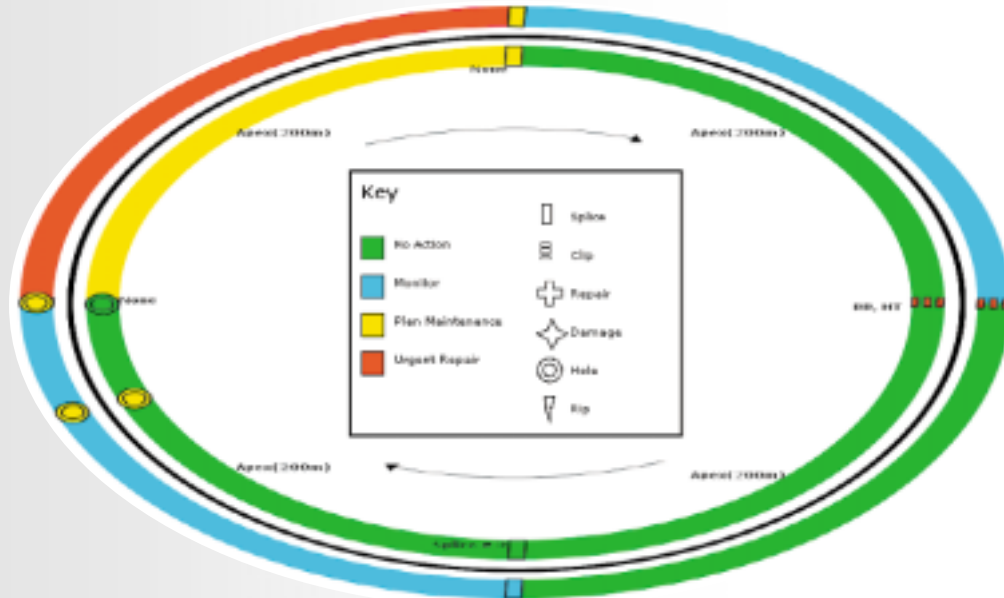


As part of our continued growth in the service industry, Apex Fenner Technical Services has been established to provide high end technical solutions using the very latest in computer software and mechanical hardware. A summary of these is as follows:



Belt Mapping

When the need exists for a technically detailed report on your conveyor belt to aid your maintenance planning, you cannot go past the Apex Fenner belt mapping reports.

The reports include a summary of the urgent maintenance requirements and include detailed photos of the problems. The reports are stored securely on the Apex Fenner system ensuring quick access for any authorised person to download.

Conveyor Inspections

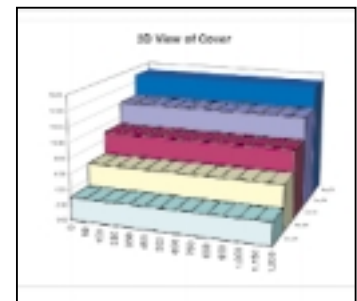
Apex Fenner offers comprehensive conveyor inspections reporting on all aspects of the conveyor systems. The reports include a summary of the urgent maintenance requirements to assist with maintenance planning. The reports are stored securely on the Apex Fenner system ensuring quick access for any authorised person to download.

Belt Wear Life Analysis

Using an advanced ultrasonic gauge that makes thickness, material velocity, and time of flight measurements on the conveyor belt covers that are difficult or impossible to measure using standard ultrasonic gauges, an accurate wear profile can be obtained.

Regular measurements not only gives the client the current condition of the belt, it builds up a wear rate over time that can be used to predict the remaining life in both time and tonnage. This also gives a comparison of current belt performances vs. previous belts.

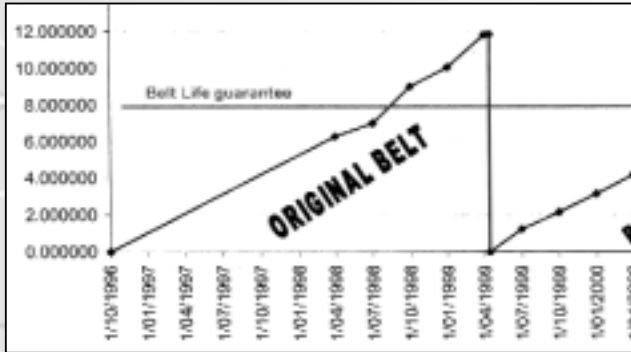
APEX FENNER		Conveyor Condition Audit			
Site	Sample	Contact	Date		
Conveyor ID	Conveyor Date	Stationary/Running	Ref Pages 7		
					
No	Roller ID	DN (mm)	Lagged (mm)	Condition	Action
No.1	Roller	300	Y	Good condition	
No.2	Tail	300	Y	Good condition	
No.3	LT/Bend	300	Y	Good condition	
No.4	LT/Bend Trolley	300	Y	Good condition	
No.5	Drive Roller	300	Y	Good condition	
No.6	Drive	300	Y	Good condition	
No.7	Drive Roller	300	Y	Good condition	
No.8	Drive/Discharge	300	Y	Good condition	
No.9	Headrun	1000	Y	Good condition	
No.10	Head	1000	Y	Good condition	
Conveyor Belt 1800mm (74.81in) x 4.40mm (0.173in) Grade Rubber Covers Condition - No attached samples condition report					
Tail Transition Grub to 1' 30" 1800mm - 300mm to 2' 40" @ 1' depth Cleaner - return - Polydeck - 5 hrs format Good condition - Belt Tracking (BTR) Flat w/ rollers/Trackers on rollers					
On/Off Loading Zone Product Fall into bin 5 hrs high velocity impact Head to Clean 10 hrs low velocity impact Coal Flow Slow angle of discharge onto belt, differential speed Impact chis Light duty impact chis, suffice for development cost Belt Tracking OMSWS this minor only					



Whole of Life (WOL) costs

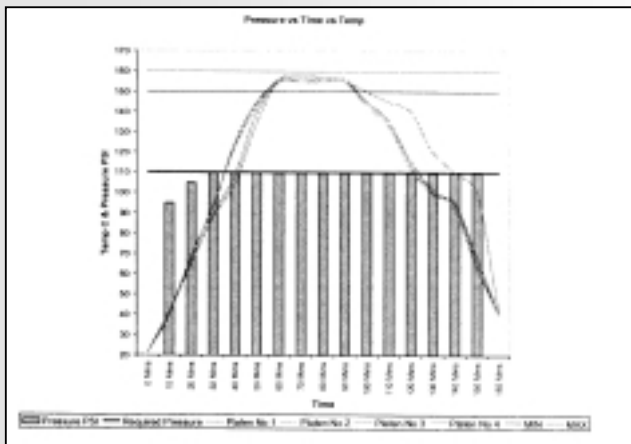
Without knowing the WOL cost of your conveyor belt the decision would always be made to purchase the lowest capital outlay.

Being a supplier of premium plied conveyor belt we understand the need to demonstrate the WOL cost effectiveness of our product. Using our integrated software we are able to deliver to our clients a set of reports outlining belt life guarantees and WOL cost.



Splicing Audits

Apex Fenner offers QA supervision on splicing procedures for clients through our network of service branches using qualified QA technicians.



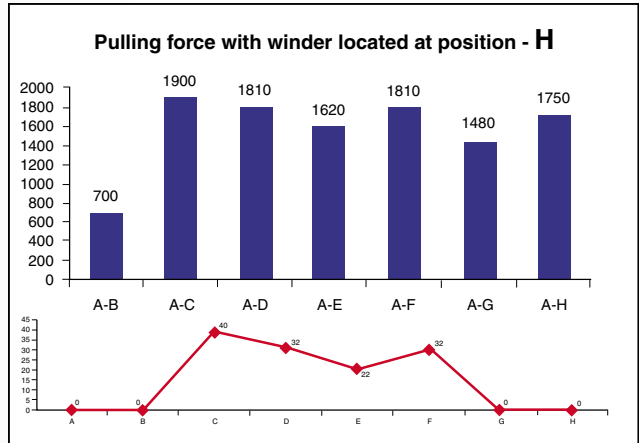
Belt Pull Calculation

The right tool for the job has never been more required when it comes to the installation of belts, new and old. In keeping with Apex Fenner's philosophy of "SAFETY FIRST" we are now able to offer to our clients a range of safety services that includes providing an accurate calculation of the forces required to pull the conveyor belt around the system.

The Apex Fenner Belt Pull calculator has been developed in conjunction with independent registered engineers and takes in to account pulleys, idlers, gearboxes and the many years experience gained in the field by Apex Fenner personnel.

Extensive testing in the field to verify the accuracy of the tool has also been carried out. This is essential to ensure correct selection of equipment such as Belt Winders, Winches, Pulling Cables and Pulling Plates.

The importance of assessing the pull force goes far beyond carrying out a risk assessment and is essential to ensure the task is carried out safely and incident free.



Custom Belt Design

Whether changing, upgrading an existing belt or designing a new conveyor Apex Fenner can assist with your belt selection to ensure you have the best belt for your application not just the nearest belt specification from existing stock.

By completing a simple conveyor data sheet with basic information Apex Fenner will carry out the calculation using our CON5000 software and make recommendations in a timely manner.

CON5000 Program
Belt Powers and Tensions

Client/Site: Chain Valley
Conveyor Name: A Drift - 15 sec start

Conveyor 1	Conveyor 2	Conveyor 3
Length: 95 m	140 m	100 m
LR: 25.6 m	LR: 400 m	LR: 100 m
CGDGRV: 2200 mm	DRIVE MOTOR: 5.25	DRIVE MOTOR: 110 kW
Belt width: 1200 mm	Drive "N" factor: 0.95	
Belt Speed: 3 m/s		

Components 1	Components 2	Components 3
Roller mass: 15 kg/m	Roller power: 120 kW	Roller power: 40 kW
Trough mass: 15.5 kg	Motor: 1000	Roller power: 11.5 kW
Trough pitch: 1.5 m		
Return mass: 12.8 kg		
Return pitch: 3 m		
Roller mass: 2000 kg	Roller: 18 kW	

Starting Tensioning 1	Starting Tensioning 2	Starting Tensioning 3
T1 tension: 44 kN	T1 tension: 47.5 kN	T1 tension: 47.5 kN
T2 tension: 11.5 kN	T2 tension: 11.5 kN	T2 tension: 11.5 kN
Roller tension: 46.5 kN	Roller tension: 46.5 kN	Roller tension: 46.5 kN
Tail tension: 11.5 kN	Tail tension: 11.5 kN	Tail tension: 11.5 kN

Curve Analysis	Concave curve	Convex curve
Rolling: 98 m	DR: 100 m	DR: 100 m
Working tension: 98 kN	LR above DR: 2.7 m	LR above DR: 0
Belt modulus: 4000 kN/m	Roll tension: 11.5 kN	Roll tension: 11.5 kN
	DRIT tension: 16.1 kN	DRIT tension: 16.1 kN
	Enter tension: 11.5 kN	Enter tension: 11.5 kN