DT TORSION ARM SECONDARY 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 perform blade change-outs safely and quickly to ensure optimum cleaning efficiency.

The DT Torsion Arm Secondary Belt Cleaner effectively cleans the belt at a negative angle, absorbing the impact of splices and other irregularities on high-speed belts, reducing damage to the belt.

FEATURES & BENEFITS

BLADES

ESS offers a range of blade materials that include urethanes, plastics, abrasion-resistant tool steel and tungsten carbide, which can be customised to suit the type of material and the condition of the belt.

This allows optimal cleaning without damaging the conveyor belt surface of splices. The blades overlap to provide total coverage of the belt.

These blades snap in and out of the urethane arms with a swivel action that allows deflection from faults in the belt surface before any damage is done.

Blade change-out can be done quickly by one technician as there are no nuts and bolts, so service time is significantly reduced.

The urethane support arms are available in a range of urethane types, which allows the arms to move independently while retaining the correct blade-to-belt tension. These arms are modular in design and are removed for service along the mainframe track, resulting in reduced service times and personnel.

MAINFRAME

The mainframe is a simple, robust construction made from a polyethene sleeve and telescoping ends in mild or stainless steel. The blade assemblies slide along the track without needing fasteners, allowing easy replacement even after working in severe, dirty or corrosive conditions.

The mainframe is available in mild steel, polymer steel or stainless steel constructions, so corrosive environments can be catered for.

The mainframe can be customised to suit conveyor stringer arrangements.

TENSIONING DEVICES

Several tensioning devices are available to maintain the blade-to-belt pressure throughout the blade's life.

This provides optimal cleaning performance while preserving blade wear rates and removing material that would otherwise pass between the belt and the blade surface.
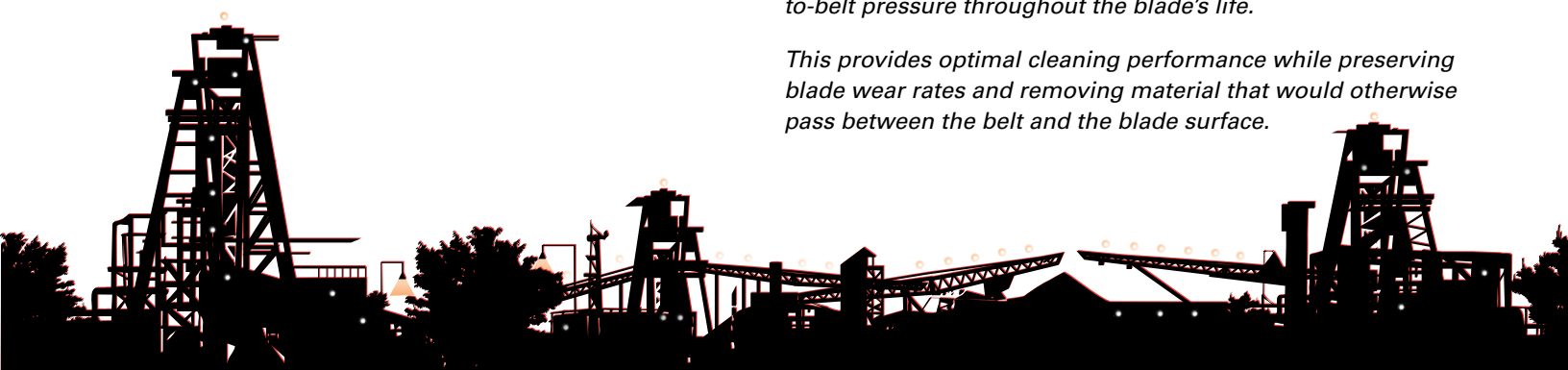
HOW IT WORKS

The DT Torsion Arm is typically mounted under the head pulley or elsewhere on the return strand of the conveyor belt. The blades of the DT Torsion Arm meet the belt at a negative angle, presenting a reduced danger to the belt or splices.

The blades are set at a scraping angle to the belt, providing precise cleaning while cleaner arms absorb the impact of splices or other irregularities of high-speed belts.

The DT Torsion Arm can be tensioned firmly into the belt to remove the slimy film of fines commonly left by the primary cleaner. Therefore, the DT Torsion Arm is intended to be used in conjunction with a primary cleaner (such as the TM or the DT Primary) and a suitable spray-wash system.
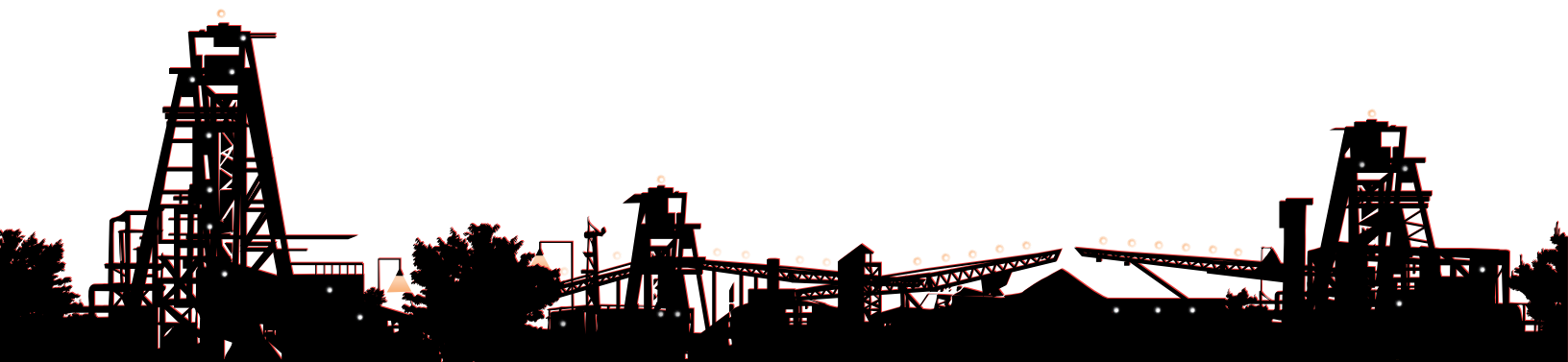
Belt Cleaner Dimensional Data

BELT WIDTH	450	600	750	900	1050	1200	1350	1500	1600	1800	2000	2200	2400
TRACK LENGTH	450	600	750	900	1100	1250	1450	1650	1880	2000	2250	2450	2700
NO. BLADES	2	3	4	5	6	7	8	9	9,10	11	12	13	15
DB BLADE COVER	304	456	608	760	912	1064	1216	1368	1368,1520	1672	1824	1976	2128
TA BLADE COVER	317	469	621	773	925	1077	1229	1381	1381,1533	1685	1837	1989	2141
MAX FRAME LENGTH	1200	1350	1500	1650	1800	2300	2450	2600	2700	2980	3180	3300	3500
STIFFENER LENGTH	I/S HEAD CHUTE DIMENSION REQUIRED												

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 centers. Service crews are available for installation, service, inspection and troubleshooting.

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