Efficient conveyor belt cleaning is as essential today as ever. Both perfect cleaning results and simple, efficient maintenance plus gentle, belt-saving operation are the selection criteria determining the efficiency of all scraper systems. STARCLEAN® conveyor belt cleaning systems fulfill these criteria perfectly.

Proven throughout the world in all areas of mining and industry and supported by a highly motivated team, STARCLEAN® offers the best and most efficient solutions for your application.

Unique thanks to the modular system set-up and patented TWIST-SWING® feature, STARCLEAN® conveyor belt scrapers prove thousands of times, day after day and around the globe, why more and more customers in all sectors of the bulk materials industry rely on solutions provided by Schulte Strathaus.

STARCLEAN® – the versatile modular system from the 200-Series to the 900-Series
A Convincing Concept: The Unique Modular System

The modular set-up of the STAR-CLEAN® belt-cleaning system offers the perfect solution for just about every application from a range of standardised components. This modular principle guarantees fast delivery times for both complete systems and spare parts. Regardless of belt width, belt speeds or type of material conveyed:
We have the right answer!

- Tensioning devices in various designs
- Hexagon blade base
- Scraper blades featuring unrivalled wear resistance through diligently selected materials
- Individual adjustment to the belt thanks to the patented TWIST-SWING® function
- Reinforced components depending on requirements
- Two-sided tensioning device for highest demands
Conventional conveyor belt scrapers – even those featuring a segment-type design – provide a serious disadvantage: They are either not able to sufficiently adapt to the various degrees of wear across the belt width or they reach this function using mechanical components that are exposed to extreme contamination by the conveyed material which means they do not operate with the sufficient operational reliability.

The innovative, patented TWIST-SWING® technology features unique geometry that allows the individual blades to adjust to the belt perfectly. There is no need for any moving mechanical parts in the flow of scraped material – the special shape and geometry of the polyurethane feet alone ensure this flexibility. This in turn ensures that each scraper blade rests on the belt with the optimum contact pressure needed to reach optimum cleaning results on one hand, and keep blade wear to a minimum on the other – thereby saving conveyor belts from premature wear.

For users this means: the best possible cleaning results in the most economical way.

Unique Thanks to the Patented TWIST-SWING® Feature. The Essential Requirement for Optimum Results and Belt-Saving Operation.

Servicing belt scrapers is time-consuming and therefore expensive. Due to the innovative and unique snap-in feet the scraper blades of the STARCLEAN® scraper can be replaced in no time without any tools and without needing to undo any screw or pin connections.

After blade replacement the tensioning device is reset to the specified position and all segments automatically adjust to the belt surface again – THAT’S ALL!
**STARCLEAN® Conveyor Belt Cleaner with Lever-Type Tensioning Device Series 600**

Type 620.81 / 622.81 / 624.81
Featuring polyurethane blades for cleaning conveyor belts at the pulley. Suitable for reversible belt installations and mechanical belt joints.

Type 620.85 / 622.85 / 624.85
Featuring blades with a polyurethane base and special integrated carbide inserts for cleaning conveyor belts at the pulley. Scraper-blade overlap is achieved through the combination of blades in long and short design ensuring perfect cleaning results across the entire scraping width. Suitable for reversible belt installations.

To ensure optimum flexibility we have developed STARCLEAN® conveyor belt cleaners with a lever-type tensioning device.

Special characteristics include:
- Simple adjustment of pre-tensioning force via cylinder springs with a pre-tensioning display
- Compact design
- Slot for standard or reinforced blade bases from the STARCLEAN® modular system
- Flexible installation options
- Use of the proven scraper blade technology with the TWIST-SWING® feature
- Two-sided tensioning devices for wide belts from 1,600 mm
- Plain bearing for blade bases ensures optimum adjustment to the belt surface
Type 720.85 / 722.85 / 724.85
Featuring blades with a polyurethane base and special integrated carbide inserts for cleaning conveyor belts at the pulley. Scraper-blade overlap is achieved through the combination of blades in long and short design ensuring perfect cleaning results across the entire scraping width. Suitable for reversible belt installations.

Type 720.81 / 722.81 / 724.81
Featuring polyurethane blades for cleaning conveyor belts at the pulley. Suitable for reversible belt installations and mechanical belt joints.

Our patented torsion-tensioning device offers unique user-friendliness: Thanks to the pre-tensioning dial the actual pre-tensioning force can be seen any time. Once it falls below the desired setting, simply use the spanner supplied on the device and twist the pre-tensioning nut a few degrees until the pre-tensioning dial displays the correct setting. The tensioning device automatically snaps into position.

Special characteristics include:

- Tension can be reset in one easy movement
- Pre-tension setting is visible at all times
- Tensioning device can be disengaged for blade replacement by simply lifting the locking mechanism
- Compact design
- Slot for standard or reinforced blade bases from the STARCLEAN® modular system
- Flexible installation options
- Use of the proven scraper blade technology with the TWIST-SWING® feature
- Two-sided tensioning devices for wide belts from 1600 mm
- Plain bearing for blade bases ensures optimum adjustment to the belt surface
- Dustproof encapsulated
STARCLEAN® Conveyor Belt Cleaner with Raster Tensioning Device Series 800

Type 830.85 / 830.285 / 832.85 / 832.285
Featuring blades with a polyurethane base and special integrated carbide inserts for cleaning conveyor belts at small-diameter pulleys. Suitable for reversible belt installations. Scraper blade overlap is achieved through the combination of blades in long and short design ensuring perfect cleaning results across the entire scraping width.

Type 830.56 / 830.53 / 832.56 / 832.53
Featuring blades with a polyurethane base and pivoting special stainless-steel blades with carbide tips for cleaning conveyor belts below the belt.

Type 830.18 / 830.81 / 830.281 / 832.18 / 832.81 / 832.281
Featuring polyurethane blades for cleaning conveyor belts at small diameter pulleys. Suitable for reversible belt installations and mechanical belt joints.

The raster tensioning device was designed for primary and secondary scrapers. Equipped with the proven quick tensioning device the scraper can be cleaned and maintained within seconds.

Special Characteristics Include:
- Quick tensioning and releasing of the scraper enabled by the automatic locking mechanism
- Compact design
- Minimum space requirements
- Easy and efficient handling

Raster Tensioning Device series 830/832
STARCLEAN® Conveyor Belt Cleaner
Series 900

Featuring blades with a polyurethane base and pivoting special stainless-steel blades with carbide tips for cleaning conveyor belts below the belt.

Types 960.56 and 960.50
With top mounting- and spindle-guiding plate.

Types 970.56 and 970.50
With top mounting- and spindle-guiding plate and adapter arms for flexible installation options for the blade base.

Types 980.56 and 980.50
With compact U-shaped installation and spindle-guiding base for flexible installation options and smallest space requirements.

The Series 900 was designed for cleaning conveyor belts below the belt. Its spindle-type tensioning device makes it easy to set the scraper to the conveyor belt precisely and efficiently. Here, too, simple installation and maintenance coupled with optimum belt-cleaning results and belt-saving operation are the key characteristics for efficient conveyor-belt cleaning.

Characteristics include:
- Unlimited choice of installation locations from 6 o’clock position of the pulley to any point along the belt
- Use of proven blade technology with the TWIST-SWING® feature
- Toolless blade replacement
- Belt-saving operation through towing operation
- Simple maintenance: all blades are perfectly set to the belt at one time by adjusting the spindles to a predefined setting
- Scraper blade overlap is achieved through the combination of blades in long and short design ensuring perfect cleaning results across the entire scraping width.
- Pivoting blades with plain bearings for optimum adjustment to the belt surface
- High-quality special carbide inserts for long service life
STARCLEAN® Conveyor Belt Cleaner
Series 600 for Heavy-Duty Belt Conveyors

Belt widths up to 3,400 mm and over as well as belt speeds exceeding 3 m/s

Type 627.481 / 628.581 / 629.781
for use at the pulley

Featuring polyurethane blades with snap-in foot. Suitable for reversible belt installations.

For heavy-duty belt installations with the highest requirements we have developed the types 627, 628 and 629 STARCLEAN® conveyor belt cleaners with lever-type tensioning device and polyurethane blades.

Special characteristics include:
- Simple adjustment of pre-tensioning force via cylinder springs with pre-tensioning display
- Highly robust thanks to their very rugged design, proven in the world’s highest performing open pit mines
- Slot for reinforced blade bases from the STARCLEAN® modular system
- Flexible installation options
- Use of the proven scraper blade technology featuring TWIST-SWING® feature and snap-in foot for toolless blade replacement
- Two-sided tensioning device for wide belts

Series 600
for Heavy-Duty Belt Conveyors
STARCLEAN® Conveyor Belt Cleaner
Series 700 for Heavy-Duty Belt Conveyors

Belt widths up to 3,400 mm and over as well as belt speeds exceeding 3 m/s

Type 727.481 / 728.581 / 729.781 for use at the pulley

Featuring the torsion tensioning device for low maintenance use and polyurethane blades with snap-in foot. Suitable for reversible belt installations.

For heavy-duty belt installations with the highest requirements we have developed the types 727, 728 and 729 STARCLEAN® conveyor belt cleaners with torsion tensioning device and polyurethane blades.

Special characteristics include:
- Easy tension adjustment with tension indicator
- Closed execution with special integrated springs
- Low maintenance thanks to highest possible torsion angle
- Highly robust thanks to their very rugged design, proven in the world’s highest performing open pit mines
- Slot for reinforced blade bases from the STARCLEAN® modular system
- Flexible installation options
- Use of the proven scraper blade technology featuring TWIST-SWING® feature and snap-in foot for toolless blade replacement
- Two-sided tensioning device for wide belts
**STARCLEAN® Conveyor Belt Cleaner**

**Series 900 for Heavy-Duty Belt Conveyors**

Belt widths up to 3,400 mm and over as well as belt speeds exceeding 3 m/s

Type 995.66 / 996.66
for use below the belt
Featuring carbide blades and twin blade base (996) for highest demands

Series 990 was designed for optimum cleaning below the belt using carbide blades for heavy-duty belt installations. Its unique twin configuration ensures the load is distributed between two blade bases and the overlapping blade geometry ensures uniform cleaning across the entire scraping width while only minimum force is applied to the belt.

The model 995 requires less installation space. Here the overlap of the blades is achieved by using alternating short and long blades.

The spindle-type tensioning device makes it easy to set the scraper to the conveyor belt precisely and efficiently.

Also here, simple installation and maintenance, optimum cleaning results and belt-saving operation are the key characteristics for economical conveyor belt cleaning.

**Special characteristics include:**
- Unlimited choice of installation locations from 6 o’clock position of the pulley to any point along the belt
- Highly robust thanks to very rugged design, proven in the world’s best performing open pit mines
- Defined contact pressure applied by the spindle-type tensioning mechanism
- Use of proven scraper blade technology featuring TWIST-SWING® operation and snap-in feet for toolless blade replacement
- Belt-saving operation through towing operation and pivoting blades
- Simple maintenance: all blades are perfectly adjusted to the belt by adjusting the spindles to a predetermined setting
- Scraper blade overlap is achieved through the twin blade base configuration (996)
- Scraper blade overlap is achieved by alternating short and long blades (995)
STARCLEAN® Conveyor Belt Cleaner
Series 300 with automatic Lift-Off Device for reversible Conveyors

Automatically disengaging scraper for optimum cleaning results below the belt.

Type 320.56 / 322.56 / 324.56 / 320.50 / 322.50 / 324.50

With pivoting shaft. When the direction of the conveyor changes, the blades are lifting off the belt. Before the blades loose the contact to the belt, two additional blades in the shaft of the other side of the scraper get in contact to the belt and make sure that the reversing position is held safely. When the conveyor again turns into the other direction, these steps are inverted and the cleaning blades are automatically tensioned again by the TWIST-SWING® function.

Characteristics include:
- Automatic disengaging and engaging without the use of electric, pneumatic or hydraulic energy
- Optimum cleaning below the belt
- Locations from 6 o’clock position of the pulley to any point along the belt
- Use of proven blade technology with the TWIST-SWING® feature
- Simple maintenance: the blades are adjusted by simply turning the shaft in the disengaged mode
- Toolless blade replacement
- Belt-saving operation through towing operation
- Scraper blade overlap is achieved through the combination of blades in long and short design ensuring perfect cleaning results across the entire scraping width.
- Pivoting blades with plain bearings for optimum adjustment to the belt surface
- High-quality special carbide inserts for long service life
STARCLEAN® Conveyor Belt Scraper with Segmented Pressure Roller System

The STARCLEAN® Conveyor Belt Scraper System for extremely sticky and abrasive Materials. Segmented pressure rollers establish the optimum pressure of the belt to the scraper strip.

Type 511.08hm/513.08hm/511.09hm/513.09hm
With single piece mounting plate and tungsten carbide strip for unidirectional or reversing conveyors.

Type 521.08hm/523.08hm/521.09hm/523.09hm
With two piece mounting plate and tungsten carbide strip for unidirectional or reversing conveyors.

Special characteristics include:
- Scraper Strip with special tungsten carbide inserts
- Segmented pressure rollers located in the inner belt featuring the proven TWIST-SWING® technology
- Quick tensioning device for simple pressure adjustment
- Flexible installation positions, simple maintenance
- Belt-saving operation due to evading segmented rollers
- Optimum cleaning result through perfect adaption of the belt surface
- Highest lifespans through optimised force
- Available in belt widths from 400 mm to 1,600 mm
- Perfect for sticky and abrasive bulk materials like recycling slag, gypsum and others
Inner Belt Scraper

The STARCLEAN® series of inner belt scrapers was developed to prevent material from being deposited on the inner belt between pulley and belt thereby damaging the belt and the pulley.

Diagonal Scraper Type 240
Featuring polyurethane lips and gravity-based adjustment to the belt.

Plough Scraper Type 262/264
Featuring polyurethane lips. With one or two pivotal bearings and gravity-based adjustment to the belt.

Chevron Conveyor Scraper

Type 982.04n/982.07n, with optional fixture 830 and Type 422.04n/422.07n
Because of the Polyurethane blades type 04 (continuous) or type 07 (slotted) in connection with the TWIST-SWING® feature the chevron belt cleaner offers an optimum cleaning result in the return part of the belt and eliminates the usual problems caused by rotating brushes.

Apron Conveyor Scraper

Thanks to the innovative TWIST-SWING® technology the STARCLEAN® modular scrapers for cleaning at the pulley and between pulleys are uniquely suited for cleaning apron conveyors and come with both polyurethane and carbide scraper blades.
Scraper Blades for Use below the Belt

Type 56 / 256
- Polyurethane base featuring the proven TWIST-SWING® technology with snap-in foot
- Pivoting stainless steel blade holder for optimum, individual adjustment to the conveyor belt
- Plain bearing with grease pockets for 100% reliable operation
- Polyurethane base featuring the proven TWIST-SWING® technology with snap-in foot
- Pivoting stainless steel blade holder for optimum, individual adjustment to the conveyor belt
- Plain bearing with grease pockets for 100% reliable operation
- Special carbide blades for long service life and uniform wear
- Small contact area to the surface of the belt for perfect cleaning results achieved at lowest contact pressure
- 90° angle to the belt with towing operation for ultimate belt-saving operation
- PU aprons to protect the blade base against the scraped material
- Type 256 in double width available

Type 50
- Like Type 56 but suitable for use with mechanical belt joints or damaged belts
- Special carbide blades fitted into stainless steel for long service life and uniform wear
- 100° angle to the belt with towing operation to be able to avoid obstacles
- Also available in ATEX design and for food applications
- Scraper segments in long and short versions with overlapping blades to ensure efficient cleaning across the entire scraping width
- PU aprons protect the blade base against the scraped material

Type 55S
- Resistant to temperatures from -50°C to +300°C
- Holder featuring a special stainless steel spring for the proven TWIST-SWING® technology with snap-in foot
- Temperature-resistant, pivoting stainless steel blade support
- Special carbide blade for long service life and uniform wear
- Small contact area to the surface of the belt for perfect cleaning results achieved at lowest contact pressure
- 90° angle to the belt with towing operation for ultimate belt-saving operation
- Scraper blades in long and short versions with overlapping blades to ensure efficient cleaning across the entire scraping width
- Silicon aprons protect the blade base against the scraped material
- Short model available for tight installation spaces

Type 53
- Polyurethane base featuring the proven TWIST-SWING® technology with snap-in foot
- Pivoting stainless steel blade holder for optimum, individual adjustment to the conveyor belt
- Short type for tight installation space and small conveyors
- Plain bearing with grease pockets for 100% reliable operation
- Special carbide blades for long service life and uniform wear
- Small contact area to the surface of the belt for perfect cleaning results achieved at lowest contact pressure
- 90° angle to the belt with towing operation for ultimate belt-saving operation
- Scraper segments in long and short versions with overlapping blades to ensure efficient cleaning across the entire scraping width
- PU aprons protect the blade base against the scraped material

Type 53S
- As type 53, but with an integrated primary scraper made from polyurethane
- Self-adjusting primary blade to support the tungsten carbide blade
- Perfect for small conveyors

Type 66
- Reinforced design for belt widths up to 3,400 mm and over as well as belt speeds exceeding 3 m/s
- Polyurethane base with proven TWIST-SWING® technology and snap-in foot
- Pivoting stainless steel blade holder for optimum, individual adjustment to the conveyor belt
- Plain bearing with grease pockets for 100% reliable operation
- Special carbide blade for long service life and uniform wear
- Small contact area to the surface of the belt for perfect cleaning results achieved at lowest contact pressure
- 90° angle to the belt with towing operation for ultimate belt-saving operation
- Also available in ATEX design
- PU aprons to protect the blade base against the scraped material
Scraper Blades for Use at the Pulley

**Type 781**
- Polyurethane blade featuring proven TWIST-SWING® technology and snap-in foot
- Special blade formula and high wear volume for long service life
- Suitable for reversible operation
- Type 781 in double width for conveyors with increased belt misalignment
- Also available in ATEX design and for food applications
- PU aprons to protect the blade base against the scraped material

**Type 04/07**
- Polyurethane blade for cleaning of chevron belts, slotted or continuous
- Different heights for belt profiles up to 150 mm

**Types 281, Type 282 and Type 283**
- Polyurethane blade featuring proven TWIST-SWING® technology and snap-in foot
- Special blade formula and high wear volume for long service life
- Suitable for reversible operation
- Type 282 in double width for conveyors with increased belt misalignment
- Type 283 in triple width for conveyors with increased belt misalignment or damaged belts
- Also available in ATEX design and for food applications
- PU aprons to protect the blade base against the scraped material

**Type 481, Type 481HD, Type 581, Type 681 and Type 781**
- Polyurethane blade with snap-in foot for use in heavy-duty belt installations with belt widths up to 1,400 mm and over as well as belt speeds exceeding 3 m/s.
- Featuring proven TWIST-SWING® operation
- Special blade formula and highest wear volume possible for long service life
- Suitable for reversible operation
- Also available in ATEX design
- PU aprons for protecting the blade base against the scraped material

**Type 85 and 285**
- Blades in polyurethane with snap-in foot and carbide scrapers
- Long service life through proven TWIST-SWING® operation and special carbide inserts
- Type 285 in double width for conveyors with increased belt misalignment
- Type 285 in triple width for conveyors with increased belt misalignment or damaged belts
- Scaper segments in long and short versions with overlapping blades to ensure efficient cleaning across the entire scraping width
- PU aprons to protect the blade base against the scraped material
- Type “P” with armored backside for extremely abrasive bulk materials
- In long execution for large drum diameters available

**Types 85 and 285**
- Blades in polyurethane with snap-in foot and carbide scrapers
- Long service life through proven TWIST-SWING® operation and special carbide inserts
- Type 285 in double width for conveyors with increased belt misalignment
- Type 285 in triple width for conveyors with increased belt misalignment or damaged belts
- Scaper segments in long and short versions with overlapping blades to ensure efficient cleaning across the entire scraping width
- PU aprons to protect the blade base against the scraped material
- Type “P” with armored backside for extremely abrasive bulk materials
- In long execution for large drum diameters available
Blade Bases for Use in Industry

**Type 0 (SKN)** with a hexagon shape wrench size = 36 mm, with machined pockets for toolless blade assembly and replacement.

**Type 2 (SKV)** designed for higher loads in a 60 mm diameter tube, with machined pockets and welded hexagon journal. Compatible with SKN.

**Type 4 (SKX)** for highest loads and industrial belt widths. Design like SKV but with U-profile welded to the back to increase the bending moment.

All blade bases with galvanised surfaces for corrosion resistance.

Blade Bases for Heavy Duty Applications

**Type 5** made of steel tube D = 110 mm with flange mounted hexagon journals, wrench size = 60 mm and U-profile welded to the back for the secondary scraper 995.

**Type 6** as a dual blade base made of steel tube D = 110 mm with flange mounted hexagon journals, wrench size = 60 mm and U-profile welded to the back for the secondary scraper 996.

**Type 7** made of steel tube D = 120 mm with welded-in hexagon journals, wrench size = 60 mm.

**Type 8** made of steel tube D = 120 mm with flange-mounted hexagon journals, wrench size = 60 mm and with U-profile welded to the back.

**Type 9** made of steel tube D = 120 mm with flange-mounted hexagon journals, wrench size = 60 mm and with special steel profile welded to the back.

All blade bases feature machined blade pockets for toolless blade assembly and replacement and a galvanised surface for corrosion resistance.

Accessories

End support plate with self-aligning ball bearing for use at the pulley. Designed for installation on uneven or not parallel surfaces where the end support plate with self-aligning bearing provides compensation to avoid twisting of the belt cleaner.

Blade base extensions and adapters. For wider spans or special structures blade bases can either be customised or standard blade bases can be used with base extensions. This means the cleaner can be "custom-assembled" from a range of standard components and without delaying deliveries due to custom builds.

Mounting bracket for installation in any imaginable position.

Adapter arms for adjusting the blade base position to every possible belt installation.

Modular set-up for installation on all conveyor belt systems.

With safety!
Belt-Saving, Efficient, Clean

Looking back on several decades of experience gained as a supplier and engineering expert for conveyor belts we know what really counts.

Your conveyor belt is an investment that needs to remain operational for as long as possible. This means cleaning must always be gentle on the conveyor belt without producing surface wear or increasing existing damage.

At the same time, the conveyor belt must be optimally cleaned to prevent premature component wear and to minimize cleaning costs.

There is a system on the market that fulfills all of these requirements: STARCLEAN®.

Safe conveyor belt cleaning as a warranty for efficient bulk material handling.