieter operation
- Over 30 backing material options
- 3,000+ welded profile designs
- Engineering support for custom designs



DRIVEN BY POSSIBILITY™

# SUPER FLEX™ POLAR

## FABRICATION CAPABILITIES

<b>PITCHES</b>	H / T5 / T10 / T20 / AT5 / AT10 / ATL10 / ATL20 / AT20 / HTD5 / HTDL5 / HTD8 / HTD14
<b>WIDTH</b>	10mm – 170mm
<b>LENGTH</b>	1500mm – 22500mm
<b>HARDNESS</b>	90° Shore A
<b>TEMPERATURE RANGE LOW TEMP</b>	-30° to +50° C / -22° to 122° F
<b>MINIMUM PULLEY DIAMETER</b>	Minimum diameters of pulleys and idlers +50% at temperatures below -5° C / 23° F
<b>CORDS</b>	Steel (standard), high-strength steel, high-flexible steel, stainless steel
<b>FABRICS</b>	Polyamide on teeth - NT
<b>BACKINGS</b>	Over 30 different backings available
<b>PROFILES</b>	Over 3000 designs for welded profile available, special profiles on request
<b>SPECIAL PROCESSING</b>	Grinding, milling, punching and many more available on request

## ATTRIBUTES + APPLICATIONS

Gates® SUPER Flex™ POLAR belts serve demanding drives and conveying applications in the most diverse industries and markets:

- Deep freeze storage systems
- Cold ambient temperature
- Outdoor equipment and technical installations
- Offshore plants
- Intra-logistics
- Machine tools

