

COAL QUEST™

DESCRIPTION:

It's not just tough. It's Triple-Warp™ Tough! Goodyear's exclusive, patent – pending, polyester x nylon Triple-Warp fabric weave makes Coal Quest the belt of choice for abusive underground applications.

Markets



- Coal
- Potash
- Trona

Applications



- Mainline Belts
 - Panel Belts
 - Slope Belts
- to name a few.*

Cover Compounds



- ARMA II
- ARMA

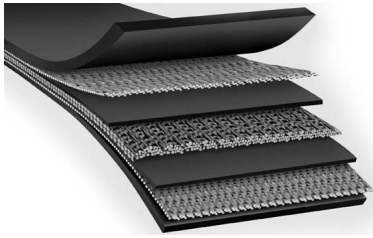


Tension Range

600, 800 to 1000 PIW

Features

Benefits

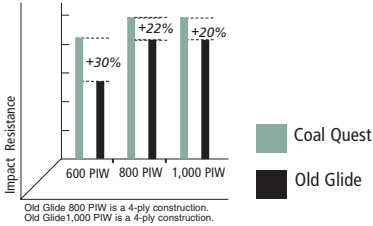


Designed for Down-under Durability

This unique belt construction features a Triple-Warp center ply surrounded by a pair of abuse-resistant and flexible outer plies. This provides superior mechanical fastener holding strength, unbeatable vulcanized splice capabilities, a high degree of flexibility and great impact, tear and rip resistance.

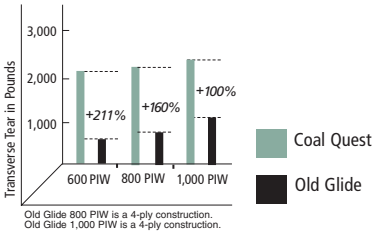
Impact Resistance

Goodyear underground belts come well prepared to withstand the worst. That's because loading impact damage, a major cause of belt failure is already assessed and predicted at our Technical Center Laboratory. During the design phase, Goodyear engineers utilize an enhanced Dynamic Impact Tester to accurately simulate loading impact force and its effects on belting. This information contributes to the design of our Triple-WarpTM fabric weave.



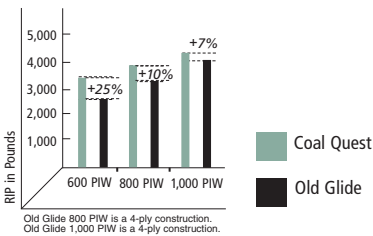
Transverse Tear Resistance

Due to the extremely high transverse tear strength of Coal Quest belts, edge tear occurrences are minimized and contained.



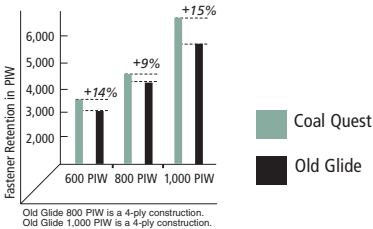
Rip Resistance

The Triple-Warp fabric design of Coal Quest belting helps dislodge and expel foreign objects and contain rips to a small area.



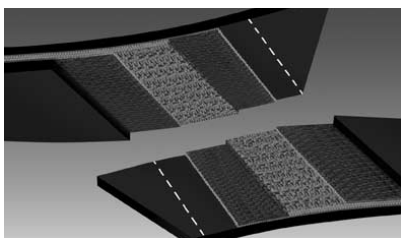
Fastener Retention

The mechanical fastener splices of Coal Quest belts are rated at 100% of the rated working tension. At Goodyear's world-class Technical Center, these splices have undergone rigorous dynamic and static testing, which enables the belt to offer superior mechanical fastener retention vs. multi-ply and straight-warp constructions.



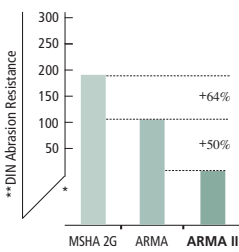
Vulcanized Splice Capability

Goodyear has designed the Coal Quest 3-ply 600 PIW to function at 100% of rated tension with a standard bias step splice. Step splices greatly reduce downtime and are recognized industry-wide as the standard, quick and effective splicing technique.



Abrasion Resistant Compounds – ARMA II

Goodyear's advanced rubber technology produced ARMA II rubber compound. ARMA II extends service life by providing very high resistance to abrasion wear. The result is lower cost-per-ton conveyed.



^{**}MSHA 2G has been discontinued
^{**} DIN = Deutsche International Norm (All DIN results utilize a rotating disk)

COAL QUEST CONVEYOR BELT DATA - Imperial

	Coal Quest 600	Coal Quest 800	Coal Quest 1000
PIW Rating (pounds per inch of width)	600	800	1000
Plies	3	3	3
Fabric Type (Triple-Warp)*	P/N	P/N	P/N
Vulcanized & Fastener Rating (piw)	600	800	1000
Carcass Gauge (in.)	0.268	.324"	.354"
Carcass Weight (lbs/sq.ft.)	1.41	1.66	1.96
Approx 1/32" cover wt (lbs/sq.ft.)	0.22	0.22	0.22
Average Permanent Elongation (%) **	1.0	1.4	1.9
Elastic modulus (piw)	55,500	60,500	72,000
Vulcanized Step Length (in.)***	20	Finger	Finger
Recommended Fasteners:			
Hinge	R5-1/2	R6	R6
Hinge	U35	U36	U37

* Polyester Warp Cord X Nylon Fill Cord

** Average Permanent elongation values at 100% of rated belt tension are based on ISO 9856 test procedure. Consult Goodyear field sales or GAD for elastic & total elongation calculations specific to each system based on Minuteman™ calculations.

*** A biased step splice can be used with Coal Quest 600/3 at 100% of rated tension. Proprietary finger splices are required for the 800/3 and 1000/3. Consult Goodyear.

COAL QUEST LOAD SUPPORT (Maximum Belt Width) (in.)

Construction	Material Weight Idler Angle	0-65 lbs.			65-100 lbs.		
		20 deg	35 deg	45 deg	20 deg	35 deg	45 deg
Coal Quest 600/3		72	60	54	60	54	48
Coal Quest 800/3		84	72	60	72	60	54
Coal Quest 1000/3		96	84	72	84	72	60

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

COAL QUEST TROUGHABILITY (Minimum Belt Width) (in.)

	Coal Quest 600	Coal Quest 800	Coal Quest 1000
	3	3	3
20 degree idlers	30	30	30
35 degree idlers	36	36	36
45 degree idlers	42	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.

Table based on ISO 703 testing procedure.

COAL QUEST MINIMUM (Pulley Diameters) (in.)

	Coal Quest 600	Coal Quest 800	Coal Quest 1000
	3	3	3
Over 80% Tension	24	30	30
60% to 80% Tension	20	24	24
40% to 60% Tension	18	20	20
Up to 40% Tension	16	18	18
Tails and Snubs	16	18	18

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.

Table based on ISO 703 testing procedure.

COAL QUEST CONVEYOR BELT DATA - Metric

	Coal Quest 600	Coal Quest 800	Coal Quest 1000
PIW Rating (pounds per inch of width)	600	800	1000
Plies	3	3	3
Fabric Type (Triple-Warp)*	P/N	P/N	P/N
Vulcanized & Fastener Rating (kn/m)	105	140	175
Carcass Gauge (mm)	6.81	8.23	8.99
Carcass Weight (kg/sq. m)	6.88	8.11	9.57
Approx 1/32" cover wt (kg/sq. m)	1.07	1.07	1.07
Average Permanent Elongation (%) **	1.0	1.4	1.9
Elastic modulus (kn/m)	9,720	10,595	12,610
Vulcanized Step Length (mm)***	508	Finger	Finger
Recommended Fasteners:			
Hinge	R5-1/2	R6	R6
Hinge	U35	U36	U37

* Polyester Warp Cord X Nylon Fill Cord

** Average Permanent elongation values at 100% of rated belt tension are based on ISO 9856 test procedure. Consult Goodyear field sales or GAD for elastic & total elongation calculations specific to each system based on Minuteman™ calculations.

*** A biased step splice can be used with Coal Quest 600/3 at 100% of rated tension. Proprietary finger splices are required for the 800/3 and 1000/3. Consult Goodyear.

COAL QUEST LOAD SUPPORT (Maximum Belt Width) (mm.)

Construction	Material Weight Idler Angle	0-65 cu.ft.			65-100 cu.ft.		
		20 deg	35 deg	45 deg	20 deg	35 deg	45 deg
Coal Quest 600/3		1829	1524	1372	1524	1372	1219
Coal Quest 800/3		2134	1829	1524	1829	1524	1372
Coal Quest 1000/3		2438	2134	1829	2134	1829	1524

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

COAL QUEST TROUGHABILITY (Minimum Belt Width) (mm.)

	Coal Quest 600	Coal Quest 800	Coal Quest 1000
	3	3	3
20 degree idlers	762	762	762
35 degree idlers	914	914	914
45 degree idlers	1067	1067	1067

If top cover and pulley cover are balanced, i.e. 4.7 mm x 4.7 mm or less than 1.5 mm differential, i.e. 4.7 mm x 3.9 mm, add 152 mm 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.

Table based on ISO 703 testing procedure.

COAL QUEST MINIMUM (Pulley Diameters) (mm.)

	Coal Quest 600	Coal Quest 800	Coal Quest 1000
	3	3	3
Over 80% Tension	610	762	762
60% to 80% Tension	508	610	610
40% to 60% Tension	457	508	508
Up to 40% Tension	406	457	457
Tails and Snubs	406	457	457

If top cover and pulley cover are balanced, i.e. 4.7 mm x 4.7 mm or less than 1.5 mm differential, i.e. 4.7 mm x 3.9 mm, add 152 mm 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.

Table based on ISO 703 testing procedure.