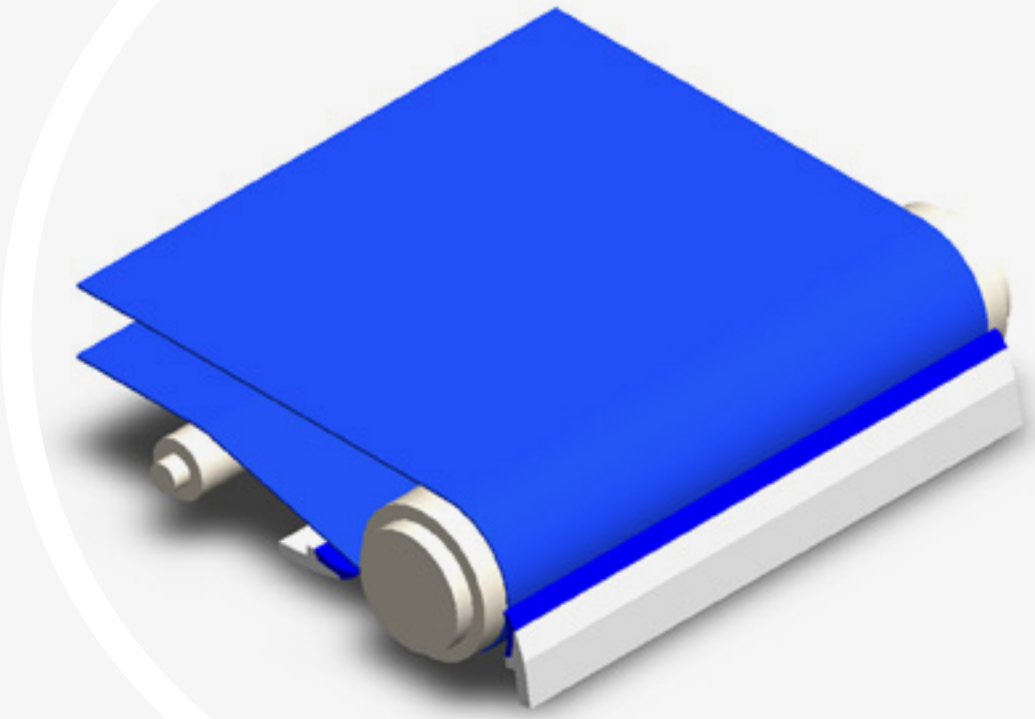
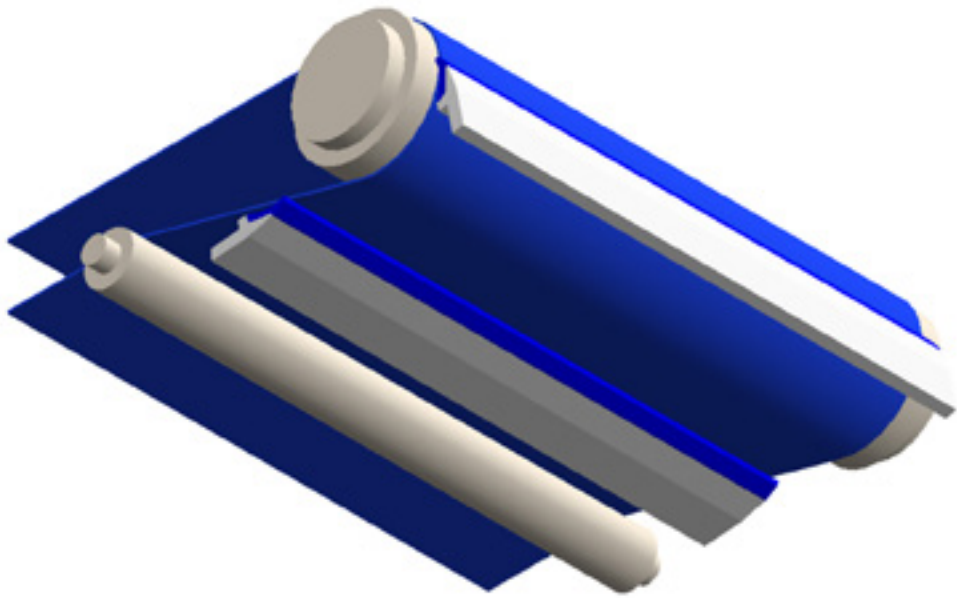
# Habasit Belt Scrapers

## Use and Installation Guide



# Introduction

Habasit Belt Scrapers are accessories for belts cleaning, mainly used in the food industry and specifically designed for the most challenging hygienic applications. These are especially efficient on liquids (e.g. water, oil, detergents), thus improving further issues like slipping of products on the belt and of the belt on the drive pulleys.



Compared to a classic scraper, usually made by metal-sheet or hard plastic, the advantages of using a TPU scraper are given by their flexible tip:

- The TPU tip is flexible and can easily adapt to the belt irregularities avoiding scratches or damage
- The TPU scraping tip will match the belt surface even in case of surface irregularities, resulting in a more efficient cleaning action

# Installation

## Material choice

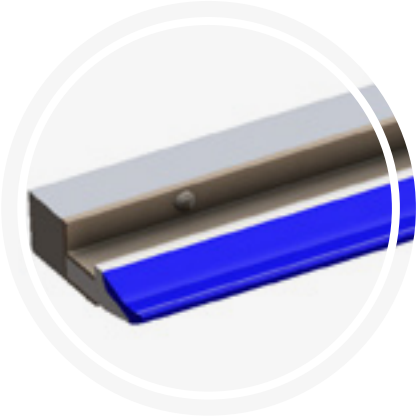
**(unless specified for fabric belt applications)**

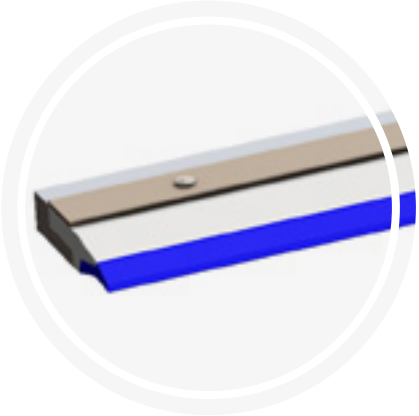
- **E-BS-F Polyester TPU** – Standard scraper to recommend for all dry or fatty applications
- **E-BS-F+M Metal detectable polyester TPU** – Standard scraper to recommend for all dry or fatty applications where metal detectability is required

- **E-BS-H Polyether TPU** – Standard scraper to recommend for all wet applications and Habasit® Cleandrive (positive and friction drive)
- **E-BS-H+M Metal detectable polyether TPU** – Standard scraper to recommend for all wet applications and Habasit® Cleandrive (positive and friction drive) where metal detectability is required

- **E-BS-J Polyether TPU** – Hard scraper to recommend for Habasit® Cleandrive (positive and friction drive) > 50 ShD hardness
- **E-BS-J+M Metal detectable polyether TPU** – Hard scraper to recommend for Habasit® Cleandrive (positive and friction drive) > 50 ShD hardness where metal detectability is required

- **E-BS-D TPEE** Scraper for use with fabric belts in tobacco applications





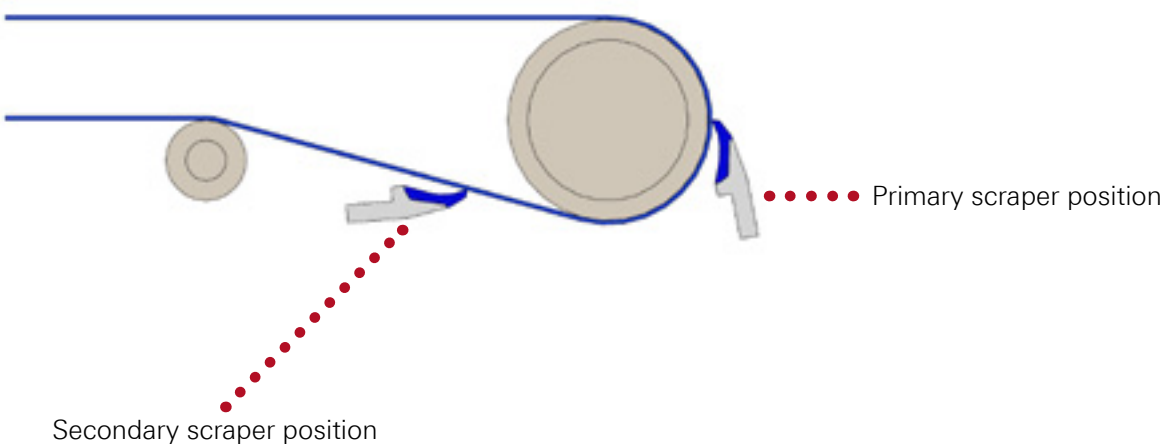
## Mounting

The simple design of the body relief allows multiple solutions, based on customers' preferences and existing equipment setup. Scraper bars can be held between two brackets or directly screwed to a supporting bar like shown in the two examples above.

The scraper must not be installed and tested with pressure on a clean and dry belt when commissioning. The resulting friction between the belt and the scraper TPU tip will generate undesired vibrations or deflections, and ultimately irreparable damage either to the belt, scraper or both elements.

## Positioning

When the material transported is made of coarse or sticky and / or wet particles, the primary scraper is placed against the drive pulley, or sprockets immediately after the discharge flow. The vertical position depends on the belt speed and the goods size: the scraper must avoid collisions with correctly discharged materials



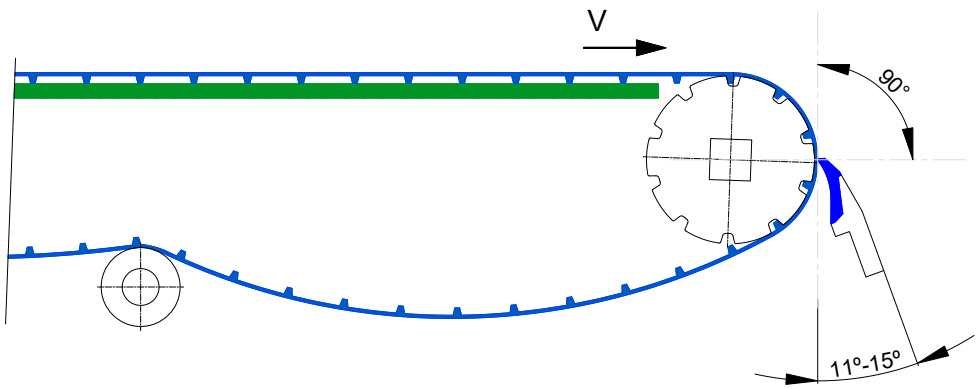

The secondary scraper is used in combination with a primary scraper when more thorough cleaning is required. Otherwise, it is used alone if the material to be removed is dry and fine. Usually mounted after the drive pulley, in this configuration the scraper pushes directly against the belt to increase the cleaning action.

The use of a secondary scraper is recommended for friction-driven belts only.

**Positioning of the primary scraper**

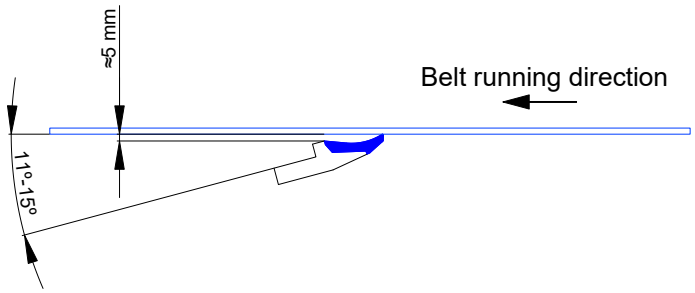
This scraper position is recommended for all fabric and monolithic belts including Habasit® Cleandrive (Friction, Positive or Lug driven types).

Positive driven Habasit® Cleandrive belts equipped with scrapers must have the sprockets placed closer together with a larger number of sprockets on the drive shaft. Ensure that the scraper is positioned above at least one sprocket tooth to avoid pinching. Please, refer to the Habasit® Cleandrive Monolithic Belts Engineering Guide for detailed information.



## Angle of the scraper

See below a sketch with the recommended angle between the belt and the scraper:




## Scraper pressure

Pressure applied against the belt surface plays an important role with regards to the lifetime of the scraper and effectiveness in cleaning. From our experience, low pressure is usually offering the better performance and also increases the belt's service life.
**Recommended contact force 0.1 N/mm**

## Operating temperature

The recommended service temperature range is -30 °C to 80 °C.

The scrapers will get a lot softer and more fragile around 80 °C *(176 °F)*.
Below -30 °C *(-22 °F)*, the scraper will start losing its flexibility and will become hard and brittle. The scraper could still function at these lower temperatures if the pressure against the belt is low and there is no shock or any impact on the scraper during service.

## Impact of belt joining methods

Scrapers can work on smooth homogeneous surfaces. Therefore, mechanical joining methods are not recommended unless they are hidden or covered.

## Chemical resistance

The chemical resistance of TPU and TPEE materials can be found using the Habasit Chemical Resistance tool which is accessible under: https://rims.habasit.com/

## Maintenance and cleaning

If the scraper is installed correctly then a long lifetime can be expected. Care of the scraper can help to maintain its cleaning efficiency and prolong the lifetime.

- Regular cleaning and removal of food stuff
- Check the positioning, contact force and angle of the scraper
- Check for wear of the tip – if this is uneven or excessively worn then replace the scraper

**Cleaning of the scraper:**
Wipe off loose debris and then follow the same cleaning routine that will be used for the accompanying conveyor belt.

# Notes

# Sketches

Information provided herein does not constitute
legal representations or warranties and may change without notice.

Please refer to the specifications/disclaimers
provided in the respective product data sheets.

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