



A Tomkins Company

# Bandas Poly Chain® GT Carbon™

Soluciones productivas en  
Transmisiones

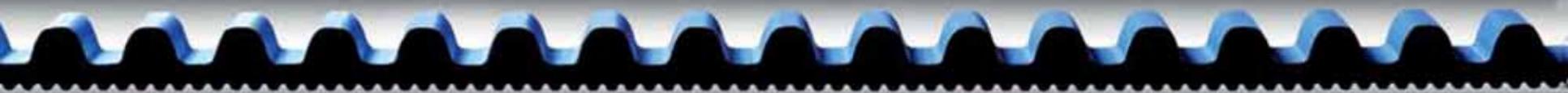


POLY CHAIN® GT  
CARBON™



A Tomkins Company

La banda Síncrona jamás vista ...



POLY CHAIN® GT  
CARBON™



# POLY CHAIN® GT CARBON™

## La banda síncrona jamás vista ....:

- ▶ Ligera
- ▶ Limpia
- ▶ Libre de mantenimiento
- ▶ Ahorrador de energía
- ▶ Tecnología patentada de fibra de carbón



# POLY CHAIN® GT CARBON™

Tiene numerosas aplicaciones



**Maquinaria Pesada**



**Transmisiones de motocicletas**



**Sistemas transmision De Aeronaves**



**Transmisiones Industriales**



**Transportadores**



**Bicicletas**



# Aplicaciones de Alto desempeño



Automotriz y Deportiva



Maquinaria Pesada



Sopladores de aire



Compresores



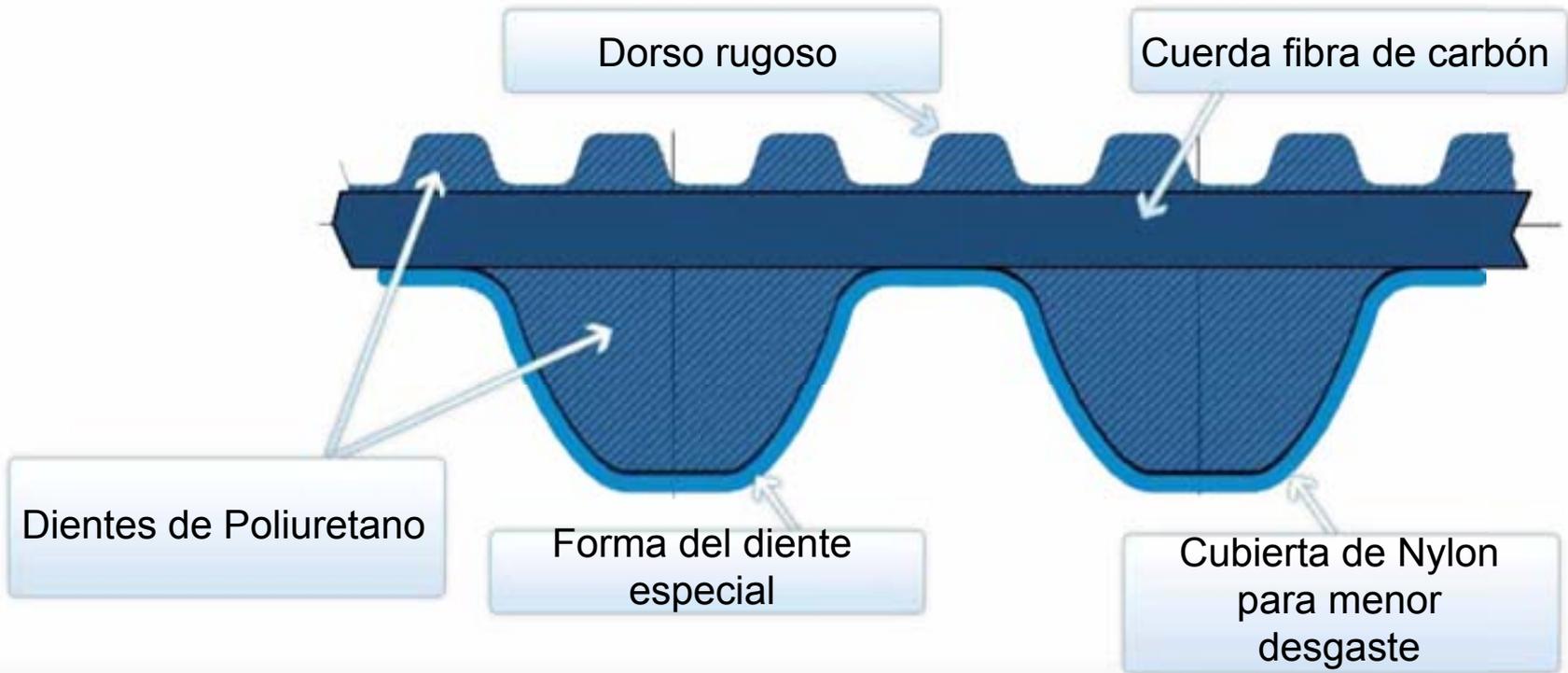
Empaque y Transporte



Procesamiento de alimentos

# POLY CHAIN® GT CARBON™

Construcción única



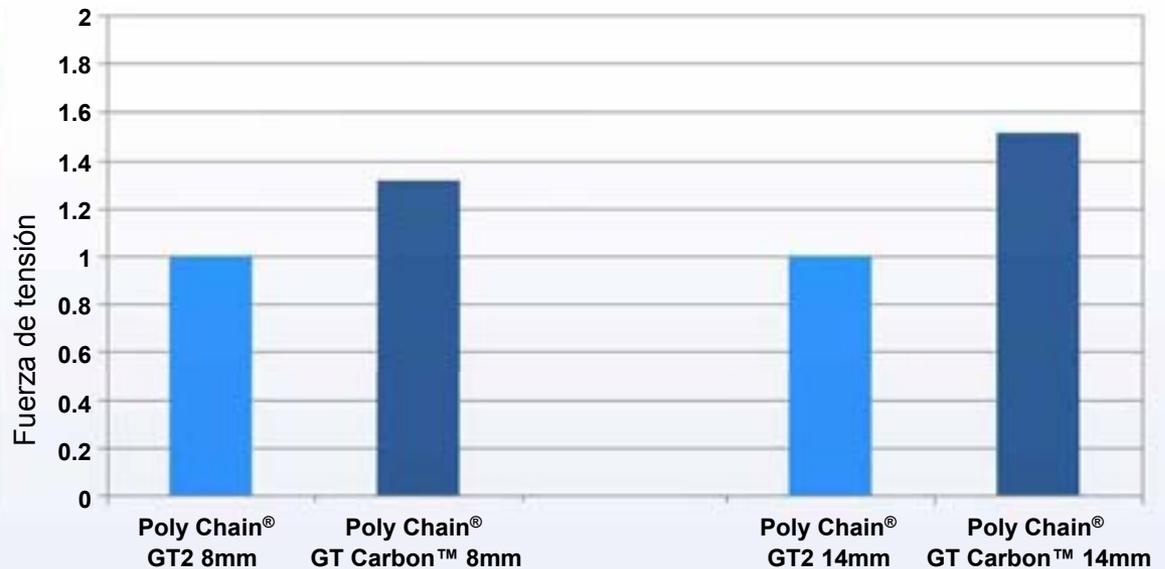
# POLY CHAIN® GT CARBON™

## Ventajas únicas de ésta construcción



### Construcción de Poly Chain® GT Carbon™:

Resultados de pruebas con Poly Chain® GT2 y Poly Chain® GT Carbon™



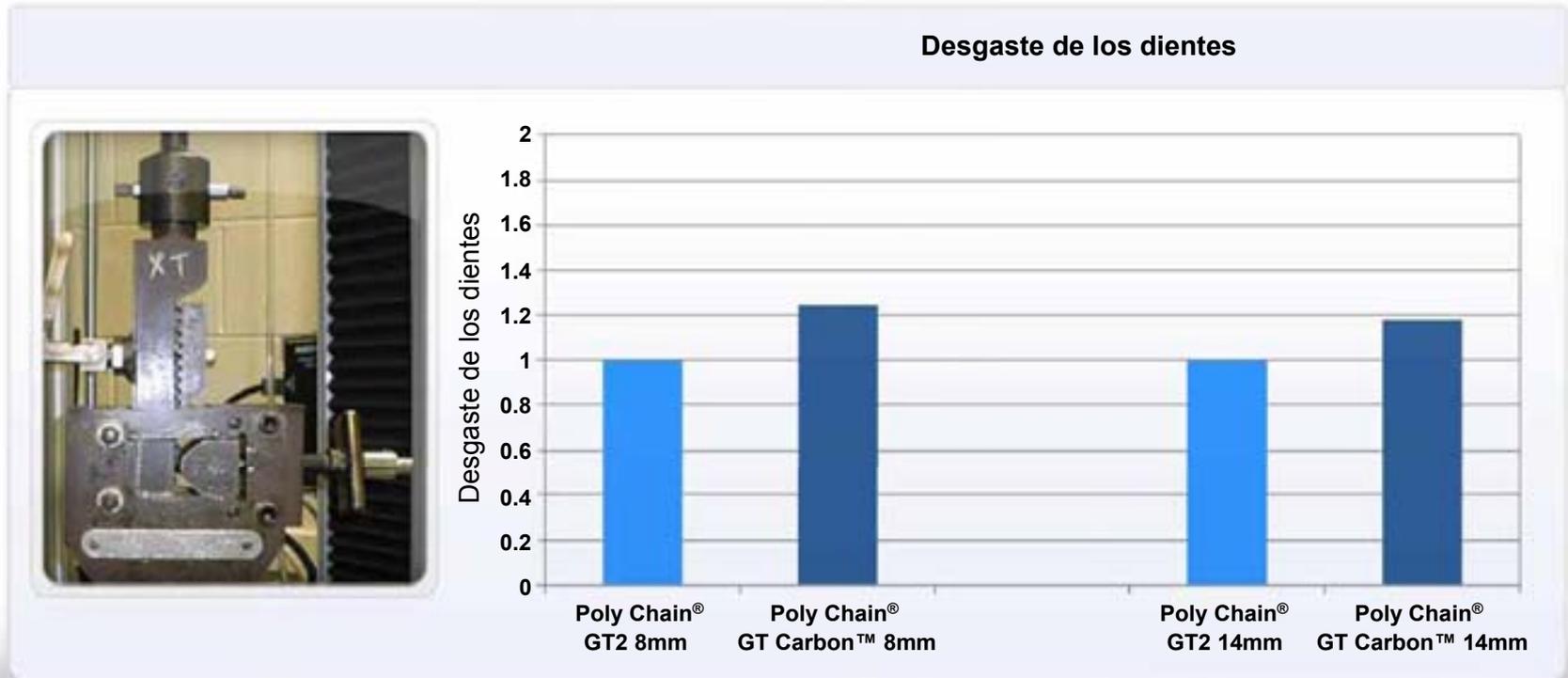
# POLY CHAIN® GT CARBON™

## Ventajas únicas de ésta construcción



### Construcción de Poly Chain® GT Carbon™:

Resultados de pruebas con Poly Chain® GT2 y Poly Chain® GT Carbon™



# POLY CHAIN® GT CARBON™

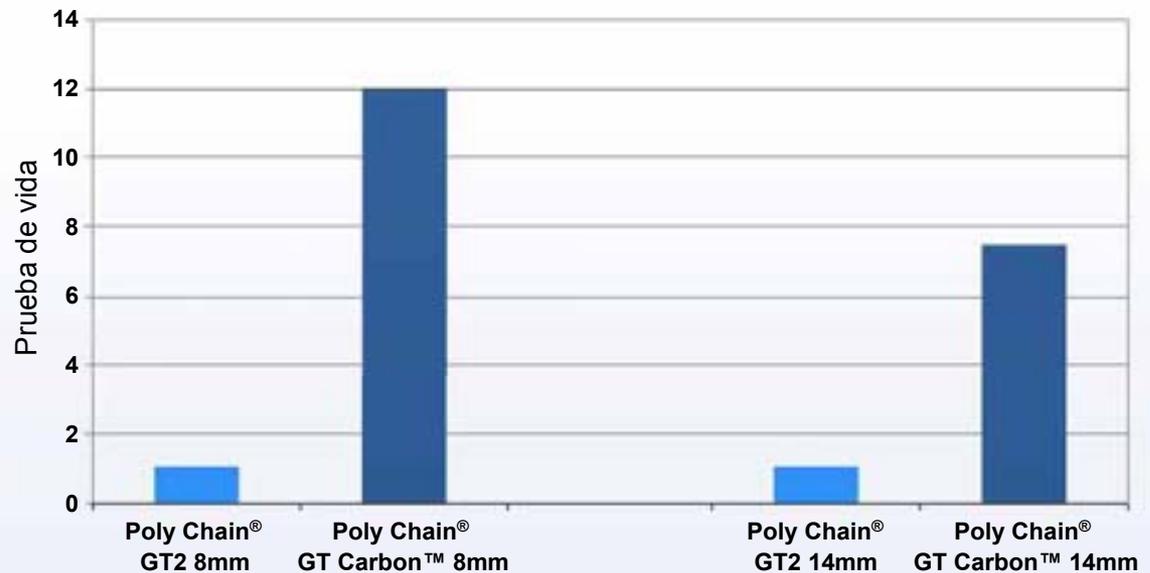
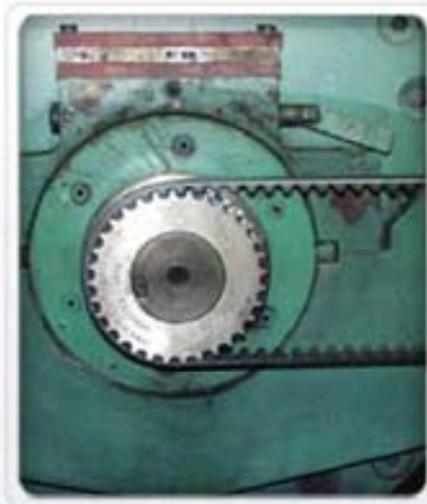
## Ventajas únicas de ésta construcción



### Construcción de Poly Chain® GT Carbon™:

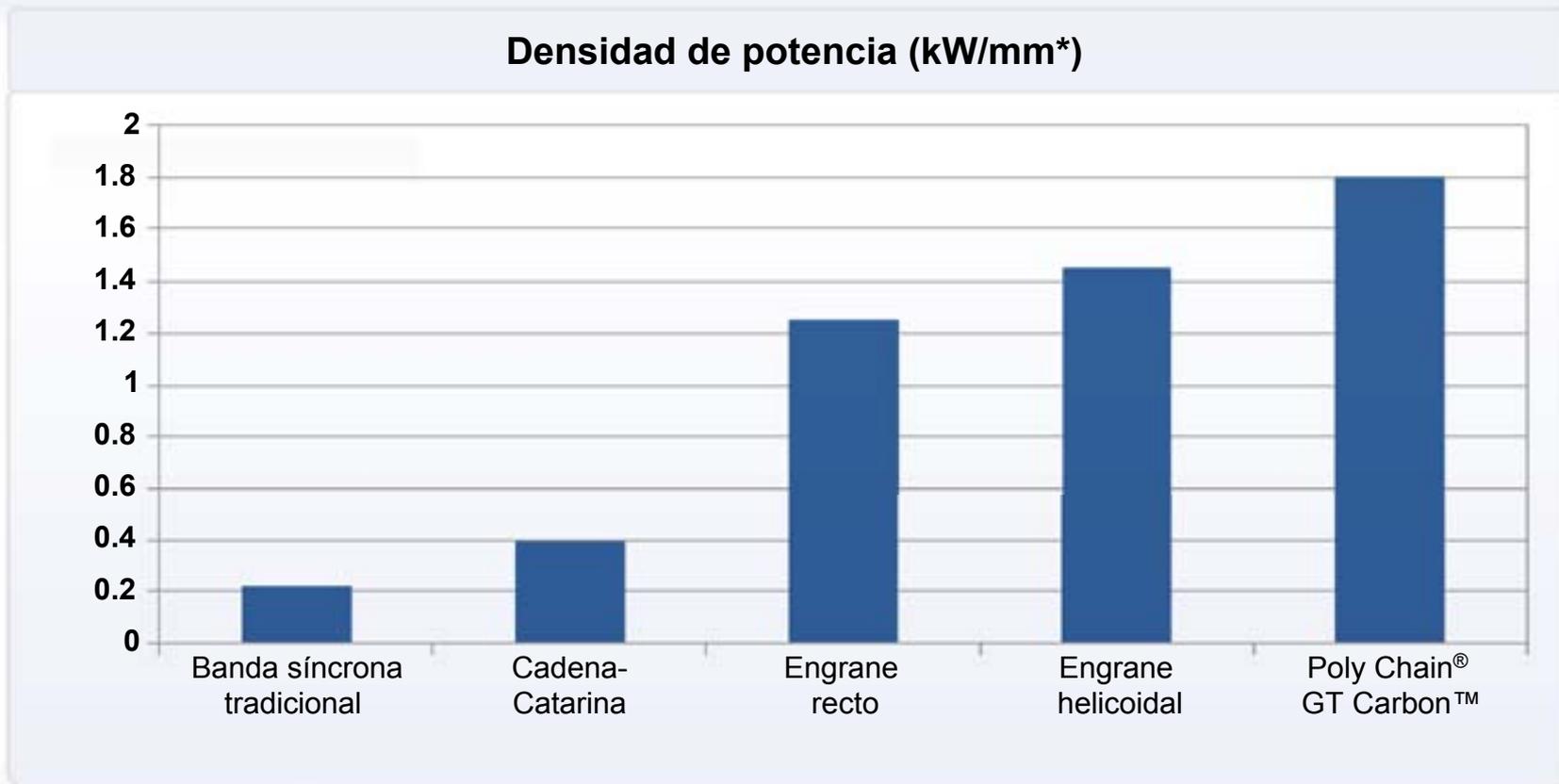
Resultados de pruebas con Poly Chain® GT2 y Poly Chain® GT Carbon™

Prueba de carga - 8mm 24T 14kW polea - 14mm 32T 56kW polea



# POLY CHAIN® GT CARBON™

Supera cualquier tipo de transmisión



\* Valores de diseño kW/mm a 1000 rpm



# POLY CHAIN® GT CARBON™

Superior a cualquier otra banda



Componente de la transmisión	Hule HTD®	Hule GT2	Poly Chain® GT2	Poly Chain® GT Carbon™
Paso (mm.)	14	14	14	14
Poleas (# dientes)	P32/P64	P32/P64	P32/P64	P32/P64
Diámetros (mm.)	142/285	142/285	142/285	142/285
Ancho de la banda (mm.)	<b>170</b>	<b>85</b>	<b>37</b>	<b>20</b>





A Tomkins Company



# POLY CHAIN<sup>®</sup> GT CARBON<sup>™</sup>

AUTENTICO AHORRADOR DE COSTOS

# POLY CHAIN® GT CARBON™

Genuino ahorrador de costos



- ▶ Alta densidad de poder (más potencia/mm)  
= mas compactas (poleas, rodamientos,...)
- ▶ Mayor vida útil  
= menos tiempos muertos  
= mayor tiempo de operación continua
- ▶ No requiere lubricación ni retensionamiento  
= Menor costo de mantenimiento
- ▶ AHORROS DE ENERGIA

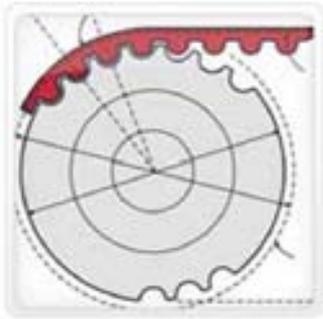


**AUTENTICO AHORRADOR DE COSTOS**

# POLY CHAIN® GT CARBON™ AUTENTICO AHORRADOR DE COSTOS

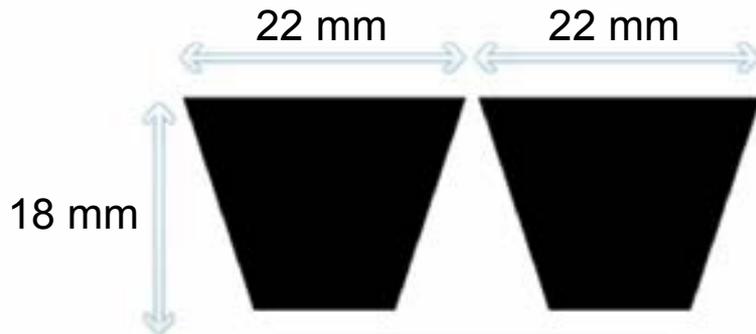


## Porqué las bandas sincronas son mas eficientes que las de bandas V

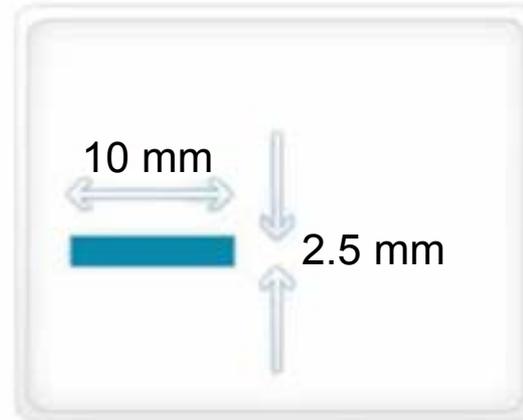


◀ Transmis. positiva – No hay deslizamiento de banda-polea  
Menores perdidas internas, porque son más flexibles

Base de 40kw @ 1450 rpm



Seccion "SPC"  
(44 X 18 mm)

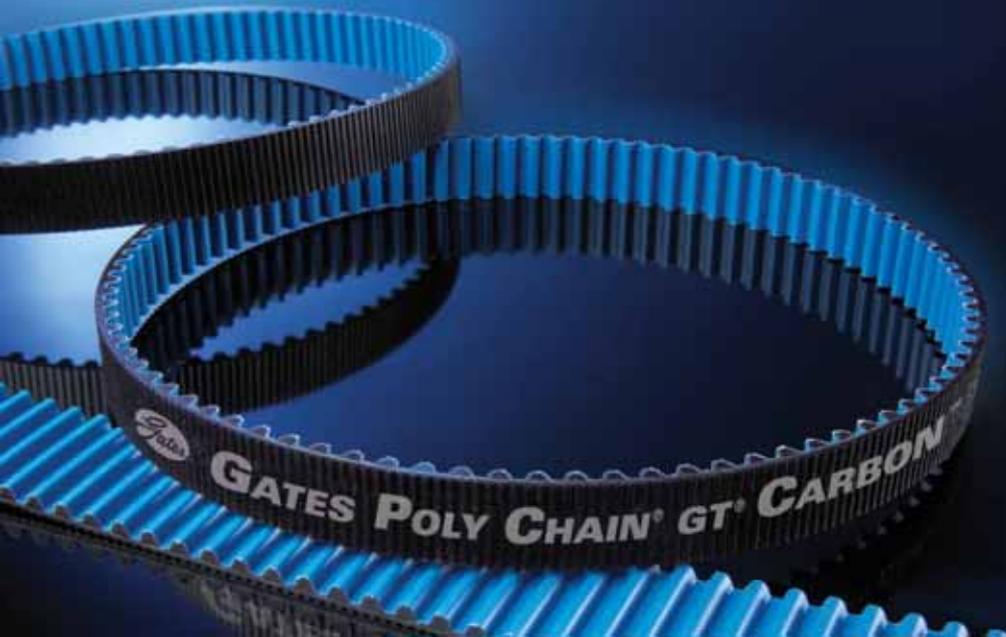


8MGT Poly Chain® GT Carbon™  
(10 x 2.5 mm)



# POLY CHAIN® GT CARBON™

La mejor banda síncrona del mundo



# Apoyos al Programa Poly Chain® GT® Carbon™

La alternativa inteligente para cambio de transmisión de cadena



- Apoyo/Servicio

- Herramientas de diseño sin costo
- Design Flex Pro
- Design View
- Design IQ (Análisis de vida útil)
- Productos de aplicación y asistencia técnica
- Ventas y servicio al cliente
- Garantía: 30 días de prueba (para quien lo requiera)
- Calculadores de ahorros ¡Sin costo!
- Pagina de Internet Gates
- Importante programa de INCENTIVOS :Distribuidor y Vendedor



# Poly Chain GT Carbon

## Historias de Éxito



# Proceso de Fabricación tablaroca

¡No mas cadena Perpetua!



Un fabricante global de materiales para la construcción limpia su operación!

Desafío – Ambiente Ruidoso y sucio en la fabricación de tablas de yeso.

Solución – Transmisión confiable, silenciosa, limpia, cero mantenimiento Poly Chain GT Carbon! ¡Nada mas resistente!

[www.Gates.com/NothingTougher](http://www.Gates.com/NothingTougher)

# Go Carts



¡Precisión!

Transmisiones para Go Carts –  
¡Construidas para la velocidad!

Desafío – poleas dentadas con  
diámetros pequeños, tensión  
inadecuada y mantenimiento  
constante.

Solución – ¡Transmisión Poly Chain GT  
Carbon = mantienen su tensión  
constante en poleas con diámetros  
pequeños! ¡Nada mas resistente!

[www.Gates.com/NothingTougher](http://www.Gates.com/NothingTougher)

# Aserraderos

¡Altas Cargas!

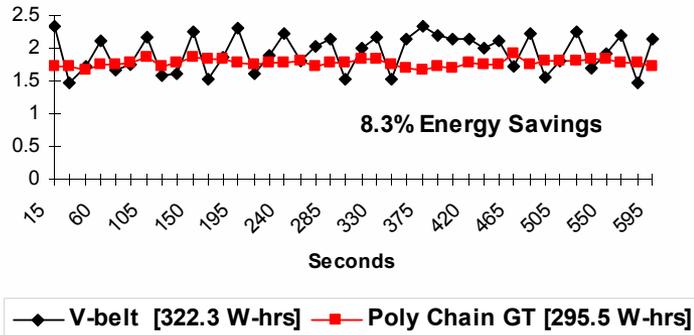
¡Fabricar tablas de madera en una solo proceso, es una aplicación demandante!

Desafío – Aplicación a 200 caballos de fuerza – Cambios de carga frecuentes debido ocasionados por diferentes tipos de madera. ¡Bandas de la competencia solo duran días!

Solución – Las bandas Poly Chain GT Carbon siguen operando después de 11 meses! ¡Nada mas resistente!

[www.Gates.com/NothingTougher](http://www.Gates.com/NothingTougher)

# ¡Extractores de Aire!



¡Mejor eficiencia!

Un fabricante global enfocado a la eficiencia de energía, cambio un ventilador HVAC de 2 bandas sección B a un sistema Poly Chain GT Carbon.

¡El resultado fue una mejora en la eficiencia de un 5% y un mejor flujo de aire constante!

[www.Gates.com/NothingTougher](http://www.Gates.com/NothingTougher)

# Mezcladores de Masa Industriales



Mezclar multi-granos, carbohidratos y masa congelada puede sobrecargar el sistema.

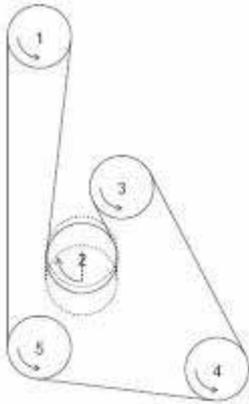
Desafío – 150 caballos de fuerza, altas cargas, cadenas con aceite en aplicación alimenticia es una pesadilla!

¡Transmisiones de cadena regularmente fallan en días generando tiempos muertos!

Solución – ¡Transmisiones Poly Chain GT Carbon no necesitan lubricación y resisten altas cargas – sigue operando sin problemas después de 1 año! ¡Nada mas resistente!

[www.Gates.com/NothingTougher](http://www.Gates.com/NothingTougher)

# Producción de Cables Telefónicos



¡Flexibilidad en el Lomo!

Desafío – Fabricante de cable para la industria de telecomunicación con un accionador servo requiere de un arreglo de múltiples poleas. ¡Las bandas solo le duran un mes!

Solución – La flexibilidad del sistema Poly Chain GT Carbon sigue trabajando después de 14 meses y sin problema = generando ahorros. ¡Nada mas resistente!

[www.Gates.com/NothingTougher](http://www.Gates.com/NothingTougher)

# Cortadora Industrial



Desafío – Un motor de 5 caballos de fuerza generando 1750 RPMs opera con 3 bandas en V sección B.

Solución – Se convirtió la cambio la transmisión con Poly Chain GT Carbon de 12mm de ancho. Se redujo el ancho y se incremento la eficiencia y consistencia! ¡Nada mas resistente!



[www.Gates.com/NothingTougher](http://www.Gates.com/NothingTougher)

# Conversión de Caja de engranes

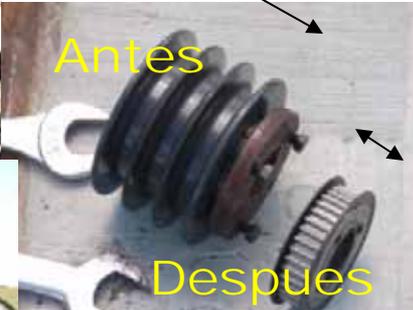


Un importante fabricante de materiales para la construcción estaba en un problema. Tenían un equipo obsoleto con una caja de engranes con una relación de 7:1. Necesitaban una solución.

Los ingenieros de Gates Corporation rediseñaron la transmisión con Poly Chain GT Carbon y el equipo a funcionar nuevamente! ¡Sin engranes, sin lubricación! ¡Nada mas resistente!

[www.Gates.com/NothingTougher](http://www.Gates.com/NothingTougher)

# Bomba para Industria Petrolera

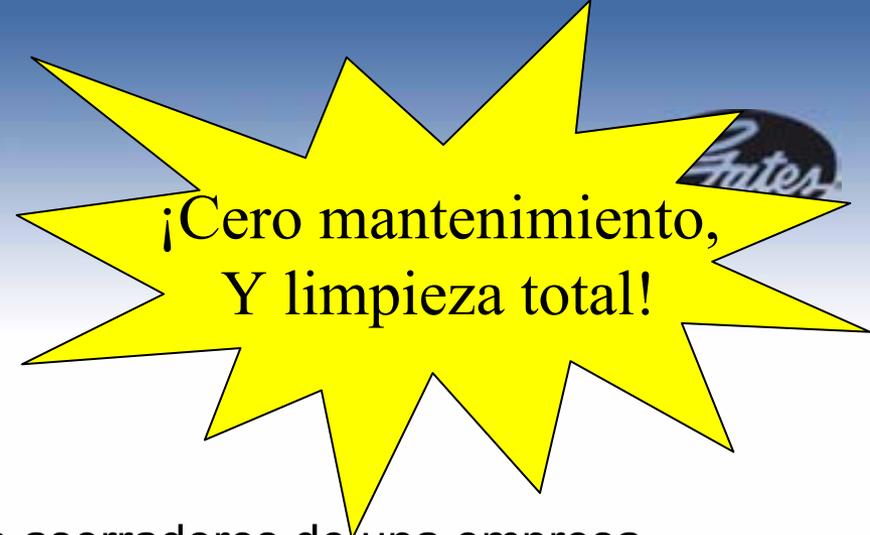


Originalmente esta bomba de 7.5 caballos de fuerza fue diseñado con 3 bandas en V sección C. Las condiciones climáticas hacían que las bandas se patinaran.

El nuevo sistema de transmisión Poly Chain GT Carbon de 12mm de ancho, trabaja en cualquier tipo de clima sin problemas. En el primer año esta transmisión genero ahorros por US\$1,600. ¡Nada mas resistente!

[www.Gates.com/NothingTougher](http://www.Gates.com/NothingTougher)

# Materiales para la construcción



La división de aserradores de una empresa importante tenía una transmisión de cadena con varios puntos de contacto creando problemas de mantenimiento. La cadena necesitaba lubricación y mantenimiento constante.

Los ingenieros de Gates Corporation rediseñaron la transmisión con Poly Chain GT Carbon.

Estas transmisiones críticas actualmente llevan 1 año sin problemas! ¡Nada más resistente!

[www.Gates.com/NothingTougher](http://www.Gates.com/NothingTougher)

# Motores de alto desempeño

ANTES



Un fabricante de motores de alto desempeño estaba buscando un nuevo diseño para cumplir con las expectativas del medio ambiente.

El fabricante trabajo en conjunto con los ingenieros de Gates para diseñar una transmisión usando una banda Poly Chain GT Carbon de alta temperatura. El resultado. Se elimino el aceite, ruido y el peso de la transmisión. ¡Nada mas resistente!

DESPUES

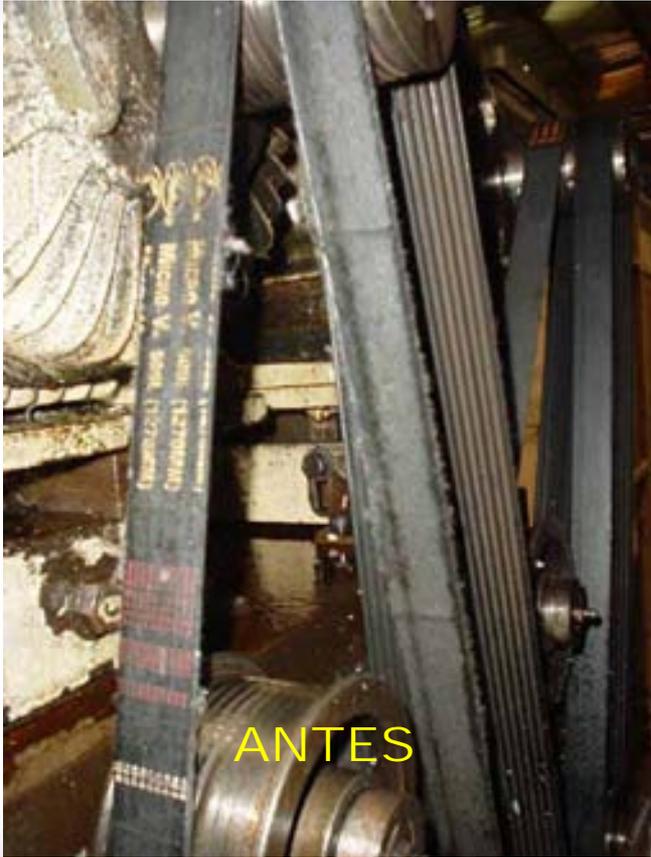


¡Reemplace  
Engranés y Aceite!

[www.Gates.com/NothingTougher](http://www.Gates.com/NothingTougher)

# GM, MAQUINADO DE CABEZAS AREA, "CHEVY"

Soluciones



ANTES



DESPUES



# GM, "CHEVY", THERMOGRAFIA

## MICRO V

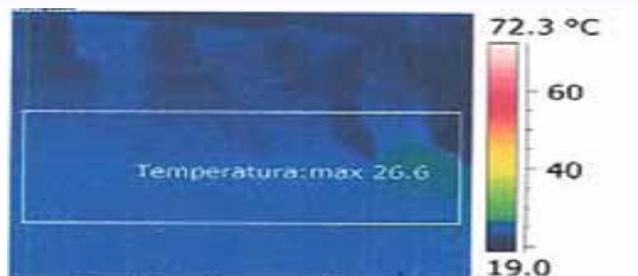


Imagen Termografica

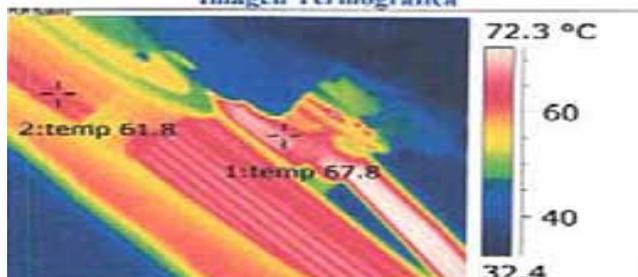
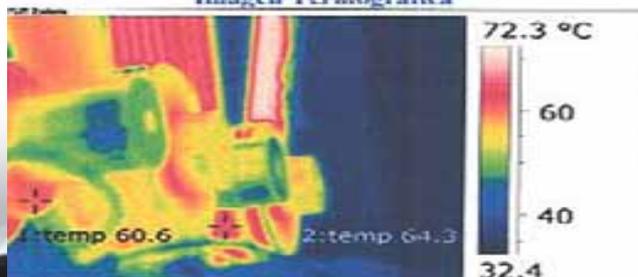


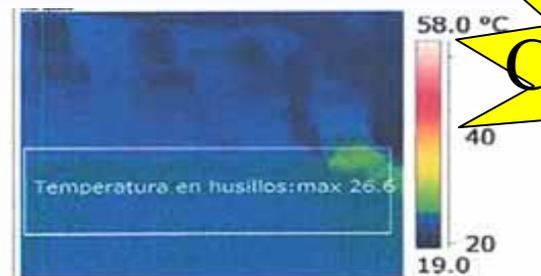
Imagen Termografica



Poleas de Husillos

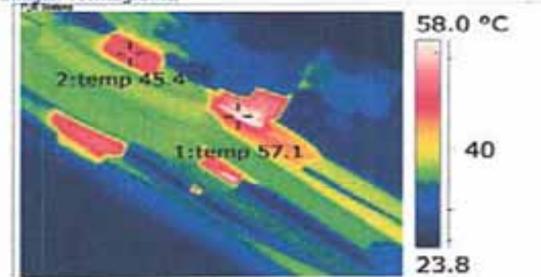
## POLYCHAIN

Creatividad



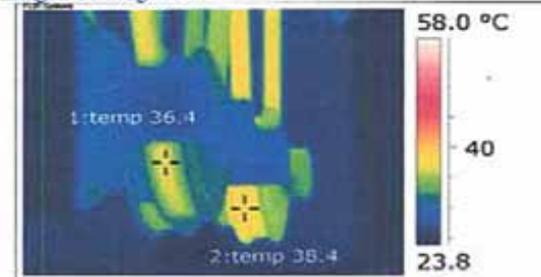
Husillos de maquinado

Imagen Termografica



Poleas Tensoras

Imagen Termografica

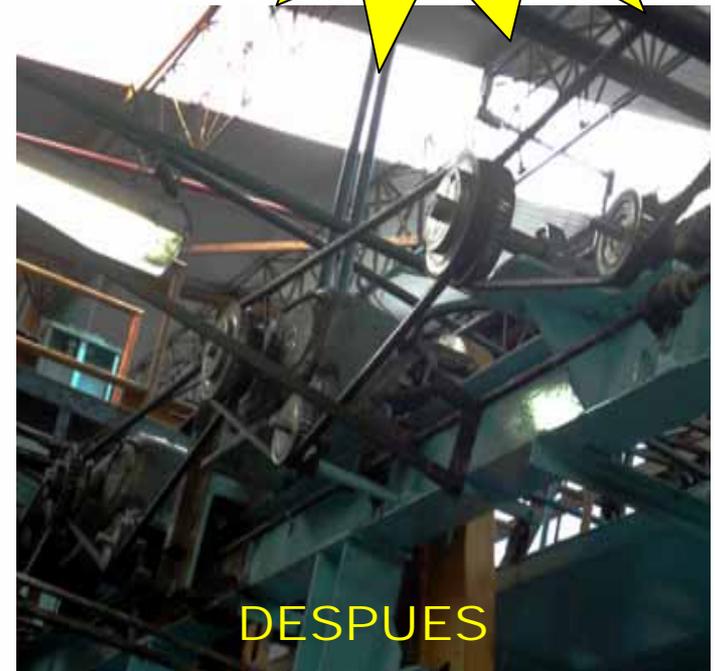


Poleas de husillos

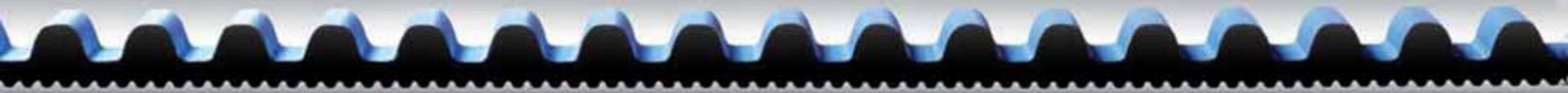
## 2.- TOLUCA PLANT, CALANDRIA 2



ANTES



DESPUES



### 3.- RASSINI SAN LUIS PLANT

Soluciones



# ¡Juegos Extremos!



## ¡Sin Limites!

Fabricantes de equipos extremos buscan a nivel mundial la ultima tecnología. Mas livianos, sin lubricación, mas eficiencia, mas potencia, menos mantenimiento y mayor vida útil son algunas de los objetivos. **8,000 HP's**

Solución – ¡Gates Poly Chain GT Carbon – el sistema de transmisión de los campeones! ¡Nada mas resistente!

[www.Gates.com/NothingTougher](http://www.Gates.com/NothingTougher)



¿Cómo vamos a sustituir las  
Cadenas-Catarinas  
con productos Gates?

MUY SIMPLE!!!



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Industrial Fluid Power



Auto Aftermarket

Timing Belts



Automotive OE

**Gates New POLY CHAIN® GT® CARBON™ Belt.**

Nothing Tougher.

If you thought roller chain was your only drive option, think again.

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Where To Buy

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- Distributor Ordering

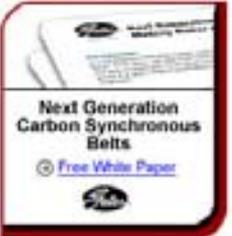
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Ask for Gates V Belts and synchronous belts, and you'll also get the most experienced engineering, customer service and field sales experts in the industry.



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- Design View Drawings

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When making a drive conversion or designing a new power transmission system, there are 3 broad options: Roller chain drives, V belt drives, Synchronous belt drives. Each has its own advantages and disadvantages, and cost considerations.

#### Drive Design Engineering

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- Design Flex Web
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- Belt Number & ID Chart
- CAD & 3D Models

The Store for PT Distributors



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## Industrial Power Transmission



**Gates Drive Design Engineering Tools**  
Design Flex®GatesFacts™ Technical Library and Design View™ are some of many tools you can use for selecting and maintaining your industrial drives!

- ▶ [Design Flex Web](#)
- ▶ [Drive Design Manual Online](#)
- ▶ [PDF Manuals/Catalogs](#)  
Download the resource you need.
- ▶ [DesignView® Drawings](#)  
DesignView® contains part specification drawings for 8mm and 14mm Poly Chain GT2 sprockets; 5mm, 8mm, and 14mm Power Grip GT2 sprockets, and TL Bushings.
- ▶ [Design Flex®](#)  
Attention Belt Drive Designers! FREE Design Software Now Available Online from Gates! Design Flex® Pro™ is the newest upgrade to the previous versions of Design Flex software, including DF-4. Download your copy today!

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More time for the work that drives you




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- Yes
- No
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The Gates sonic tension  
meter is precise, fast and  
easy to use. It even  
allows for the use of an  
induction sensor to  
provide precise readings  
in windy or noisy  
conditions

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DesignView® contains part specification drawings for 8mm and 14mm Poly Chain GT2 sprockets; 5mm, 8mm, and 14mm Power Grip GT2 sprockets, and TL Bushings.

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Expert users can download this program to design multi-point and complex belt drives.

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Now you can get consistent, accurate tension readings without the stress, thanks to the Gates Sonic Tension Meter. It measures belt tension by analyzing the harmonic characteristics of a vibrating belt. Simply strum the belt like a guitar string and the meter takes care of the rest.

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Power Transmission White Papers & PA Notes from the leading group of Engineers in the industry.

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With Gates new Gates EZ Align™ precision laser alignment device you can align all of your industrial belt drives quickly and easily with just one tool.

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design software](#)

More time for the work  
that drives you



Gates FREE weekly "Belt  
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DESIGN FLEX WEB

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Find your drive design fast.

No software download required

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V-Belts		Synchronous Belts	
Belt	Sizes	Belt	Sizes
Super HC®	3V, 3VX, 5V, 5VX, and 8V Singles and PowerBands	Poly Chain® GT® Carbon™	8 and 14mm
Hi-Power® II	A, B, C, and D Singles and PowerBands	PowerGrip® GT2	2, 3, 5, 8, and 14mm
Tri-Power®	AX, BX, and CX	PowerGrip Timing	MXL, XL, L, H, VH, and VXH



# Design Flex Web™

Version: 1.02/1.10/1.12/ 568 North America

**Belt** Drive Parameters Driven Pulley Driven Pulley Speed Center Distance Between Shafts Design

- Known Belt / Roller Chain
- Single Belts
- Recommended Synchronous Belts
- PowerBand
- Recommended V-Belts
- Light Power and Precision Belts

- Synchronous
  - Poly Chain Carbon
  - PowerGrip GT2
  - TruMotion
  - PowerGrip Timing
  - Poly Chain GT
  - PowerGrip HTD
- V
  - Super HC
  - Predator
  - Predator Matrix

[Next >>](#)



# Design Flex Web™

Version: 1.02/1.10/1.12/ 568 North America

- Belt**
- Drive Parameters**
- Driver Pulley
- Driven Pulley
- Driven Pulley Speed
- Center Distance Between Shafts
- Design

Power

RPM

### Drive Service Factor

Drive Characteristics

Type of Service

Drive Characteristics

V-Belts

Synch Belts

Low-Speed Poly Chain

« Back

Next »



# Design Flex Web™

Version: 1.02/1.10/1.12/ 568 North America

[Belt](#) [Drive Parameters](#) [DrivesN Pulley](#) [DrivesN Pulley](#) [DrivesN Pulley Speed](#) [Center Distance Between S&S Pk](#) [Design](#)

## Design

Click "Design" to view a list of drive solutions that satisfy the entered parameters.

[Design »](#) Show results in new window

*Gates products are not intended for use in any application where the failure of the product to perform could cause injury or death. This includes use on aircraft propeller or rotor drive systems or other in-flight systems necessary for safe flight.*

*By clicking on the "Design" button, you certify that your application meets the above restriction.*

[» Back](#)



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Print All...

Print Selected...

Synchronous

<input type="checkbox"/>	Prod Line	Belt	Driver (Teeth)	Drivell (Teeth)	dR RPM	A RPM	ODR	Rel. Cost	CD (in)	Δ CD (in)	Belt Pull (lb)	Width (in)	
<input type="checkbox"/>	Poly Chain Carbon	8MGT-2600-12	28	28	1750	0	1.0	1.0	46.77	-1.23	329.9	1.00	View...
<input type="checkbox"/>	Poly Chain Carbon	8MGT-2600-12	30	30	1750	0	1.1	1.0	46.46	-1.54	307.9	1.00	View...
<input type="checkbox"/>	Poly Chain Carbon	8MGT-2600-12	28	27	1814.0	65	1.0	1.1	46.05	-1.15	329.9	1.00	View...
<input type="checkbox"/>	Poly Chain Carbon	8MGT-2600-12	28	29	1689.7	-60	1.0	1.1	46.69	-1.31	329.9	1.00	View...
<input type="checkbox"/>	Poly Chain Carbon	8MGT-2600-12	29	28	1812.5	63	1.0	1.1	46.69	-1.31	318.6	1.00	View...
<input type="checkbox"/>	Poly Chain Carbon	8MGT-2600-12	29	29	1750	0	1.0	1.1	46.61	-1.39	318.6	1.00	View...
<input type="checkbox"/>	Poly Chain Carbon	8MGT-2600-12	29	30	1691.7	-58	1.1	1.1	46.54	-1.46	318.6	1.00	View...
<input type="checkbox"/>	Poly Chain Carbon	8MGT-2600-12	30	29	1810.3	60	1.1	1.1	46.54	-1.46	307.9	1.00	View...
<input type="checkbox"/>	Poly Chain Carbon	8MGT-2600-12	30	31	1693.5	-56	1.1	1.1	46.38	-1.62	307.9	1.00	View...
<input type="checkbox"/>	Poly Chain Carbon	8MGT-2600-12	31	30	1808.3	58	1.1	1.1	46.38	-1.62	298.0	1.00	View...
<input type="checkbox"/>	Poly Chain Carbon	8MGT-2600-12	31	32	1695.3	-55	1.2	1.1	46.22	-1.78	298.0	1.00	View...
<input type="checkbox"/>	Poly Chain Carbon	8MGT-2600-12	32	31	1806.5	56	1.2	1.1	46.22	-1.78	288.7	1.00	View...
<input type="checkbox"/>	Poly Chain Carbon	8MGT-2600-12	32	32	1750	0	1.2	1.1	46.14	-1.86	288.7	1.00	View...
<input type="checkbox"/>	Poly Chain Carbon	8MGT-2600-12	32	33	1697.0	-53	1.2	1.1	46.06	-1.94	288.7	1.00	View...
<input type="checkbox"/>	Poly Chain Carbon	8MGT-2600-12	33	32	1804.7	55	1.3	1.1	46.06	-1.94	279.9	1.00	View...
<input type="checkbox"/>	PowerGrip GT2	2800-8MGT-12	56	56	1750	0	1.1	1.1	46.30	-1.70	165.0	0.89	View...
<input type="checkbox"/>	PowerGrip GT2	2800-8MGT-12	60	60	1750	0	1.2	1.1	45.67	-2.33	154.0	0.89	View...
<input type="checkbox"/>	Poly Chain Carbon	8MGT-2600-12	31	31	1750	0	1.2	1.2	46.30	-1.70	298.0	1.00	View...
<input type="checkbox"/>	Poly Chain Carbon	8MGT-2600-12	33	33	1750	0	1.3	1.2	49.92	1.92	279.9	1.00	View...
<input type="checkbox"/>	Poly Chain Carbon	8MGT-2600-12	33	34	1696.5	-51	1.3	1.2	49.84	1.84	279.9	1.00	View...
<input type="checkbox"/>	Poly Chain Carbon	8MGT-2800-12	34	33	1803.0	53	1.3	1.2	49.84	1.84	271.7	1.00	View...
<input type="checkbox"/>	Poly Chain Carbon	8MGT-2800-12	34	34	1750	0	1.4	1.2	49.76	1.76	271.7	1.00	View...

CONTACTS

<b>Designed For:</b>	Pete Haberbosch Gates Corporation Corporate One West 1195 Washington Pike Bridgeville, PA 15017 United States phaberbosch@gates.com 412-257-4205 Phone	<b>Provided By:</b>	Design Flex® Pro Gates Corporation
<b>Application:</b>	Unspecified		

INPUT

<b>Drive Information</b>		<b>Driver</b>	<b>DriveN</b>
Speed Ratio:	1.00	RPM:	1750.0
Motor Power:	10 hp		1750.0 +/-4%
Service Factor:	1.6		
Design Power:	16 hp		
Center Distance:	48 in +/-10%	Bushings Checked:	Any
Motor Standards:	NEMA Electric Motor	Belts Checked:	Poly Chain Carbon, PowerGrip GT2

SELECTED DRIVE

<b>Belt Type:</b>	<b>Poly Chain GT Carbon - 8M</b>	<b>Belt</b>	<b>Driver</b>	<b>DriveN</b>
<b>Speed Ratio:</b>	1.0	Part No:	8MGT-2600-12	PB8MX-28S-12
<b>dN RPM</b>	1750.0	Product No:	9274-0325	7715-1228
<b>Rated Power:</b>	15.85 hp	Top Width:	--	1.00 in
<b>Belt Pull:</b>	329.9 lb	Installed Weight:	0.3 lb	1.4 lb
		Rim/Belt Speed:	1286 ft/min	1257 ft/min
		RPM:	150.8	1750.0
Center Distance:	46.77 in	Bushing Part No:	--	MPB
Install/Take-Up Range:	45.30 in to 46.82 in	Bushing Product No:	--	MPB
		Bore:	--	0.5 in - 1.75 in
		Pitch Diameter:	--	2.81 in

TENSION

	<b>New Belt</b>	<b>Used Belt</b>	
Static Tension (Per rib/strand):	171.8 lb to 187.5 lb	125.0 lb to 140.6 lb	
Rib/Strand Deflection Distance:	0.7 in	0.7 in	
Rib/Strand Deflection Force:	12.6 lb to 13.6 lb	9.7 lb to 10.6 lb	
Sonic Tension Meter:	764 to 834 N	556 to 625 N	
Belt Frequency:	49 to 51 Hz	42 to 44 Hz	
505C/507C Model STM Settings:	Weight: 4.7 g/m.Width: 12 mm/#R. Span: 1188 mm		

When planning to re-install used belts, measure and record the tension before removing and re-install at the recorded tension.



# Calculador directo sustitución de Cadenas-Catarinas

## Nada más simple!





Roller chain to  
**POLY CHAIN® GT CARBON™ Belt Drive  
 Retrofit Calculator**

exit

Determine the proper Poly Chain GT Carbon belt drive replacement for your roller chain drive.

Please enter your current roller chain drive parameters below:

Pitch  ?

Number of Strands  ?

Driver Sprocket Size (# of teeth)  ?

Driver RPM (0.5-750)  ?

Center Distance (in)  ?

Driven Sprocket Size (# of teeth)  ?

If you need help with parameters, click "?" by appropriate field

Helpful Information:

If you have a roller chain drive that is not configured properly, the results from this calculator may be inaccurate.

Some indicators of improper chain drive design are the need for:

- frequent retensioning
- frequent replacement of chain drive components

Number of Strands: 1

Width: inches mm  
 1.93 49.1

NEXT >>



**Llenar  
 con  
 datos**



 **Roller chain to**  
**POLY CHAIN® GT CARBON™ Belt Drive**  
**Retrofit Calculator** exit: [X]

Determine the proper Poly Chain GT Carbon belt drive replacement for your roller chain drive.

Poly Chain GT Carbon Belt Drive		Roller Chain Drive	
<b>Pitch Options :</b>	<input checked="" type="radio"/> <b>8MGT</b>	<input type="radio"/> <b>14MGT</b>	<b>Driver Sprocket Pitch Diam. (in) :</b> 4.33
Width (mm) :	21	<b>Not An Option</b>	<b>Selected Pitch:</b> Pitch is the distance from the center of one tooth to the center of the next tooth. 
Driver Sprocket (# of teeth) :	42		
Driver Sprocket Pitch Diameter (in) :	4.21		
<b>Driven Sprocket Options :</b>	<input type="radio"/> <b>Option 1</b>	<input checked="" type="radio"/> <b>Option 2</b>	<b>Target Driven Speed (rpm) :</b> 194.12
Driven Sprocket (# of teeth) :	33	71	<b>Select the Poly Chain GT Carbon sprocket that provides the driven speed closest to your desired speed.</b>
Driven Sprocket Pitch Diameter (in) :	6.32	7.12	
Driven Speed (rpm) :	200	177.4E	
<b>Belt Length Options :</b>	<input checked="" type="radio"/> <b>Option 1</b>	<input type="radio"/> <b>Option 2</b>	<b>Center Distance (in) :</b> 33
Nearest Belt Length (mm) :	2241	2411	<b>Select belt length option that will provide the center distance closest to your desired center distance. Center distance is measured from</b>
Approximate Center Distance (in) :	88.17	111.12	

**<< BACK** **NEXT >>**



**Seleccio-  
nar  
mejor  
opcion**



Roller chain to  
**POLY CHAIN® GT CARBON™ Belt Drive**  
**Retrofit Calculator**

exit

Determine the proper Poly Chain GT Carbon belt drive replacement for your roller chain drive.

**Your selected Gates belt drive solution:**

	Part #	Bushings Part #	Bore Range (in)	
			Min	Max
Poly Chain GT Carbon Belt	FMGT-2247-21			
Poly Chain GT Carbon Driver Sprocket	8MX-12S-21	2012	0.5	2.125
Poly Chain GT Carbon Driven Sprocket	8MX-71S-21	2517	0.5	2.688
Approximate Center Distance (in)	35.17			

Tensioning Data:	Min	Max
Static Tension (lbs)	525	573
Deflection Force (lbs)	36	39
Sonic Tension Meter (Hz)	86	90
Deflection Distance (in)	1.55	

This drive may be optimized by using Gates drive design program Design Flex. [Download Here](#)

For multi-shaft drives and tensioning idler placement, use Design IQ software. [Download Here](#)

[Contact your Gates authorized distributor](#) to place your order or for additional assistance.

« BACK

Print Your Results

Calculate Another Drive



# Solución completa



Diseño en 2Dim/3Dim

Nada más simple!





- Solutions
- Catalogs
- Part Interchanges
- Industrial Power Transmission
  - Find a Distributor
  - Catalogs
  - Selecting the Right Drive
  - Drive Design Engineering
  - Design Flex Web
  - Drive Design Manual Online
  - PDF Manuals/Catalogs
  - DesignView® Drawings**
  - Design Flex®
  - Design Kit
  - Sonic Tension Meter
  - Product Application Engineers
  - GatesFacts™
  - White Papers & Notes
  - EZ Align™
  - Maintenance Engineering
  - Synchronous Belts
  - V Belts
  - Snowmobile Belts
  - Pulleys & Sprockets
  - Markets & Applications
  - PT Partners
- Industrial Fluid Power
- Automotive Aftermarket
- Auto OE
- Gates Brand Protection
- News
- Sitemap

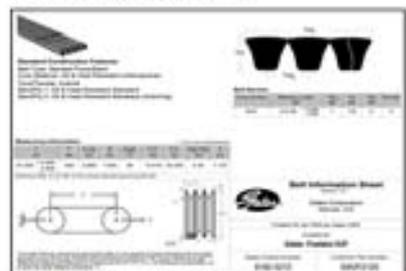
## Design View® Software

A faster, easier way to obtain engineering drawings of Gates belts and hardware.

### Drawings for Belts

Detailed information sheets for most Gates' standard catalog belts.

- Synchronous Belt Products
- V-Belt & Micro-V Belt Products



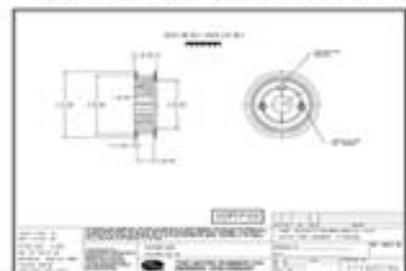
View Above Sample in Detail

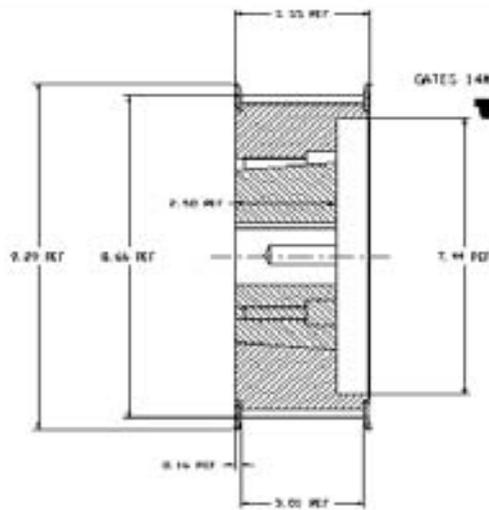


### Drawings for Hardware - CAD & Profile formats

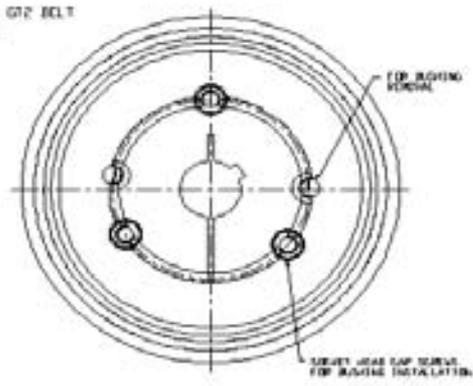
Engineering drawings available in .dwg (AutoCAD), .doc, .dxf, .dwt, and .igs formats.

- Gates synchronous belt hardware only.
- Now details 3D solid models as native Profile files.





GATES 14R POLY CHAIN GT2 BELT



CERTIFIED

TOOTH TYPE: GT  
 BELT TYPE: 14R  
 PITCH DIA: 0.792  
 NO. OF TEETH: 50  
 MATERIAL: DUCTILE IRON  
 FINISH: B50 ✓  
 COATINGS: ANTI-RUST

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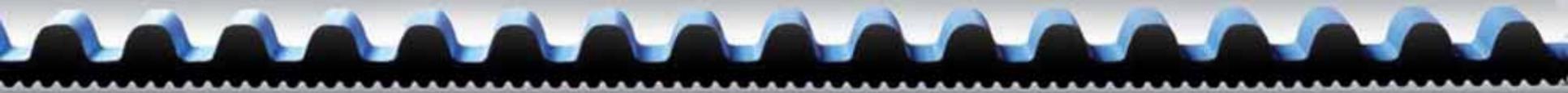
**THE GATES RUBBER CO.**  
 DENVER, COLORADO

REV	DATE	BY	CHKD	REASON
PART DESCRIPTION: 14R0-500-60 7005				
GATES PART NUMBER: 77196050				
APPROVED BY: _____				NET. WEIGHT: _____
DATE: _____				
DR. BY: _____	DATE: _____	ISSUING NO.		
CHK. BY: _____	DATE: _____	77196050		
APP. BY: _____	DATE: _____			



# DESIGN IQ "Multi-Puntos"

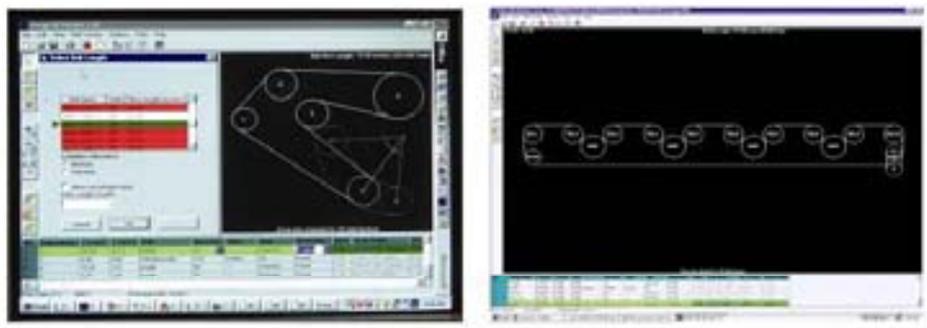
Tensión, Carga, Vida y Más!





- Solutions
- Catalogs
- Part Interchanges
- Industrial Power Transmission
  - Find a Distributor
  - Catalogs
  - Selecting the Right Drive
  - Drive Design Engineering
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### Gates Design IQ Software

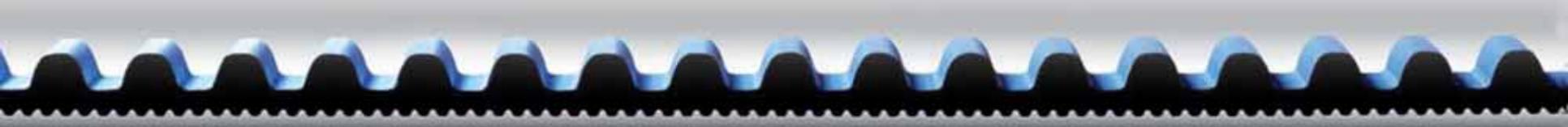


This program provides a blank slate for designing multi-point and complex serpentine belt drives. Utilizing a specific Gates product that you have identified, as well as your drive specifications, the software will calculate:

- belt tension
- shaft load
- belt length
- and more

**Design IQ**

[Download your copy now.](#)





# CALCULADOR DE AHORROS



# GATES POLY CHAIN® GT® vs. CADENA-CATARINA CALCULADOR DE AHORROS

12/03/2008



Nota: Solo llenar los cuadros sombreados en color rojo

CLIENTE:		Cadena-Catarina	Poly Chain GT
Transmision No:			
Costo de Cadena ó Banda Poly Chain® GT® 2		\$250.00	\$680.00
Costo de Cadena-Catarina ó Poly Chain GT 2 Sprocket - Motriz		\$300.00	\$500.00
Costo de Bushing ó Rebore Motriz		\$150.00	\$150.00
Costo de Cadena-Catarina ó Poly Chain GT 2 Sprocket - Conducido		\$500.00	\$800.00
Costo de Bushing ó Rebore Conducido		\$180.00	\$180.00
<b>Costo Total de la Transmision</b>		<b>\$1,380.00</b>	<b>\$2,310.00</b>
Costos del 1er año con el uso de Cadena-Catarina y Poly Chain GT 2 (Instalacion, Mantenimiento y Tiempos Muertos)			
<b>Tiempo Promedio de operación sin fallas: Cadena-Catarina= 1 año ; Poly Chain GT= 3 años</b>			
Costo de Mano de Obra/Hora (\$11.50 = Promedio, a 2 salarios mínimos/día)		<b>\$11.50</b>	
Instalacion del nuevo Sistema	<b>10.00</b> Horas	\$115.00	\$115.00
Costo de la partes reemplazadas - 1er año.			
Cadena-Catarina ó Poly Chain		\$250.00	\$680.00
Cadena-Catarina ó Poly Chain Sprocket Motriz		\$300.00	\$500.00
Cadena-Catarina ó Poly Chain Sproket conducido		\$500.00	\$800.00
<b>Costo de la partes reemplazadas - 1er año.</b>		<b>\$1,050.00</b>	<b>\$1,980.00</b>
Costo mano Obra - primer año			
Cadena-Catarina y Sprockets	<b>10.00</b> Hrs	\$115.00	\$115.00
Costos de Mnnto durante el 1er año			
Costo de Mnnto durante el 1er año		\$115.00	\$115.00
Partes			
Partes		\$1,050.00	\$1,980.00
Mano Obra			
Mano Obra		\$115.00	\$115.00
Costos de Mnnto durante el 1er año		<b>\$1,165.00</b>	<b>\$2,095.00</b>
Costos de lubricación de la Cadena-Catarina			
Lubricación por año	<b>1.00</b> hrs/sem	\$598.00	\$0.00
Costo del lubricante	<b>\$ 500.0</b> /cubeta	\$2,000.00	\$0.00
Tiempo de limpieza para Lubricacion por año	<b>0.50</b> hrs/sem	\$299.00	\$0.00
Costo de lubricacion - 1er año.		\$2,897.00	\$0.00
Costo/Hrs del Tiempo Muerto			
Costo/Hrs del Tiempo Muerto		<b>\$500.00</b>	
Costo anual por mantenimiento de la transmision.		\$10,750.00	\$230
Costo anual por la instalacion de la transmision		\$115.00	\$115.00
<b>Reduccion de la Production con transmision Cadena-Catarina</b>		<b>\$10,865.00</b>	<b>\$ 345.00</b>
Costo anual del Mito de la Transmision			
Partes y Refacciones		\$4,430.00	\$2,310.00
Mano de Obra		\$1,127.00	\$115.00
Tiempos muertos		\$10,000.00	\$5,000.00
Reduccion de la Produccion		\$10,865.00	\$345.00
<b>Costos Totales durante el 1er año.</b>		<b>\$26,422.00</b>	<b>\$7,770.00</b>
<b>AHORROS con Poly Chain durante el 1er año</b>		<b>\$18,652.00</b>	
Tiempo necesario para pagarse a sí mismo Poly Chain GT2			
		0.29	Años
AHORROS con Poly Chain durante 3 años			
		\$79,266.00	\$23,310.00
<b>AHORROS TOTALES con Poly Chain durante 3 años</b>		<b>\$55,956.00</b>	

# Material de apoyo para el vendedor



## Lanzamiento:

- Brochure a color con el concepto Poly Chain Carbon
- Brochure general de la línea
- CD:
  - Calculador de transmisiones Cadena-Catarina
  - Calculador de ahorros
  - Boletines Técnicos:
    - Bandas
    - 6 Boletines de campo
    - Brochure general
    - Folleto Design Flex
    - Folleto Calculador de ahorros
    - Folleto de casos éxito
  - Revistas Performance con artículos PCC
  - Presentación de Producto

