

CONQUEST®

DESCRIPTION:

This rugged fabric reinforced conveyor belt withstands high abuse applications. It's made with a revolutionary patent-pending Triple-Warp™ weave design, holds up to the most demanding applications, and delivers the lowest cost-per-ton with unsurpassed system savings.

Markets



- Aggregate
- Hard Rock
- Steel Production
- Cement
- Coal
- Wood Products
- Pulp and Paper
- Foundry

to name a few.

Applications



- Primary Crushers
- Secondary Crushers
- Pit Belts
- Mainlines
- Ship Unloaders
- Log Decks
- Log Debarkers
- Trash and Recycling
- Any High Abuse Applications

to name a few.

Cover Compounds



- Style B II
- Survivor™
- Stacker®
- Global X™
- Premarc®
- Gorilla™
- Style B Hot Material
- MORS

(See page 38 for more specific details.)

See the process diagram for Aggregate, Hard Rock Mining, Sand and Gravel markets on page 5 for alternative belt recommendations.

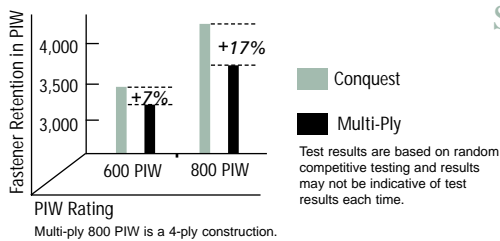
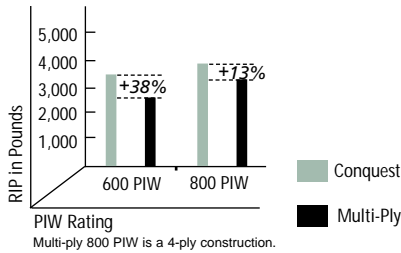
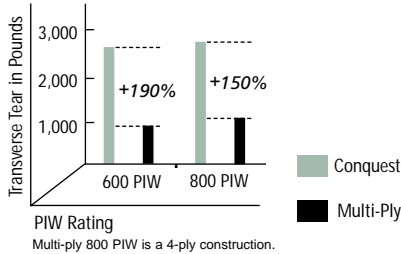
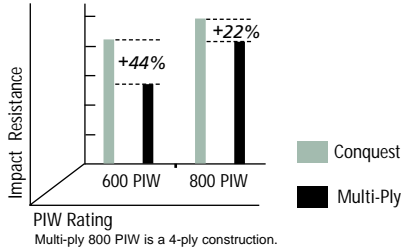
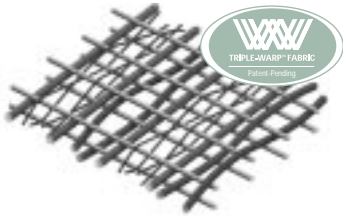


Tension Range

600 and 800 PIW

Features

Benefits



Patent-pending, polyester/nylon Triple-Warp weave

The heavy Triple-Warp weave center ply is sandwiched between flexible abuse-resistant outer plies. Conquest belts are strong and provide a better overall value than multi-ply and straight-warp fabric constructions in high abuse applications.

Tested for impact resistance

Loading point impact damage can be a major cause of belt failure. Goodyear design engineers use an enhanced Dynamic Impact Tester to simulate loading impact force and its effects on belting. Conquest provides better impact resistance than plain weave constructions with equivalent PIW rating.

High transverse tear strength

The Triple-Warp fabric design incorporates extremely high transverse tear strength. This minimizes tears that result from material punctures as well as edge tears from misaligned belts.

Superior rip resistance

Scrap metal or debris often gets "hung up" in the structure of the conveyor, causing equipment damage and slits or cuts in long sections of belt. The Triple-Warp fabric design helps dislodge and expel foreign objects and contain rips to a small area.

Superior mechanical fastener holding strength

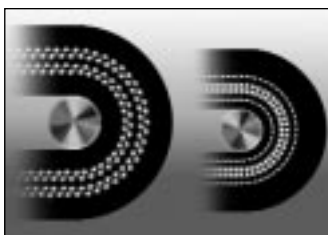
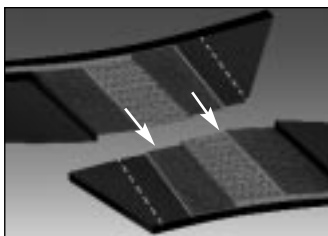
Rigorous dynamic and static testing ensures that Conquest belts will provide superior mechanical fastener retention as compared with multi-ply and straight-warp constructions.

Vulcanized splice capabilities

Vulcanized bias step splices greatly reduce downtime. When this quick and effective splicing technique is teamed with Goodyear materials, the result is outstanding performance.
(Bias step splice to be used on Conquest 600/3 only. Goodyear recommends a finger splice for Conquest 800/3.)

Triple-Warp design offers a high degree of flexibility

With its superior flexibility around small pulleys, a Conquest belt saves significant investment dollars compared with the large pulleys required for straight-warp belt systems. This translates into a cost-per-pulley savings of up to 80%.



CONQUEST CONVEYOR BELT DATA - Imperial

	CONQUEST 600	CONQUEST 800
Plies	3	3
Fabric Type	P/N Triple-Warp	P/N Triple-Warp
Vulcanized & Fastener Rating	600 PIW	800 PIW
Carcass Gauge	0.268 in.	0.320
Carcass Weight	1.38 lbs./sq. ft.	1.60 lbs./sq. ft.
Approx. 1/32" cover wt.	0.19 lbs./sq. ft.	0.19 lbs./sq. ft.
Avg. Permanent Elongation*	1.0%	0.8%
Elastic Modulus	54,800 PIW	70,000 PIW
Step Length	20 in.	Finger Splice**
Recommended Fasteners	BR10, R5-1/2, U35	BR14, R6, U37/U37A

* Average Permanent elongation values at 100% of rated belt tension are based on ISO 9856 test procedure.

Consult your Goodyear field sales person or Goodyear Authorized Distributor for elastic and total elongation calculations.

** Consult your Goodyear field sales person or Goodyear Authorized Distributor for finger splice specifications.

CONQUEST LOAD SUPPORT (Maximum Belt Width) (in.)

Material Weight	0-40 lbs/cu.ft.			41-80 lbs/cu.ft.			81-120 lbs/cu.ft.			Over 120 lbs/cu.ft.					
	Trough	Idlers		20 deg	35 deg	45 deg	20 deg	35 deg	45 deg	20 deg	35 deg	45 deg			
Conquest 600	3 Plies			96	84	84	84	72	72	84	72	60	72	60	54
Conquest 800	3 Plies			96	84	84	84	72	72	84	72	60	72	60	54

On systems with troughing idler spacing greater than 5 ft. OR idler roll gap greater than 1/2", consult Goodyear.

CONQUEST TROUGHABILITY (Minimum Belt Width) (in.)

	Conquest 600	Conquest 800
Idlers		
20 degree idlers	30	30
35 degree idlers	36	36
45 degree idlers	42	42

If top cover and pulley cover are balanced, i.e. 3/16" x 3/16" or less than 1/16" differential, i.e. 3/16" x 5/32", add 6" to the minimum belt width.

6" narrower widths are possible if the belt is broken in for an extended period of time fully loaded. Consult Goodyear.

CONQUEST MINIMUM PULLEY DIAMETERS (in.)

	Conquest 600	Conquest 800
Over 80% Tension	24	30
60% to 80% Tension	20	24
40% to 60% Tension	18	20
Up to 40% Tension	16	18
Tails and Snubs	16	18

CONQUEST CONVEYOR BELT DATA - Metric

	CONQUEST 600	CONQUEST 800
Plies	3	3
Fabric Type	P/N Triple-Warp	P/N Triple-Warp
Vulcanized & Fastener Rating	105 kn/m	140 kn/m
Carcass Gauge	6.80 mm	8.06 mm
Carcass Weight	6.7 kg/sq.m	7.8 kg/sq. m
Approx. 1/32" cover wt.	1.2 kg/sq. m	1.2 kg/sq. m
Avg. Permanent Elongation*	1.0%	0.8%
Elastic Modulus	9,595 kn/m	12,260 kn/m
Step Length	510 mm	Finger Splice**
Recommended Fasteners	BR10, R5-1/2, U35	BR14, R6, U37/U37A

* Average Permanent elongation values at 100% of rated belt tension are based on ISO 9856 test procedure.

Consult your Goodyear field sales person or Goodyear Authorized Distributor for elastic and total elongation calculations.

** Consult your Goodyear field sales person or Goodyear Authorized Distributor for finger splice specifications.

CONQUEST LOAD SUPPORT (Maximum Belt Width) (mm)

Material Weight	(0-640 kg/cu.m)			(641-1,280 kg/cu.m)			(1,281-1,920 kg/cu.m)			(Over 1,920 kg/cu.m)		
	20 deg	35 deg	45 deg	20 deg	35 deg	45 deg	20 deg	35 deg	45 deg	20 deg	35 deg	45 deg
Trough Idlers												
Conquest 600 3 Plies	2450	2150	2150	2150	1850	1850	2150	1850	1550	1850	1550	1400
Conquest 800 3 Plies	2450	2150	2150	2150	1850	1850	2150	1850	1550	1850	1550	1400

On systems with troughing idler spacing greater than 1.5 m OR idler roll gap greater than 12.7mm, consult Goodyear.

CONQUEST TROUGHABILITY (Minimum Belt Width) (mm)

	Conquest 600	Conquest 800
Idlers	600	800
20 degree idlers	750	750
35 degree idlers	900	900
45 degree idlers	1050	1050

If top cover and pulley cover are balanced, i.e. 4.7mm x 4.7mm or less than 1.5mm differential, i.e. 4.7mm x 3.9mm, add 152mm to the minimum belt width.
152 mm narrower widths are possible if the belt is broken in for an extended period of time fully loaded. Consult Goodyear.

CONQUEST MINIMUM PULLEY DIAMETERS (mm)

	Conquest 600	Conquest 800
Over 80% Tension	600	750
60% to 80% Tension	500	600
40% to 60% Tension	450	500
Up to 40% Tension	400	450
Tails and Snubs	400	450