

Conveyor Belt Cleaners



TSGlobal[®]
Conveyor & Polyurethane Specialists



TSGlobal

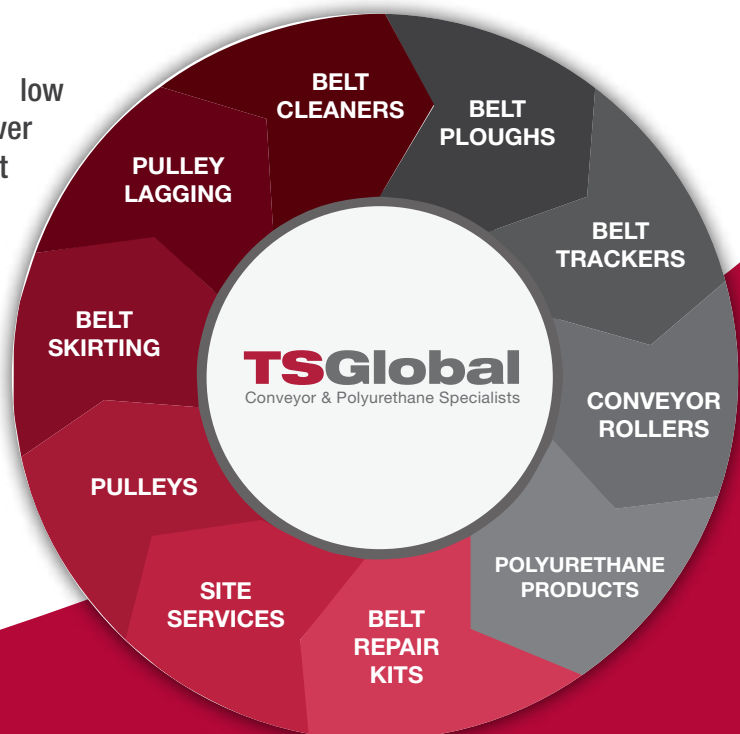
Conveyor & Polyurethane Specialists

Since 2007 TS Global has specialised in the manufacture of a comprehensive range of high quality conveyor accessories and polyurethane components. Our engineering and manufacturing expertise delivers world-class conveyor solutions that are built to withstand the harshest conditions.

Our focus is on high performance, low maintenance products to ensure we deliver our clients solutions that improve plant availability, reduce downtime and minimise maintenance expenditure.

TS Global has developed a diverse and

-  Proven Performance
-  Quality Product
-  Flexibility in Design
-  On-time Delivery



We manufacture premium quality, innovative conveyor products and market leading solutions.

WHY

In mining operations, materials handling constitutes a major component of production costs. Conveyors play a central role in the operations processing, storage and transportation of materials. It is essential that they operate efficiently, with maximum availability and a minimum of down-time.

When operating a conveyor system product losses due to spillage and carry-back will occur. These product losses reduce equipment life expectancy, increase site hazards and operational costs. By understanding the basics of the product being conveyed we are able to design solutions that will deliver significant improvements in conveyor performance.



WHERE

Typically, belt cleaning systems are mounted at or near the discharge (head/tripper) pulley to remove residual fines adhering to the belt. Provided sufficient room is available, the selected belt cleaning system should be installed within the confines of the transfer chute area. This



HOW

Belt cleaning devices are commonly used throughout the materials handling industry. Our range of belt cleaners apply a light tension to the carry side of a conveyor belt via a screw, spring, air bag or hydraulic cylinder. This tip pressure removes residual fines adhering to the conveyor belt and returns them to the mainstream of the product flow.

To minimise carry-back under a conveyor, where room is available, our approach is to install a belt cleaning system which incorporates a primary, secondary (with water where available) and tertiary belt cleaners. These will be supported by a set of stabilising rollers that ensures that the belt cleaners operate on a flat and stable surface.

For optimum performance, where possible, water should be introduced to any belt cleaning system. Water provides many advantages including:

- Improved cleaner performance
- Acts as a lubricant and reduces wear on tips and belt cover
- Assists with minimising airborne dust.

Selecting the correct belt cleaner

Materials conveyed throughout any plant vary in consistency and density. These variables each have their own unique properties and careful consideration must be given to the selection of the belt cleaning system to be installed.

When selecting a belt cleaning system, a set of standard principles must always be considered to ensure its longevity and guaranteed performance levels including:

- Can we utilise water within the cleaning process?
- How many cleaners can be installed within the chute?
- Is the belt stable or is a pressure/stabilising roller required?
- What is the condition of the belt and pulley lagging?
- Does the belt cleaning system interact with mechanical fasteners or will the belt be permanently vulcanised?
- Is the cleaning system installed within a corrosive environment where the use of stainless steel is imperative?
- Are there any gussets or flanges impeding belt cleaner installation areas?
- Does the system need to cater for reversing situations, heavy run back or belt stretch?

WET CLEANING SYSTEMS

Industry performance testing has consistently confirmed that a wet belt cleaning system will always out perform a dry system. It is our recommendation, wherever water can be applied, it should be incorporated within a belt cleaning system.

The use of water reduces wear to the cleaner components and conveyor belt with the water acting as a lubricant and dust suppressor within the transfer chute. The below table details the spray options available and the volume

Spray Options

Spray Type (Angle)	Spray Size	l/min. (gpm) at 50 PSI (3.4 bar)
110 degree fan	11006	2.4 (0.64)
110 degree fan	11008	3.2 (0.85)
110 degree fan	11010	3.9 (1.03)
110 degree fan	11015	5.9 (1.56)

Note: Figures above are per spray.



PRIMARY BELT CLEANERS

The main objective of a primary belt cleaner is to remove the majority (up to 80%) of the fines at the discharge point of the conveyor. An effective primary belt cleaner will allow secondary belt cleaners to operate at the optimum levels to ensure carry-back is minimised, reducing maintenance and improving conveyor performance.

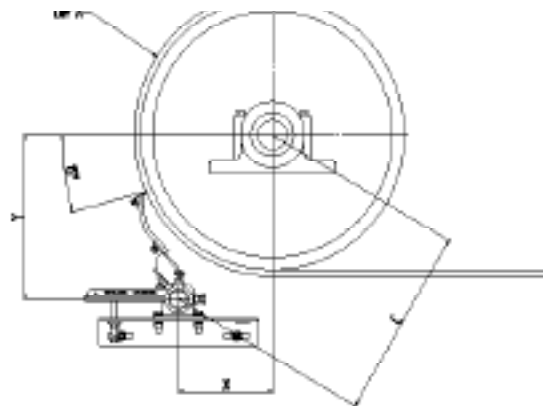
Our primary cleaners are manufactured from 304 grade stainless steel (316 available upon request) and our range includes:

H Tungsten Belt Cleaner



- Single or bi-directional conveyors
- Pulley diameter up to 1700mm (67")
- Belt speed up to 8.0m/s (1575ft/min)
- Vulcanised belts only
- High cleaning performance
- Long lasting tungsten

DIM A = Pulley diameter including lagging & belt thickness mm (inches)	Recommended Arm Size
250mm to 500mm (10 to 20)	SS
500mm to 800mm (20 to 32)	S
800mm to 1000mm (32 to 39)	M
1000mm to 1200mm (39 to 47)	L
1200mm to 1700mm (47 to 67)	LL



**SS Arms for Head Pulley Diameters up to
500mm (19¹¹/₁₆ inches)**

Ø	X	Y	C	Gap
250 (9 ⁷ / ₈)	35 (1 ³ / ₈)	299 (11 ³ / ₄)	302 (11 ⁷ / ₈)	62 (2 ¹ / ₂)
275 (10 ⁷ / ₈)	47 (1 ⁷ / ₈)	303 (11 ⁷ / ₈)	306 (12)	57 (2 ¹ / ₄)
300 (11 ³ / ₄)	60 (2 ³ / ₈)	306 (12)	312 (12 ¹ / ₄)	53 (2 ¹ / ₈)
325 (12 ³ / ₄)	72 (2 ⁷ / ₈)	309 (12 ¹ / ₈)	317 (12 ¹ / ₂)	49 (1 ⁷ / ₈)
350 (13 ³ / ₄)	84 (3 ¹ / ₄)	312 (12 ¹ / ₄)	323 (12 ³ / ₄)	45 (1 ³ / ₄)
375 (14 ³ / ₄)	96 (3 ³ / ₄)	316 (12 ³ / ₈)	330 (13)	42 (1 ⁵ / ₈)
400 (15 ³ / ₄)	108 (4 ¹ / ₄)	319 (12 ¹ / ₂)	337 (13 ¹ / ₄)	39 (1 ¹ / ₂)
425 (16 ³ / ₄)	120 (4 ³ / ₄)	322 (12 ⁵ / ₈)	344 (13 ¹ / ₂)	36 (1 ³ / ₈)
450 (17 ³ / ₄)	132 (5 ¹ / ₄)	325 (12 ³ / ₄)	351 (13 ⁷ / ₈)	33 (1 ¹ / ₄)
475 (18 ³ / ₄)	144 (5 ⁵ / ₈)	329 (12 ⁷ / ₈)	359 (14 ¹ / ₈)	31 (1 ¹ / ₄)
500 (19 ⁵ / ₈)	156 (6 ¹ / ₈)	332 (13)	367 (14 ³ / ₈)	29 (1 ¹ / ₈)

**S Arms for Head Pulley Diameters
500mm (19¹¹/₁₆ inches) -
800mm (31¹/₂ inches)**

Ø	X	Y	C	Gap
500 (19 ⁵ / ₈)	129 (5 ¹ / ₈)	378 (14 ⁷ / ₈)	400 (15 ³ / ₄)	53 (2 ⁵ / ₈)
525 (20 ⁵ / ₈)	141 (5 ¹ / ₂)	381 (15)	407 (16)	50 (2 ¹ / ₂)
550 (21 ⁵ / ₈)	153 (6)	385 (15 ¹ / ₈)	414 (16 ¹ / ₄)	47 (2 ³ / ₈)
575 (22 ⁵ / ₈)	165 (6 ¹ / ₂)	388 (15 ¹ / ₄)	422 (16 ⁵ / ₈)	44 (2 ¹ / ₄)
600 (23 ⁵ / ₈)	177 (7)	391 (15 ³ / ₈)	429 (16 ⁷ / ₈)	41 (2 ¹ / ₄)
625 (24 ⁵ / ₈)	189 (7 ¹ / ₂)	394 (15 ¹ / ₂)	437 (17 ¹ / ₄)	39 (2 ¹ / ₈)
650 (25 ⁵ / ₈)	201 (7 ⁷ / ₈)	398 (15 ⁵ / ₈)	446 (17 ¹ / ₂)	37 (2)
675 (26 ⁵ / ₈)	214 (8 ³ / ₈)	401 (15 ³ / ₄)	454 (17 ⁷ / ₈)	35 (2)
700 (27 ¹ / ₂)	226 (8 ⁷ / ₈)	404 (15 ⁷ / ₈)	463 (18 ¹ / ₄)	33 (1 ⁷ / ₈)
725 (28 ¹ / ₂)	238 (9 ³ / ₈)	407 (16)	472 (18 ⁵ / ₈)	31 (1 ⁷ / ₈)
750 (29 ¹ / ₂)	250 (9 ⁷ / ₈)	410 (16 ¹ / ₈)	480 (18 ⁷ / ₈)	29 (1 ³ / ₄)
775 (30 ¹ / ₂)	262 (10 ¹ / ₄)	414 (16 ¹ / ₄)	490 (19 ¹ / ₄)	27 (1 ⁵ / ₈)
800 (31 ¹ / ₂)	274 (10 ³ / ₄)	417 (16 ³ / ₈)	499 (19 ⁵ / ₈)	26 (1 ⁵ / ₈)

**M Arms for Head Pulley Diameters
800mm (31¹/₂ inches) -
1000mm (39³/₈ inches)**

Ø	X	Y	C	Gap
800 (31 ¹ / ₂)	255 (10)	467 (18 ³ / ₈)	533 (21)	50 (2)
825 (32 ¹ / ₂)	267 (10 ¹ / ₂)	471 (18 ¹ / ₂)	541 (21 ¹ / ₄)	48 (1 ⁷ / ₈)
850 (33 ¹ / ₂)	279 (11)	474 (18 ⁵ / ₈)	550 (21 ⁵ / ₈)	45 (1 ³ / ₄)
875 (34 ¹ / ₂)	291 (11 ¹ / ₂)	477 (18 ³ / ₄)	559 (22)	43 (1 ³ / ₄)
900 (35 ³ / ₈)	303 (12)	480 (18 ⁷ / ₈)	568 (22 ³ / ₈)	42 (1 ⁵ / ₈)
925 (36 ³ / ₈)	316 (12 ³ / ₈)	484 (19)	577 (22 ³ / ₄)	40 (1 ⁵ / ₈)
950 (37 ³ / ₈)	328 (12 ⁷ / ₈)	487 (19 ¹ / ₈)	587 (23 ¹ / ₈)	38 (1 ¹ / ₂)
975 (38 ³ / ₈)	340 (13 ³ / ₈)	490 (19 ¹ / ₄)	596 (23 ¹ / ₂)	36 (1 ³ / ₈)
1000 (39 ³ / ₈)	352 (13 ⁷ / ₈)	493 (19 ³ / ₈)	606 (23 ⁷ / ₈)	35 (1 ³ / ₈)

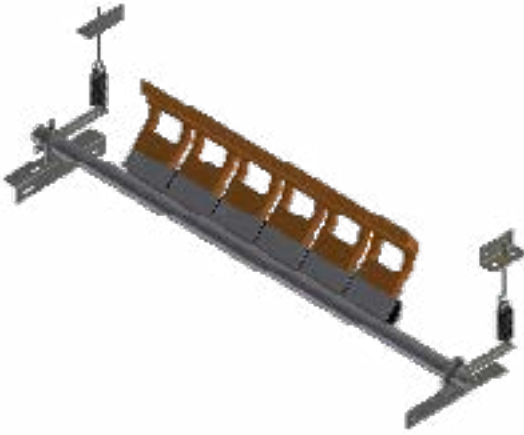
**L Arms for Head Pulley Diameters
1000mm (39³/₈ inches) -
1200mm (47¹/₄ inches)**

Ø	X	Y	C	Gap
1000 (39 ³ / ₈)	327 (12 ⁷ / ₈)	518 (20 ³ / ₈)	613 (24 ¹ / ₈)	67 (2 ⁵ / ₈)
1025 (40 ³ / ₈)	339 (13 ³ / ₈)	521 (20 ¹ / ₂)	622 (24 ¹ / ₂)	65 (2 ¹ / ₂)
1050 (41 ³ / ₈)	351 (13 ⁷ / ₈)	525 (20 ⁵ / ₈)	631 (24 ⁷ / ₈)	63 (2 ¹ / ₂)
1075 (42 ³ / ₈)	363 (14 ¹ / ₄)	528 (20 ³ / ₄)	641 (25 ¹ / ₄)	62 (2 ³ / ₈)
1100 (43 ¹ / ₄)	375 (14 ³ / ₄)	531 (20 ⁷ / ₈)	650 (25 ⁵ / ₈)	60 (2 ³ / ₈)
1125 (44 ¹ / ₄)	387 (15 ¹ / ₄)	534 (21)	660 (26)	59 (2 ¹ / ₄)
1150 (45 ¹ / ₄)	399 (15 ³ / ₄)	538 (21 ¹ / ₈)	670 (26 ³ / ₈)	57 (2 ¹ / ₄)
1175 (46 ¹ / ₄)	412 (16 ¹ / ₄)	541 (21 ¹ / ₄)	680 (26 ³ / ₄)	56 (2 ¹ / ₄)
1200 (47 ¹ / ₄)	424 (16 ⁵ / ₈)	544 (21 ³ / ₈)	689 (27 ¹ / ₈)	54 (2 ¹ / ₈)

**L Arms for Head Pulley Diameters 1200mm (47¹/₄ inches) -
1700mm (66¹⁵/₁₆ inches)**

Ø	X	Y	C	Gap
1200 (47 ¹ / ₄)	416 (16 ³ / ₈)	650 (25 ⁵ / ₈)	771 (30 ³ / ₈)	79 (3 ¹ / ₈)
1225 (48 ¹ / ₄)	428 (16 ⁷ / ₈)	653 (25 ³ / ₄)	781 (30 ³ / ₄)	76 (3)
1250 (49 ¹ / ₄)	440 (17 ³ / ₈)	656 (25 ⁷ / ₈)	790 (31 ¹ / ₈)	74 (2 ⁷ / ₈)
1275 (50 ¹ / ₄)	452 (17 ³ / ₄)	659 (26)	799 (31 ¹ / ₂)	72 (2 ⁷ / ₈)
1300 (51 ¹ / ₈)	464 (18 ¹ / ₄)	663 (26 ¹ / ₈)	809 (31 ⁷ / ₈)	70 (2 ³ / ₄)
1325 (52 ¹ / ₈)	476 (18 ³ / ₄)	666 (26 ¹ / ₄)	818 (32 ¹ / ₄)	68 (2 ⁵ / ₈)
1350 (53 ¹ / ₈)	488 (19 ¹ / ₄)	669 (26 ³ / ₈)	828 (32 ⁵ / ₈)	66 (2 ⁵ / ₈)
1375 (54 ¹ / ₈)	500 (19 ³ / ₄)	672 (26 ¹ / ₂)	838 (33)	64 (2 ¹ / ₂)
1400 (55 ¹ / ₈)	512 (20 ¹ / ₈)	676 (26 ⁵ / ₈)	848 (33 ³ / ₈)	62 (2 ¹ / ₂)
1425 (56 ¹ / ₈)	524 (20 ⁵ / ₈)	679 (26 ³ / ₄)	858 (33 ³ / ₄)	61 (2 ³ / ₈)
1450 (57 ¹ / ₈)	536 (21 ¹ / ₈)	682 (26 ⁷ / ₈)	868 (34 ¹ / ₈)	59 (2 ³ / ₈)
1475 (58 ¹ / ₈)	548 (21 ⁵ / ₈)	685 (27)	878 (34 ¹ / ₂)	57 (2 ¹ / ₄)
1500 (59)	560 (22 ¹ / ₈)	689 (27 ¹ / ₈)	888 (35)	56 (2 ¹ / ₈)
1525 (60)	573 (22 ¹ / ₂)	692 (27 ¹ / ₄)	898 (35 ³ / ₈)	54 (2 ¹ / ₈)
1550 (61)	585 (23)	695 (27 ³ / ₈)	908 (35 ³ / ₄)	52 (2 ¹ / ₈)
1575 (62)	597 (23 ¹ / ₂)	698 (27 ¹ / ₂)	918 (36 ¹ / ₈)	51 (2)
1600 (63)	609 (24)	701 (27 ⁵ / ₈)	929 (36 ⁵ / ₈)	49 (2)
1625 (64)	621 (24 ¹ / ₂)	705 (27 ³ / ₄)	939 (37)	48 (1 ⁷ / ₈)
1650 (65)	633 (24 ⁷ / ₈)	708 (27 ⁷ / ₈)	950 (37 ³ / ₈)	47 (1 ⁷ / ₈)
1675 (66)	645 (25 ³ / ₈)	711 (28)	960 (37 ³ / ₄)	45 (1 ³ / ₄)
1700 (66 ⁷ / ₈)	657 (25 ⁷ / ₈)	714 (28 ¹ / ₈)	971 (38 ¹ / ₄)	44 (1 ³ / ₄)

H Polyurethane Belt Cleaner



- Single or bi-directional conveyors
- Worn or damaged covers
- Pulley diameter up to 1200mm (47")
- Belt speed up to 5.5m/s (1100ft/min)
- Vulcanised or clipped conveyor belts
- Available with retractable cartridge

SS Arms for Head Pulley Diameters up to 500mm (19¹¹/₁₆ inches)

∅	X	Y	C	Gap
250 (9 ⁷ / ₈)	51 (2)	280 (11)	285 (11 ¹ / ₄)	47 (1 ⁷ / ₈)
275 (10 ⁷ / ₈)	64 (2 ¹ / ₂)	284 (11 ¹ / ₈)	291 (11 ¹ / ₂)	45 (1 ³ / ₄)
300 (11 ³ / ₄)	76 (3)	287 (11 ¹ / ₄)	297 (11 ³ / ₄)	42 (1 ⁵ / ₈)
325 (12 ³ / ₄)	89 (3 ¹ / ₂)	291 (11 ¹ / ₂)	304 (12)	40 (1 ⁵ / ₈)
350 (13 ³ / ₄)	102 (4)	294 (11 ⁵ / ₈)	311 (12 ¹ / ₄)	38 (1 ¹ / ₂)
375 (14 ³ / ₄)	114 (4 ¹ / ₂)	297 (11 ³ / ₄)	319 (12 ¹ / ₂)	36 (1 ³ / ₈)
400 (15 ³ / ₄)	127 (5)	301 (11 ⁷ / ₈)	326 (12 ⁷ / ₈)	34 (1 ³ / ₈)
425 (16 ³ / ₄)	139 (5 ¹ / ₂)	304 (12)	335 (13 ¹ / ₈)	33 (1 ¹ / ₄)
450 (17 ³ / ₄)	152 (6)	307 (12 ¹ / ₈)	343 (13 ¹ / ₂)	32 (1 ¹ / ₄)
475 (18 ³ / ₄)	164 (6 ¹ / ₂)	311 (12 ¹ / ₄)	351 (13 ⁷ / ₈)	30 (1 ¹ / ₄)
500 (19 ⁵ / ₈)	176 (7)	314 (12 ³ / ₈)	360 (14 ¹ / ₈)	29 (1 ¹ / ₈)

S Arms for Head Pulley Diameters 500mm (19¹¹/₁₆ inches) - 800mm (31¹/₂ inches)

∅	X	Y	C	Gap
500 (19 ⁵ / ₈)	162 (6 ³ / ₈)	375 (14 ³ / ₄)	409 (16 ¹ / ₈)	60 (2 ³ / ₈)
525 (20 ⁵ / ₈)	174 (6 ⁷ / ₈)	379 (14 ⁷ / ₈)	417 (16 ³ / ₈)	57 (2 ¹ / ₄)
550 (21 ⁵ / ₈)	187 (7 ³ / ₈)	382 (15)	425 (16 ³ / ₄)	55 (2 ¹ / ₈)
575 (22 ⁵ / ₈)	199 (7 ⁷ / ₈)	385 (15 ¹ / ₈)	434 (17 ¹ / ₈)	53 (2 ¹ / ₈)
600 (23 ⁵ / ₈)	211 (8 ³ / ₈)	389 (15 ¹ / ₄)	442 (17 ³ / ₈)	51 (2)
625 (24 ⁵ / ₈)	223 (8 ³ / ₄)	392 (15 ³ / ₈)	451 (17 ³ / ₄)	50 (2)
650 (25 ⁵ / ₈)	236 (9 ¹ / ₄)	395 (15 ¹ / ₂)	460 (18 ¹ / ₈)	48 (1 ⁷ / ₈)
675 (26 ⁵ / ₈)	248 (9 ³ / ₄)	398 (15 ⁵ / ₈)	469 (18 ¹ / ₂)	47 (1 ⁷ / ₈)
700 (27 ¹ / ₂)	260 (10 ¹ / ₄)	402 (15 ⁷ / ₈)	478 (18 ⁷ / ₈)	45 (1 ³ / ₄)
725 (28 ¹ / ₂)	272 (10 ³ / ₄)	405 (16)	488 (19 ¹ / ₄)	44 (1 ³ / ₄)
750 (29 ¹ / ₂)	284 (11 ¹ / ₄)	408 (16 ¹ / ₈)	497 (19 ⁵ / ₈)	43 (1 ⁵ / ₈)
775 (30 ¹ / ₂)	297 (11 ⁵ / ₈)	411 (16 ¹ / ₄)	507 (20)	41 (1 ⁵ / ₈)
800 (31 ¹ / ₂)	309 (12 ¹ / ₈)	415 (16 ³ / ₈)	517 (20 ³ / ₈)	40 (1 ⁵ / ₈)

M Arms for Head Pulley Diameters 800mm (31¹/₂ inches) - 1000mm (39³/₈ inches)

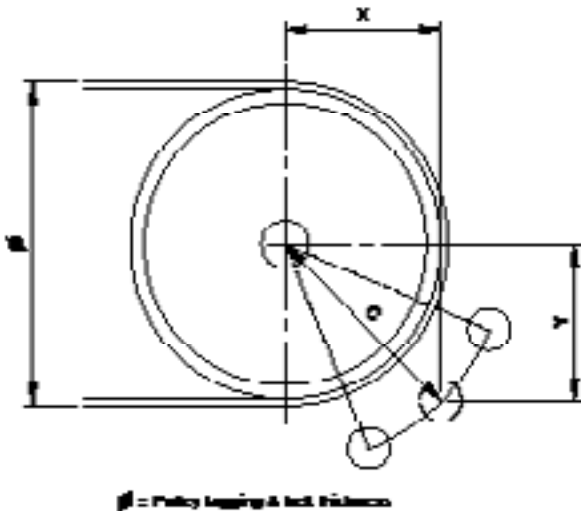
∅	X	Y	C	Gap
800 (31 ¹ / ₂)	298 (11 ³ / ₄)	453 (17 ⁷ / ₈)	543 (21 ³ / ₈)	59 (2 ¹ / ₄)
825 (32 ¹ / ₂)	311 (12 ¹ / ₄)	457 (18)	552 (21 ³ / ₄)	57 (2 ¹ / ₄)
850 (33 ¹ / ₂)	323 (12 ³ / ₄)	460 (18 ¹ / ₈)	562 (22 ¹ / ₈)	56 (2 ¹ / ₄)
875 (34 ¹ / ₂)	335 (13 ¹ / ₈)	463 (18 ¹ / ₄)	571 (22 ¹ / ₂)	54 (2 ¹ / ₈)
900 (35 ³ / ₈)	347 (13 ⁵ / ₈)	466 (18 ³ / ₈)	581 (22 ⁷ / ₈)	53 (2 ¹ / ₈)
925 (36 ³ / ₈)	359 (14 ¹ / ₈)	470 (18 ¹ / ₂)	591 (23 ¹ / ₄)	52 (2)
950 (37 ³ / ₈)	371 (14 ⁵ / ₈)	473 (18 ⁵ / ₈)	601 (23 ⁵ / ₈)	51 (2)
975 (38 ³ / ₈)	383 (15 ¹ / ₈)	476 (18 ³ / ₄)	611 (24 ¹ / ₈)	50 (2)
1000 (39 ³ / ₈)	396 (15 ⁵ / ₈)	479 (18 ⁷ / ₈)	621 (24 ¹ / ₂)	48 (1 ⁷ / ₈)

L Arms for Head Pulley Diameters
1000mm (39³/₈ inches) - 1700mm (66¹⁵/₁₆ inches)

Ø	X	Y	C	Gap
1000 (39 ³ / ₈)	391 (15 ³ / ₈)	509 (20)	642 (25 ¹ / ₄)	59 (2 ³ / ₈)
1025 (40 ³ / ₈)	403 (15 ⁷ / ₈)	512 (20 ¹ / ₈)	652 (25 ⁵ / ₈)	58 (2 ¹ / ₄)
1050 (41 ³ / ₈)	415 (16 ³ / ₈)	516 (20 ¹ / ₄)	662 (26 ¹ / ₈)	57 (2 ¹ / ₄)
1075 (42 ³ / ₈)	428 (16 ⁷ / ₈)	519 (20 ³ / ₈)	672 (26 ¹ / ₂)	55 (2 ¹ / ₈)
1100 (43 ¹ / ₄)	440 (17 ¹ / ₄)	522 (20 ¹ / ₂)	683 (26 ⁷ / ₈)	54 (2 ¹ / ₈)
1125 (44 ¹ / ₄)	452 (17 ³ / ₄)	525 (20 ³ / ₄)	693 (27 ¹ / ₄)	53 (2 ¹ / ₈)
1150 (45 ¹ / ₄)	464 (18 ¹ / ₄)	529 (20 ⁷ / ₈)	703 (27 ³ / ₄)	52 (2)
1175 (46 ¹ / ₄)	476 (18 ³ / ₄)	532 (21)	714 (28 ¹ / ₈)	51 (2)
1200 (47 ¹ / ₄)	488 (19 ¹ / ₄)	535 (21 ¹ / ₈)	724 (28 ¹ / ₂)	50 (2)
1225 (48 ¹ / ₄)	500 (19 ³ / ₄)	538 (21 ¹ / ₄)	735 (28 ⁷ / ₈)	49 (1 ⁷ / ₈)
1250 (49 ¹ / ₄)	512 (20 ¹ / ₈)	542 (21 ³ / ₈)	746 (29 ³ / ₈)	48 (1 ⁷ / ₈)
1275 (50 ¹ / ₄)	524 (20 ⁵ / ₈)	545 (21 ¹ / ₂)	756 (29 ³ / ₄)	47 (1 ⁷ / ₈)
1300 (51 ¹ / ₈)	537 (21 ¹ / ₈)	548 (21 ⁵ / ₈)	767 (30 ¹ / ₄)	46 (1 ⁷ / ₈)
1325 (52 ¹ / ₈)	549 (21 ⁵ / ₈)	551 (21 ³ / ₄)	778 (30 ⁵ / ₈)	45 (1 ³ / ₄)
1350 (53 ¹ / ₈)	561 (22 ¹ / ₈)	555 (21 ⁷ / ₈)	789 (31)	45 (1 ³ / ₄)
1375 (54 ¹ / ₈)	573 (22 ¹ / ₂)	558 (22)	800 (31 ¹ / ₂)	44 (1 ³ / ₄)
1400 (55 ¹ / ₈)	585 (23)	561 (22 ¹ / ₈)	811 (31 ⁷ / ₈)	43 (1 ³ / ₄)
1425 (56 ¹ / ₈)	597 (23 ¹ / ₂)	564 (22 ¹ / ₄)	822 (32 ³ / ₈)	42 (1 ⁵ / ₈)
1450 (57 ¹ / ₈)	609 (24)	568 (22 ³ / ₈)	833 (32 ³ / ₄)	42 (1 ⁵ / ₈)
1475 (58 ¹ / ₈)	621 (24 ¹ / ₂)	571 (22 ¹ / ₂)	844 (33 ¹ / ₄)	41 (1 ⁵ / ₈)
1500 (59)	633 (25)	574 (22 ⁵ / ₈)	855 (33 ⁵ / ₈)	40 (1 ⁵ / ₈)
1525 (60)	646 (25 ³ / ₈)	577 (22 ³ / ₄)	866 (34 ¹ / ₈)	40 (1 ¹ / ₂)
1550 (61)	658 (25 ⁷ / ₈)	581 (22 ⁷ / ₈)	877 (34 ¹ / ₂)	39 (1 ¹ / ₂)
1575 (62)	670 (26 ³ / ₈)	584 (23)	889 (35)	38 (1 ¹ / ₂)
1600 (63)	682 (26 ⁷ / ₈)	587 (23 ¹ / ₈)	900 (35 ³ / ₈)	38 (1 ¹ / ₂)
1625 (64)	694 (27 ³ / ₈)	590 (23 ¹ / ₄)	911 (35 ⁷ / ₈)	37 (1 ¹ / ₂)
1650 (65)	706 (27 ³ / ₄)	594 (23 ³ / ₈)	922 (36 ³ / ₈)	37 (1 ¹ / ₂)
1675 (66)	718 (28 ¹ / ₄)	597 (23 ¹ / ₂)	934 (36 ³ / ₄)	36 (1 ³ / ₈)
1700 (66 ⁷ / ₈)	730 (28 ³ / ₄)	600 (23 ⁵ / ₈)	945 (37 ¹ / ₄)	36 (1 ³ / ₈)



- Worn or damaged covers
- Single or bi-directional conveyors
- A continuous blade
- Pulley diameter 250-900mm (10"-35")
- Belt speed up to 4.0m/s (787ft/min)
- Vulcanised or clipped conveyor belts
- Easy to maintain



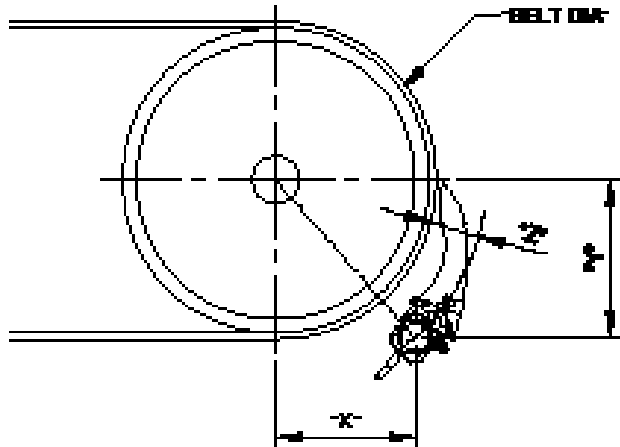
Pole Centre Location Table - mm (inches)

Ø	X	C	Y
250 (9 ⁷ / ₈)	102 (4)	229 (9)	250 (9 ⁷ / ₈)
280 (11)	121 (4 ³ / ₄)	229 (9)	258 (10 ¹ / ₄)
300 (11 ⁷ / ₈)	137 (5 ³ / ₈)	229 (9)	266 (10 ¹ / ₂)
330 (13)	162 (6 ³ / ₈)	229 (9)	280 (11)
355 (14)	175 (6 ⁷ / ₈)	229 (9)	288 (11 ³ / ₈)
380 (15)	197 (7 ³ / ₄)	229 (9)	302 (11 ⁷ / ₈)
405 (16)	206 (8 ¹ / ₈)	229 (9)	308 (12 ¹ / ₈)
430 (17)	225 (8 ⁷ / ₈)	229 (9)	321 (12 ⁵ / ₈)
460 (18 ¹ / ₈)	235 (9 ¹ / ₄)	229 (9)	328 (13)
485 (19 ¹ / ₈)	254 (10)	229 (9)	342 (13 ¹ / ₂)
510 (20 ¹ / ₈)	264 (10 ³ / ₈)	229 (9)	349 (13 ³ / ₄)
535 (21 ¹ / ₈)	279 (11)	229 (9)	361 (14 ¹ / ₄)
560 (22 ¹ / ₈)	298 (11 ³ / ₄)	229 (9)	376 (14 ⁷ / ₈)
585 (23 ¹ / ₈)	314 (12 ³ / ₈)	229 (9)	389 (15 ³ / ₈)
610 (24)	330 (13)	229 (9)	402 (15 ⁷ / ₈)
635 (25)	346 (13 ⁵ / ₈)	229 (9)	415 (16 ³ / ₈)
660 (26)	362 (14 ¹ / ₄)	229 (9)	428 (16 ⁷ / ₈)
685 (27)	378 (14 ⁷ / ₈)	229 (9)	442 (17 ³ / ₈)
710 (28)	391 (15 ³ / ₈)	229 (9)	452 (17 ⁷ / ₈)
740 (29 ¹ / ₈)	406 (16)	229 (9)	466 (18 ³ / ₈)
760 (30)	422 (16 ⁵ / ₈)	229 (9)	480 (18 ⁷ / ₈)
790 (31 ¹ / ₈)	435 (17 ¹ / ₈)	229 (9)	491 (19 ³ / ₈)
815 (32 ¹ / ₈)	451 (17 ³ / ₄)	229 (9)	505 (19 ⁷ / ₈)
840 (33 ¹ / ₈)	464 (18 ¹ / ₄)	229 (9)	517 (20 ³ / ₈)
865 (34 ¹ / ₈)	479 (18 ⁷ / ₈)	229 (9)	531 (20 ⁷ / ₈)
890 (35 ¹ / ₈)	492 (19 ³ / ₈)	229 (9)	543 (21 ³ / ₈)

XHD Polyurethane Belt Cleaner



- Single or bi-directional conveyors
- Worn or damaged covers
- Pulley diameter up to 1200mm (47")
- Belt speed up to 5.5m/s (1100ft/min)
- Vulcanised or clipped conveyor belts
- Easy to maintain



CLEANER SETOUT

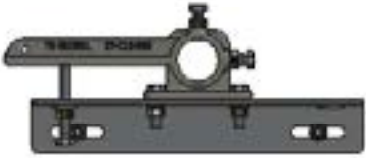

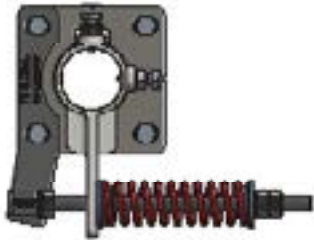


Recommended Cleaner Setout Dimensions - mm (inches)

Pulley DIA	600 (23 ⁵ / ₈)	700 (27 ⁵ / ₈)	800 (31)	900 (35 ¹ / ₂)	1000 (39 ³ / ₈)	1100 (43 ³ / ₈)	1200 (47 ¹ / ₄)
DIM "X"	222 (8 ³ / ₄)	300 (12 ¹ / ₄)	368 (15)	443 (17 ¹ / ₂)	494 (19 ¹ / ₂)	552 (21 ³ / ₄)	610 (24)
DIM "Y"	340 (13 ³ / ₈)	340 (13 ³ / ₈)	340 (13 ³ / ₈)	340 (13 ³ / ₈)	340 (13 ³ / ₈)	340 (13 ³ / ₈)	340 (13 ³ / ₈)
DIM "Z"	106 (4 ¹ / ₄)	103 (4 ¹ / ₈)	101 (4)	100 (4)	99 (3 ⁷ / ₈)	99 (3 ⁷ / ₈)	98 (3 ⁷ / ₈)

PRIMARY BELT CLEANER OPTIONS

Type	Blade Options			Suspension Arms			Cushions		Pole				Tensioners			
	Standard Tungsten	Heavy Duty Tungsten	Polyurethane	Standard	Heavy Duty	Extreme Duty	Standard Duty	Extreme Duty	Standard Duty	Reinforced	Extreme Pole	Retractable	Screw	Spring	Air	Hydraulic
H Tungsten	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
H Poly (mono arm)	✗	✗	✓	✗	✗	✗	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓
XHD	✗	✗	✓	✗	✗	✗	✗	✗	✓	✓	✗	✗	✗	✓	✓	✗
EP Cleaner	✗	✗	✓	✗	✗	✗	✗	✗	✓	✓	✗	✗	✗	✓	✗	✗

PRIMARY TENSIONING OPTIONS

H Type Screw	H Type Spring Hook	Compression Spring EP
 <ul style="list-style-type: none"> • Compact • Low cost • Simple to use • Used on tungsten cleaner 	 <ul style="list-style-type: none"> • Simple to use • Self-tensioning • Used on polyurethane cleaners 	 <ul style="list-style-type: none"> • Lost cost • Compact • Simple to use • Self-adjusting
Compression Spring XHD	Air Tension XHD	
 <ul style="list-style-type: none"> • Compact • Simple to use • Available with wear indicator • Self-adjusting 	 <ul style="list-style-type: none"> • Compact • Simple to use • Available with wear indicator • Self-adjusting 	

POLYURETHANE OPTIONS

All TS Global polyurethane cleaners are available in the following grades:

Polyurethane Grades	Colour	Application
Standard		Wet, non-abrasive applications such as coal
Fire Resistant Anti-Static (MSHA)	Black	Underground mines and tunnels
Ceramic	Blue	Abrasive applications such as quarry and hard rock
Ceramic Fire Resistant Anti-Static	Black	Abrasive applications in underground mines and
Low Friction	Green	Dry, abrasive, high speed applications such as iron ore

SECONDARY (OR TERTIARY) BELT CLEANERS

The main objective of a secondary belt cleaner is to remove the majority of fines that pass through the primary belt cleaner and return them to the main product flow. This minimises carry-back, reduces maintenance and improves conveyor performance. Secondary cleaners cannot operate at their optimum level without the assistance of a high performing primary belt cleaner.

SECONDARY (OR TERTIARY) BELT CLEANER OPTIONS

Type	Blade Options				Cushions		Pole			Tensioners			
	Standard Tungsten	Heavy Duty Tungsten	Tool Steel	Polyurethane	Standard Duty	Extreme Duty	Standard Duty	Reinforced	Extreme Pole	Screw	Spring	Air	Hydraulic
P Type Cleaner	✓	✓	✓	✓	✓	✓	✓	✗	✗	✓	✗	✗	✗
P Type Spraypole Cleaner	✓	✓	✗	✗	✓	✓	✓	✗	✓	✓	✗	✗	✗
R Type Cleaner	✓	✓	✓	✓	✓	✓	✓	✗	✗	✓	✗	✗	✗
R Type Spraypole Cleaner	✓	✓	✗	✗	✓	✓	✓	✗	✓	✓	✗	✗	✗
U Type Cleaner	✓	✗	✗	✓	✓	✗	✗	✗	✗	✗	✓	✗	✗
P Line Cleaner	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓
R Line Cleaner	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Tuffline Cleaner	✓	✗	✓	✓	✓	✓	✗	✓	✗	✓	✓	✓	✓
ES Cleaner	✓	✗	✓	✓	✗	✗	✓	✗	✗	✗	✓	✗	✗

P Type Cleaner



- Single directional conveyors
- Belt speed up to 7.0m/s (1400ft/min) - tungsten; 5.5m/s (1100ft/min) - tool steel or polyurethane
- Vulcanised (tungsten) or clipped (tool steel) conveyor belts
- Available with retractable cartridge

Spray Pole P Cleaner



- Single directional conveyors
- Belt speed up to 7.0m/s (1400ft/min)
- Vulcanised (tungsten) or clipped (tool steel) conveyor belts
- High cleaning performance
- Available with retractable cartridge

R Type Cleaner



- Shuttles, trippers, single, reversing or bi-directional conveyors
- Belt speed up to 7.0m/s (1400ft/min) - tungsten; 5.5m/s (1100ft/min) - tool steel
- Vulcanised (tungsten) or clipped (tool steel) conveyor belts
- High cleaning performance
- Available with retractable cartridge

Spray Pole R Cleaner



- Shuttles, trippers, single, reversing or bi-directional conveyors
- Belt speed up to 7.0m/s (1400ft/min) - tungsten; 5.5m/s (1100ft/min) - tool steel
- Vulcanised (tungsten) or clipped (tool steel) conveyor belts
- High cleaning performance
- Available with retractable

U Type Cleaner



- Single direction conveyors
- Belt speed up to 7.0m/s (1400ft/min) - tungsten; 5.5m/s (1100ft/min) - polyurethane
- Vulcanised (tungsten) or clipped (polyurethane) conveyor belts
- Easy to maintain

P Line Cleaner



- Single directional conveyors
- Belt speed up to 7.0m/s (1400ft/min) - tungsten; 5.5m/s (1100ft/min) - tool steel
- Vulcanised (tungsten) or clipped (tool steel) conveyor belts

R Line Cleaner



- Shuttles, trippers, single, reversing or bi-directional conveyors
- Belt speed up to 7.0m/s (1400ft/min) - tungsten; 5.5m/s (1100ft/min) - tool steel or polyurethane
- Vulcanised (tungsten) or clipped (tool steel or polyurethane) conveyor belts

Tuff Line Cleaner



- Shuttles, trippers, single, reversing or bi-directional conveyors
- Belt speed up to 7.0m/s (1400ft/min) - tungsten; 5.5m/s (1100ft/min) - tool steel or polyurethane
- Vulcanised (tungsten) or clipped (tool steel or polyurethane) conveyor belts
- Easy to maintain due to retractable cartridge and slide-on

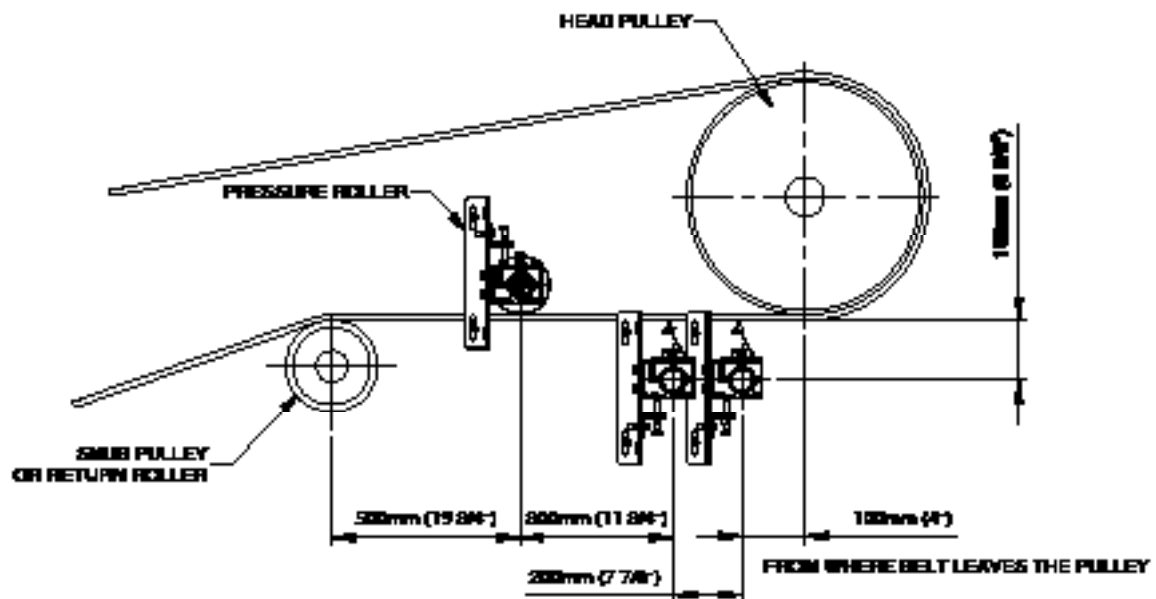
ES Cleaner



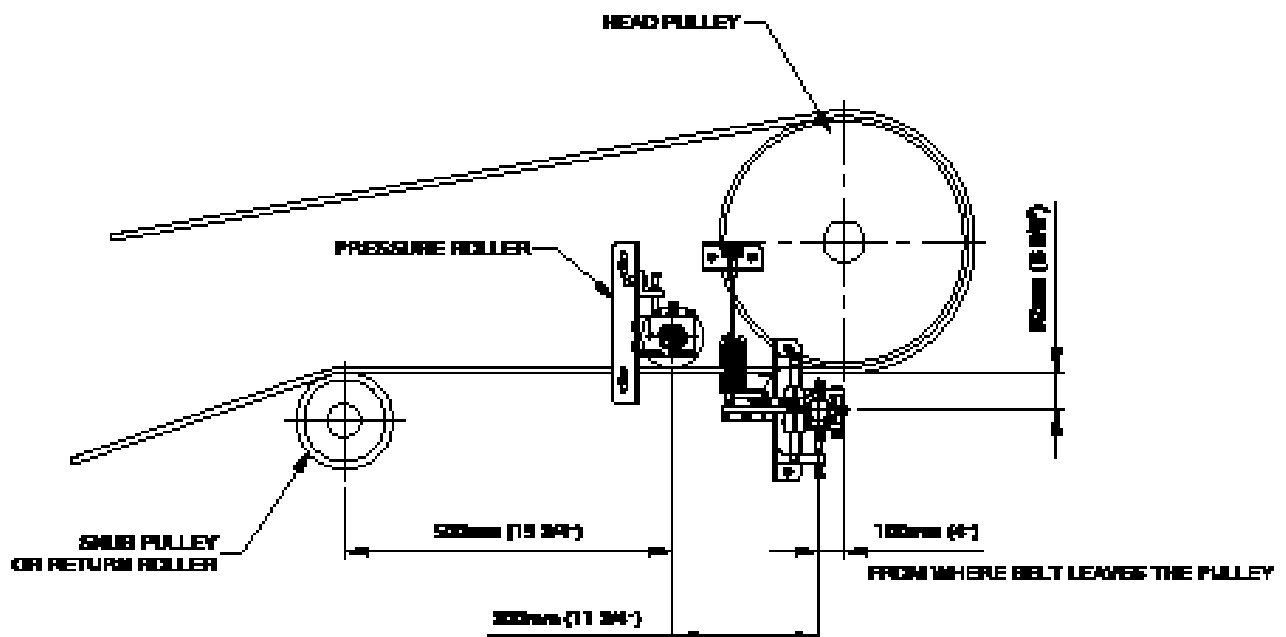
- Low cost cleaner
- Easy to maintain due to slide-on blades
- All conveyors including shuttles, trippers, single, reversing or bi-directional conveyors
- Belt speed up to 5.5m/s (1100ft/min)
- Vulcanised (tungsten or tool steel) or clipped (tool steel or polyurethane) conveyor belts

Installation Guide

P/R TYPE INSTALLATION GUIDE







U TYPE INSTALLATION GUIDE



INLINE CLEANER MOUNTING OPTIONS

All TS Global inline cleaners are available with the following mounting options:

Single Fixed	Single swivel
 <ul style="list-style-type: none"> • Compact • Low cost • Simple to install • Range of tensioners available 	 <ul style="list-style-type: none"> • Compact • Allows cleaner adjustment to exact angle • Optimises performance • Range of tensioners available
Dual Fixed	Dual swivel
 <ul style="list-style-type: none"> • Minimises space requirement when two cleaners are used • Simple to install • Minimises installation time • Range of tensioners available 	 <ul style="list-style-type: none"> • Minimises space requirement when two cleaners are used • Minimises installation time • Allows cleaner adjustment to exact angle • Optimises performance • Range of tensioners available

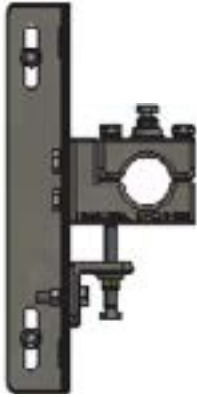
INLINE CLEANER TENSIONING OPTIONS

All TS Global inline cleaners are available with the below tensioning options:

Screw	Spring	Air
		

SECONDARY CLEANER TENSION OPTIONS

P/R Screw



- Compact
- Low cost
- Simple to use

ES



- Compact
- Low cost
- Self-adjusting
- Simple to use

P/R Spring



- Self-adjusting
- Simple to use
- Suits retractable cleaners

Auto Tensioner



- Hydraulically operated
- No external power or air required
- Self adjusting
- Maintains constant pressure



Associated Products

TS Global has developed a range of conveyor accessories designed to contribute to optimising the performance of any belt cleaning system, including:

- Stabilising rollers
- Water control manifolds
- Spray bars
- Air control boxes
- Hydraulic tensioners
- Inspection doors

BELT STABILISATION

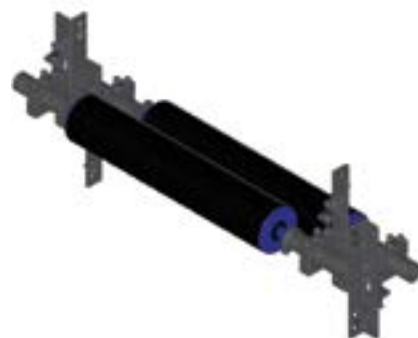
Harmonic frequency within a conveyor belt, can create an unstable surface for the belt cleaners to operate. To ensure that all belt cleaners perform at their optimum level they must maintain a constant tip pressure on a flat and stable belt surface. This can be achieved by the installation of either a pressure roller (where a snub pulley exists) or a set of stabilising rollers. Our belt stabilisation systems are flexible in design to allow standard site rollers to be

Pressure Roller Assembly*



- Used in conjunction with any belt cleaning system
- Easy installation and adjustment
- Suits all rollers
- Stabilises belt for improved cleaner

Stabilising Roller Assembly*



- Stabilises belt for improved cleaner performance
- Used in conjunction with any belt cleaning system
- Easy installation and adjustment
- Suits all rollers

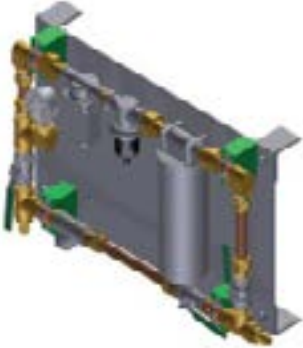


*Rollers not included

WATER CONTROL MANIFOLDS

The water control manifold has been developed to control the supply, pressure and cleanliness of water to the belt cleaning system. These three deliverables are critical to ensure that the cleaning system operates at its optimum performance levels and the life of all interacting components such as conveyor belt, lagging and return rollers are maximised. The water supply is controlled via a solenoid that is connected to the conveyors operating system (PLC) and programmed to ensure that water is only supplied when the conveyor is in operation.



Our water control manifolds are available in:

- Standard inline configuration (no bypass line) – also available in an enclosed cabinet
- Standard with bypass (maintenance line) – also available in an enclosed cabinet
- Customised configurations to suit specific requirements

Water Control Unit with Bypass	Water Control Unit	Enclosed Water Control Unit with Bypass
 <ul style="list-style-type: none"> • Controls water flow to sprays • Filters water to prevent blocked sprays • Bypass line allows for maintenance in operation • Regulator allows water pressure 	 <ul style="list-style-type: none"> • Controls water flow to sprays • Filters water to prevent blocked sprays • Regulator allows water pressure to be adjusted whilst conveyor is operating 	 <ul style="list-style-type: none"> • Controls water flow to sprays • Filters water to prevent blocked sprays • Protected by SS304 sloped roof cabinet • Allows water pressure to be adjusted whilst conveyor is operating

SPRAY BARS

The spray bar allows water to be retro fitted to an existing dry belt cleaning system without the expense of a new cleaner. The spray bar is usually installed after the primary and prior to the secondary belt cleaner to prevent sprays from blocking. An advantage of using a spray bar is that they are light and can be easily removed to clean the spray nozzles when required.

Spray Bar with U Bolt Mounts	Spray Bar with Clamp Block Mounts
 <ul style="list-style-type: none"> • Significantly compact design • Improves performance of cleaners • Reduced weight for handling • Simple mounting arrangement 	 <ul style="list-style-type: none"> • Compact design • Improves performance of cleaners • Reduced weight for handling • Adjustable mounting arrangement

AIR CONTROL BOXES

Our air control boxes are designed to be robust, with longevity in mind. The purpose of the air control box, is to ensure that a fixed pressure is applied to the belt cleaning system at all times.

Features of the air control unit include:

- Water or air filtration
- Pressure control

These are available with single, double or triple outlets to control single or multiple cleaners from one box.



Air Control Box Single



- Maintains constant air pressure on a single cleaner
- Enclosed by SS304 sloped roof cabinet
- Robust design

Air Control Box Double



- Maintains constant pressure on two cleaners
- Enclosed by SS304 sloped roof cabinet
- Robust design

Air Control Box Triple



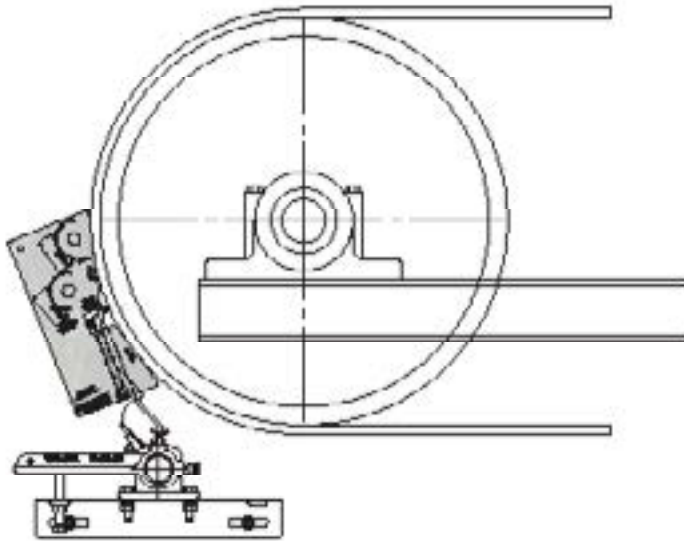
- Maintains constant pressure on three cleaners
- Enclosed by SS304 sloped roof cabinet
- Robust design

HYDRAULIC TENSIONER

Our patented hydraulic tensioner has been designed to be retro fitted on existing or new belt cleaning systems. The unit is self-powered via a nitrogen accumulator and requires no site supplied power source. The nitrogen accumulator ensures that a constant pressure is applied to the belt cleaner throughout its life-cycle i.e. automatically adjusts to compensate for wear to the tips or conveyor belt. The purpose designed manifold incorporates an oil reservoir with sufficient capacity to drain all components. The oil is pressurised via an in-built hand pump for ease of adjustment.

CLEANER SETUP TEMPLATES

H Type

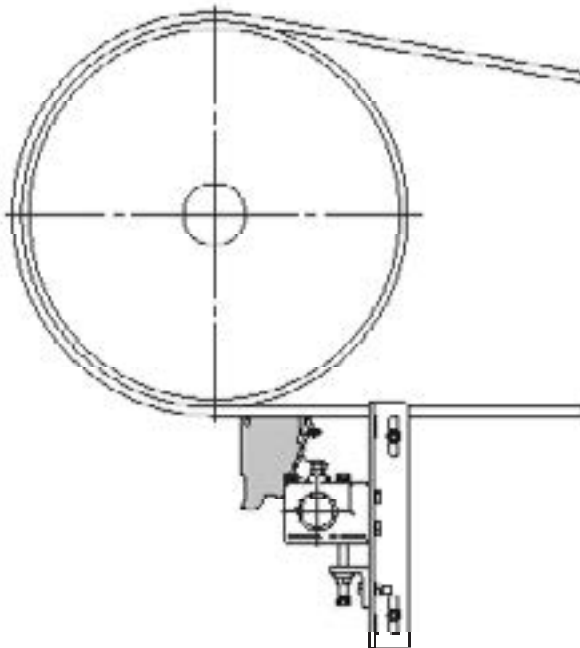


H Type Template



- Low cost
- Assists with the correct set-up of cleaner

P Type



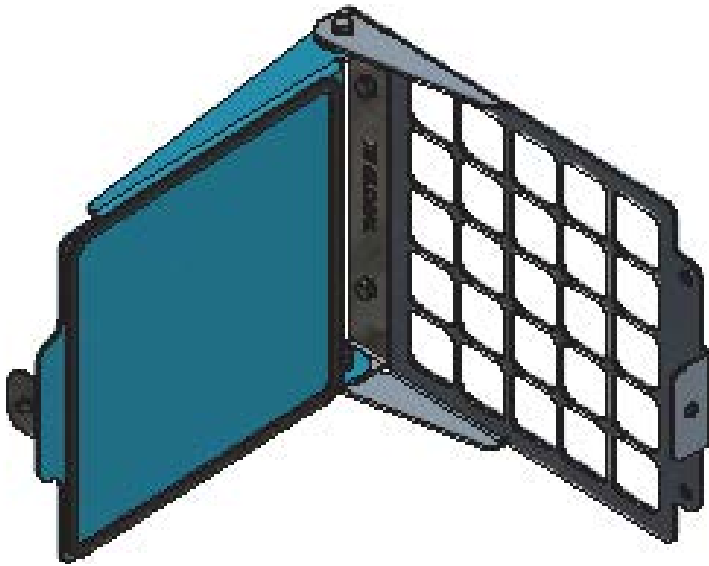
P Type Template



- Low cost
- Assists with the correct set-up of cleaner

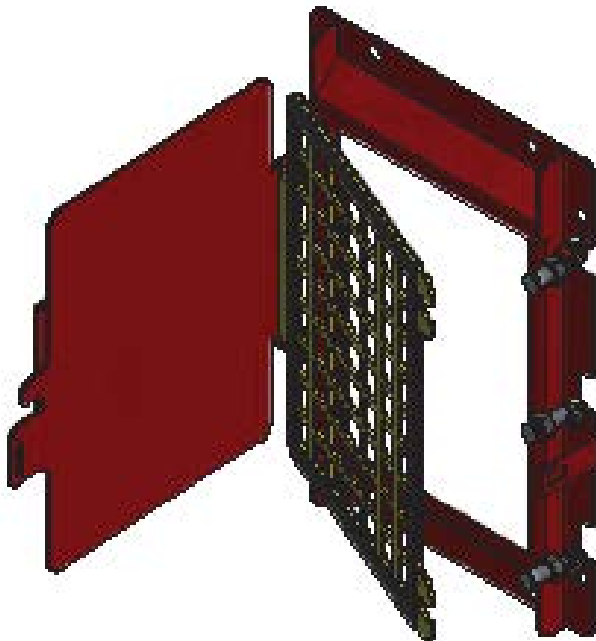
INSPECTION DOOR

Basic Inspection Door



- Allows safe inspection of cleaners while belt is operating
- Retains dust within confines of transfer chute
- Available in 3 sizes:
 - 300mm (L) x 300mm (W) (12" x 12")
 - 300mm (L) x 450mm (W) (12" x 18")
 - 450mm (L) x 600mm (W) (18" x 24")

Premium Inspection Door



- Allows safe inspection of cleaners while belt is operating
- Retains dust within confines of transfer chute
- Mesh guard is able to be removed/opened
- Available in 3 sizes:
 - 300mm (L) x 220mm (W) (12" x 8⁵/₈")
 - 450mm (L) x 300mm (W) (17³/₄" x 11³/₄")
 - 600mm (L) x 450mm (W) (23⁵/₈" x 17³/₄")



TS Global

Conveyor & Polyurethane Specialists



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