

BELT CONVEYOR EQUIPMENT



SERTIFICAS



Serlifika

ISO 45001 : 2018











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ATTESTATION OF COMPLIANCE

Secure Summing Claims Base Sec. vs St. 196 St. Tambée (SEP St. Se 10) Sec. Common Self Species Common Self Species

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The effective and efficient operation of belt conveyors depends on the use of the proper equipment.

Tekaysan® is founded to manufacture the equipment that will increase the efficiency of your belt conveyor in our country, with its experience over 15 years. It is the first and sole company in its sector that carries out domestic projects and manufacturing. We are proud to offer domestic products of international quality to our country and industry.

Each product which is not manufactured domestically necessitates procurement of such from abroad. As Tekaysan®, we are relieving our country from such necessities in our sector, identifying the problems correctly where they emerge and eliminating them by the selection of proper products with our expert team. Tekaysan® provides service with its experienced staff on conveyor belt scrapers, belt tracking systems, impact bars, loading-dumping improvement systems, and air pulse systems.

Our aim is to present all the products we manufacture to the world market.

Why Do We Scrape?

Transported Materia



Material stuck to the belt falls down at return path. The material is scraped and is dropped to the chute. Therefore, material loss is prevented.

Environment



Spilled material causes serious environmental pollution. The use of scrapers helps you to keep the environment clean.

Rolls/Drums



Material stuck to the belt coats the roll and drum in time. Friction increases, belt is decentered. Rolls and drums operate properly on a clean belt surface, Becomes more durable.

Motor/Reducer



Overloading may occur since the materials tire the system. This may cause an increase in the electricity consumption of the motors, and even cause the motor to burn out. A clean system ensures an ideal consumption.

Maintenance and Cleaning



Cleaning the bottom of the belt, replacing the rollers and drums, repairing the torn belts causes high labor costs and blow-outs, apart from the material cost. By using a scraper, you can prevent time and financial losses and save money.





FACTORS AFFECTING SCRAPING PERFORMANCE

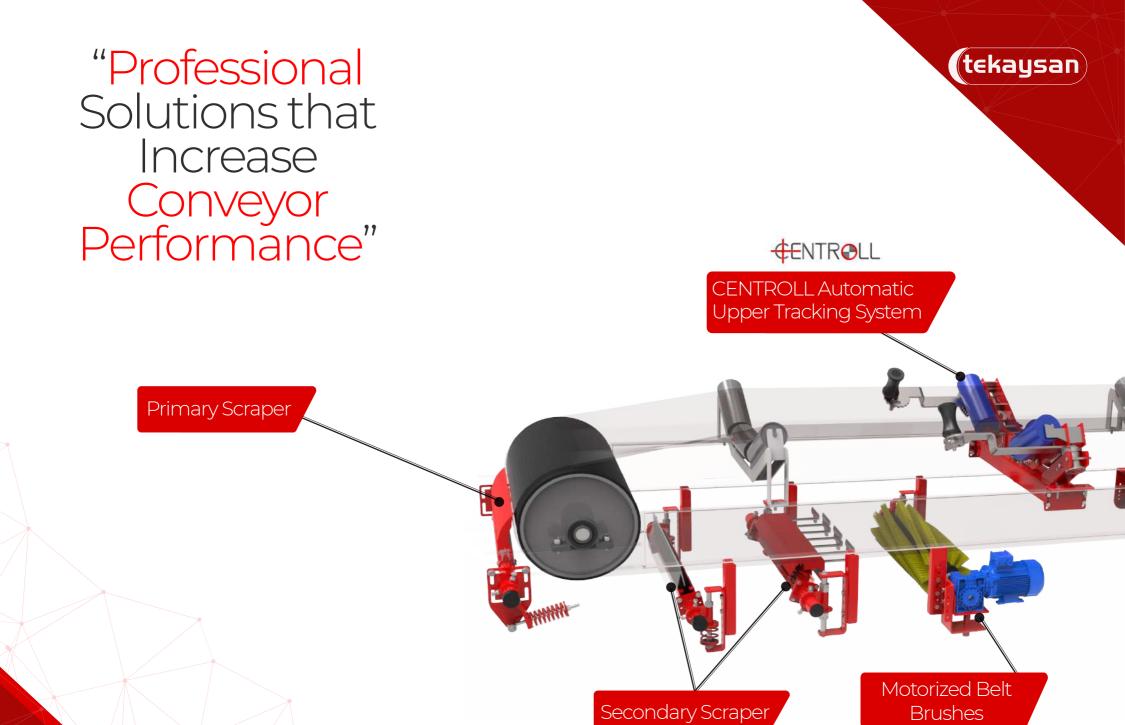


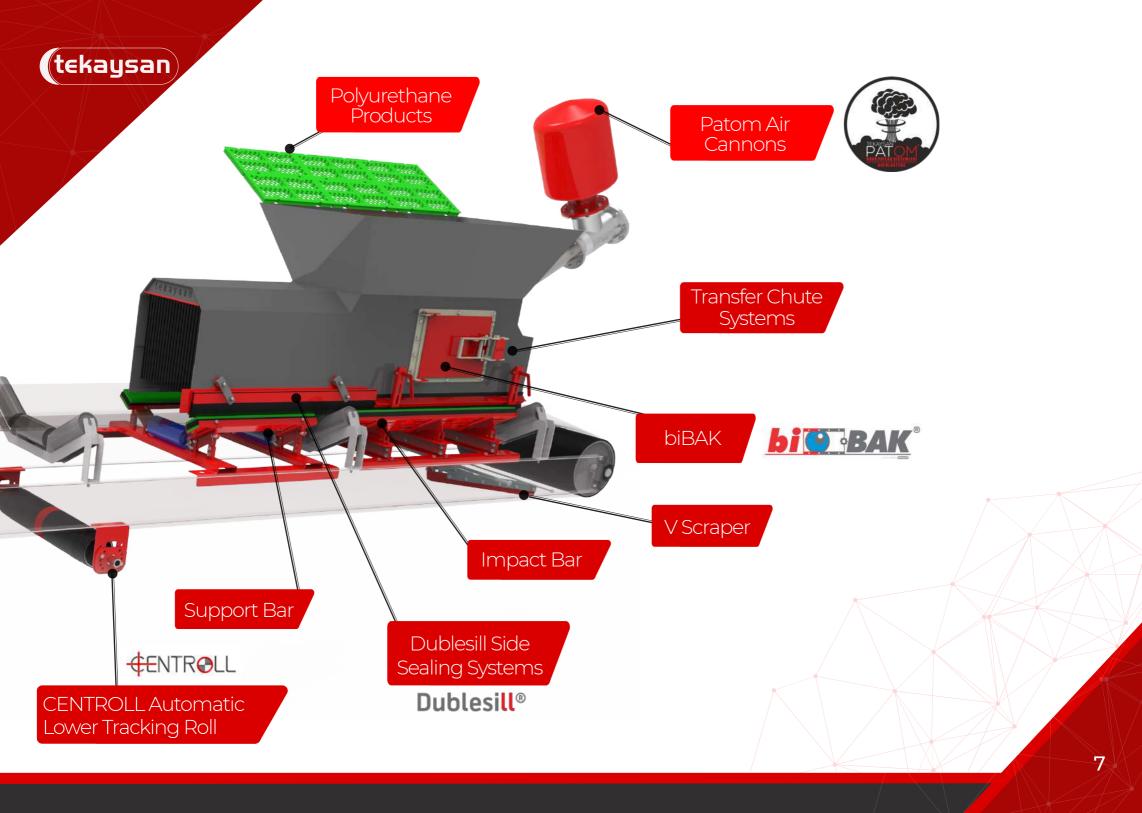
Belt conveyors must be cleaned for effective and efficient operation. Damages and downtimes to occur in cases where the belt is not cleaned are many times higher than the required scraper costs.

"STOP IS THE GREATEST COST IN FACILITIES WITH CONTINUOUS PRODUCTION!"

TEKAYSAN® SCRAPERS







Primary Scrapers

tekaysan

Polyurethane tipped primary scrapers are designed to provide high scraping performance under difficult and most severe conditions.

Thanks to the specially designed spring pressure systems, it easily adapts to the level differences on the belt surface, and does not require adjustment other than routine maintenance. Thanks to its easy attach-detach feature, the products are easy to maintain.



"YOUR INDISPENSIBLE ASSISTANT WHEN IT COMES TO BELT CLEANING"







We have different types of chassis models that we have designed considering the extra situations experienced in conveyors and that contain alternative solution suggestions.



STANDARD TYPE CHASSIS



HEAVY TYPE CHASSIS



AXIS SHIFTING CHASSIS

PRIMARY SCRAPER TYPES













CODE	BSH1	BSA1	BSA1XL	BSA1XXL	BSA1 BLACK	BSM1
MAXIMUM BELT WIDTH	1200	3000	3000	3000	3000	3000
MAXIMUM BELT SPEED	2,5	5,5	10	10	10	10
DRUM DIAMETER	133 - 300	300 - 700	500 - 1250	550 - 3000	550 - 1250	500 - 1250
OPERATING TEMPERATURE	-40, +90	-40, +90	-40, +90	-40, +90	-40, +120	-40, +90

▲ Secondary Scrapers

Secondary scrapers are designed to do the final cleaning of the belts. It has high performance in cleaning fine-dust or moist-adhesive materials from the belt surface. Provides high scraping performance thanks to its flexible modular structure and long-lasting **tungsten carbide** tips.



SECONDARY SCRAPER TYPES

		CODE	MAXIMUM BELT WIDTH	MAXIMUM BELT SPEED	OPERATING TEMPERATURE	PRODUCT SPECIFICATIONS
	A	AS HI	3000	5,5	-40, +135	It is a light type secondary scraper. Thanks to its double spring pressure mechanism, it provides maximum scraping performance by adapting 100% to the surface differences and mechanical attachments on the belt.
1		S - SM uble Sided	3000	7	-40, +135	It can be used especially in problematic situations such as pouring from one belt to another and chute mouths and belts being close to each other. Thanks to its body structure, it is designed to be used in both bidirectional and unidirectional belts.
		C-XL	3000	10	-40, +135	It is designed to work with high performance under hard and difficult conditions. Thanks to the working principle different from the standard secondary scrapers, it can also be installed in the lower part of the driving drum in cases where there is no pouring chute.
	A	S-PU	3000	7	-40, +90	Designed for use on problematic belts or belts with metal clamps where tungsten carbide tipped secondary scrapers cannot be used.
	P	PIANO	2000	3,5	-40, +135	It is used in conveyor belts with special conditions such as v pattern belt or mechanical attachment. Thanks to its special structure and pressure system, it contacts with the channels formed between the bands and scrapes the accumulated materials.

C-XL Secondary Scraper



Designed by TEKAYSAN® engineers, the C-XL has a completely different working principle than all the secondary scrapers used so far and has a high scraping performance thanks to its flexible and modular structure.



Thanks to its design, C-XL takes shape (Ex: Figures 3.1 and 3.2) according to the stretching and right-left pressing movements of the conveyor belt and thus prevents the material from escaping behind.



3.2

3.1

The C-XL is user-friendly and has always been designed to provide convenience to the user with the understanding of 'the shortest time for maintenance'. With its easy attach-detach design (eg Figure 3.3), maintenance is carried out in just 5 minutes without the need to completely interfere with the system during cleaning, maintenance and tip replacement.

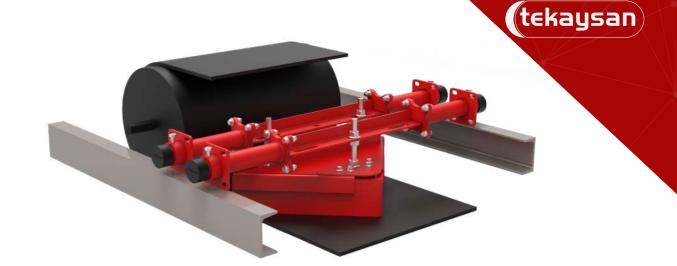




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✓ Scraper

It is generally used for preventing the materials coming into the inner part of the conveyor from getting stuck between the tail-pulley and the belt. It provides easy adjustment with its pressure mechanism. Polyurethane tips are long lasting.



▲ Y Sıyırıcı

It is used for preventing the materials coming to the inner part of the conveyor in bidirectional belts from getting stuck between the tail pulley and the belt.



Belt Brushes



It is used on belts where more precise cleaning is required or on belts with mechanical attachments or v pattern type where scrapers cannot be used. It works with high performance thanks to its height-adjustable pressure system and long-lasting tip structure. It can be produced according to all belt widths.

PIANO

It is used in conveyor belts with special conditions such as v pattern type belts or mechanical attachments. Thanks to its special structure and pressure system, it contacts the channels between the belts and scrapes the accumulated materials.





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▲ MOTORIZED Belt Brushes

Motorized drum brushes are high energy efficient systems used in conveyor belt cleaning while incorporating all drive parts (motor and gear units) in a compact form.

It does not contain all the protruding parts and equipment such as external motor, reducer, belt pulley, chain and sprockets and occupational safety protections found in typical systems. Thus, since the periodic maintenance required by these equipment, additional parts and materials used in maintenance and repair will not be needed, operating and maintenance costs are significantly reduced.

The system is completely isolated from the external environment with its compact structure. All moving parts work in a special liquid oil where lubrication and cooling processes occur together. Tekaysan drum brushes, which can work in perfect harmony in all seasons and weather conditions, are suitable for all belt types. Thanks to its strong double sealed structure, it is not affected by water, dirt and dust.

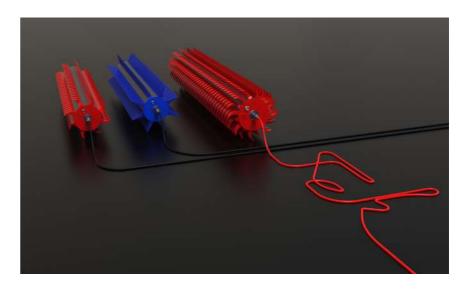
Practical and applicable, easy solutions with special design possibilities according to your projects in line with your needs and demands.

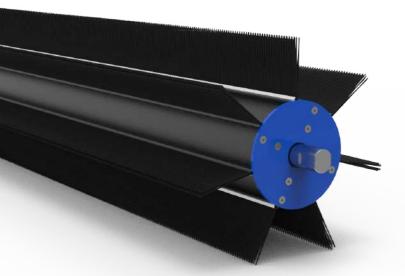
Advantages of Tekaysan® Drum Brushes

- Compact design
- ☑ High durability against outdoor conditions
- ✓ Maintenance-free structure and long life
- Easy assembly suitable for existing systems
- ☑ Easily replaceable sturdy brush
- ✓ High quality sealed construction
- ✓ Wide usage area (B=450-2000 mm)
- Easily adjustable height
- ✓ Superior performance and high efficiency



In Tekaysan® drum brushes, delicate and meticulous craftsmanship catches the eye at first glance. Quality criteria have been established for all materials and raw materials used, and longevity has been taken as a basis in line with technical data. Mechanical parts have been designed and manufactured for at least 5 years of operating life. Gear groups are high quality steel and precision workmanship products that are hardened with special processes and their operating life is extended. It has superior impermeability with first class oil and dust seals. All the bearings used have been selected with high quality according to the safety factor over the operating life calculations. The oil used is high performance, and is designed to perform the cooling of the engine and the lubrication of gears, bearings and moving parts together.





It is designed in such a way that it can be easily disassembled and intervened in case of any malfunction. Tekaysan®, which offers fast and accessible solutions with its staff that will provide spare parts and technical support in case of need, is always by its customers with its experienced team of employees for more than 15 years.

Tekaysan® has proven its performance efficiency in the field of conveyor equipment and belt cleaning with its different designs and product groups, and has succeeded in being a permanent solution partner of its customers by constantly adding new products.

▲ Centroll® Automatic Lower Tracking Roll

Centroll® Automatic Tracking Roller is designed to prevent the belt from decentering during the return. (Figure 1)

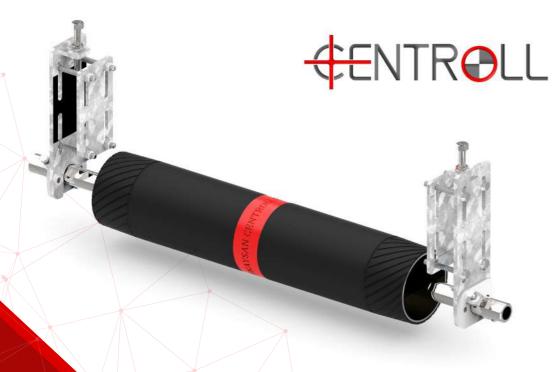
Thanks to its design, it can be easily mounted on the existing conveyor system without requiring any revision. Its assembly is practical and fast.

Bearings do not require lubrication thanks to the oil it contains in its inner chamber.

It does not need guide rollers. In this way, the negative effect of the guide rollers that cause belt damage is also eliminated.

Advantages of Centroll® automatic tracking roll;

- ✓ Faster belt tracking
- ▼ Easy montage
- ✓ Adjustable height and hole center
- ☑ Premium band grip with Polyurethane-Rubber coating
- ✓ Protection of the system from dust with sealing elements
- ✓ No lubrication required
- ✓ Wide usage range (B=300-2000 mm)
- ✓ Possibility to be used for bidirectional belts



DIFFERENT TYPES OF LOWER TRACKING MODELS



HEAVY TYPE AUTOMATIC LOWER TRACKER



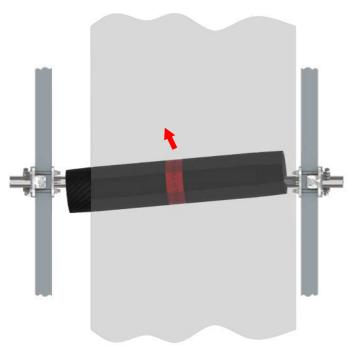
CRAB LOWER TRACKING SYSTEM

CONICAL LOWER TRACKER

www.konveyorbantmerkezleme.com

The working principle is briefly as follows:

In case the belt is decentered, the "Centroll® Automatic Tracking Roll" with its changing center of gravity moves horizontally and vertically thanks to its 45° pivot point in the center.



Centering of the Centroll® Automatic Tracking Roll by angling horizontally and vertically.



It instantly reacts to the decentered belt and ensures the centering. Centers the belt faster than traditional belt centering systems. Response time is much shorter.



▲ Centroll® Automatic Upper Tracking System

Automatic Upper Tracking Systems are designed to prevent your conveyor belt from decentering during transfer. Thanks to their design, they can be easily integrated into the existing system. In cases where the belt is decentered, the polyurethane guide roller guiding mechanism is activated and instantly centers the belt without damaging the belt.

It is much more effective, efficient and faster than conventional trackers..



Advantages of Automatic Upper Tracking system;

- ☑ Quick and easy assembly
- ✓ Compact design
- ✓ Applicability to all belts (except bidirectional belts)
- ✓ Dust-proof
- ☑Wide usage area (B=500-2000 mm)
- ✓ Height adjustment
- ✓ Chassis hole center adjustment
- ☑ Polyurethane guide rollers that do not damage the belt
- Manual centering when necessary thanks to the special fixing system



DIFFERENT TYPES OF UPPER TRACKING MODELS



BRAKE UPPER TRACKING SYSTEM

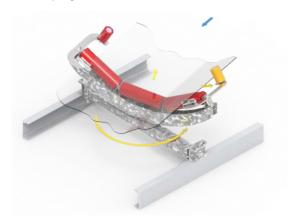
CONICAL UPPER TRACKER



The working principle is briefly as follows:

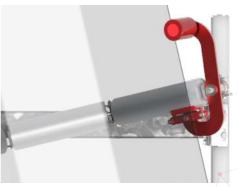
It has a large contact surface. This feature allows the belt to respond in a more effective way in case it is decentered.

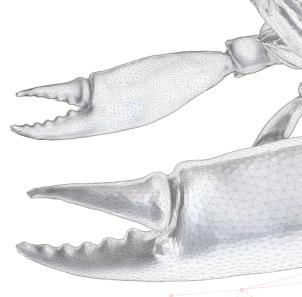
"Crab Automatic Upper Traking System" helps change the center of gravity on the decentered belt and also helps the steering mechanism to be activated by hitting the polyurethane guide roller. The guiding mechanism moves the centralizer from the pivot point in its center in the direction of its horizontal axis, thus centering the band quickly and abruptly.



The guide rollers used are made of polyurethane material and are designed not to damage the edges of the belt. The response time can be adjusted by moving the guide rollers closer and further away from the band as desired.







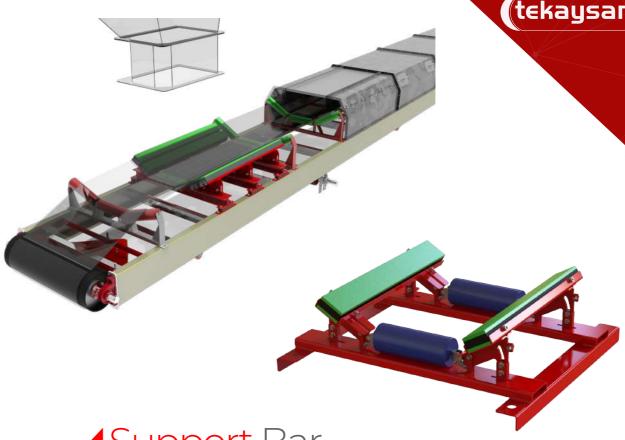


▲ Impact Bar

Impact bars are installed below the pouring point of the conveyor belts. It absorbs impacts to protect the belt and the flat structure. One of its biggest features is to prevent material escape by stabilizing the belt alignment.

The upper surface of the impact bars is produced from Polyethylene 1000 (UHMW) material, which can show high resistance to abrasion and has low friction coefficient. On the lower layer, there is a shockabsorbing epidermis rubber and an aluminum slide for easy assembly. The structure of the bedding system is very important in order for the impact bars to be used for a long time. With its solid steel construction and adjustable structure, the bedding systems allow the use of long-lasting products. The whole system is supported by PU 80 springs at 4 points in order to absorb the incoming load. Bedding systems are manufactured in accordance with spilled materials, gutter structure and return path standards.





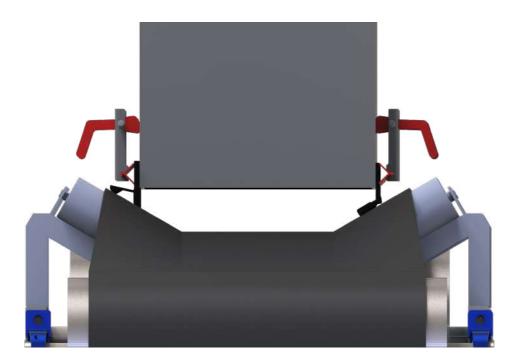
▲Support Bar

On the lower and upper layers of the Support Bars, there is UHMW 1000 polyethylene in D95 Shore hardness with high wear value and low coefficient of friction, and EPDM rubber in A55 Shore hardness to absorb the load on the middle surface. It can be used on both sides thanks to its special design.

It is produced as angled type with adjustable height and angle thanks to its special design, which is produced with ST-37 sheet metal and fine cutting.

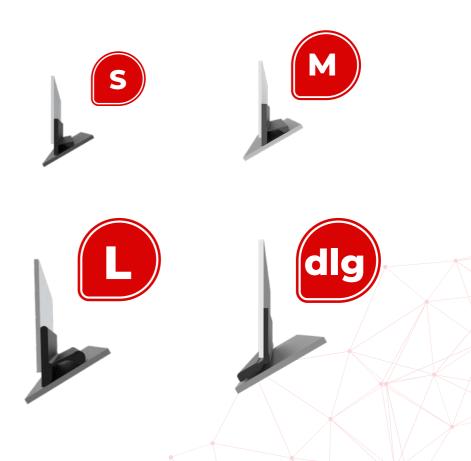
The entire mechanism is supported by a 4-point polyurethane spring system so that overloading does not damage the chassis and bars.

Dublesill®



Side Sealing Systems

Dublesill side sealing systems are designed to prevent material-dust leaks in your conveyor. Thanks to its special design and high density, low friction coefficient structure, it prevents material leaks by contacting the belt from two points. Contact us for the most suitable product choice for your conveyor belt.

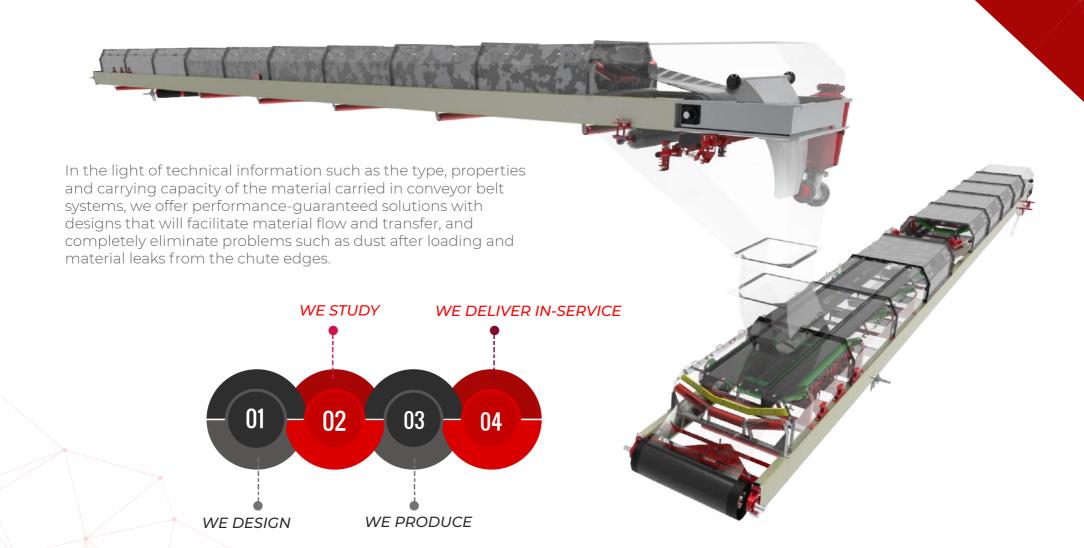




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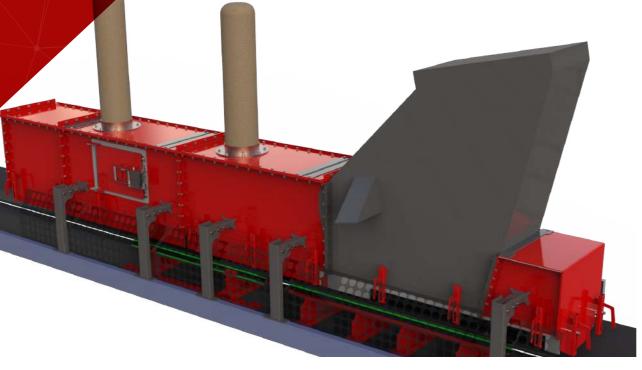
▲ Transfer Chute Systems and Equipment





THE ONLY THING LEFT TO YOU IS TO FOLLOW YOUR PRODUCTS.

Transfer Chute Systems and Equipment



We use 2 different methods as Active Dust Holding and Passive Dust Holding in our transfer chute revision processes or in all our designs. In cases where the dust particles are not dense, we trap the dust with bag systems according to the results of our analysis, and then include it in the production process.



■ biBAK

Safely monitor your material with biBAK ® Inspection Hatch. Thanks to the BiBAK inspection hatch developed by Tekaysan engineers, material control can be ensured safely without directly interfering with the conveyor during maintenance or inspection.



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▲Over-Belt Dust Filter Systems

In cases where the dust particles are more concentrated, dust is collected by filtering method using a fan. The collected dust is re-discharged onto the conveyor with the help of pulse valves and included in the production process.

Thanks to its modular structure and robustness, our filter systems designed to work in all kinds of harsh conditions, fully adapt to operating conditions with its fully automatic PLC control unit.

ADVANTAGES OF TEKAYSAN OVER-BELT DUST FILTER SYSTEM

Since the dust collected by the filters is not carried in a line, problems such as congestion in the lines and the system, decrease in suction power, and occupational safety problems caused by cleaning the clogged pipes are not experienced.

Thanks to the cartridge or bag filters, the collected dust is re-discharged to the belt within a certain period of time and included in the system process.

It is manufactured with bag or cartridge filter, according to the on-site evaluation of our technical team.









Regardless of the, content, and humidity of the material, if you are experiencing problems such as sticking and clogging in the transport areas such as silos, bunkers, transfer chutes, cyclones, chutes where you store the material, you can use PATOM Air Cannons.

Compressed air in a tube resistant to high pressure is sprayed to the clogged area in fractions of a second with adjustable timing.

In this way, blocked dustlike materials are dissolved and flow is facilitated.

Pulse systems can be used in Local-Manual-Remote modes by using Tekaysan automation systems. It can be integrated into PLC systems. Correct determination, project design, air and pressure calculation, appropriate nozzle and tank selection, and on-site assembly stages are very important for the success of air cannons. Please contact Tekaysan technical team for the most suitable and ergonomic solution.





PATOM AIR CANNON with diffuser nozzle

Jan jet angled nozzle PATOM AIR CANNON

Jan jet angled nozzle PATOM AIR CANNON



Üfleme borusu nozu**l**



Yayıcı nozul



Fan jet açılı



Fan jet üfleyici



Asimetrik nozul



Yarık nozul







PATOM® Air Cannons





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