Telescopic Steel Covers
Telescopic Steel Covers for all requirements

The range of steel way covers manufactured by HENNIG is unlimited. With over 50 years of experience in the industry, there is little that we haven’t seen and built. With manufacturing facilities located worldwide, HENNIG is knowledgeable of nearly every telescoping steel way cover application in the world. This experience also enables HENNIG to design and manufacture custom steel way covers for new, state of the art equipment as well as for unusual or unique applications.

Technical Data
• Valid for all forms of telescopic steel covers shown.
• All forms are made from rolled High-grade steel sheets from 1.5 mm (16 gauge) to 3 mm (11 gauge) thick.
• Corrosion-proof stainless steel can be used for extreme conditions.
• Depending on space availability, speeds of up to 150 m/min can be attained by steel covers of all shapes. Way wipers, guides, rollers and damping elements are interchangeable. Coolant troughs (preventing coolant entering the boxes) can be included in the design of different models.

1. **Flat - Type AA**
   The flat, u-shaped design represents the best economical solution for the protection of slideways.

2. **Peak - Type BB**
   The roof-shaped design deflects coolant and swarf on either side, depending on the angle of inclination. Additionally, the ridge provides higher rigidity and perfect guidance of the boxes.
<p>| | | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>SLANT - TYPE CC</strong></td>
<td>The slope of this design ensures the diversion of coolant and swarf in one direction, depending on the angle of inclination.</td>
<td></td>
</tr>
<tr>
<td><strong>HIP ROOF - TYPE DD</strong></td>
<td>The flat-roof form is used for broad covers to provide maximum rigidity of the box surfaces.</td>
<td></td>
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<tr>
<td><strong>FLAT/SLOPE - TYPE EE</strong></td>
<td>The pent-roof design meets special geometric requirements and improves the draining of coolant and swarf, depending on the angle of inclination. The additional folded edge increases the rigidity of the boxes.</td>
<td></td>
</tr>
<tr>
<td><strong>VERTICAL SLIDING PLATE</strong></td>
<td>In this type of cover, the individual plates slide in separate guide rails. Since these types of covers do not require slideways, they are particularly suited for the protection of column recesses. In the presence of swarf and coolant, the vertical sliding plate covers can only be mounted vertically. The guide rails are available in various materials to meet individual requirements.</td>
<td></td>
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<tr>
<td><strong>DUAL-AXIS MOTION</strong></td>
<td>Dual-Axis covers are typically moving behind the tables and under the spindle when space is limited. This design is limited to 3 boxes unless guide rails are used, and must be flat design for this style of cover.</td>
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Hennig’s High-Speed TSC

Hennig’s new-patented TSC (Telescoping Cover) ensures a perfectly impact-free extending movement at speeds of up to 150 m/min (6000 ipm) and accelerations exceeding 2 g over the entire traverse path. The system can be manufactured with up to eight telescoping boxes and can be used for traverse paths of variable lengths. It’s ideal for the speeds and acceleration/deceleration rates found on linear motor machines.

X-Y Shield “Vertical Wall” protection

Hennig manufactures vertical-wall telescoping steel covers to deliver full protection of the X and Y-axes on horizontal-spindle machining centers. The precision ways and CNC feedback devices are completely protected against the hot chips and flood coolant that can potentially affect machine uptime and accuracy. Based on space availability, these covers can be designed with telescoping steel boxes, stainless steel or fabric roll-up aprons, bellows with steel plate protection (lamellas), or our new Aluminum FlexProtect system.
**Way Wiper Systems**

**eN Series**
- Wiper lip vulcanized to a flat steel profile
- Highly wear-resistant polyurethane lip, resistant to oil, coolants and microbes
- Standard length of the eN way wiper: 500 mm

**C Series Wiper Lip**
- Universal lip design for all types of C wiper casings
- Highly wear-resistant polyurethane lips ensuring optimum resistance to water, coolants, chemicals and oil
- Various Shore hardness’s available as required (dry, fluid and mixed machining, as well as native oils)

**C2**
- C2 is designed for minimal cover extension/compression lengths
- Replaceable wiper lips
- Minimal horizontal space required
- Also available with a rubber profile vulcanized on the profiled support (shown), for optimum damping properties at high traverse speeds

**C3**
- Wider profile to ensure a better overlap between boxes when spot welding it to the box
- Replaceable wiper lips
- Minimal vertical space (mounting height) required
- Available with and without damping as shown on C2 profile

**C5**
- Designed for large covers
- Replaceable wiper lips
- Taller casing design allows for easily replaceable dampers
- Optimum rigidity of the cover box in the wiper area
- Available with and without damping

**C6**
- Latest wiper generation – can be replaced directly on the machine, without disassembling the steel cover
- Replaceable wiper lips
- Time saving and cost-effective
- Available with and without damping
Hennig Steel Waycovers

Way Extention Brackets

Side View

Cover Types

Mounting Configurations

Special Shapes: Please provide sketch or CAD drawing
## Hennig Telescoping Steel Covers Order Form

### Application

- **Manufacturer**: Hennig Enomo Other
- **Hennig or Enomo Part#**
- **OEM Part#**

### Machine Type:

- **Make**
- **Model**

### Axis:

- [ ] X
- [ ] Y
- [ ] Z
- [ ] Other

### Photos available?

- [ ] Yes
- [ ] No

### DWGs or sketches available?

- [ ] Yes
- [ ] No

### Cover Orientation:

- [ ] Horizontal
- [ ] Vertical
- [ ] Cross Rail
- [ ] Slant Bed
- [ ] Column/Table

### Operating environment of the cover:

- [ ] Dry
- [ ] Grinding
- [ ] Hot Chip
- [ ] Heavy Coolant
- [ ] Other: ______________________

### Operating Temperature Range
- [ ]

### Maximum Travel Speed
- [ ]

### Technical Data / Existing Cover Dimensions

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Each</th>
<th>Set</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Boxes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cover Type (See page 6 for examples)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mounting Configurations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WOC Width of cover</td>
<td></td>
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</tr>
</tbody>
</table>

### Dimensions

- **A** Extended length
- **B** Compressed length
- **C** Travel
- **D1** End of way to table when compressed
- **D2** End of way to table at overtravel
- **E1** Table width
- **E2** Table height
- **E3** Table height above way
- **E4** Side of way to side of table
- **F1** Way wiper height above way
- **F2** Side of way wipers to side of way
- **F3** Way wiper to table (depth)
- **G** Height of ball screw above way
- **H** Width over ways
- **J1** Individual width of way
- **J2** Individual height of way
- **J3** Side of way to side of casting
- **J4** Casting distance below way
- **K1** Individual width of way
- **K2** Individual height of way
- **K3** Side of way to side of casting
- **K4** Casting distance below way
- **L1** Width of drive mount
- **L2** Depth of drive mount
- **L3** Side of way to side of drive mount
- **L4** End of way to front of motor
- **L5** Drive mount height above way
- **L6** End of way to drive mount
- **M** Rail type
- **M1** Width over linear rails
- **M2** Rail width (top)
- **M3** Rail width (bottom)
- **M4** Rail height
- **M5** Side of casting to side of rail
- **W1** Way extension length
- **W2** Way height to floor
- **W3** Way to bed offset
- **W4** Bed to way offset

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Mail form to 9900 N. Alpine Road, Machesney Park, IL 61115 or Fax to 815-636-9737 or email to: info@hennig-inc.com
Hennig Dual-Axis Motion

Vertical Slide

Cover Extended

Cover Compressed

Horizontal Slide Table

Vertical Slide

or Column Mounting Surface
# Hennig Dual Axis Cover Order Form

## Application
- **Quantity**: [Blank]
- **Number of Boxes**: [Blank]
- **Model**: [Blank]
- **Photos available?**: Yes/No
- **DWGs or sketches available?**: Yes/No
- **Operating temperature range**: [Blank]
- **Maximum travel speed**: [Blank]
- **Movements/Day**: [Blank]

## Dimensions
- **Cover extended**: [Blank]
- **Cover compressed**: [Blank]
- **A Max vertical extension of slide**: [Blank]
- **B Vertical slide travel**: [Blank]
- **C Min compressed vertical slide length**: [Blank]
- **D Min compressed horizontal slide length**: [Blank]
- **E Max compressed horizontal extension of slide**: [Blank]
- **F Horizontal slide travel**: [Blank]
- **G Width of trough**: [Blank]
- **H Cut-out around column width**: [Blank]
- **J Extension beyond column depth**: [Blank]
- **K Vertical slide**: [Blank]
- **L Width of cover**: [Blank]
- **M Height of cover**: [Blank]
- **N Distance between guide bars**: [Blank]
- **O Guide bar width**: [Blank]
- Mounting Option - Upper (see below)
- Mounting Option - Lower (see below)

Please include additional sketches, drawings, or CAD files if available.

## Mounting Options - Upper
- **A1**
- **A2**
- **A3**

## Mounting Options - Lower
- **B1**
- **B2**
- **B3**
- **B4**
- **B5**

Mail form to 9900 N. Alpine Road, Machesney Park, IL 61115 or Fax to 815-636-9737 or email to: info@hennig-inc.com
Hennig Sliding Plate Order Form

1. Company (complete address)

2. Application
   - Quantity
   - Existing Cover
     - Manufacturer: Hennig  Enomoto  Other ______
     - Hennig or Enomoto Part#
     - OEM Part#
   - Machine Type:
     - Make
     - Model

3. Dimensions
   - A. Overall length
   - B. Top compressed
   - B1. Number of top plates
   - C. Travel
   - D. Lower compressed
   - D1. Number of lower plates
   - E. Width
   - F. Width with rails
   - G. Rail width
   - H. Diameter or rectangular opening
   - I. Rail type: Type 1  Type 2  Other________
   - J. Rail thickness
   - K. Mounting hole pattern
   - L. Scissor options:
     - Top: none  single  double
     - Bottom: none  single  double

Please include additional sketches or CAD files if available.

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At Hennig we service everything we sell. Our repair and refurbishment facilities are located in regions worldwide, so you get fast, localized service from experts who speak your language and deeply understand the systems you’re using. We have the resources to keep your systems running—and running right—so you minimize downtime and get the greatest possible return from your machine investment.

- On-site way cover repairs for all Hennig and non-Hennig way covers
- Same-day turn-around on diagnosis and repair estimates
- Reverse engineering of existing way covers
- Fast, local access to spare parts and supplies
- Customer training for in-house way cover repair
- Service and repair of Hennig Chip Conveyors
- Preventive maintenance service contracts available
- All systems repaired to OEM specifications or better
- Service initiated within 48 hours in most locations
- 180-day warranty on parts and labor
(HSC) - Telescopic Steel Covers
Chip Conveyors
Chip Disc Filtration (CDF) Systems
Folded Bellows
Flex-Protect Systems
Machine Enclosures
Power Generator Enclosures
Roll-up & Flexible Apron Covers
Wiper Systems
Stabilastic Telescopic Springs
Stabiflex Cable Conduits
XYZ-Modules
Customer Specific Designs

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Chandler, Oklahoma
Cincinnati, Ohio
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Perfect Machine Protection.
For 50 years, Hennig, has been designing and producing custom machine protection and chip / coolant management products for state-of-the-art machine tools. Hennig products are reliable, durable, and perfectly tailored to protect against corrosion, debris and common workplace contaminants. There’s no better way to protect your investment on the shop floor.

Innovative Products and Services.
AME, Hennig’s sister company, provides innovative and precision engineered components, machines and services. To learn more about AME and our innovative approach to precision machining, please call 815-962-6076 or visit www.ame.com.

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