

# DT PRIMARY CLEANER

Carryback from conveyor belts is an everyday occurrence, resulting in reduced operation efficiency, reduced safety, increased maintenance costs and increased environmental contamination.

Planned maintenance shutdowns of conveyor belts are necessary to achieve effective and continual bulk handling operations. However, while conveyor areas are down production time is lost, so it is important to safely and quickly perform blade change outs to assure optimum cleaning efficiency.

The DT Primary Cleaner System utilises high strength urethanes, proven in industrial environments, to provide corrosion free, non-stick surfaces. These materials, combined with minimum pressure blade design create a uniquely efficient, ultimately serviceable cleaner.



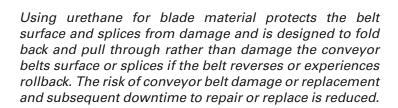
## **BLADE TYPE**

Modular blade design provides increased wear life and ability to change blade order or material.

Constant Angle Radial Pressure (CARP) blade profile assures that there is a consistent, even blade to belt contact throughout the life of the blade. This provides effective and protective cleaning.

A variety of urethane types allow blades to conform to the belt profile and conditions.

The patented 'Keysafe' feature allows the blade removal from outside the chute, blade by blade. This eliminates the risk potential from both manual handling and confines space issues while servicing the cleaners. The reduced time needed to perform maintenance means that valuable down time can be minimised.



# **MAINFRAME**

The mainframe is available in either mild steel or stainless steel constructions; this means that corrosive environments can be catered for.

The telescoping main frame ensures the device can be adjusted to fit into chutes where the conveyor belt is not centred. This feature also allows the entire track to be easily removed for maintenance.



#### TENSIONING DEVICES

There are several typed of tensioning device available to maintain the blade to belt pressure throughout the life of the blade. This provides optimal cleaning performance while preserving blade wear rates removing material that would otherwise pass between the belt and the blade surface.

Differing styles of tensioning device are and can be customised to suit what is available on each plant. ESS tensioning devices allow blade adjustment while the conveyor is still running from outside the chute, allowing the applied pressure to be fine-tuning without the need to stop production.

# **HOW IT WORKS**

The DT Primary Cleaner is typically used in conjunction with a least one Secondary Cleaner, such as the DT Secondary Cleaner. For optimum results, it is recommended that it be used with a water spray system.

It utilises an extruded polymer track and industrial urethane that is designed to control costly material carryback. It protects the secondary cleaner from being overpowered by excess material, thus increasing its effectiveness.

The DT Primary Cleaner is normally mounted on the face of the conveyor head pulley and is designed to peel off the thick layer of loosely adhering material that often accounts for 80%-90% of carry-back. The blade material is a 152mm wide one-piece cast urethane. These segmented blades can be easily removed by sliding on and off the mainframe track.

The cleaner is mono-directional; however, the cleaner will not be damaged by belt direction reversal. The cleaner is suitable for use on crowned head pulleys and damaged or grooved belts. The urethane blades quickly conform to the belt profile.

## **Belt Cleaner Dimensional Data**

Belt Width	450	600	750	900	1050	1200	1350	1500	1600	1800	2000	2200	2400
No. of STD Blades	2	3	4	5	6	7	8	9	10	11	12	13	14
Blade Cover	304	456	608	760	912	1064	1216	1368	1520	1672	1824	1976	2128
Frame Length	1250	1350	1500	1650	1800	2300	2450	2600	2700	2900	3100	3300	3500

#### **BACK UP AND SUPPORT**

ESS backs up its products 100%. We proudly manufacture all our products at two separate locations in Australia.

ESS maintains local stores and service crew's in most Australian mining centres. Service crews are available for installation, service, inspection and troubleshooting.

ESS design team provide a solution to your specific plant requirements.

