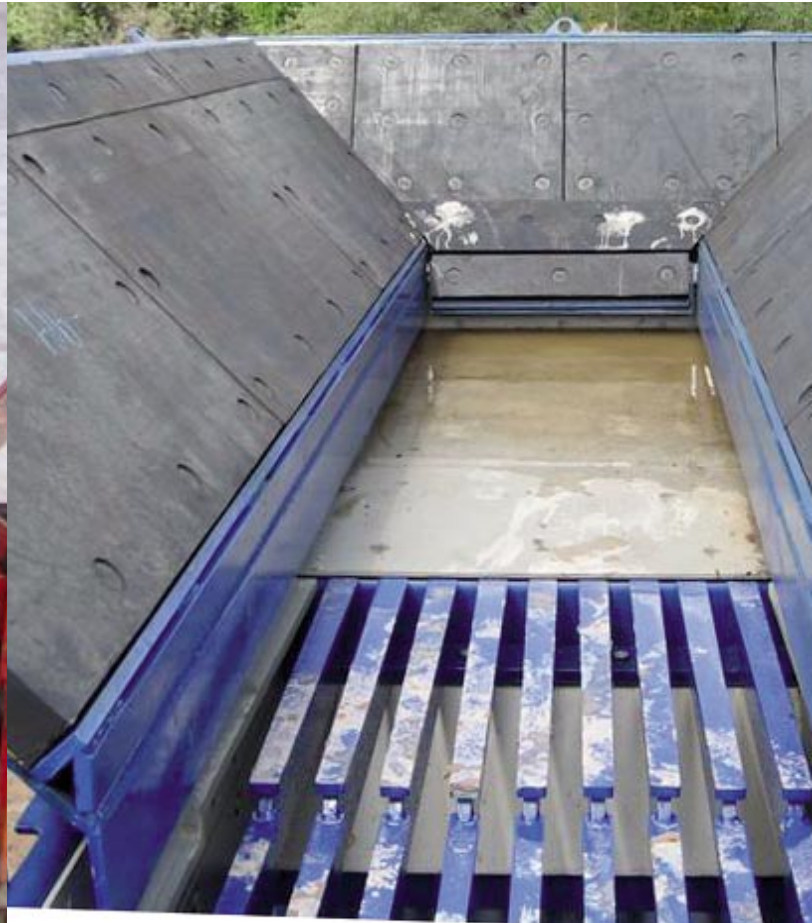


# Sandvik Wear Protection



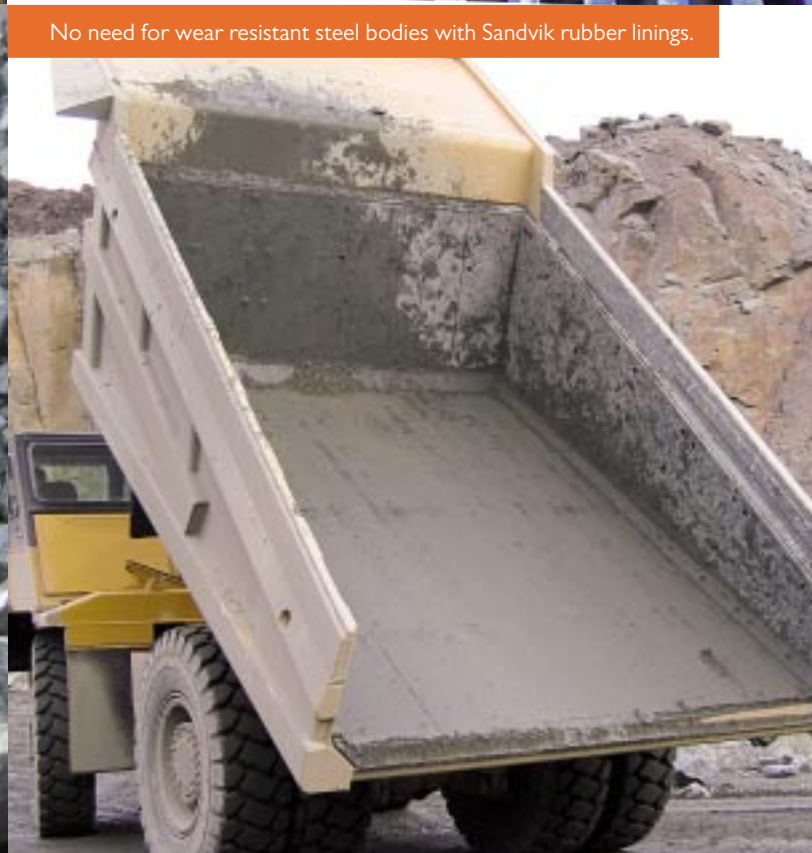
Long service intervals and less maintenance with liners from Sandvik.



No need for wear resistant steel bodies with Sandvik rubber linings.



Reduced noise levels and longer equipment life thanks to Sandvik wear protection.



Silent and trouble-free operation with Sandvik WT6000 rubber lining.



Efficient and long lasting scrubber and mill linings from Sandvik.

# Sandvik Wear Protection

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# Sandvik rubber wear plates

**Sandvik long lasting rubber wear plates with full steel backing or extruded aluminum profiles are an all-around wear protection that can be tailor-made to fit most applications from light- to extra heavy-duty.**

## **FLAT WITH STEEL BACKING**

The WT6000 rubber material has excellent wear and tear resistance making it the perfect choice for demanding applications. The full steel backing offers stability and allows for safe installation using through bolts or stud welding. It is available in a wide variety of thicknesses making it suitable for applications ranging from light to extra heavy duty.

When extra large wear plates are required WT6000-XL is the perfect choice. This extra large wear plate is available for light to medium duty applications. When installed uncut it offers fewer joints, but more often it is used in rubber workshops as raw material when cutting out other parts with a minimum of waste.

## **FLAT WITH ALUMINUM PROFILES**

Sandvik WT6000 rubber wear plates with aluminum profiles are lightweight compared to steel linings, which makes handling liner parts easy and greatly reduces the risk of work place accidents. The T-bolt attachment system offers flexibility and makes installation quick, easy and safe.

## **LONGER EQUIPMENT LIFE WITH SANDVIK RUBBER WEAR PLATES**

WT6000 plates extend equipment life by reducing vibrations and by dampening the impact forces that otherwise cause cracks to the superstructure. Provided that the correct rubber thickness has been selected the flexibility of the WT6000 rubber allows it to move away preventing cracking and surface deformation. Since rubber isn't affected by corrosion it has an additional benefit compared to steel linings.

## **SAFE HANDLING AND REDUCED NOISE LEVELS**

Sandvik WT6000 rubber linings are lightweight compared to steel linings, making them easy and safe to handle. Their replacement is simple thanks to mechanical fastening systems. As experienced by the human ear, installing rubber liners from Sandvik typically cuts the noise level in half compared to steel.

## **LONG WEAR LIFE, LESS MAINTENANCE**

The properties of Sandvik rubber wear plates reduce the need for heavy expensive steel constructions and allow for open frame designs.

Due to the long wear life and the impact absorbing properties, service intervals are longer, less maintenance is required and unscheduled break-downs are avoided.

Rubber lined primary hopper in half, as experienced by the



Stud welding is a quick and WT6000 wear plates.

ers cut the noise level  
e human ear.



Flat WT6000 with aluminum profiles.



Flat WT6000 with steel backing.



Rubber lined truck bodies lower operating cost.



safe way of installing



## Technical Data

### Dimensions

*Flat WT6000 with steel backing*

Thickness (incl. 3 mm steel backing):  
10, 15, 20, 25 and 30 mm

Thickness (incl. 5 mm steel backing):  
30, 40, 50, 75, 100, 125 and 150 mm

Width: 500, 600, 750 mm

Length: 1000 and 1500 mm

*Flat WT6000-XL with steel backing*

Thickness (incl. 3 mm steel backing):  
10, 15, 20, 25 and 30 mm

Thickness (incl. 5 mm steel backing): 30, 40 and 50 mm

Width: 1400 mm

Length: 3000 mm

*Flat WT6000 with aluminum profiles*

Thickness: 50, 75, 100, 125 and 150 mm

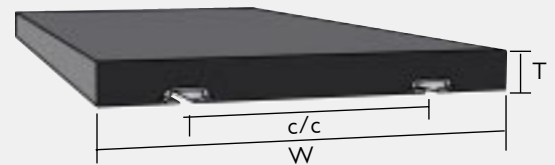
Width: 500, 600, 750 mm

c/c aluminum profiles:

300 mm (width 500 and 600 mm)

450 mm (width 750 mm)

Length: 1000 and 1500 mm



### Fastening methods

WT6000 with steel backing: Through bolts, stud welding ( $t > 50$  mm), welded studs on steel backing

WT6000-XL with steel backing: Through bolts, self tapping screws, welded studs on steel backing

WT6000 with aluminum profiles: T-bolts

### Materials

Wearing material: 60 Shore A rubber

Reinforcement: Steel plate or Aluminum profiles

### Example of typical applications

Hoppers - Chutes - Feeders - Truck bodies - Skips -

Transfer points - Bins - Silos - Spouts - Concrete mixers -

Scrubbers - Screen feed boxes and discharge lips

### Limitations

Do not install in applications with any amount of oil present. Temperature: Max. 80°C. Min. -25°C.

# Sandvik corrugated rubber wear plates

**Sandvik corrugated, long lasting rubber wear plates with full steel backing have a profiled surface especially designed for medium- to heavy-duty applications with an unfavorable impact angle (10-50°).**

## **OPTIMAL IMPACT ANGLE OR ROCK BOX EFFECT**

The WT6000 corrugated plates provide impact absorption in areas with an unfavorable impact angle (10-50°) thereby extending equipment life by reducing excessive wear. Due to the corrugated surface, an optimal impact angle (~90°) can be achieved, extending the wear life of the lining material. The liners can also be installed turned upside down creating a rock box effect. Since rubber isn't affected by corrosion it has an additional benefit compared to steel linings.

Corrugated rubber linings are lightweight compared to steel linings, which makes handling easy and greatly reduces the risk of injury.

## **SAFE AND EASY INSTALLATION**

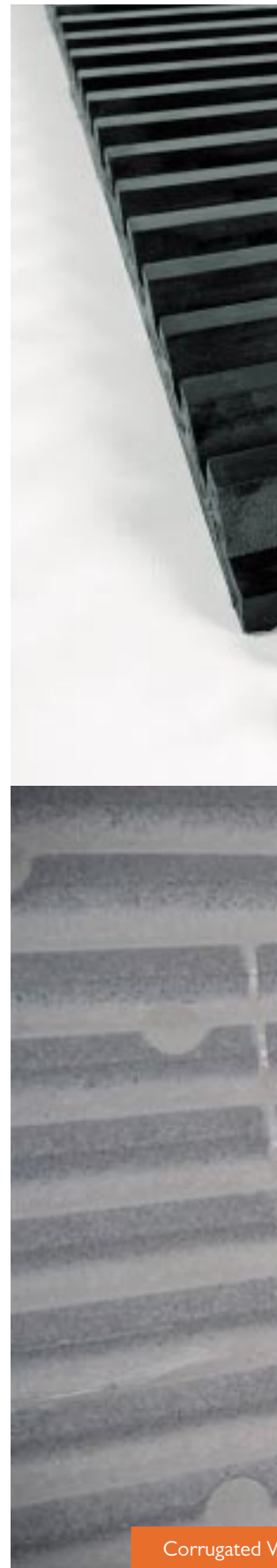
Replacing WT6000 liner parts is made easy by use of mechanical fastening systems. Through bolts and stud welding are two safe methods to install Sandvik corrugated liners. Installing rubber liners from Sandvik typically cuts the noise level in half compared to steel, as experienced by the human ear.

## **LESS MAINTENANCE AND REDUCED OPERATING COST**

Due to the long wear life and the impact absorbing properties, less maintenance is required, service intervals are longer, and unscheduled breakdowns can be avoided. Sandvik corrugated WT6000 rubber liners increase plant profitability by reducing the operating cost.



Studs can be welded on the back of the wear plates or on the receiving surface.



Corrugated V

Sandvik provides a wide range of corrugated WT6000 wear plates.



Through bolts is a safe way of installing WT6000 wear plates.



WT6000 liners create a long lasting rock-box effect when installed upside down.

## Technical Data

### Dimensions

Thickness (overall/valley):  
50/12.5, 75/37.5, 100/25, 125/50 and 150/75 mm  
Width: 500, 600 and 750 mm  
Length: 1000 and 1500 mm

### Fastening methods

Through bolts, stud welding

### Materials

Wearing material: 60 Shore A rubber  
Reinforcement: 5 mm steel plate

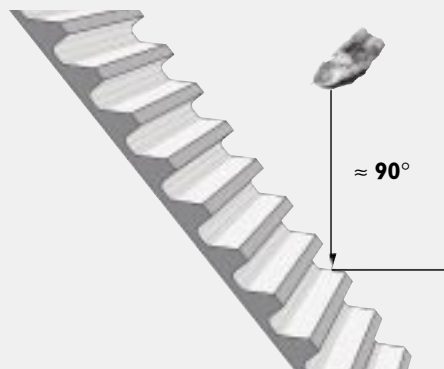
### Example of typical applications

Hoppers - Chutes - Skips - Transfer points - Bins - Silos

### Limitations

Do not install in applications with any amount of oil present.

Temperature: Max. 80° C. Min. -25° C.



# Sandvik modular dual hardness rubber wear plates

**Sandvik long lasting modular dual hardness rubber wear plates are a lightweight, all-around wear protection that can be easily tailor-made to fit most applications from light- to medium-duty.**

## **RECYCLABLE RUBBER MAKES WT7000 ECO FRIENDLY**

Sandvik's WT7000 modular wear protection made in dual hardness rubber offers a longer life of equipment by reducing vibrations and by dampening the impact forces that otherwise cause cracks to the superstructure. As no steel is used, worn out liners can easily be recycled making the product eco friendly.

## **LIGHT WEIGHT AND EASY TO INSTALL**

Sandvik WT7000 modular wear protection is lightweight compared to other lining materials, which makes

handling easy and safe. It also makes it suitable for mobile equipment. Since rubber isn't affected by corrosion it has an additional benefit compared to steel linings. Installing and replacing WT7000 liner parts is made easy by use of mechanical fastening systems. Square neck bolts and stud welding are safe methods used to install these liners. The liners are user friendly and can easily be cut to fit on site by use of a knife or band saw.

## **PREVENTS FINES PENETRATION**

The special lip eliminates gaps and prevents fines penetration. Sandvik rubber liners typically cut the noise level in half compared to steel, as experienced by the human ear.

WT7000 dual hardness liners provide longer service intervals and reduced operating costs which increases plant profitability.



Low weight makes installation of WT7000 liner parts easy.



Sandvik WT7000 dual hardness modular wear plates can easily be cut on site using a hand saw.

The lip prevents fines penet

WT7000 features long wea

ation and the rectangular washer allows for minor adjustments.



## Technical Data

### Dimensions

Thickness: 30, 40 and 50 mm  
Width: 300 mm  
Length: 1200 mm (4 x 300 mm)  
Weight = 12, 16 and 20 kg

### Fastening methods

Square neck bolt or stud welding

### Materials

Wearing material: 70 Shore A rubber  
Reinforcement: 90 Shore A rubber

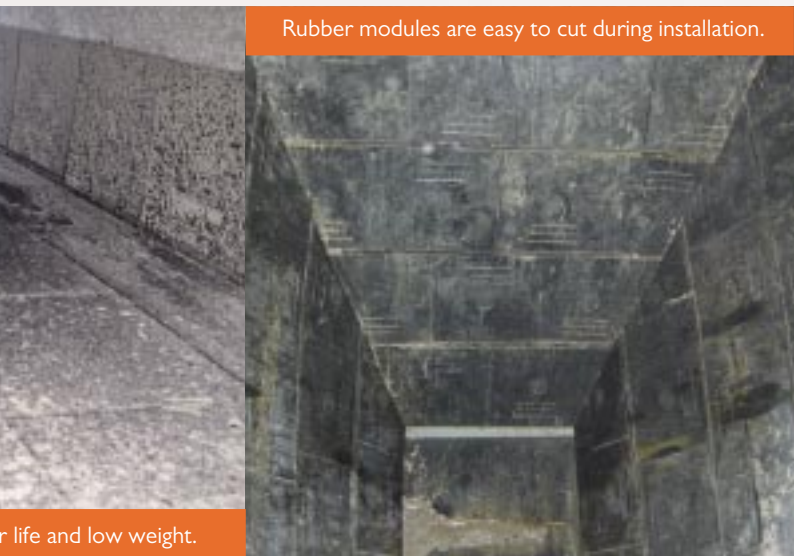
### Example of typical applications

Hoppers - Chutes - Feeders - Mobile units - Skips -  
Transfer points - Bins - Spouts - Screen feed boxes and  
discharge lips

### Limitations

Do not install in applications with any amount of oil  
present.  
Temperature: Max. 80°C. Min. -25°C.

Rubber modules are easy to cut during installation.



or life and low weight.

# Sandvik polyurethane wear plates

**Sandvik long lasting polyurethane wear plates with full steel backing is an all-around wear protection that can be tailor-made to fit most applications from light- to medium-duty. It is mainly used in wet applications.**

## **WT7000**

This is the softest of the three polyurethane wear plates in Sandvik's offering and the one with the best wear resistance. WT7000 is an excellent choice for wet applications with fine particles and sliding wear.

It has the highest impact resistance and is mainly used in wet applications where maximum wear life is required.

## **WT8000**

This product offers a combination of very good wear resistance and low friction properties making it the best choice for many applications. It performs very well in wet applications with fine particles and sliding wear.

WT8000 combines good resistance against impact and sliding wear.

## **WT9000**

WT9000 is the hardest of the three polyurethane wear plates that Sandvik supply. The hard surface makes it suitable for applications where a low coefficient of friction in combination with good wear resistance is needed.

WT9000 is mainly used in wet applications with flow problems due to its low coefficient of friction.

Installing polyurethane liners from Sandvik typically cuts the noise level in half compared to steel, as experienced by the human ear. Two safe and easy methods of installing Sandvik polyurethane wear plates are by using through bolts or self tapping screws. Sandvik polyurethane linings are lightweight compared to steel linings, which makes handling liner parts easy and greatly reduces the risk of injury.

Resistance against corrosion and most chemicals gives this product an additional benefit compared to steel linings.

The properties of Sandvik polyurethane wear liners reduce the need for heavy and expensive steel constructions and allow for open frame designs. Due to the long wear life of Sandvik polyurethane liners, service intervals are long and unscheduled breakdowns can be avoided. Sandvik polyurethane linings extend equipment life, lower operating cost and increase plant profitability.



Great resistance against sliding

Polyurethane is an excellent choice for wet applications with fine particles.



Tailor-made linings.



ing wear.

## Technical Data

### Dimensions

*WT7000, WT8000 and WT9000*

Thickness (incl. 3 mm backing):

10, 12.5, 15, 20, 25 and 30 mm

Width: 1000 mm

Length: 2000 mm

*WT7000-XL, WT8000-XL and WT9000-XL*

Thickness (incl. 3 mm steel backing):

10, 12.5, 15, 20, 25 and 30 mm

Width: 1500 mm

Length: 3000 mm

### Fastening methods

Through bolts, welded studs on steel backing, self tapping screws

### Materials

Wearing material:

70, 80 or 90 Shore A polyurethane

Reinforcement: 3 mm steel plate

### Example of typical applications

Concrete mixers - Hoppers - Chutes - Skips - Bins - Silos

- Spouts - Screens - Feeders

### Limitations

Temperature: Max. 80° C. Min. -40° C.

# Sandvik flexible wear plates

**Sandvik flexible long lasting wear plates with embedded perforated steel reinforcement can easily be shaped to fit most applications from light- to medium duty.**

## **FLEXIBLE RUBBER WEAR PLATES WT6000**

The high quality rubber in combination with the lightweight perforated steel reinforcement makes WT6000 flat flexible wear plates a perfect choice for light to medium duty applications with impact and sliding wear. The rubber has very good wear and tear resistance giving it an excellent service life.

## **FLEXIBLE POLYURETHANE WEAR PLATES WT8000**

A high grade polyurethane material provides excellent wear life making it long lasting. WT8000 flat flexible wear plates is suitable especially for wet applications with fine materials. The flexible steel reinforcement gives it stability at the same time allowing it to be bent easily to fit various applications.

## **LONG WEAR LIFE AND EXTENDED SERVICE INTERVALS**

Due to the long wear life of these liners, service intervals are extended and unscheduled breakdowns are avoided. In addition, the flexible steel reinforcement is fully embedded, thus not affected by corrosion.

## **LIGHTWEIGHT AND NOISE REDUCING**

These lining materials are lightweight compared to steel linings, making them easy and safe to handle. Installing polymer liners from Sandvik typically cuts the noise level in half compared to steel, as experienced by the human ear.

## **FLEXIBILITY MAKES INSTALLATION EASY**

Installation is made quick and easy by use of mechanical fastening systems. Through bolts, self tapping screws or Hilti-nails are three safe methods to install Sandvik flexible liners. These liners are easy to cut to fit various applications by using a compass saw. The perforated reinforcement allows it to be bent to fit complex surfaces.



Perforated reinforcement for great flexibility.



Polyurethane is an excellent material for concrete applications.



Quick and easy to install with self tapping screws.

## Technical Data

### Dimensions

#### WT6000

Thickness (incl. 0,7 mm perforated steel backing):  
10, 15, 20, 25 and 30 mm

Width: 1270 mm

Length: 3000 mm

#### WT8000

Thickness (incl. 0,7 mm perforated steel backing):  
10, 12,5, 15, and 20 mm

Width: 1015 mm

Length: 2040 mm

### Fastening methods

Through bolts, self tapping screws, Hilti-nails

### Materials

Wearing material WT6000: 60 Shore A rubber

Wearing material WT8000: 80 Shore A polyurethane

Reinforcement: 0,7 mm perforated steel plate

### Example of typical applications

Hoppers - Chutes - Feeders - Transfer points - Bins -  
Silos - Spouts - Concrete discharge chutes (WT8000) -  
Agglomeration drums

### Limitations

Do not install in applications with any amount of oil  
present (WT6000).

WT6000 temperature: Max. 80° C. Min. -25° C.

WT8000 temperature: Max. 80° C. Min. -40° C.



Flexible liners can easily be cut to fit on site.

# Sandvik

## impact bars

**Sandvik WT1000 impact bars have a top surface of low friction material and a core of soft impact absorbing rubber. They have an extruded aluminum profile for quick and safe installation, and are ideal for loading zones and transfer points.**

Sandvik WT1000 impact bars have been developed to protect conveyor belts and conveyors in the loading area. The soft rubber absorbs the impact energy from the falling material thus preventing crushing and cutting damage to the belt and cracking of the conveyor structure.

The low friction top surface results in very little drag. The WT1000 impact bars also improve belt tracking and reduce belt sagging by supporting the belt edge thus preventing spillage. Since there are no moving parts, WT1000 requires a minimum of maintenance. The top surface is resistant against oil, grease and most chemicals making it suitable for a wide range of applications.

WT1000 impact bars are normally mounted on impact cradles with foldable sides for quick and easy installation and replacement.



# Sandvik

## wear bars

**Sandvik WT6000 wear bars are made of long lasting rubber with an extruded aluminum profile for safe installation. They can be used in many different applications from light- to heavy-duty.**

Sandvik WT6000 wear bars extend equipment life by dampening the impact forces that otherwise cause cracks to the superstructure. Provided that the correct rubber thickness has been selected the flexibility of the rubber allows it to give, preventing cracking and surface deformation. Rubber wear bars are lightweight, which makes handling easy and greatly reduces

the risk of work related injury. Installing and replacing WT6000 wear bars is made easy by use of a T-bolt fastening system. It is a quick and safe method to install Sandvik WT6000 wear bars.

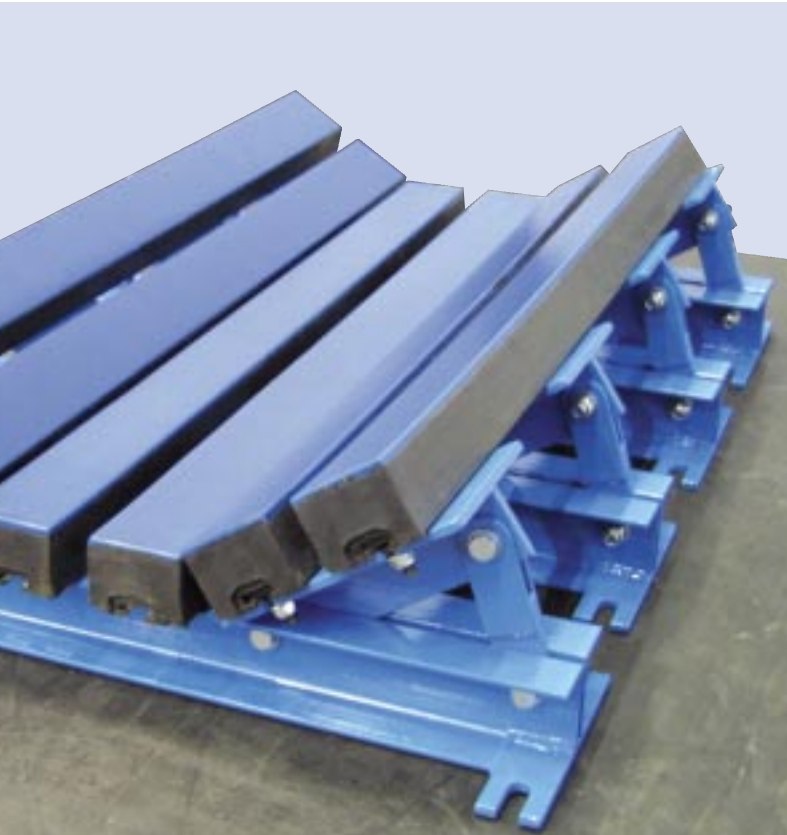
Due to the long wear life and the impact absorbing properties of Sandvik WT6000 wear bars service intervals are long and unscheduled breakdowns are avoided. Installing wear bars from Sandvik in areas exposed to heavy impact lowers the noise level and the operating cost while increasing plant profitability.

Long lasting WT6000 wear bars are also used in rock box type applications.

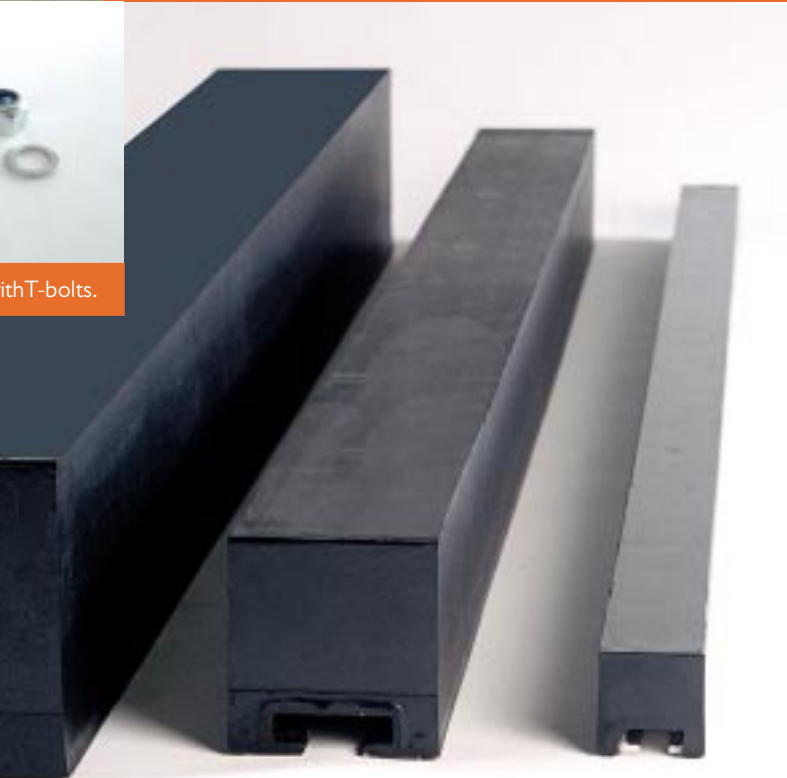


Quick and safe installation w





Sandvik WT1000 impact bars installed on a loading point cradle.



with T-bolts.

Sandvik provides a wide range of wear bars for various applications.

## Technical Data

### WT1000 impact bars

#### Dimensions

Width: 100 mm

Height: 50 mm and 75 mm

Length: 1220 and 1500 mm

#### Fastening methods

T-bolts

#### Materials

Top surface: 10 mm thick 1000 Virgin polyethylene (UHMW-PE)

Dampening material: 40 Shore A rubber

Reinforcement: Aluminum profile

#### Example of typical applications

Loading stations - Transfer points

#### Limitations

Temperature: Max. 80° C. Min. -25° C.

### WT6000 wear bars

#### Dimensions

Width: 50 and 75 mm. Height: 50, 75 and 100 mm

Width: 100 mm. Height: 50, 75, 100, 125 and 150 mm

Width: 125 and 150 mm. Height: 100, 125 and 150 mm

Length: 1000 and 1500 mm

#### Fastening methods

T-bolts

#### Materials

Wearing material: 60 Shore A rubber

Reinforcement: Aluminum profile

#### Example of typical applications

Screen center hold down bar - Chutes - Feeders - Skips - Transfer points - Scrubbers (lifter bars) - Mill linings (lifter bars)

#### Limitations

Do not install in applications with any amount of oil present.

Temperature: Max. 80°C. Min. -25°C.

# Sandvik black rubber sheeting

**Sandvik black rubber sheeting is made of a high quality, long lasting materials. It is available in smooth, tear-off or with bonding layer in 40 and 60 Shore A. It is an all-around wear protective sheeting that can be tailor-made to fit most applications from light- to medium duty.**

## **NATURAL RUBBER SHEETING**

Sandvik WG4000 has a very high degree of elongation, which makes it suitable for applications where flexibility is needed. It is very good in wet and dry applications with fine particles and sliding wear. It can be used as skirting rubber, curtains and in many other applications.

## **SYNTHETIC RUBBER SHEETING**

Sandvik WG6000 has very good tensile strength, which makes it suitable for applications with sharp, crushed material. It has very good wear and tear resistance making it long lasting.

## **LIGHTWEIGHT WEAR PROTECTION**

WG4000 and WG6000 can easily be cut to size by using a regular knife or a rotating pneumatic knife. The flexibility of the rubber allows it to be bent to fit complex surfaces. Installation can be done by using glue, screws or it can be clamped in position. Also available with tear-off backing or bonding layer making installation quick and easy. Sandvik rubber sheeting is lightweight, which makes handling easy and greatly reduces the risk of work injury.

## **LONG WEAR LIFE INCREASES PLANT PROFITABILITY**

Rubber sheeting from Sandvik typically cuts the noise level in half compared to using steel liners, as experienced by the human ear. Sandvik rubber sheeting extends equipment life by protecting it against wear thereby increasing plant profitability.

Since rubber isn't affected by corrosion it has an additional benefit compared to metal linings.



Sandvik wear resistant rubber sheeting is great for many applications.



cut and shape.



High quality wear resistant sheeting in 40 and 60 Shore A.

## Technical Data

### Dimensions

Thickness:

3, 4, 5, 6, 8, 10, 12, 15, 20, 25, 30, 40 and 50 mm

Width: 1500 mm smooth and bonding layer

Width: 1400 mm tear of backing

Length: 10 000 mm (thickness < 15 mm)

5 000 mm (thickness 20 – 25 mm)

3 000 mm (thickness 30 – 50 mm)

### Fastening methods

Glue, clamping

### Materials

Wearing material: 40 Shore A NR rubber (WG4000)

Wearing material: 60 Shore A SBR rubber (WG6000)

### Example of typical applications

Curtains - Skirt board seals - Screens - Dust encapsulation - Hoppers - Chutes - Vibrating feeders - Transfer points - Bins - Silos - Spouts - General wear protection

### Limitations

Do not install in applications with any amount of oil present.

Temperature: Max. 80° C. Min. -25° C.

# Sandvik red rubber sheeting

**Sandvik WG3500 is a high quality, long lasting 35 Shore A natural rubber sheeting available smooth or with bonding layer. It is an all-around wear protective sheeting that can be tailor-made to fit most applications from light- to medium duty.**

The wear resistant properties of the WG3500 rubber sheeting makes it long lasting. Since rubber isn't affected by corrosion it has an additional benefit compared to steel linings. WG3500 is also lightweight compared to steel linings, which makes handling easy and greatly reduces the risk of work injury.

## **EASY TO TAILOR-MAKE AND INSTALL**

The red natural rubber (NR) sheeting is normally supplied with one smooth side and one with a fabric impression. It is also available with bonding layer making it easy to glue. WG3500 sheeting is easy to cut to fit various applications by using a knife. The flexibility of the soft rubber allows it to be bent to fit complex surfaces.

## **SUPERIOR WEAR LIFE IN WET APPLICATIONS**

WG3500 has a very high degree of elongation, which makes it suitable for applications where flexibility is needed. It is very good in wet or dry applications with fine particles and sliding wear and can be installed by using glue, bolts, screws and nails or clamped in position. Due to the long wear life of WG3500 sheeting, service intervals are longer and unscheduled breakdowns are avoided.



WG3500 is available as smooth/fabric impression or with bonding layer.



The high abrasion resistance



WG3500 is an excellent material in wet sand applications.

## Technical Data

### Dimensions

Thickness:

1, 1.5, 2, 3, 4, 5, 6, 8, 10, 12, 15, 20, 25 and 30 mm

Width: 1400 mm

Length:  $t=1-5$  mm 5000 mm.  $t=6-30$  mm 10 000 mm

### Fastening methods

Glue, clamping

### Materials

Wearing material: 35 Shore A natural rubber

### Example of typical applications

Curtains - Skirt board seals - Screens - Dust encapsulation - Hoppers - Chutes - Vibrating feeders - Transfer points - Bins - Silos - Spouts - Cyclones - Classifiers - General wear protection

### Limitations

Do not install in applications with any amount of oil present.

Temperature: Max. 80° C. Min. -40° C.



It makes WG3500 the perfect choice for conveyor skirting and curtains.

# Sandvik polyurethane sheeting

**Sandvik polyurethane sheeting is a high quality, long lasting product available in three different hardnesses 70, 80 and 90 Shore A. It provides excellent abrasion resistance in wet applications with fine to medium size material and it can be tailor-made to fit most applications.**

## **WG7000**

This is the softest of the three polyurethane sheeting qualities in Sandvik's product offering. It is easy to bend and shape to fit curved surfaces.

WG7000 has as well the best wear resistance of the three. It is excellent in wet applications with fine particles and sliding wear.

It can be cut to size by using a rotating pneumatic knife, a band saw or a sharp knife. Installation is easy using square neck bolts or clamped in position.

## **WG8000**

This product offers a combination of very good wear resistance and low friction properties making it the best choice for many applications. Very good in wet applications with fine particles and sliding wear.

Can be installed by using square neck bolts or clamped in position.

## **WG9000**

This is the hardest of the three sheetings that Sandvik supply. The hard surface makes it suitable for applications where a low coefficient of friction in combination with good wear resistance is needed.

WG9000 can be installed by using square neck bolts or clamped in position.



Sandvik provides a wide range of high quality polyurethane sheeting.

## Technical Data

### Dimensions

Thickness: 5, 10, 15, 20, 25 and 30 mm

Width: 1000 mm

Length: 2000 mm

### Fastening methods

Clamping, square neck bolts

### Materials

Wearing material: 70 Shore A polyurethane (WG7000)

Wearing material: 80 Shore A polyurethane (WG8000)

Wearing material: 90 Shore A polyurethane (WG9000)

### Example of typical applications

Screens (wet) - Dust encapsulation - Hoppers - Chutes -  
Vibrating feeders - Transfer points - Bins - Silos - Spouts -  
Scraper blades - General wear protection

### Limitations

Temperature: Max. 80° C. Min. -40° C.

# Sandvik polyethylene sheeting

**Sandvik UHMW-polyethylene sheeting is a high quality, flow promoting product available in various molecular weights. Its low friction makes it suitable for applications with fine size bulk materials.**

## **RECLAIM POLYETHYLENE SHEETING (SPECKLED)**

Sandvik WG1000 reclaim is made of a mix of virgin material and regenerated material. It makes it the ideal choice for the less demanding applications. It is a low cost alternative to WG1000 Virgin with slightly lower performance. It has a low coefficient of friction and should be used in applications with less abrasive materials and limited tonnage.

## **VIRGIN POLYETHYLENE SHEETING (WHITE)**

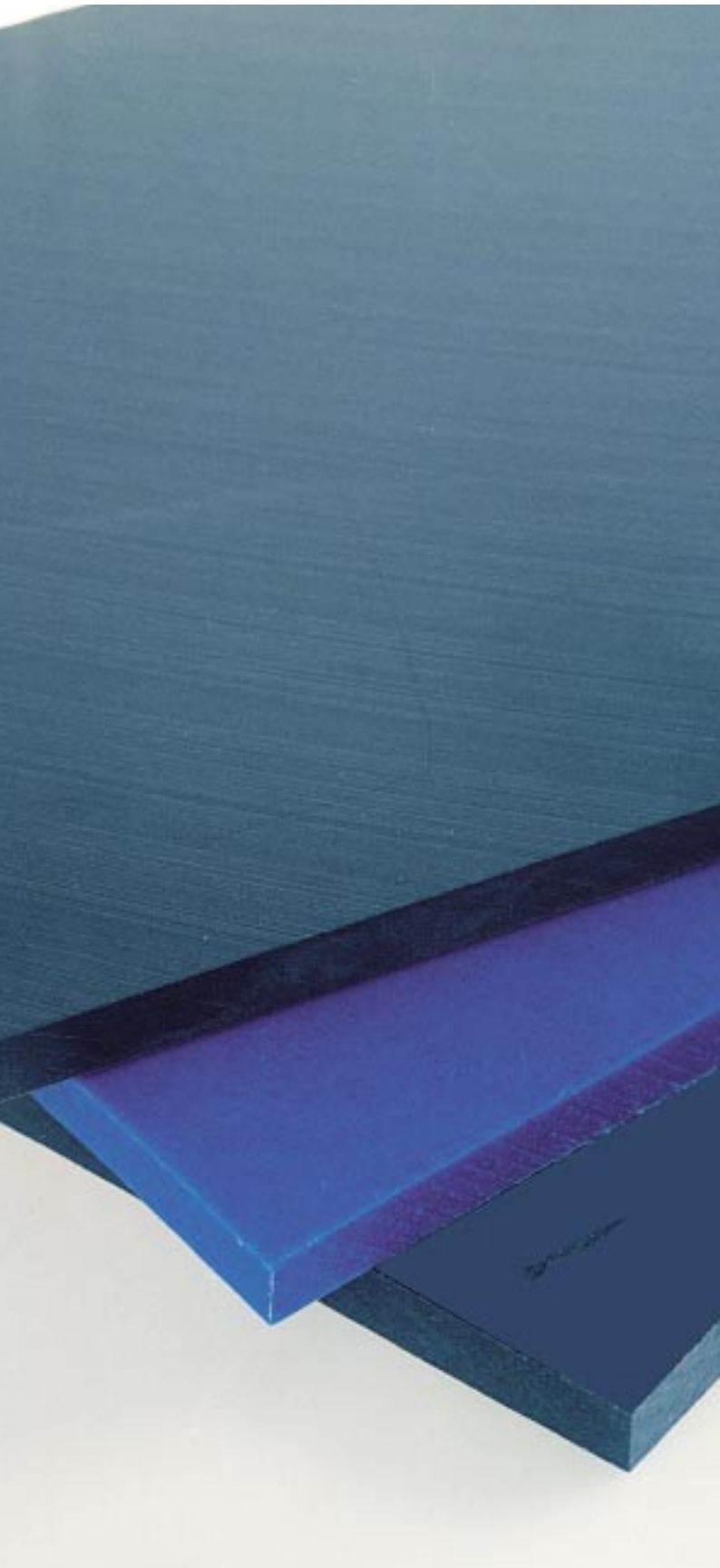
Sandvik WG1000 virgin has a low coefficient of friction, good impact and abrasion resistance making it suitable for a wide range of applications. It is the most commonly used low friction material in quarries and mines.

## **ANTISTATIC POLYETHYLENE SHEETING (BLACK)**

Sandvik WG2000 virgin is a high performance polyethylene material with the best abrasion resistance of the three. It is intended for the most demanding applications. WG2000 antistatic is UV stabilized, has self-lubricating properties and a very low coefficient of friction. It is a permanent antistatic/conductive modified UHMW-PE polymer. This material is used for applications in which it is not allowed to build up static properties.

Sandvik polyethylene products feature a low coefficient of friction which makes them very suitable for bulk material applications where flow problems occur. The UHMW polyethylene lining material prevents arching and ratholing and unscheduled production stops. These materials should be selected for applications where low friction is a more important feature than wear resistance. Since Sandvik polyethylene sheeting does not absorb any moisture it prevents material from freezing on the liner surface. It is also resistant against chemical attack and corrosion. The used additives, type and quantity, meet the cleanliness class FDA §178.3297 (USA) the EU-directives and the German BfR-recommendation (BfR = Bundesinstitut für Risikobewertung) for “Food industry applications”.





## Technical Data

### Dimensions

WG1000 Reclaim (speckled):

Width: 1000 mm

Length: 3000 mm

Thickness: 6, 8, 10, 12, 15, 20, 25 and 30 mm

WG1000 Virgin (white):

Width: 1000 mm

Length: 2000 mm

Thickness: 6, 8, 10, 12, 15, 20, 25 and 30 mm

WG2000 Virgin (black):

Width: 1000 mm

Length: 2000 mm

Thickness: 8, 10, 12, 15, 20, 25 and 30 mm

### Fastening methods

Self tapping screws, through bolts, welded studs

### Materials

Wearing material: A mix of virgin and reclaimed 1000 grade polyethylene (WG1000 reclaim)

Wearing material: Virgin 1000 grade polyethylene (WG1000 virgin)

Wearing material: Virgin 2000 grade polyethylene (WG2000 virgin)

### Electrical properties

WG2000, Antistatic

Surface resistivity: (method: IEC 60093) =  $10^9$  Ohm

Volume resistivity: (method: IEC 60093) =  $10^6$  Ohm

### Example of typical applications

Normally used in applications where low friction is more important than wear resistance.

WG1000 reclaim, for the not so demanding applications.

WG1000 virgin, relatively good impact and abrasion resistance.

WG2000 virgin, antistatic with good abrasion resistance and very low coefficient of friction.

Hoppers - Chutes - Skips - Bins - Silos - Spouts - Screens  
fines chutes - Feeders (light duty)

### Limitations

Temperature: Max. 80° C. Min. -50° C.

vik provides a wide range of low friction sheets to promote bulk materials flow.

# Sandvik ceramic wear protection

**Sandvik WT9200 ceramic wear plates and WG9200 ceramic sheeting feature extremely long wear life resulting in fewer maintenance stops, lower maintenance and production cost and increased production. The size and weight have been chosen to make these products easy to handle for fast and safe installation.**

## **LIGHT DUTY RANGE**

Sandvik's light duty ceramic sheeting and ceramic wear plates offer extremely long wear life in applications with sliding wear. The thickness and the low weight make these products ideal in applications where weight and space are limiting factors. The low friction, smooth surface prevents material build-up in low inclination installations. The square ceramic tiles make it possible to bend the sheeting which makes it the perfect protection for both concave and convex surfaces. The size of the ceramic sheeting can easily be adjusted by bending the sheeting and cutting it in between the ceramic tiles. The sheeting is supplied with a CN layer (i.e. bonding / contact layer) on the back side to simplify the gluing process and reduce the installation time needed. It results in a high bond strength which ensures that the product is securely attached throughout its wear life.

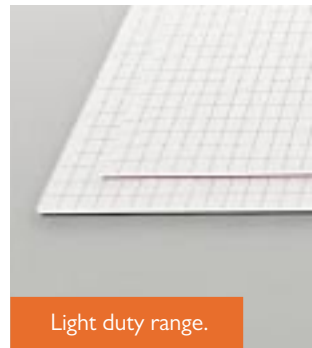
## **MEDIUM DUTY RANGE**

For tougher applications with larger material flow which contain some coarser material Sandvik has developed a brand new, pattern

protected, ceramic wear plate. By embedding the ceramic tiles in rubber the properties of the two materials can be fully utilized. The ceramic tiles' extreme hardness in combination with the dampening elasticity of the rubber provide an unsurpassed wear life. The triangular shaped tiles make it possible to cut the wear plate, not only straight but also at an angle. It makes the installation of these ceramic wear plates simple and quick. This ceramic wear plate can easily be cut using an ordinary band saw instead of expensive diamond blades which is a needed for other brands of ceramic wear protection. As a result the installation time and cost is reduced.

## **HEAVY DUTY RANGE**

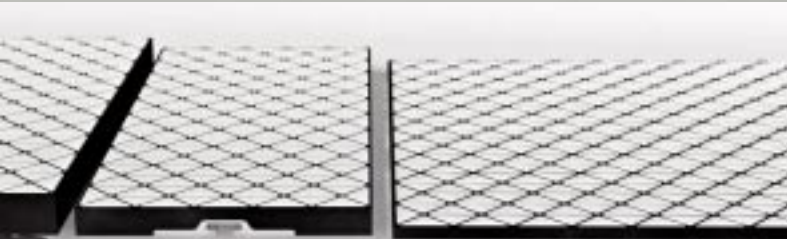
These products are intended for the toughest applications with very high material flow containing coarse material. When a combination of extreme wear- and impact resistance and long wear life is needed Sandvik can offer a number of ceramic wear plates in a completely new design. These ceramic wear plates have large and very hard ceramic bricks vulcanized into a matrix of wear resistant rubber. Due to its elastic properties the rubber acts as a dampener. It makes it possible to use this product in applications with a lot of impact without the risk of crushing the ceramic bricks. The wear plates can easily be cut crosswise with a band saw while the staggered pattern prevents longitudinal wash out.



Light duty range.



Sandvik ceramic wear liners



Medium duty range.



Heavy duty range.



s provide extremely long wear life.



The triangular shaped tiles make it easy to cut the ceramic wear plates to fit the application.

# Technical Data

## Dimensions

**Light duty range:** The size and thereby the weight of the sheeting and the wear plate have been selected to make them easy to handle by one person.

Product	Sheeting	Sheeting	Plate
Width (mm)	500	500	500
Length (mm)	500	500	500
Thickness (mm)	5	8	12
Tile thickness (mm)	3	5	5
Weight (kg)	3	5.4	12

**Medium duty range:** These wear plates are available either with an aluminum profile for adjustable and secure installation with T-bolts or with a full steel backing for installation with stud welding.

Product	Plate	Plate	Plate
Width (mm)	500	250	250
Length (mm)	500	500	500
Thickness (mm)	20	27	37
Tile thickness (mm)	10	10	20
Weight (kg)	15.3	6.5	10.4

**Heavy duty range:** The wear plates have a heavy steel backing plate well suitable for stud welding. The size of these wear plates makes it easy to tailor make the lining to fit the surface that needs protection.

Product	Plate	Plate
Width (mm)	250	250
Length (mm)	500	500
Thickness (mm)	75	100
Tile thickness (mm)	50	75
Weight (kg)	26	35

## Attachment methods

**Light duty range:** Gluing (sheeting). Stud welding M12 (plate). **Medium duty range:** T-bolt M12 (thicknesses 27 and 37 mm). Stud welding M12 (thickness 20 mm). **Heavy duty range:** Stud welding M20.

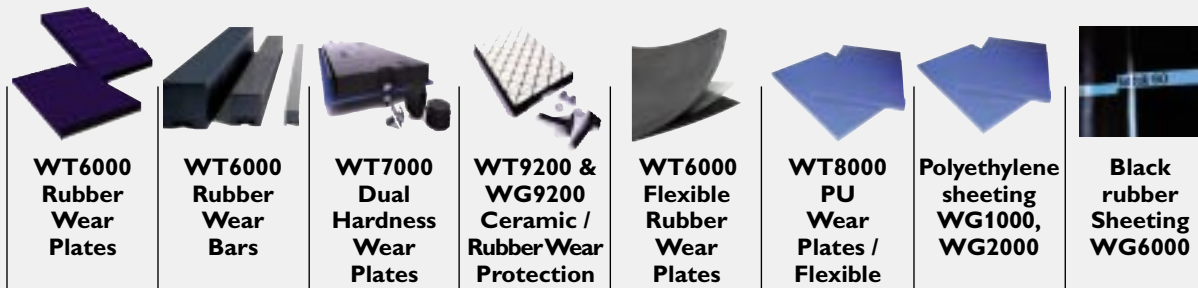
## Examples of typical applications

**Light duty range:** Smaller feeders, screen discharge lips, chutes, hoppers and spouts with fine material and sliding wear.

**Medium duty range:** Larger feeders, transfer points, screen feed boxes and discharge lips, chutes, hoppers and spouts with coarser material and limited impact forces.

**Heavy duty range:** Transfer points, chutes, and hoppers with coarse material and impact forces.

# Sandvik wear protection application guidelines



	WT6000 Rubber Wear Plates	WT6000 Rubber Wear Bars	WT7000 Dual Hardness Wear Plates	WT9200 & WG9200 Ceramic / Rubber Wear Protection	WT6000 Flexible Rubber Wear Plates	WT8000 PU Wear Plates / Flexible	Polyethylene sheeting WG1000, WG2000	Black rubber Sheeting WG6000
<b>Primary</b>								
Truck Boxes	●							
Primary Hoppers	●	●						
Feeders - Feed Chutes	●							
Feeders	●							
Crushers - Feed	●	●						
Crushers - Discharge	●	●		●				
Screens – Feed	●							
Screens - Sidewalls	●							
Screens – Discharge	●							
Screens – Oversize chute	●							
Screens – Undersize chute	●		●					
<b>Secondary</b>								
Screens - Feed	●		●	●				
Screens - Sidewalls	●		●	●	●	●		●
Screens – Discharge	●		●	●	●	●		●
Screens – Oversize chute	●		●	●	●	●		●
Screens – Undersize chute	●		●	●	●	●	●	●
Feeders - Feed Chutes	●		●	●	●	●		●
Feeders	●		●	●	●	●		●
Transfer Chutes	●	●	●	●	●	●		●
Transfer Points - Conveyor	●	●	●	●	●	●		●
Bins, Silos	●		●	●		●	●	●
Skirtings								●
<b>Concrete Mixer</b>	●					●	●	
<b>Washing Drums / Scrubbers</b>	●	●			●			
<b>Mill Lining</b>	●	●						
<b>Noise Reduction</b>	●	●	●		●			●
<b>Slurry Handling</b>				●		●		

Note 1: If there are multiple liner choices available for your application in the table above, please contact your Sandvik Mining  
 Note 2: For high tonnage (>1500 tph) applications ceramic wear liners normally offer the lowest operational cost.



Sandvik is a global industrial group with advanced products and world-leading positions in selected areas – tools for metal cutting, machinery and tools for rock excavation, stainless materials, special alloys, metallic and ceramic resistance materials as well as process systems. The Group had at the end of 2007 about 47,000 employees and representation in 130 countries, with annual sales of more than SEK 86,000 M.

Sandvik Mining and Construction is a business area within the Sandvik Group and a leading global supplier of machinery, cemented-carbide tools, service and technical solutions for the excavation of rock and minerals in the mining and construction industries. Annual sales 2007 amounted to about SEK 33,100 M, with approximately 15,200 employees.

