AS Spilka Industri

Date: 11.02.2026

Spilka Side-hung
Product Data Sheet

For the side-hung hinges – or casement hinges – Spilka offers a complete system solution consisting of the hinges and a broad and appropriate range of components including opening restrictor, end keeps, glazing beads and espagnolette solution.

Spilka Side-hung system solution offer the complete package for window manufacturers. The core of the system is the improved hinges that we produce in-house which satisfies our own quality requirements regarding materials, technical quality, and corrosion protection.

The Spilka Side-hung system solution is described in reference item 1.1 in “table A”.

Product Information:

Spilka Side-hung system solution consists of improved hinges and a complete range of components, including a separate opening restrictor. Spilka can offer a complete system with end keeps, glazing beads, and an espagnolette solution. The hinge is delivered with a cover cap of polypropylene (2 variants).

It's well known that window manufacturers might have their own preferences and variations of side-hung windows. To satisfy different needs, our hinges come in two versions: One with a flat frame plate and one with a cranked frame plate. Our side hinges have "control collars" that facilitate fitting while simultaneously ensuring a stronger connection between the profile and the hinge. If this solution does not fit in with your production line, we also supply hinges without "control collars".

The "table A", item 1.1 describes weight capacity when using two hinges and three hinges and maximum window sizes (heights and widths).

Application:

Windows with the Spilka Side-hung system solution are opened by means of a handle on the side part of the sash which operates an espagnolette system. This system solution does not incorporate an opening restrictor as a standard; however, we have a separate opening restrictor available. This will limit the initial opening of the window.

Maintenance and correct use are important to maintain functionality and life expectancy for both hinges and windows. An overview of the maintenance is shown in chapter "Maintenance" on page 7.

Profile description and interface information:

The "table A", item 1.3 give references to the profile design and interface instructions for Spilka Side-hung

Surface treatment:

The side-hung is made of steel and have been surface treated with electrolytic zinc and given a passivation coating of Chrome (Cr) in trivalent form and thereafter a sealer. Chromium in trivalent form is more environmentally friendly than in a hexavalent form. The passivation coating bonds with the top layer of the zinc and along with the sealer the hinge becomes more corrosion resistant. The side-hung hinges are powder coated, in different colors, ref. item 1.1 in "table A", Side-hung variants and capacity overview. An overview of the corrosion protection is shown in chapter "Corrosion resistance" on page 5.

Maintenance (FDV)

Hinges are used in windows in the facades of the buildings and to maintain functionality and desired service life, correct use and maintenance are required. We have prepared an overview with recommendations for what is needed in terms of continuous maintenance, but we emphasize that local conditions such as weather, proximity to the sea/water etc. are decisive for how often such maintenance must be repeated. An overview of the FDV is shown in chapter “Repair and Maintenance” on page 6-8.

Interface documentation:

The “table A” give references to relevant technical documentation for the Spilka Side-hung.

Item	Description	Document no:
1.1	Side-hung variants and capacity overview	Side-hung variants and capacity overview
1.2	Opening restrictor overview	Opening restrictor overview
1.3	Profile design and interface instruction	Construction manual Spilka Side-hung
		Monteringsanvisning Spilka Side-hung
1.4	Products and Accessories for Side-hung	PDS-Spilka Product and Accessories Side-hung

Table A

Products and Accessories:

Spilka can offer a variety of products and accessories together with the hinge system, item 1.4 in “table A” give references to the available products and accessories for door and windows.

Operation and Functionality:

OPERATION

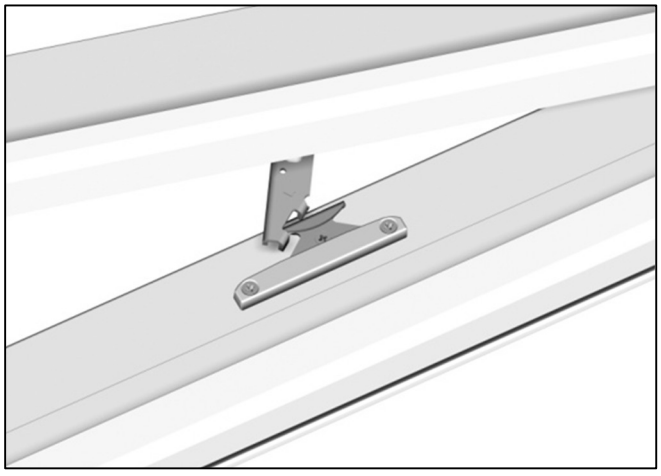
Certain hardware components require manual operation:

Side-hung hinges

Fitted to the left- or right-hand frame and sash profile.

Opening restrictor

Fitted to the lower part of the sash and frame is the opening restrictor mounted (if installed). This device limits initial opening.
Under the sash the hinge has an automatically opening restrictor. This is operated by slightly closing the sash after it has opened out against the restrictor and then lifting the restrictor catch up to release the sash for further opening.
The opening restrictor then stops in a more open position, where it locks the sash and prevent it from blowing back and forth. This device is operated the same way as explained above, both for the further opening and for closing.



Spilka Hardware – Corrosion Resistance:

Spilka is a supplier of hinges for windows. The Norwegian window manufacturers have their window certificated in a control organization called NDVK (Norwegian Door and Window Control).

These manufacturers are only allowed to use “approved” hinges. This means that the hinges must satisfy standard NS-EN 1670 grade 3.

Standard NS-EN 1670: Corrosion resistance specifies the requirements for the corrosion resistance of hardware for windows:

4 Classification

Grade (class) 3: High resistance

The requirement of corrosion for NDVK is grade (class) 3.

5.4 Electrodeposited zinc on iron or steel

If coated with electroplated zinc on iron or steel, the requirements of the appropriate classification code of ISO 2081 plus a chromate conversion coating meeting the requirements of the class of ISO 4520 specified to match that classification, shall be as follows:

- Grade (class) 3:

ISO 2081 classification code Fe/Zn 12 + ISO 4520 class 2C or 2D.

Passivated with bright chromate Cr (III).

Sealer.

Powder coated.

This treatment satisfies EN 1670.

Spilka Industri is certificated according to our Quality System that complies with NS-EN ISO 9001- 2015

Spilka Classic Hardware – Repair and Maintenance:

These are guidelines for the repair and maintenance of side-hung window hardware, including opening restrictor. Instructions are provided for the replacement or repair of damaged items or those needing replacement through wear and tear.

Material and Environment

Hinges are produced from standard grade steel of which 50% is from recycled materials and the hinges may themselves be continuously recycled. They are surface treated with zinc, chromate and then given a coat of clear lacquer. None of our hardware requires special handling or considerations due to their treatment or production.

Quality Assurance and Guarantees

Spilka hardware is produced under a quality control system in accordance with requirements for the NDVK (Norwegian Door- and window control) and AS Spilka Industri has a license from their control body. Below are details of relevant requirements and qualities.

Strength

Opening the sash until the hinges are fully extended tests the window/hardware. A vertical load of 40kg is then applied to the sash. Our hardware is designed to accept these loadings to provide a considerable safety margin in operation and longevity in service.

NOTE! Damage may be caused to the opening restrictor if exceptional force is applied before it is lifted to allow the sash to reverse. Damage caused in this way would not be covered by our guarantee.

Wear and tear

Windows are tested by opening and closing over 25 000 cycles with their maximum sash weight, this should correspond with the daily opening of a window over its lifetime.

NOTE! Damage may be caused if relevant maintenance is not carried out, or by opening the opening restrictor with excessive force. Damage caused in this way will not be covered by our warranty.

Corrosion

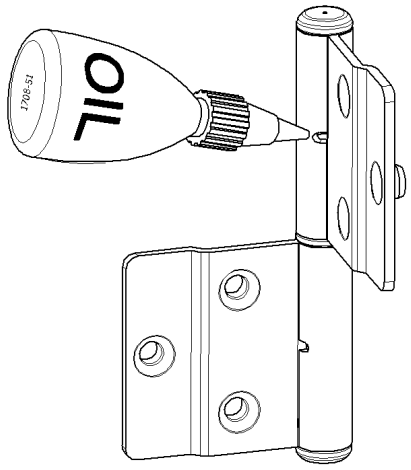
The requirement for surface treatment is a minimum of 12 µm thickness of zinc and passivated with chrome. According to the NDVK this gives a performance level as follows: "Fittings in Class 3 are suitable for use in wet or polluted environments and also salt, acid or alkaline conditions. This includes special humid conditions inside buildings and most external conditions".

NOTE! Hardware life expectancy before corrosion will depend on climate conditions and material contacts, which can cause corrosive reactions. Maintenance, including painting or staining is very important in aggressive situations and conditions.

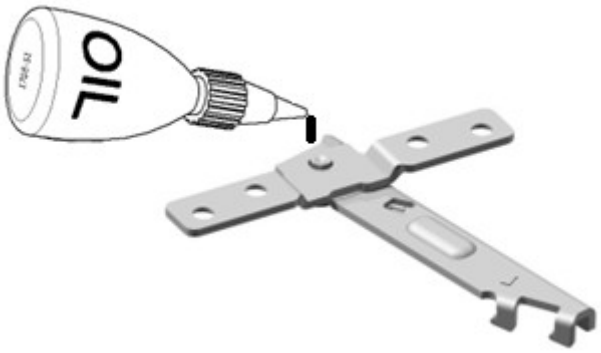
Maintenance:

Hardware is used in window construction and thereby as a part of a building's facade. It is important that all items receive relevant initial treatment and that correct maintenance is carried out to ensure continuing operation. Maintenance requirements may vary dependent on local conditions and should be increased as appropriate.

A few drops of light oil should be applied in the lubrication hole on the sash and frame part of the hinge (hinge bolt area) as shown on enclosed figure. The window should be opened and closed during lubrication of hinges to ensure the oil spreads.



A few drops of light oil should be applied on the opening restrictor on the sash part of the restrictor as shown on enclosed figure. The restrictor should be moved to open and closed position during lubrication to ensure the oil spreads.



Repairs and Replacements:

Damaged components should usually be replaced. Fitting instructions may be found on our website and these details may be used to order replacement items by their descriptions and part numbers.

Hinges

Personnel with relevant skills should generally carry this out, as it may be difficult and potentially dangerous dependent on the situation and health and safety requirements.

The sash is opened to 90° to get access to the fastening screw on the hinges.

The hinge is fixed to the frame by a screw, this can now be removed, and the replacement hinge may then be fitted. Only one hinge should be replaced at a time 'in-situ'.

NOTE! It is vital to replace/mount the relevant pins and screws before the sash is closed to ensure the sash does not fall out.

Opening restrictor

Personnel with relevant skills should generally carry this out, as it may be difficult and potentially dangerous dependent on the situation and health and safety requirements.

The sash is opened to 90° to get access to the fastening screw on the opening restrictor on the frame and sash.

The opening restrictor is fixed to the frame by a screw, this can now be removed, and the replacement opening restrictor may then be fitted.

NOTE! It is vital to replace/mount the relevant pins and screws before the sash is closed to ensure the function of the opening restricto.

Profile Materials:

Material types:

Windows with Spilka Side-hung hinges can be produced with the same timber profiles used for our Classic, Opus and Swing hardware options.

Our R&D Department will give a quick clarification as to whether our hinge variants can be used directly in your current window profile.
Side hung windows can also be produced in PVCu, fibre glass and aluminium - dependent on the relevant profile construction.

Spilka Side-hung hinges are stocked in white (RAL 9010), grey (RAL 7035) and black (RAL 9011). They have flat end caps in a durable plastic material. We also provide decorative knobs in the same quality plastic. Use of knobs require that the flat end caps are removed manually.

Wood:

Windows made of wood continue to be the predominant choice in Scandinavia. Softwood (pine) is the most common wood where a large part should be heart wood for a more solid profile. Laminated profiles ensure a more stable construction, and it is common to use spruce for the outer lamina (layers) – which is more durable as it has a closed cell structure.
An increasing number of wooden windows are now delivered with aluminium cladding, and Spilka can assist with the design and delivery of such aluminium profiles.

PVC (vinyl):

Window frame and connecting profiles of extruded PVCu, also known as vinyl or plastic, can be used in the production of windows with Spilka's system solutions.

Aluminium:

Aluminium is a well-known material which has many applications and is a light metal with great strength in relation to its weight. Aluminium is a good choice due to its durability, minimal complications linked to corrosion and its flexible profile design possibilities.