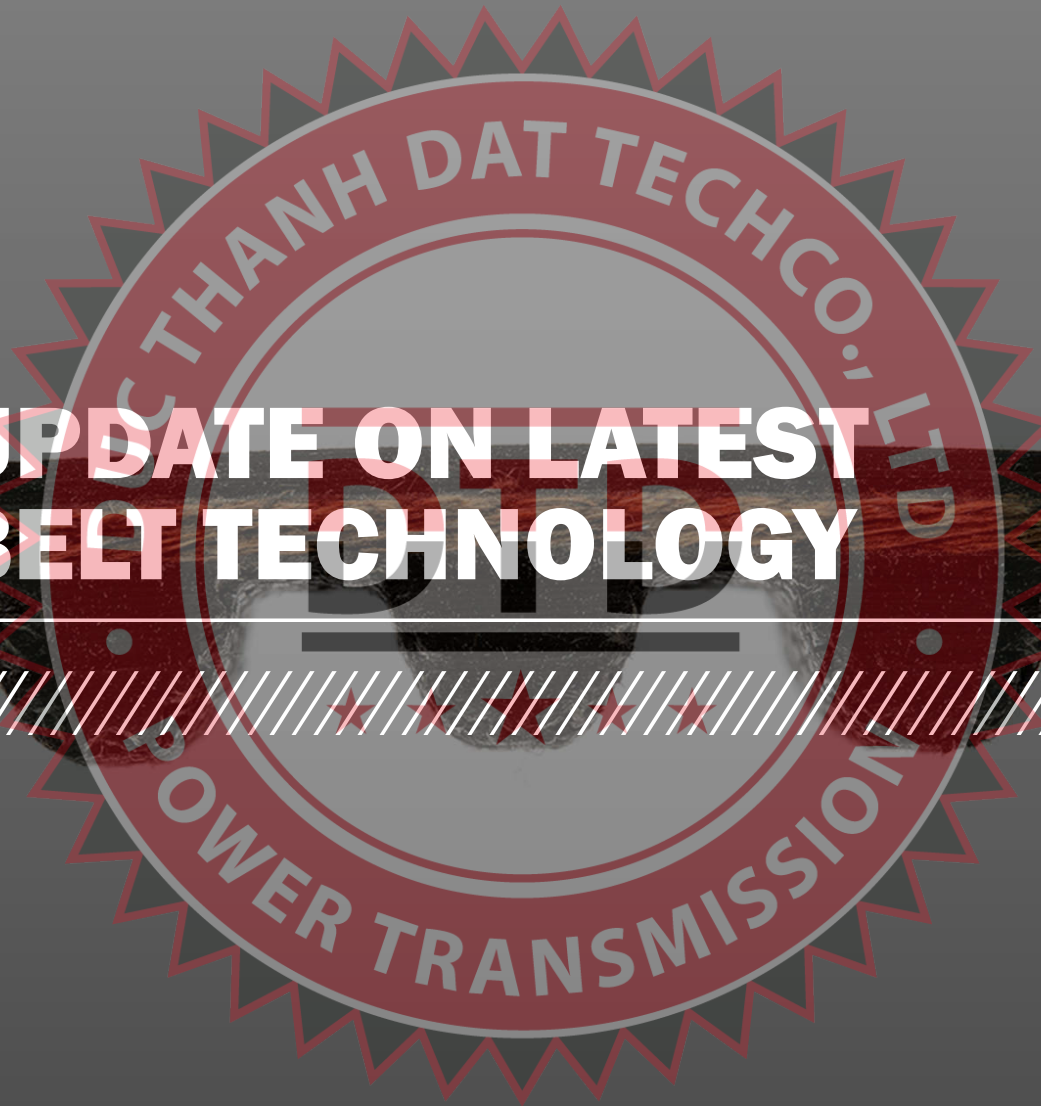




UPDATE ON LATEST BELT TECHNOLOGY





INTRODUCTION

CUSTOMERS SHARED THEIR CHALLENGES AND NEEDS.

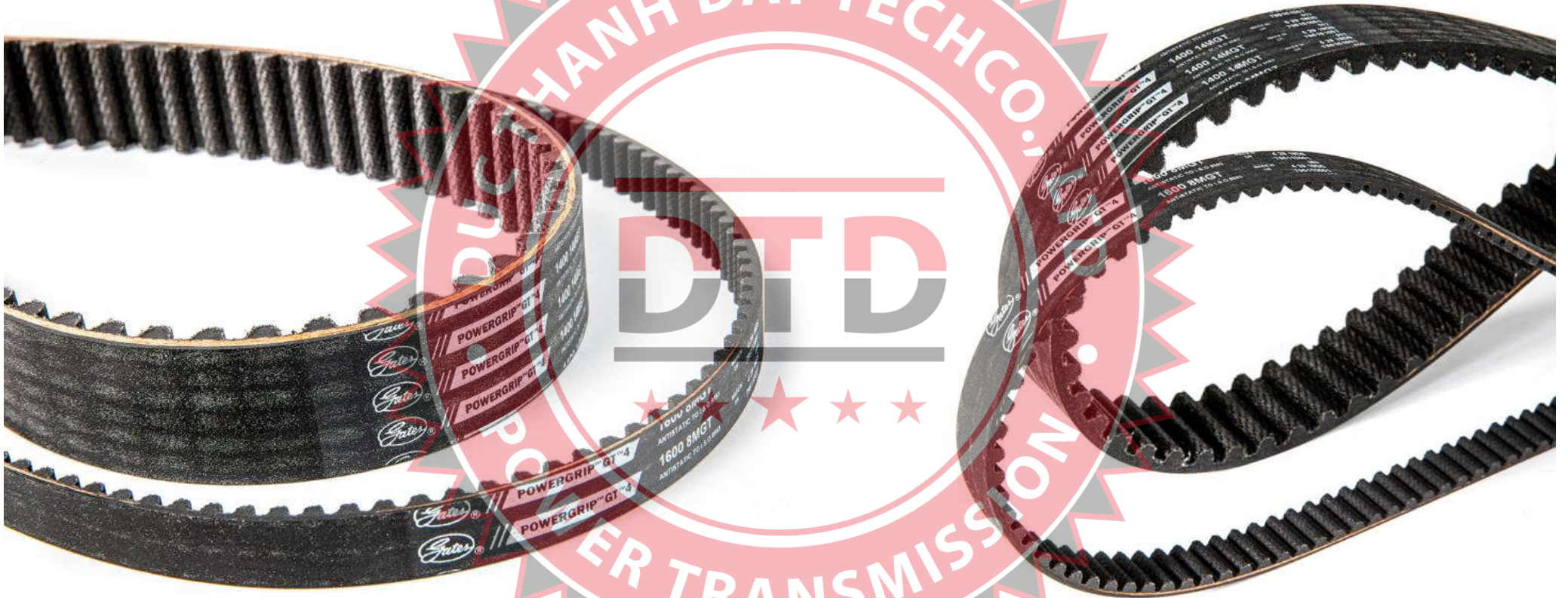
WE DEVELOPED A BELT TO ADDRESS EFFICIENCY, NOISE, DURABILITY AND EASE OF INSTALLATION.



AN ETHYLENE ELASTOMER HIGH-TORQUE SYNCHRONOUS BELT



INTRODUCTION



POWERGRIP™ GT4™ : THE LATEST IN SYNCHRONOUS BELT TECHNOLOGY



NEW TECHNOLOGY PLATFORM





KEY ADVANTAGES

- Higher-power capability
- Wider temperature range
- Service-free
- Other benefits



OPPORTUNITIES

- Applications
- Industries



PRODUCT SPECIFICATIONS

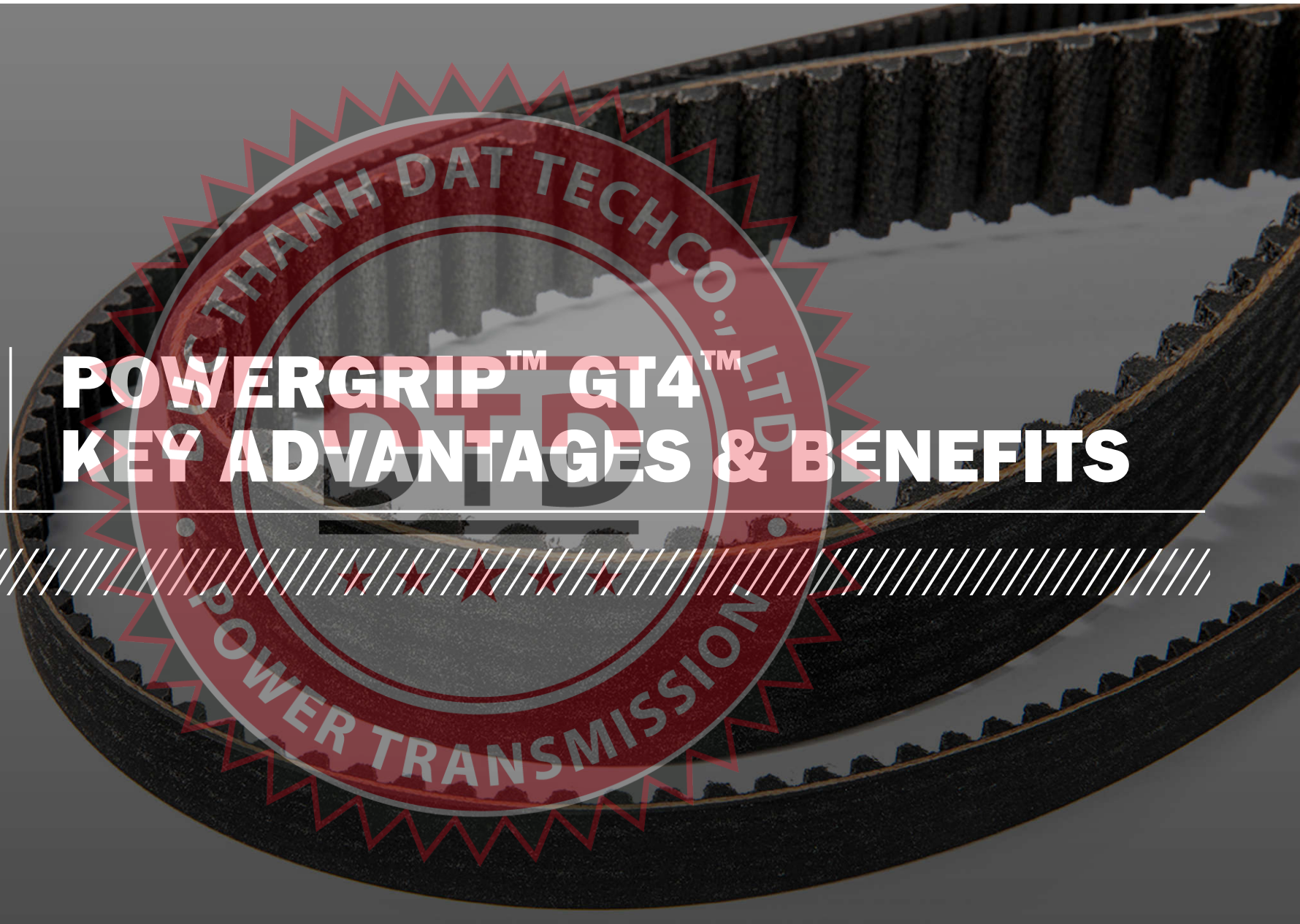
- Construction
- GT range evolution
- Benchmark
- Other product specifications
- Order codes



LET'S START

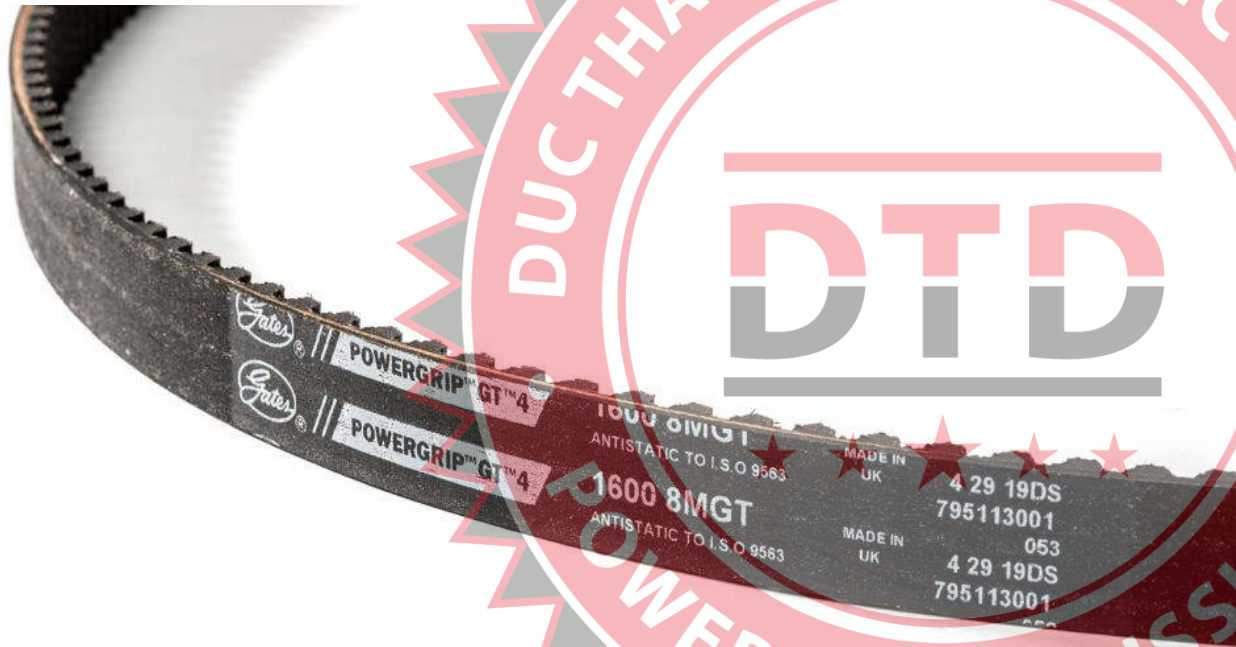


POWERGRIP™ GT4™ KEY ADVANTAGES & BENEFITS





KEY ADVANTAGES



1. HIGHER POWER-CARRYING CAPACITY

2. WIDER TEMPERATURE RANGE CAPABILITY

3. SERVICE FREE



A NARROWER BELT OPENS UP A BROADER RANGE OF USES

- You can apply a narrower belt which opens up a broader range of uses.
- Machine builders can fit a belt drive into smaller spaces or design machines that use more torque.
- Factory managers can save money as a result of a lower total cost of ownership by reducing downtime and repair costs.



POSSIBILITY TO USE A NARROWER BELT



ADVANTAGE OF MATERIALS SCIENCE

- Moving from chloroprene to the EE formulation allows the new belt to carry required power across a greater temperature range.
- This larger range capability enables application of belts in high and low temperature environments.
- Fully operational in temperatures of -40°C to $+120^{\circ}\text{C}$.

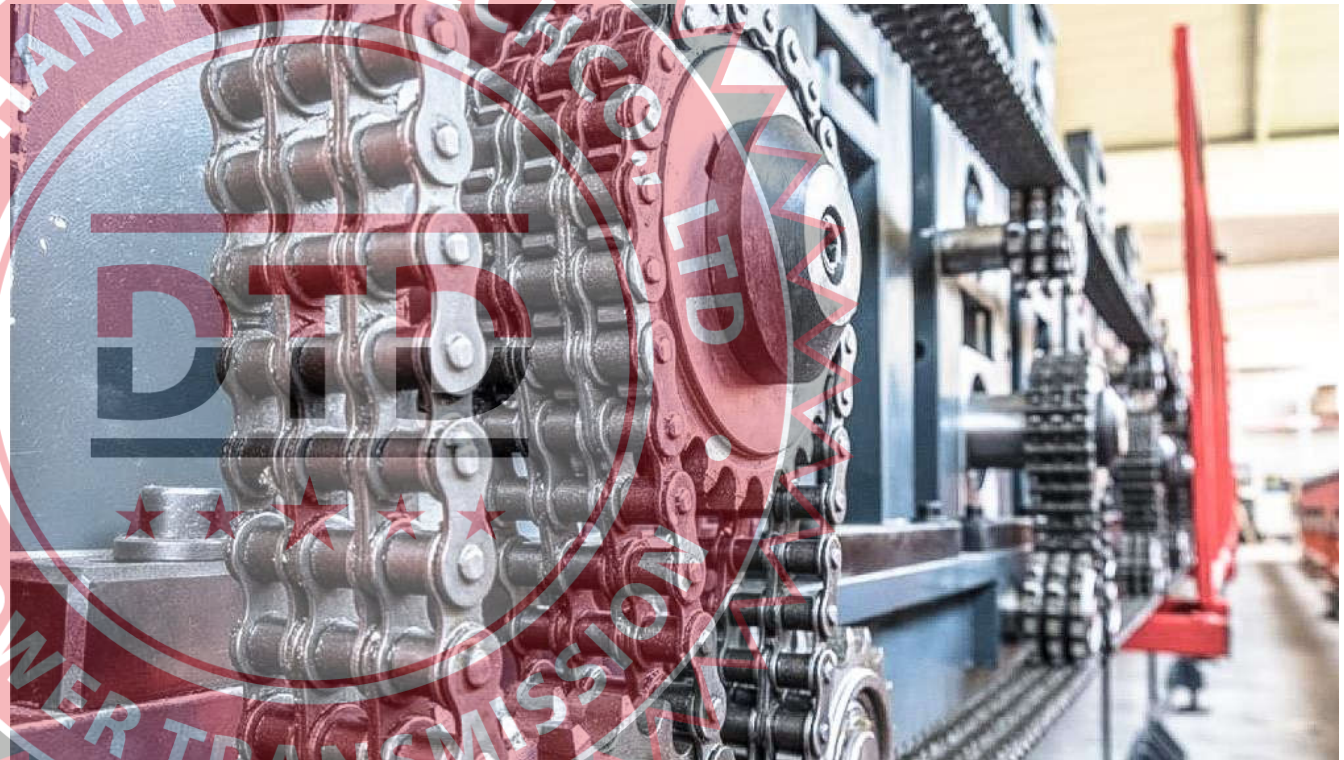
Can be used to $+140^{\circ}\text{C}$ intermittently.

FULLY OPERATIONAL IN ENVIRONMENTS FROM -40°C UP TO $+120^{\circ}\text{C}$



**POWERGRIP™ GT4™
ZERO MAINTENANCE**

- No lubrication and less re-tensioning eliminates maintenance costs throughout the life of the belt
- Running smoothly and quietly, reducing contamination risks.
- This makes it ideal to replace traditional chain drives.



NO STRETCH - NO RE-TENSIONING - NO LUBRICATION



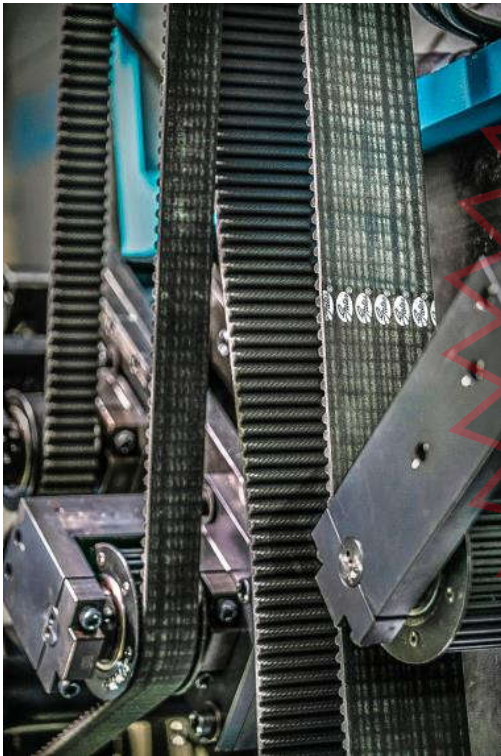
KEY ADVANTAGE | EXTRA FEATURES & BENEFITS

11

- High efficiency – up to 98% over belt life
- Improves Ergonomics – Less weight reduces fatigue and strain during installation resulting in more productivity and fewer lost time incidents
- Enables safer employee working conditions – with zero oil and less weight there's less risk of slipping and falling
- Rust free and safe for use in food handling spaces
- Less maintenance – reduces grime build-up
- Reduced environmental risk
- Increased uptime
- Improved chemical resistance against alkalis, acids, UV and ozone
- Maintains performance in all but fully submerged grease and oil environments (Intermittent contact with grease and/or oil will not adversely affect performance)



COMPLEMENTING THE EXISTING GATES PORTFOLIO



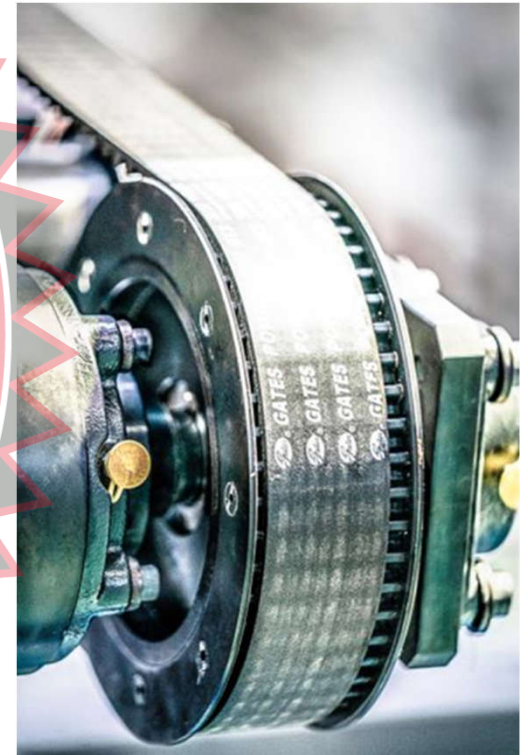
BENEFITS OF WORKING WITH GATES

- Backed by 100 Years of Innovation
- Engineered to outperform the competition
- Industry-leading product coverage
- Comprehensive training programs
- Dedicated Sales Force

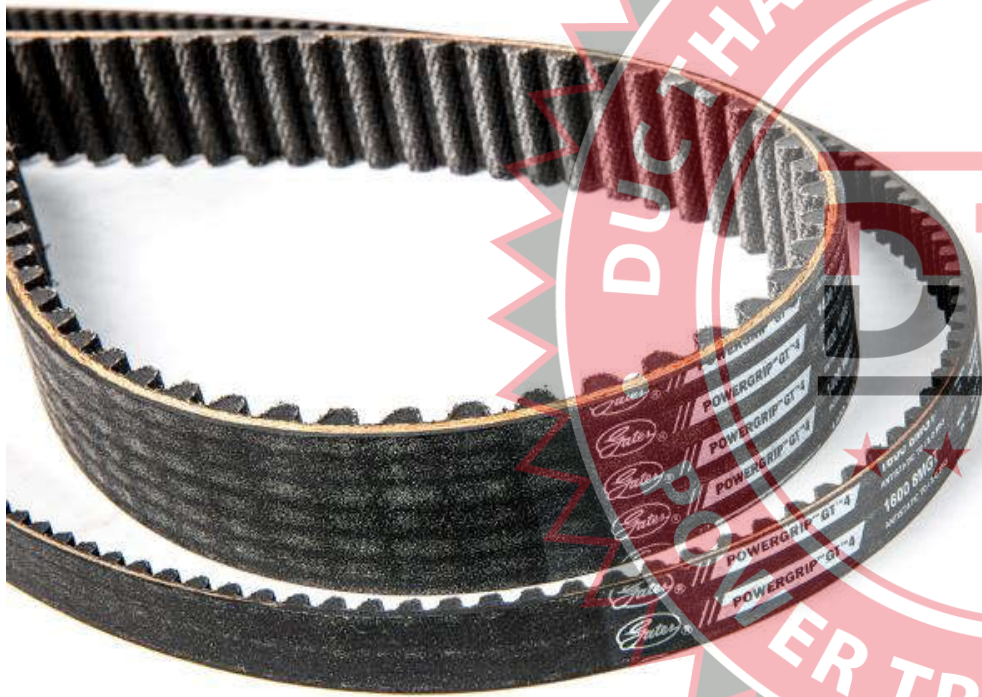
DTD

DUCH THAI DAT TECH CO., LTD

POWER TRANSMISSION



THE GATES VALUE PROPOSITION



WE CAN HELP YOU ACHIEVE...

- Global Product Availability
- Elimination of Metal-on-Metal Chain Clatter
- Corrosion Resistance
- Reduced Maintenance
- Increased Durability
- Improved Efficiency
- Weight Reduction
- Higher Speeds
- Greater Power and Load
- Cleaner Drives
- Environmentally-Friendly



... IN THESE INDUSTRIES

- Construction & mining
- Forestry & agriculture
- Textile & laundry
- Stationary machinery & tools
- Pulp & paper
- Food processing
- Packaging
- Automation
- Automotive assembly
- Robotics
-



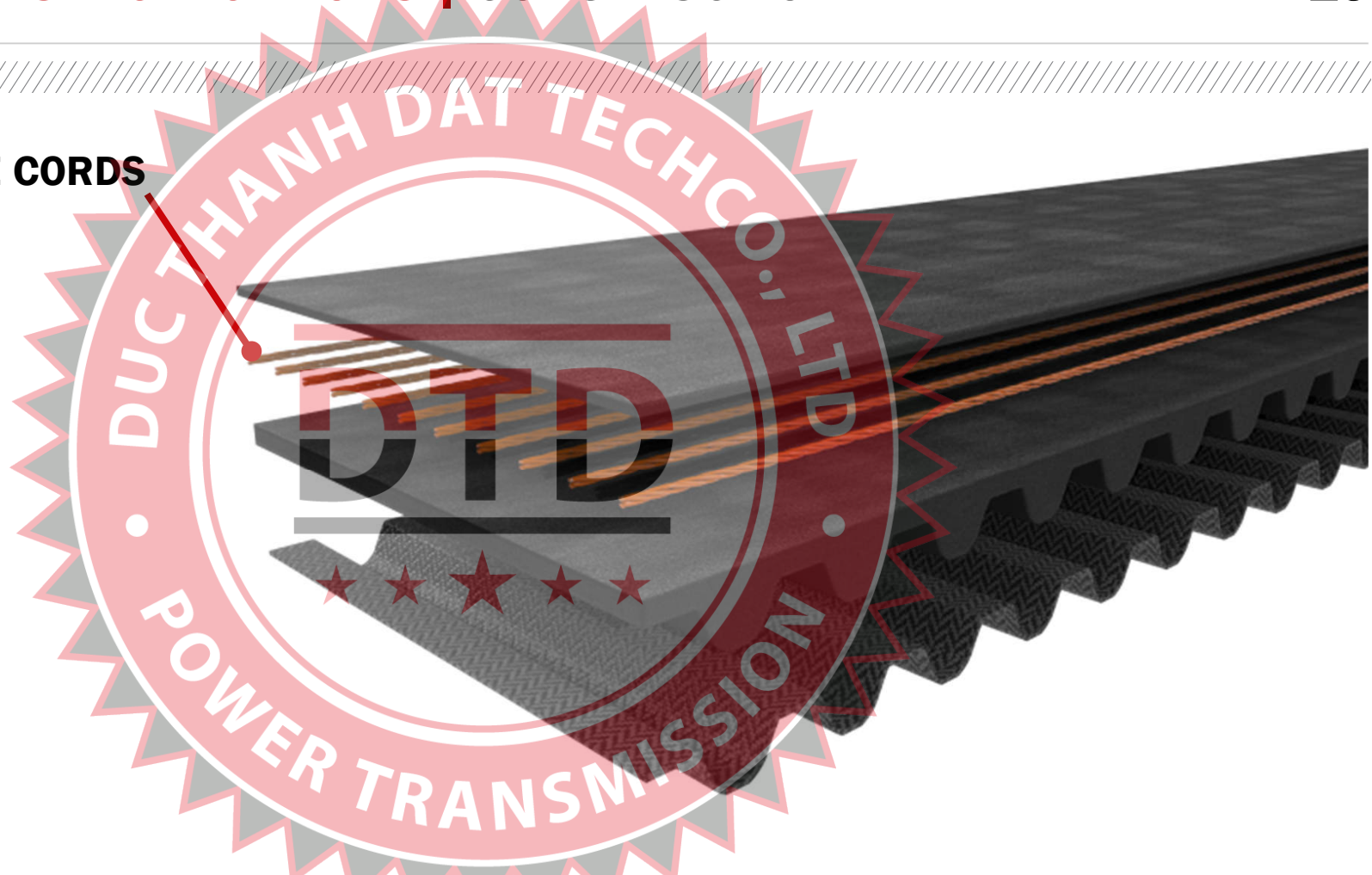
POWERGRIP™ GT4™
PRODUCT SPECIFICATIONS





FIBERGLASS TENSILE CORDS

- No re-tensioning required
- Improved flex fatigue
- High length stability
- Enhanced durability

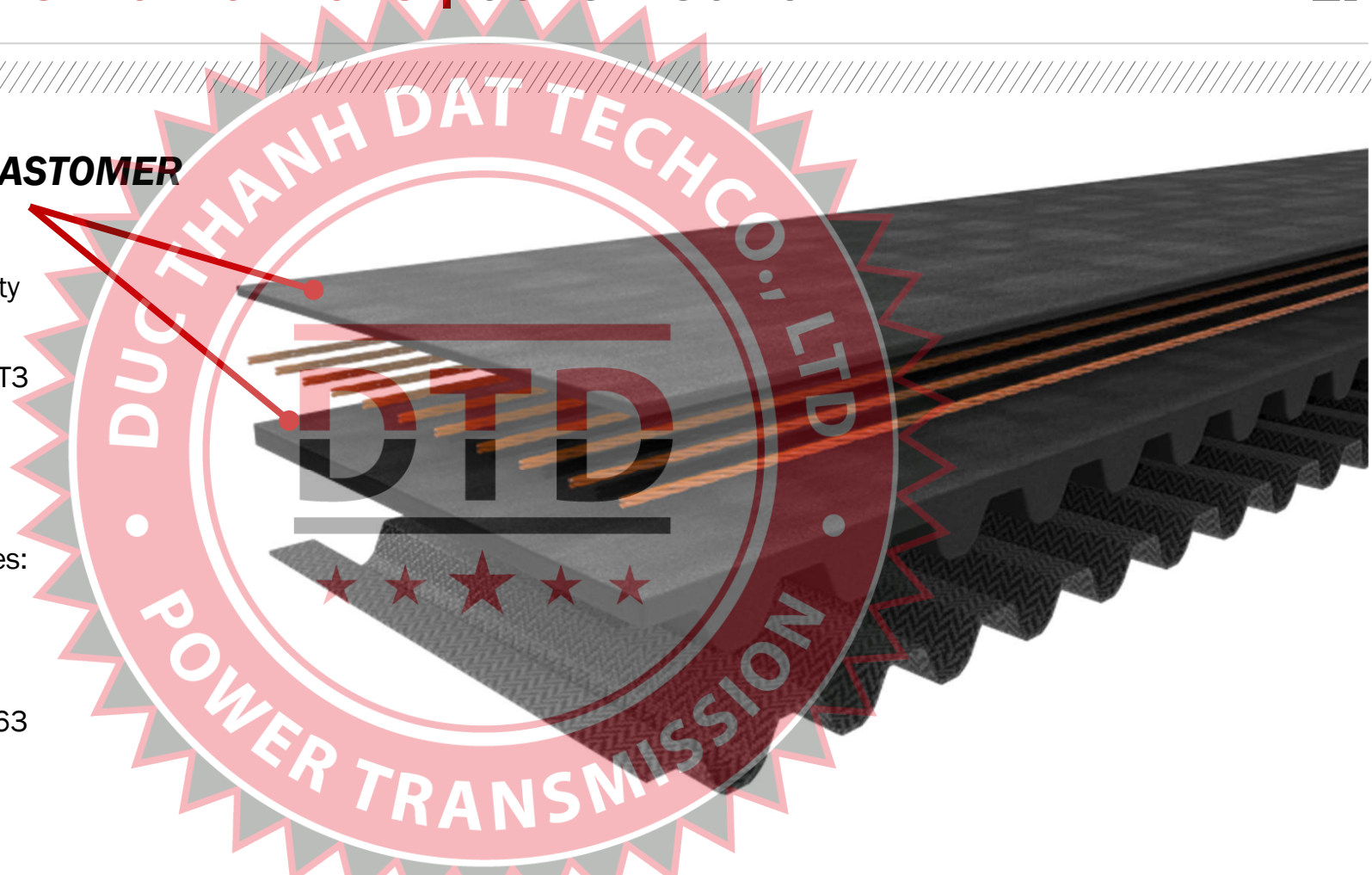


NEW DESIGNED CORD TECHNOLOGY



NEW GENERATION ELASTOMER

- Class leading power capacity
- 25% rating increase over GT3
- Compact belt drive design
- Wider range of temperatures:
-40°C to +120°C
- ATEX compliant
Static conductive – ISO 9563
- Halogen free

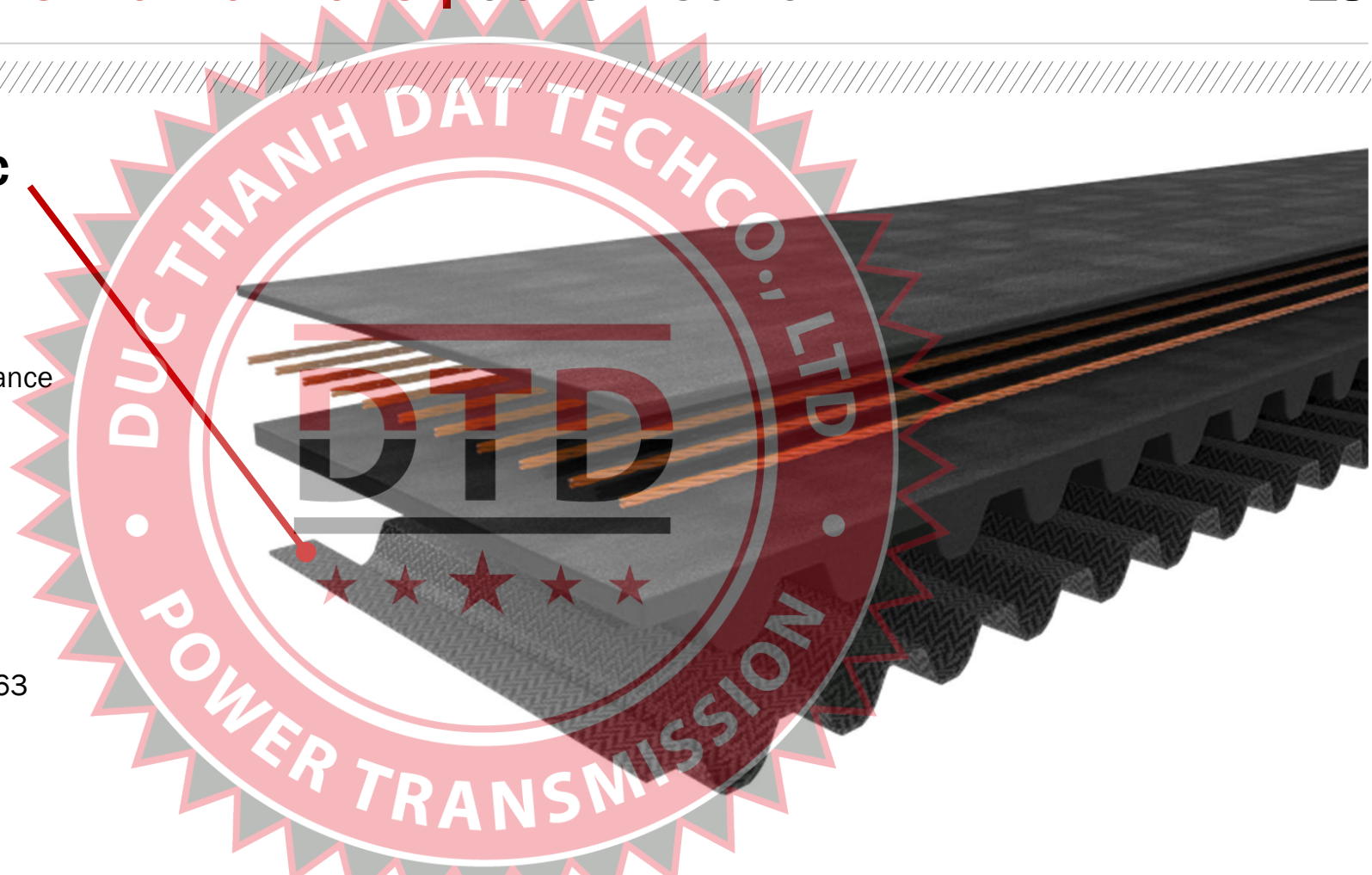


NEW ENGINEERED EPDM COMPOUND



NYLON TOOTH FABRIC

- High efficiency up to 98%
- Improved tooth wear resistance
- Reduces friction
- Longer durability
- ATEX compliant
Static conductive – ISO 9563

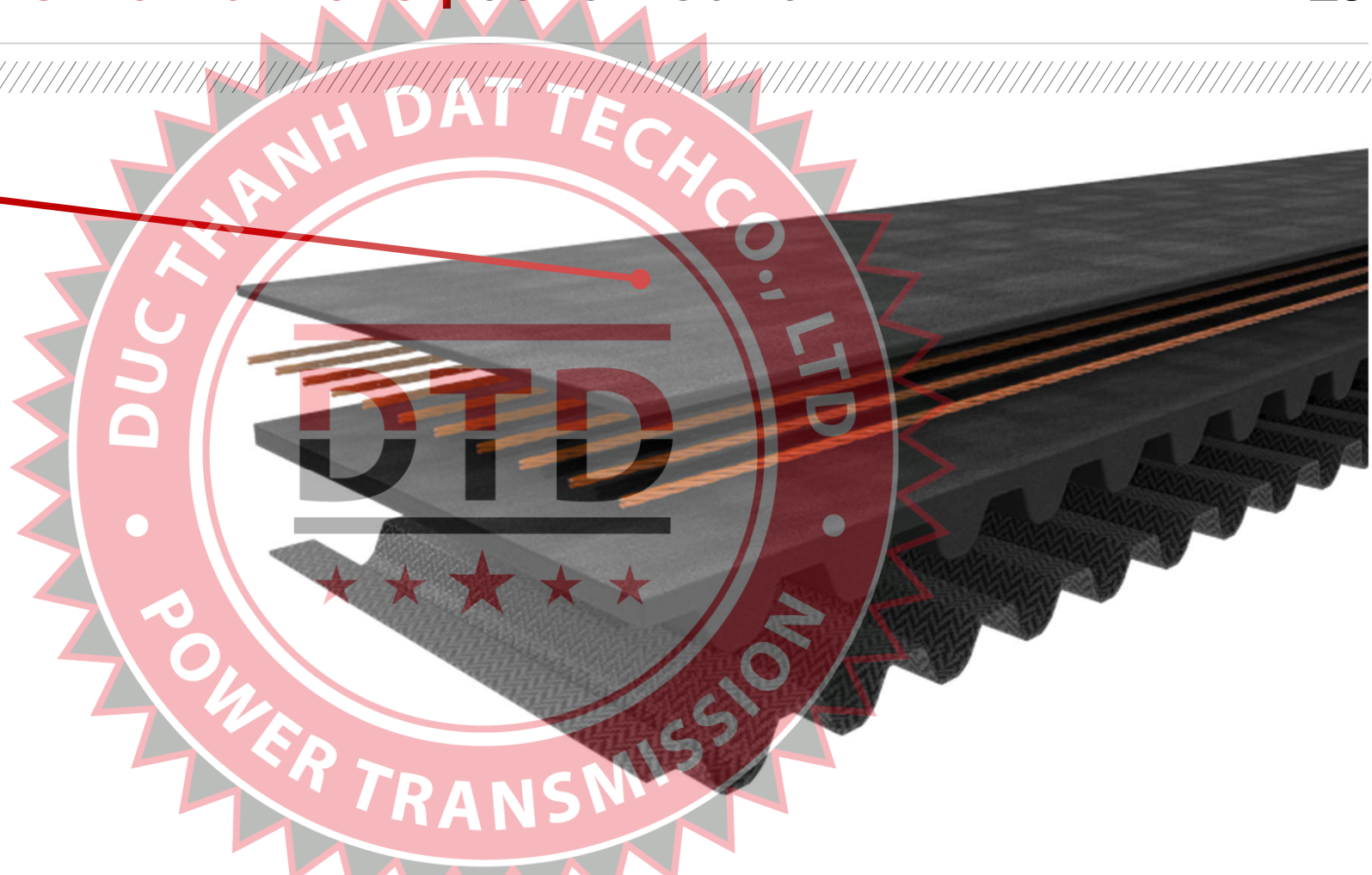


ENHANCED FABRIC MATERIAL



BACK FINISH

- Smooth back idler running
- Vibration elimination

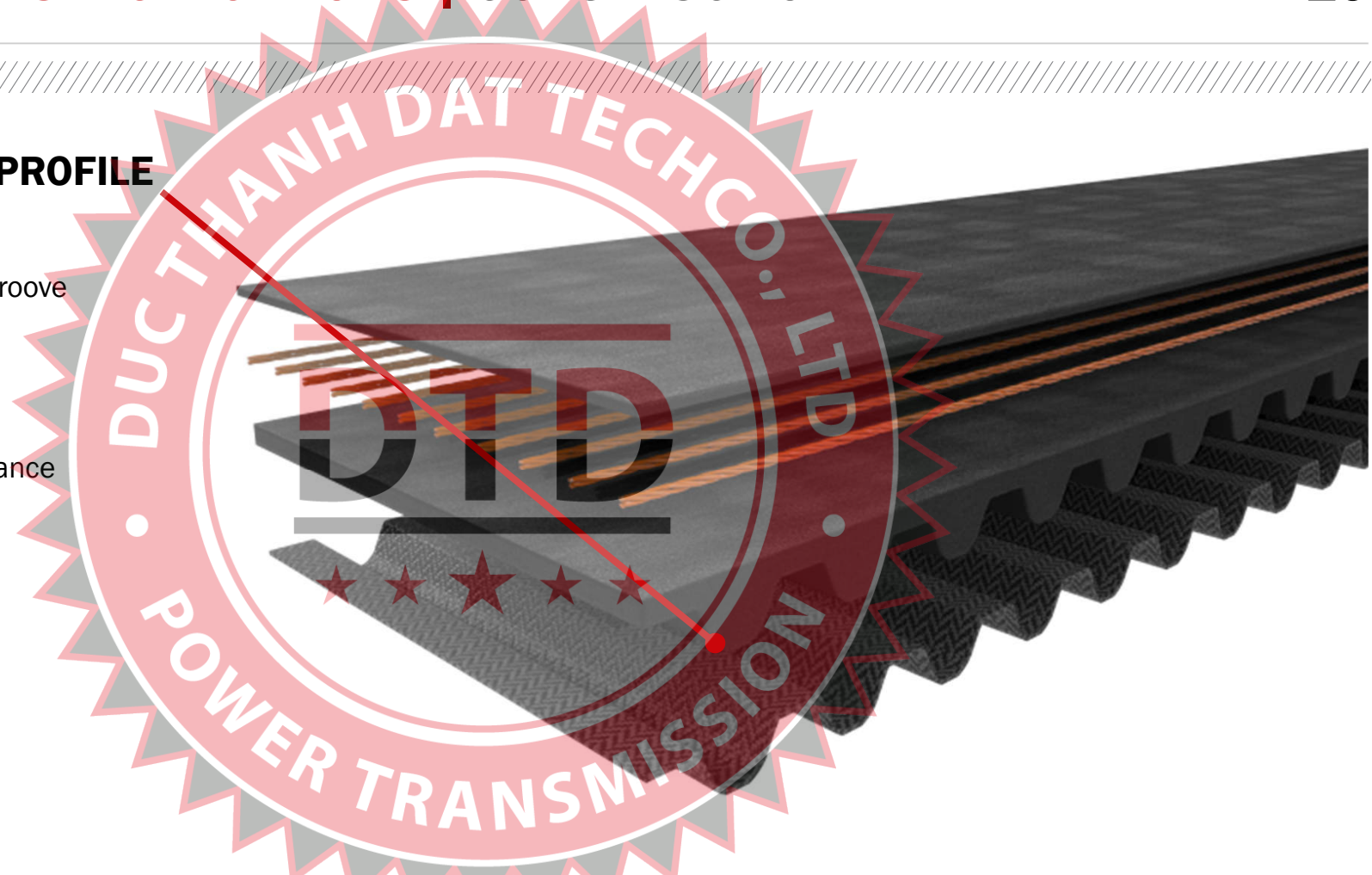


IMPROVED GRINDING



PATENTED GT TOOTH PROFILE

- Perfect fit on HTD™ pulley groove
- Reduced running noise
- Improved tooth jump resistance



OPTIMISED CURVILINEAR DESIGN

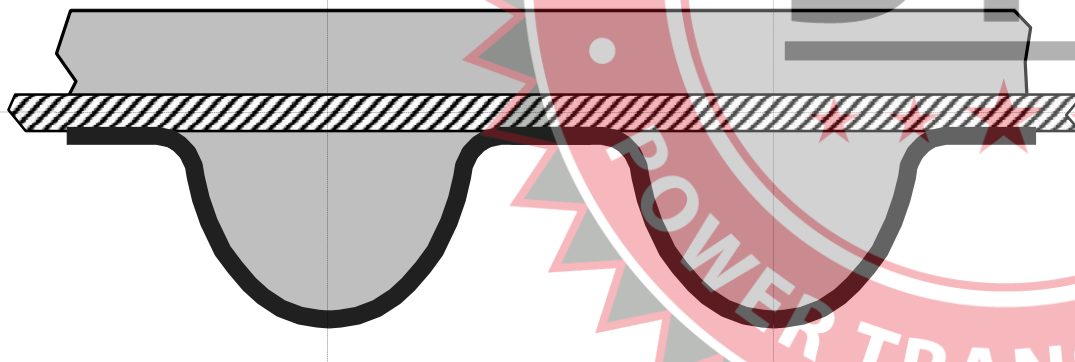


ADDITIONAL SPECIFICATIONS | LENGTH & WIDTH RANGE

21

AVAILABLE PITCH SECTIONS & DIMENSIONS

SECTION	PITCH (MM)	TOOTH HEIGHT (MM)	BELT HEIGHT (MM)	LENGTH RANGE (MM)
8MGT	8.0	3.4	5.6	384 - 4400
14MGT	14.0	6.0	10.0	966 - 6860



NEW LENGTHS 8MGT

- 576 mm / 72T
- 1104 mm / 138T
- 1224 mm / 153T
- 2200 mm / 275T

STANDARD WIDTHS

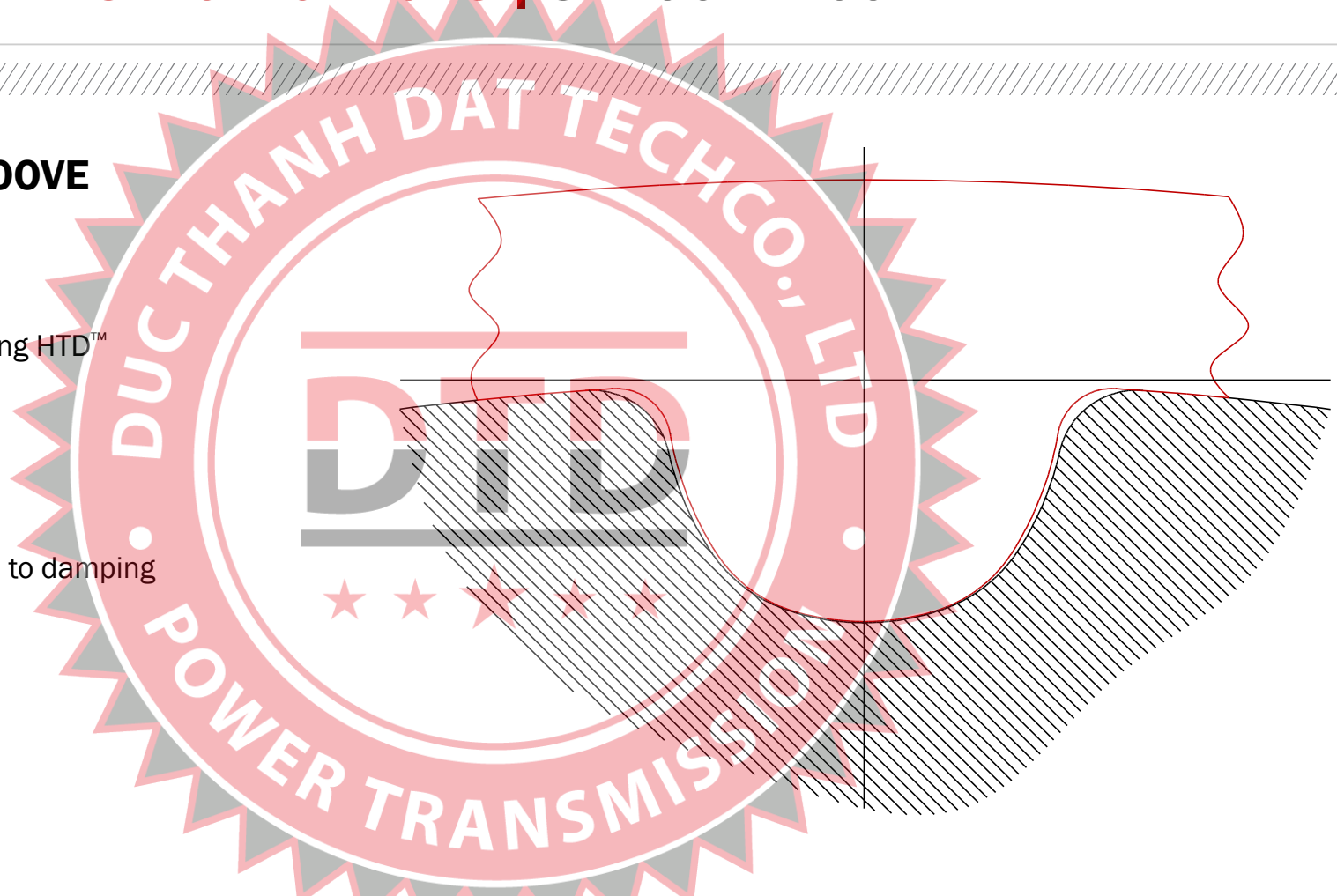
- 8MGT : 20 - 30 - 50 - 85 mm
- 14MGT : 40 - 55 - 85 - 115 - 170 mm
- Other widths available upon request

MADE TO STOCK PRODUCT LINE



HTD™ SPROCKET GROOVE COMPATIBILITY

- Easy drive upgrade in existing HTD™ sprocket groove
- Reduced backlash
- Reduced running noise due to damping effect



FIT TO MARKET PROFILE STANDARD



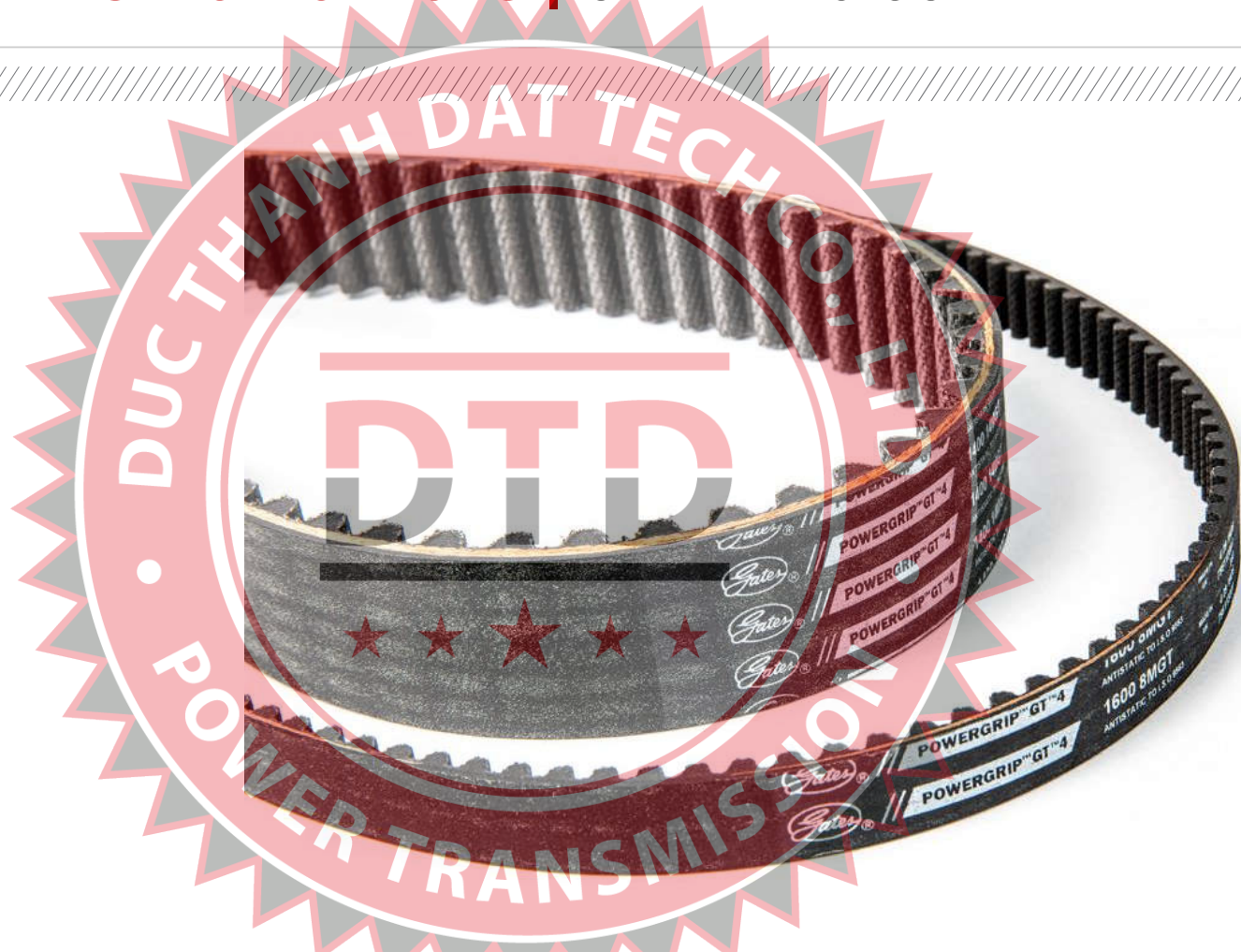
ADDITIONAL SPECIFICATIONS | ORDERING CODE

PITCH 8MGT

GT4 840 8MGT 20

PITCH 14MGT

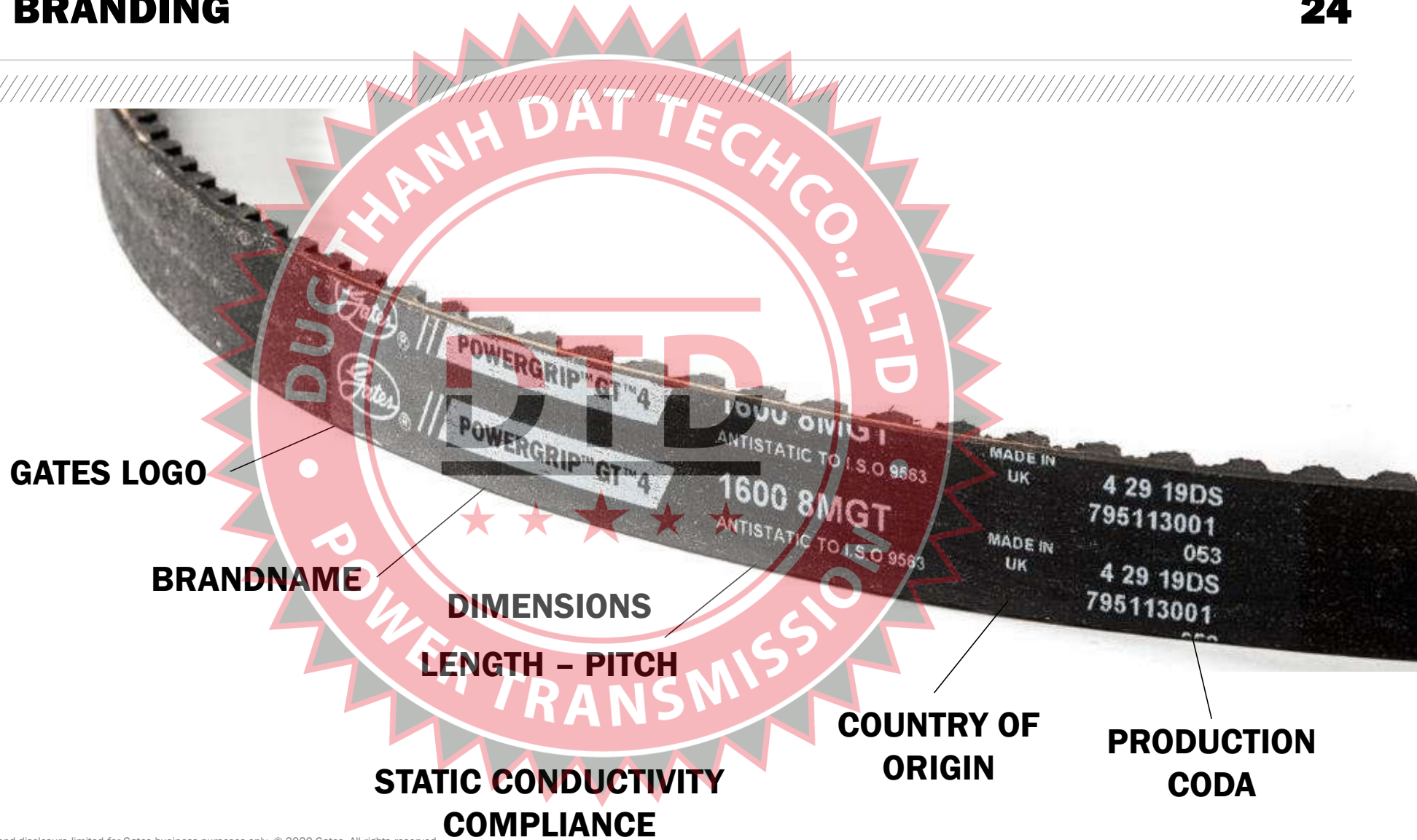
GT4 4326 14MGT 55



THE LATEST IN SYNCHRONOUS BELT TECHNOLOGY



BRANDING



GATES LOGO

BRANDNAME

DIMENSIONS

LENGTH - PITCH

**STATIC CONDUCTIVITY
COMPLIANCE**

**COUNTRY OF
ORIGIN**

**PRODUCTION
CODA**



POWERPAINT™

- PowerGrip GT4 can be supplied on demand suited for usage on Paint and Varnish applications.
- Maintaining its high performance rating and product characteristics, the PowerPaint™ version guarantees a smooth and evenly painting surface.
- Available on demand

ORDERING CODE

PPT GT4 length pitch width



POWERGRIP™ HTD4™

- Using PowerGrip GT4 advanced materials and available HTD™ production tooling, we offer the ability to have GT4™ performance in HTD™ 8M length sizes.
- Available on demand

ORDERING CODE

HTD4 length 8M width

ON DEMAND AVAILABILITY



PITCH 8MGT

- 22 = Min. recommended pulley size (number of grooves)
- 85 = Min. back idler diameter (mm)

PITCH 14MGT

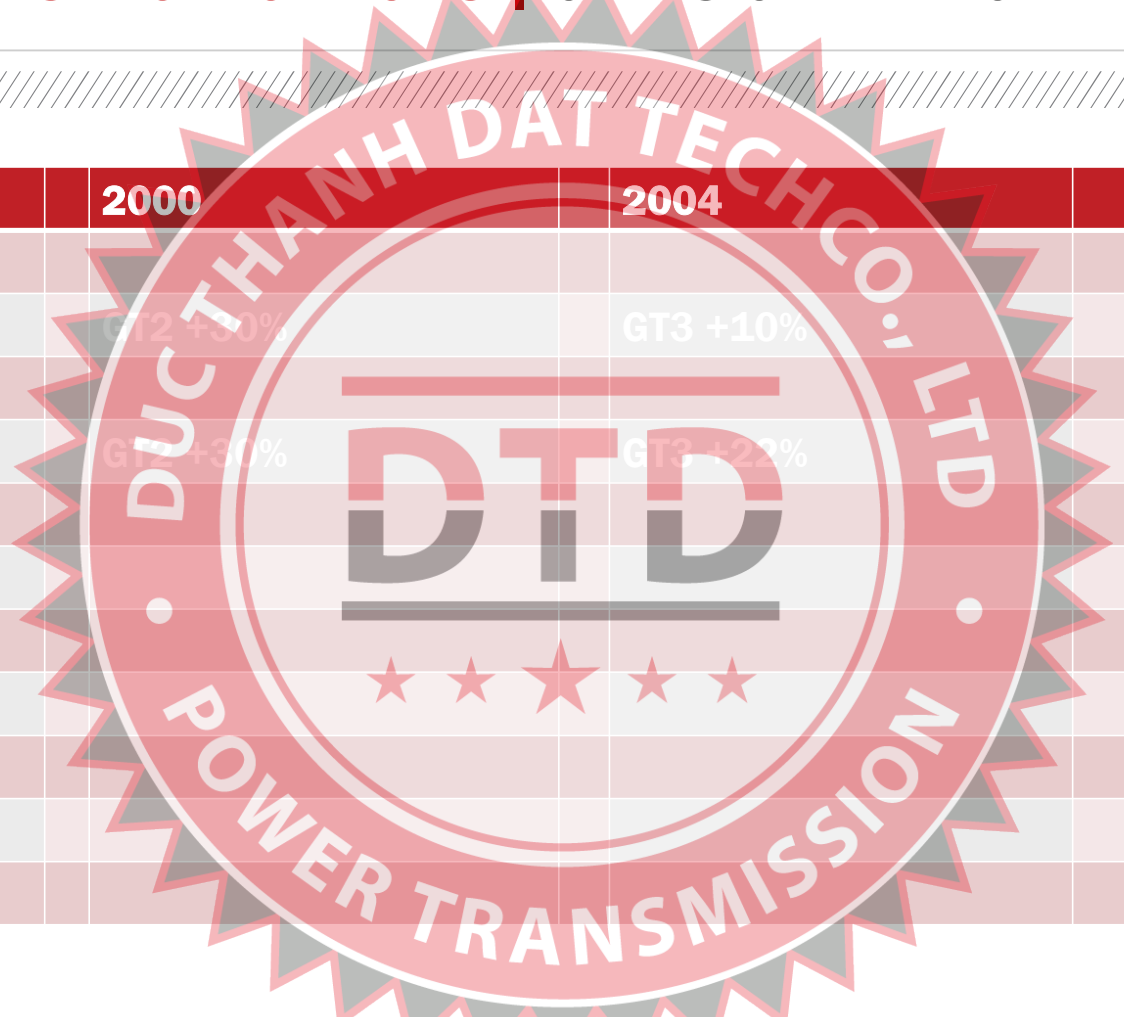
- 28 = Min. recommended pulley size (number of grooves)
- 190 = Min. back idler diameter (mm)





PRODUCT SPECIFICATIONS | GATES GT4 RANGE EVOLUTION

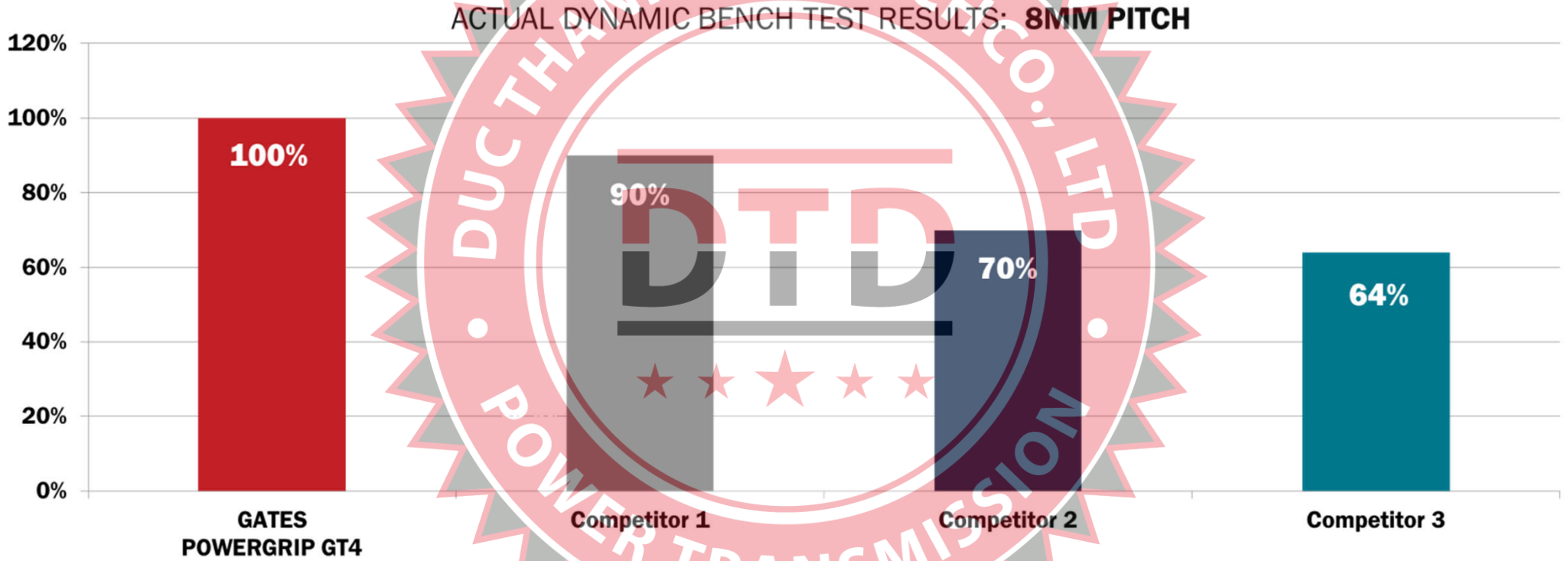
	1990	2000	2004	2020
14	GT	GT2 +30%	GT3 +10%	GT4 14MGT
8	GT	GT2 +30%	GT3 +22%	GT4 8MGT
5	GT			GT3 5MGT
3	GT			GT3 3MGT
2	GT			GT3 2MGT



CONTINUOUS PERFORMANCE IMPROVEMENT



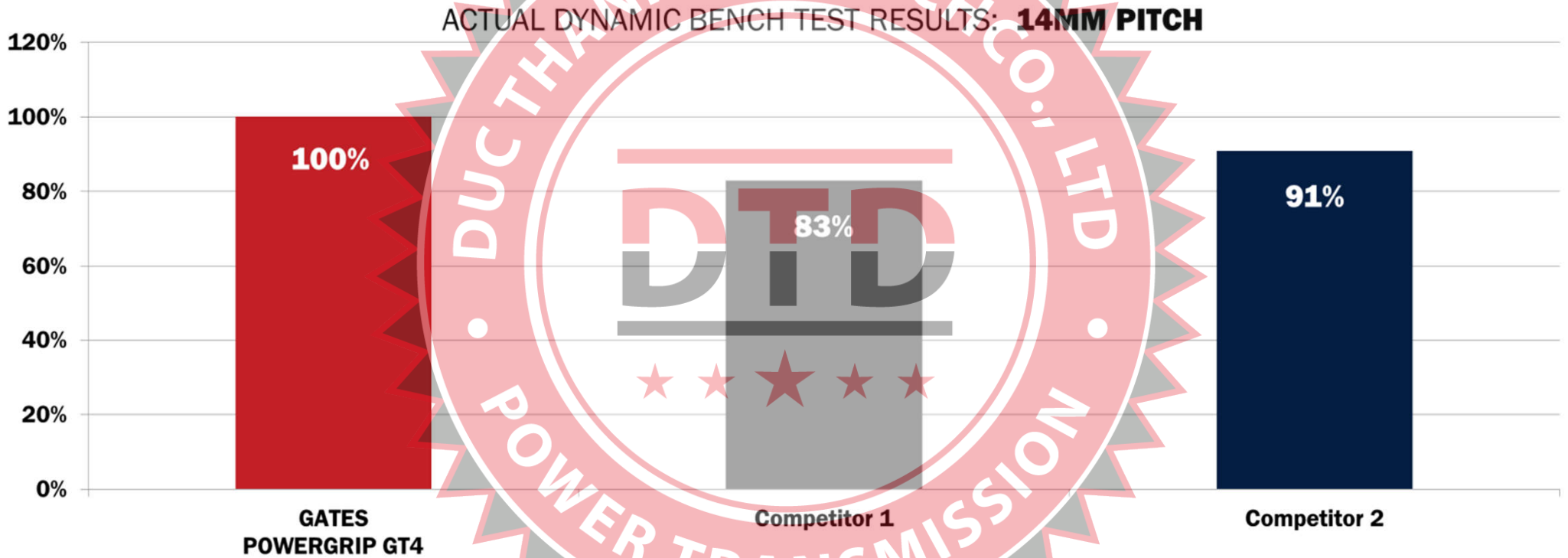
PRODUCT SPECIFICATIONS | BENCHMARK



CLASS LEADING PERFORMANCE



PRODUCT SPECIFICATIONS | BENCHMARK



CLASS LEADING PERFORMANCE



THE NEXT GENERATION EPDM COMPOUND

- This new engineered halogen free EPDM compound shows the results of our materials science.
- The key advantage of this next generation compound is the wider temperature range capability,
- which in turn benefits a wider range of industries.



LET US ADDRESS EFFICIENCY, NOISE, DURABILITY AND EASE OF INSTALLATION



**THANK YOU
FOR YOUR ATTENTION**

