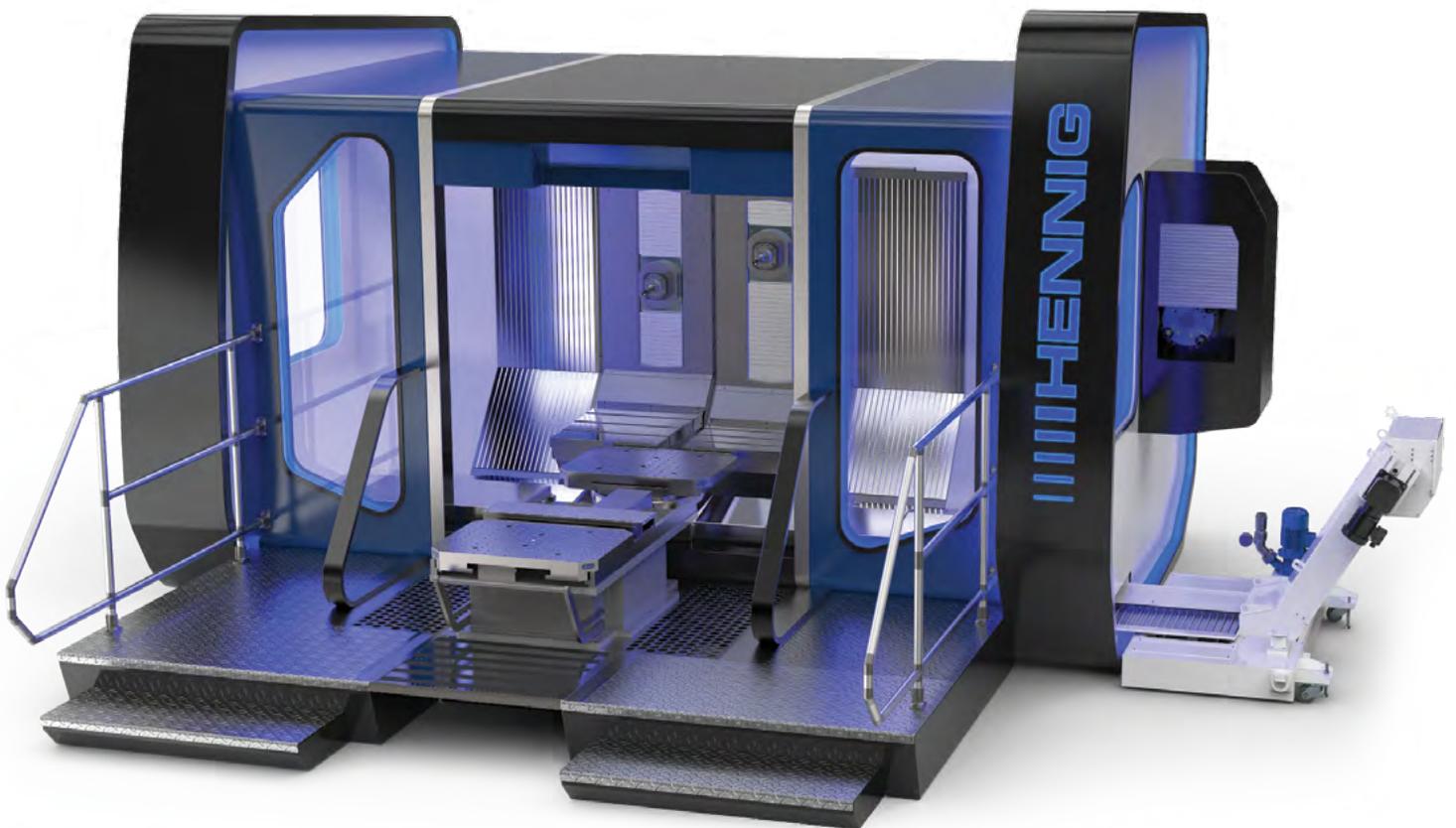


MACHINE ENCLOSURES & FACILITY SAFETY

MACHINE ENCLOSURES | ADDITIVE MANUFACTURING & 3D PRINTER ENCLOSURES | PLATFORMS & STAIRS | GUARDING & FENCING
WALK-ON PIT COVERS | MACHINE ROOF BELLOW COVERS | LIFT TABLE BELLOWS



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Making our customers successful.

Facility safety is a key factor in today's highly regulated manufacturing industry. We offer OSHA compliant solutions for a variety of safety regulations to help keep your employees safe. Whether you're an OEM looking to integrate safety features into your design, or a local shop looking to retool your production line, our engineers will work with you to meet today's standards and maximize your safety.

Safe processes are profitable processes. Team up with us to design, fabricate, and deliver a safe and accessible working environment, protecting both man and machine with enclosures, platforms, guarding, fencing, and walk-on pit covers with the safety features required to make you successful.

CONTACT US

MACHINE ENCLOSURES / PLATFORMS / STAIRS / GUARDING / FENCING

9904 North Alpine Road, Machesney Park, IL 61115

815-985-1720 | 815-636-9737 (fax)

WALK-ON PIT COVERS / MACHINE ROOF COVERS / LIFT TABLE BELLOWS

9900 North Alpine Road, Machesney Park, IL 61115

815-978-2057 | 815-636-9737 (fax)

See pages 17-18 for a complete list of our worldwide locations / contact info.





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MACHINE ENCLOSURES

Our enclosures are designed to protect operators from injury and valuable machinery from damage. We work closely with you to custom design your enclosure with the right features for your application (i.e., ventilation, power inlets, conveyor openings, etc), while providing quick and easy access to the machine for inspection and repairs.

We design and manufacture many types of enclosure systems for various applications. One popular version is the modular enclosure (single or double paneled type), which is adaptable to individual requirements.

MACHINE ENCLOSURE QUESTIONS / QUOTE REQUESTS
815-985-1720

INDUSTRIES SERVED

- Machine Tools
- Aerospace
- Medical
- Production Line Retooling
- 3-D Printers
- Additive Manufacturing
- Short Pulse Laser machines
- Manufacturing Cells
- Automation Enclosures
- Food & Beverage
- Backup Power Systems

FULL INSTALLATIONS | TURNKEY SYSTEMS

We design, manufacture, and install turnkey enclosure systems. Since each enclosure is designed based on your application, we're able to maximize the safety of the operators and the environment they work in, while allowing easy access to the machine tool for part loading, service, and repair.



Enclosure for a finish turning slant bed train axle lathe.



A custom pallet door system allows for loading and unloading of large parts.



Enclosure for a large cylindrical roll grinder.



Custom enclosure for a CNC tool and cutter grinder.

FEATURES / OPTIONS

Our enclosures can be equipped with any standard features that you'd expect from a high quality system. But we don't stop there, we can also include custom features to suit your application - i.e., ventilation systems, automated doors, sound proofing, and any other features you require to maximize your safety on the shop floor.

The image below highlights some of the standard features most enclosure systems require for safe operation and to maintain OSHA compliance.



A custom enclosure system protecting the operator from the machine tool and the moving parts of their production line.

1 PLATFORMS

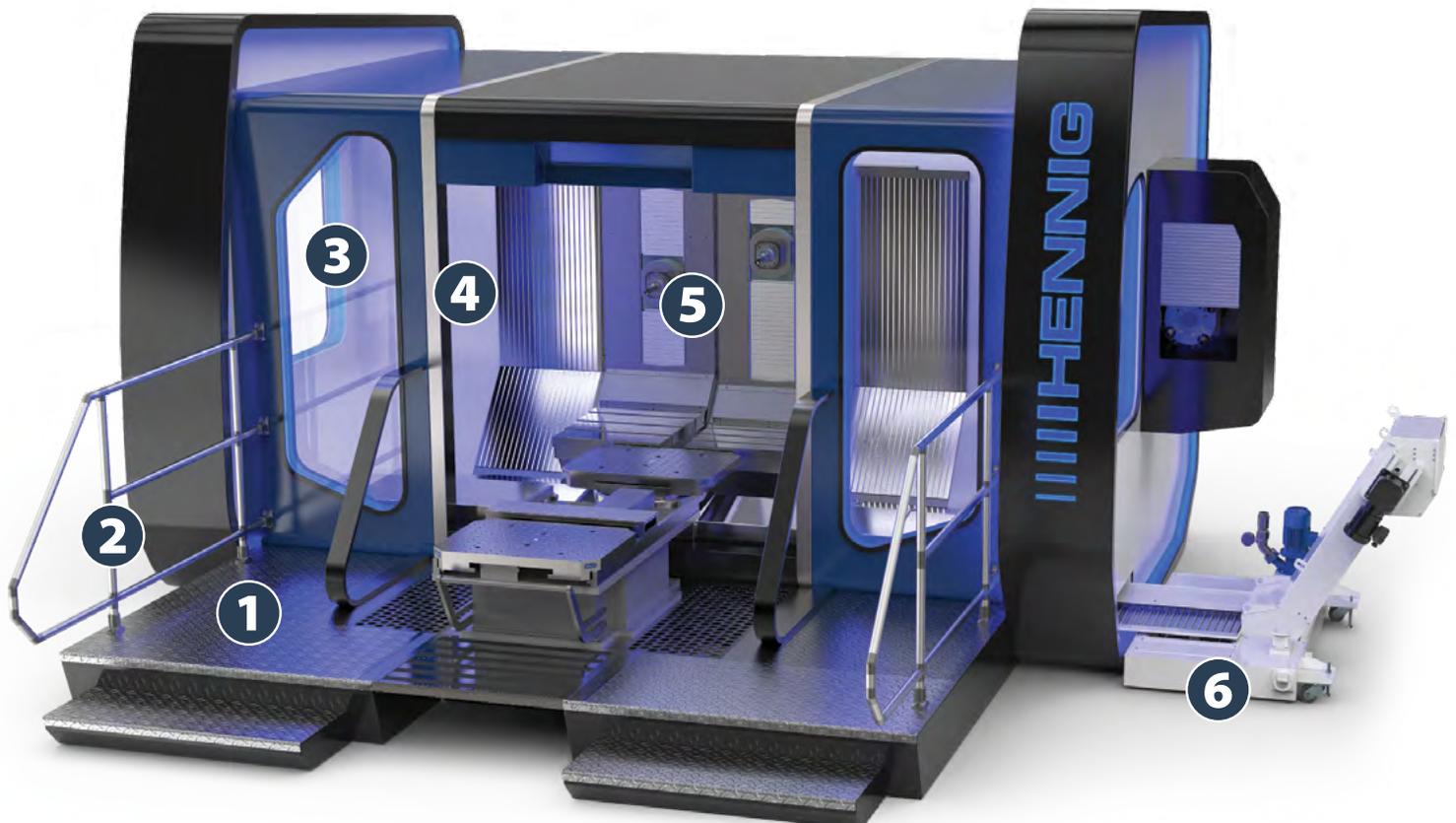
2 GUARDING AND RAILS

3 WINDOWS

4 AUTOMATED DOORS

5 WAY COVERS / SPINDLE PROTECTION

6 CHIP CONVEYORS



ADDITIVE MANUFACTURING / 3D PRINTER ENCLOSURES

A new era in manufacturing has arrived. 3D printers and additive manufacturing have revolutionized the way we process material. While this changes the way we manufacture, what will never change is the importance of safety on the shop floor.

3D printers and additive manufacturing can still be hazardous to the operator and their environment if they are exposed to high temperatures or laser beams from the manufacturing process. We build light-tight, laser safe, and fully customizable enclosures for this expanding industry, and can equip your enclosure with any of the features below. For more options, call us to discuss your application and we'll work with you to design a custom enclosure.

MACHINE ENCLOSURE QUESTIONS / QUOTE REQUESTS

815-985-1720

FEATURES / OPTIONS

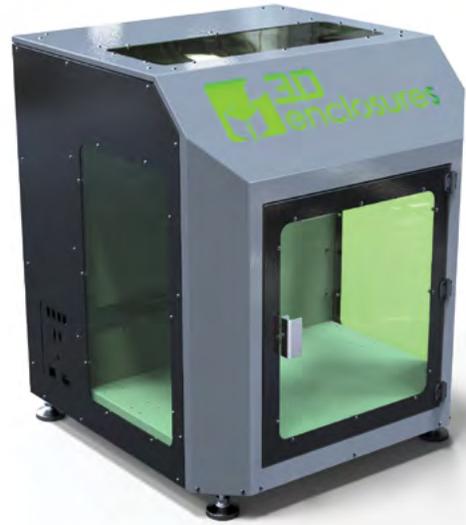
- light-tight construction
- laser safe windows
- leveling mounts
- stack lights
- automated doors
- light curtain systems
- safety interlocks



C



D



E



A: Enclosure for 3D Bio printer.

B: Additive 3D printer enclosure with ventilation system.

C: A 3D printer enclosure designed to protect against high temperatures and other environmental factors that could affect the accuracy of your printer.

D: An enclosure for a 3D printer that manufactures micro dispensing products (micro-electronic packaging, resistive devices, heater coils, printed electronics, ceramic structures, etc.).

E: A custom engineered enclosure for an additive manufacturing application. This system was designed with safety lights which let the operator know if the machine is in use, not in use, or has encountered a problem and has stalled the operation.

PLATFORMS / STAIRS / GUARDING / FENCING

UPGRADES FOR SAFETY

Upgrade your facility to comply with modern safety standards. Many of the machines in use today were originally designed with safety as an afterthought, and don't meet today's safety standards. Safety compliance of your facility is our top priority. Our engineers ensure all our products meet strict safety and quality requirements.

Your employees shouldn't have to climb or leap to reach their workstation and the surface they work on should not be slick. If this sounds like your facility, we can design a solution that will literally take your safety to another level.

Team up with us to design, fabricate, and deliver a safe and accessible working environment.



FACILITY SAFETY QUESTIONS / QUOTE REQUESTS
815-985-1720



Platforms and stairs make accessibility to the machine tool easier and safer for the operators and maintenance teams.

SAFETY PARAMETERS

Establish parameters that protect your employees from danger. When those areas require custom fabricated guards or fencing, we work with you to design and manufacture custom safety equipment for optimum protection.

Customize your guarding with a variety of materials and options from simple fabricated guards to fully automated perimeters.

A: A platform/stair combination enables safe access to the machine.

B: For exposed tables and machine tools, custom fencing can provide an ideal and economically efficient solution for protecting both the machine and your shop employees from an accident.



WALK-ON PIT COVERS

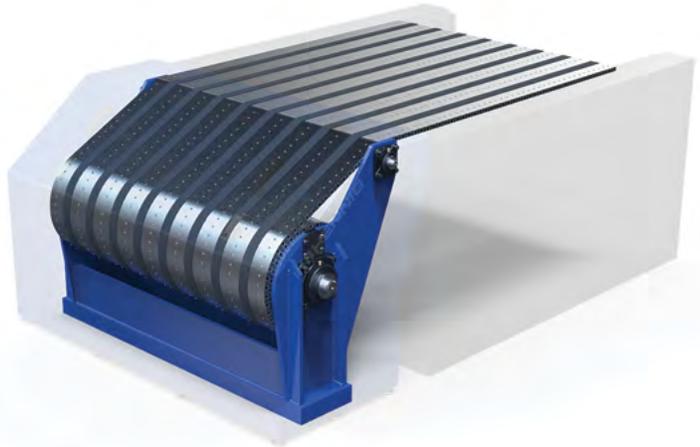
BECOME OSHA COMPLIANT

Our walk-on covers are engineered to protect open pits, exposed ways, linear guides, and tanks of all sizes. Regardless of the size of the area being protected, these covers will easily endure constant use and support the weight of heavy chip loads and personnel. Our covers are ideal for applications that require load bearing protection.

WALK-ON PIT COVER QUESTIONS / QUOTE REQUESTS
815-978-2057

typical applications

- Open pits
- Way covers
- Chemical tanks
- Water treatment facilities
- Auto maintenance shops
- Concrete foundations



See page 11 for material options and technical details.
See page 12 for Quote Request Worksheet.

DESIGNED FOR YOUR APPLICATION

Walk-On Pit Covers offer a removable solution for deep pits built to hold heavy machinery or contain hazardous chemicals. You don't have to sacrifice safety for accessibility. Work with our facility safety experts to design and build custom pit covers with the best materials and features for your specific environment.

RIGHT

A custom engineered, roll-up pit cover on the shop floor provides a safe walk-on surface when extended, and enables easy access to the machine (typically for maintenance) when rolled up.



STANDARD FEATURES

Below are some of the features that come standard with all of our roll-up pit covers. For additional features and options, call us to discuss additional solutions best suited for your application.



1 PROTECTIVE CANISTER

Protective canister housings can be provided to add protection to the roll-up covers gearing, spindle, and wound-up cover areas.

2 WALK-ON MATERIAL

We offer stainless steel and aluminum covers. Because we choose the material based on the environment it operates in, our walk-on covers are always optimized specifically for your application.

See page 11 for technical details.

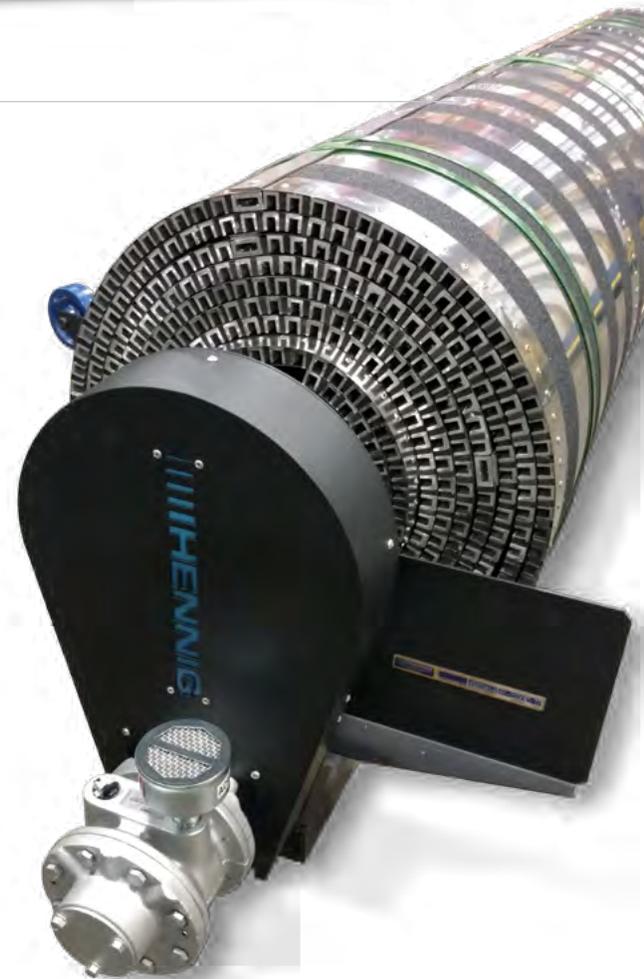
3 NON-SLIP SURFACE

A non-slip surface (skid tape or skid paint) is added so that personnel may walk across the covers surface with greater safety than walking across the covers slippery stainless steel surface.

4 ACTUATION

Our walk-on covers are actuated one of four ways:

- Air motor (regulates tension on the cover)
- Electric motor
- High-tension spring
- No motor / passive (the cover is actuated by an existing component on the machine)



WALK-ON PIT COVERS

MATERIALS

STAINLESS STEEL



- Stainless steel surface with aluminum ribbed support
- Non-skid tape or paint

AGS I



- Anodized aluminum profiles
- Non-skid tape

AGS II

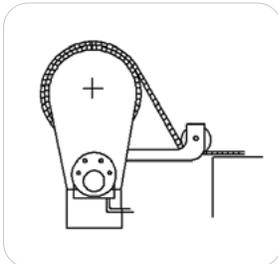


- Anodized aluminum profiles
- Non-skid tape

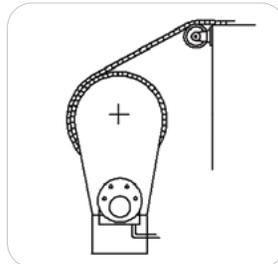
MOUNTING OPTIONS

All mounting options can be customized to suit your application.

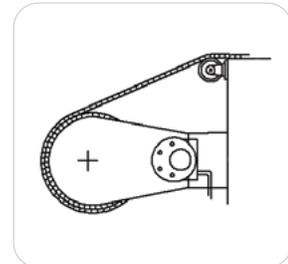
ABOVE WAY / OUTSIDE PIT



BELOW WAY / INSIDE PIT



CUSTOM MOUNTING



TECHNICAL DATA

TYPE		S.S.	AGS I	AGS II
MATERIAL	Profile			
		SS/AL	AL	AL
TECHNICAL DATA	Width x Thickness (mm)	*	34.9 x 13.8	68.3 x 25
	Return / Coil Radius (min)	*	42	100
	Net Weight (N/m ²)	*	240	380
	Max. Intermittent Contact Temp. (°C)	*	500	500
	Max. Permanent Contact Temp. (°C)	*	500	500
PROPERTIES	Water Tightness (according to IP 54)	●	◐	◑
	Resistance to emulsions	●	●	●
	Suited for chip production areas	●	○	○
	Resistance to corrosion	●	●	●

* to be determined by application. SS = Stainless Steel. AL = Aluminum.

● Recommended ◐ Can be used under certain conditions ○ Not Recommended

COMPANY *(complete address)*

Name _____
 Title _____
 E-mail _____
 Phone _____ Fax _____ Date ____/____/____

APPLICATION & ROLL-UP MATERIAL

Quantity _____

Machine Make _____

Machine Model _____ Year _____

Length of Machine Travel _____

Apron Type Extruded Aluminum (AGS I AGS II AGS III) Stainless Steel

Include air filter, lubricator, and regulator Yes No

Non-slip surface Yes No

DIMENSIONS

A Unsupported span _____

B Width of area covered _____

C Cover Width _____

D Extended cover length _____

E Height (if applicable) _____

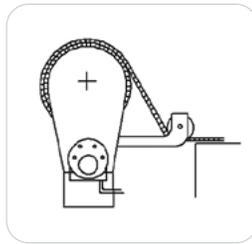
Side of take-up drive Left Right

Include mounting brackets Yes No

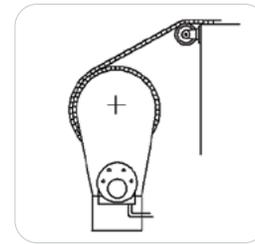
Open reel

Canister

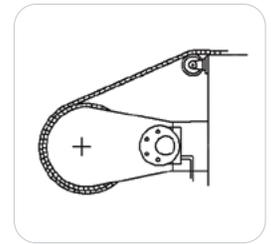
Mounting Type



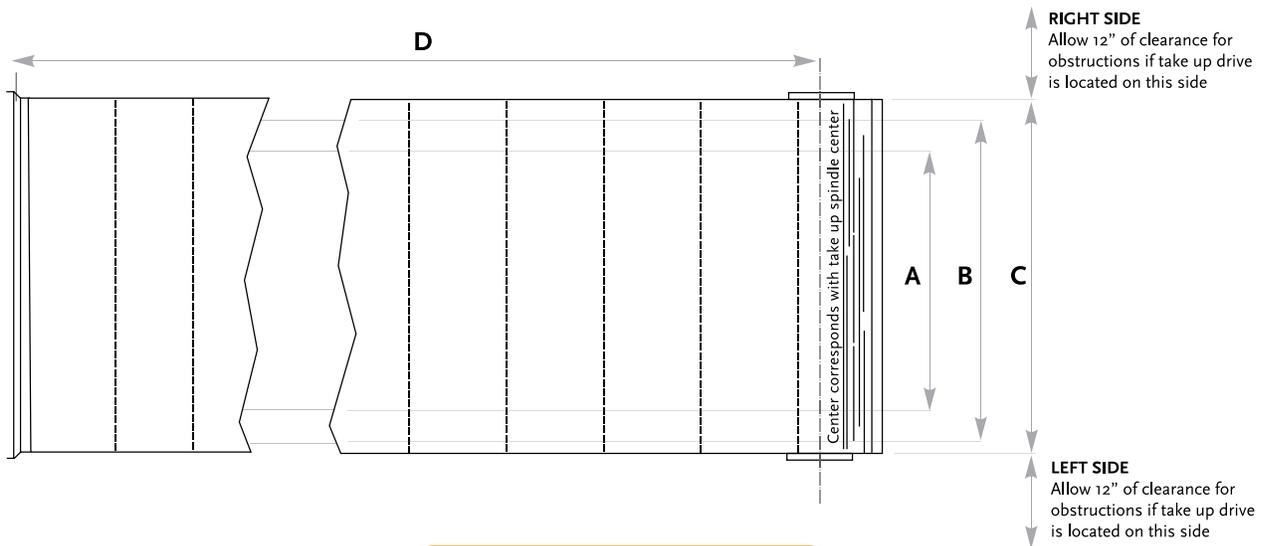
above way/outside pit



below way/inside pit



Angular/Custom



QUESTIONS? 815-978-2057

ROOF PROTECT (MACHINE ROOF BELLOW COVERS)

The lightweight, movable folding roof cover can be custom designed for any size and most guidance systems. Engineered with a double fold unit for increased stroke, our machine roof covers can be manufactured to any dimensions to suit your application, helping to protect against dust, particles, and other debris from escaping or entering the roof of the machine tool.

ADVANTAGES

- Carbon fiber processing (aerospace)
- Sound insulation
- Environment protection
- Health protection

TECHNICAL DETAILS

- 2 ply, rigid polyester (PET) sheets with polyurethane (TPU) coating on both sides (1 mm thick)
- Temp. resistance -20°C (-4°F) to 100°C (212°F)
- Width up to max. 8000 mm
- L max if necessary up to max. 24.000 mm
- Standard fold depth 125 (up to 300 mm maximum)
- Speed up to 90 m/min
- Acceleration up to 1g
- Transverse beams made of aluminum hollow profile
- White, translucent fold material provides an optimum brightness in the working area
- Slide way systems depending on requirements (rollers, gliders, slide ways)
- Motorized version for opening and closing
- Individual folding segments are replaceable
- Decoupling option for crane loading and unloading
- Material for special applications available upon request



slideways

We plan the machine roof bellow cover specifically according to your requirements.

The implementation of this system can be done with the existing slide way or with a new customized slide way.



COMPANY *(complete address)*

Name _____
 Title _____
 E-mail _____
 Phone _____ Fax _____ Date ____/____/____

APPLICATION / ENVIRONMENT

Quantity _____

Protection For Dust/Particle Containment Noise Attenuation Other (provide description below)

Mounting Existing rails (provide dimensions) _____ inch mm
 Hennig to supply rails

Machine Speed _____ Acceleration _____ (provide unit of measurement for each value)

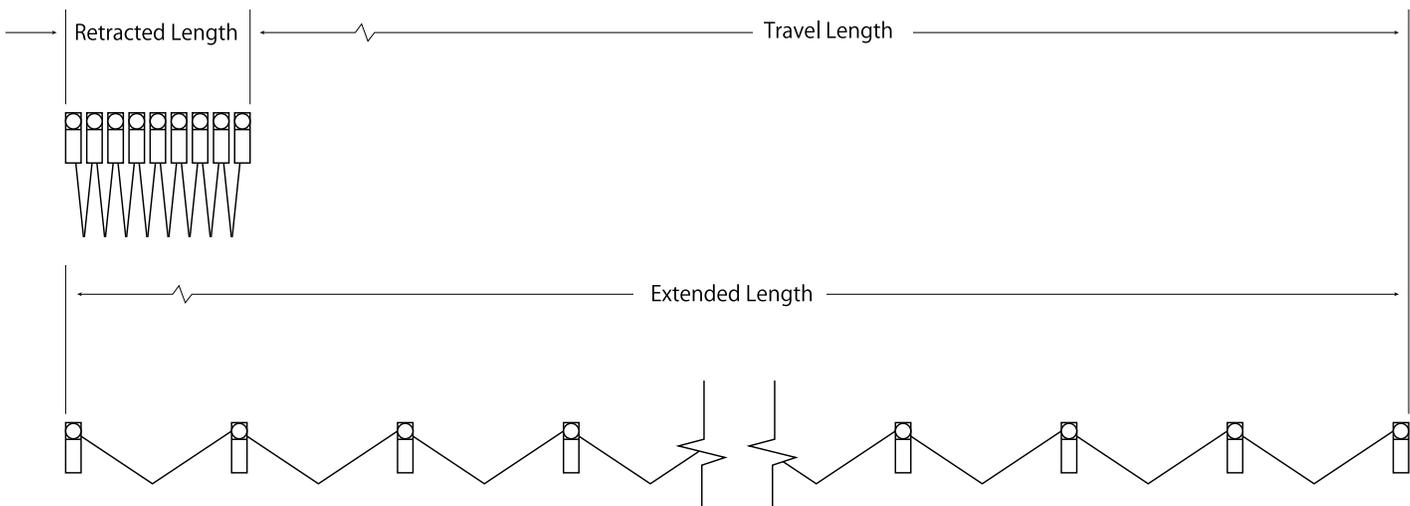
Machine Width _____ Machine Length _____ inch mm

Notes _____

DIMENSIONS / TRAVEL

inch mm

Extended Length _____ Retracted Length _____ Travel Length _____



QUESTIONS? 815-978-2057

LIFT TABLE ENCLOSURES

PINCH POINT PROTECTION

By providing a physical barrier, our enclosures help prevent injury due to hands, clothing or feet being accidentally caught in the table mechanism. Many safety conscious companies are insisting on lift table enclosures.

MECHANICAL PROTECTION

Protecting the lifting mechanism from contaminants such as dust, dirt, water and foreign objects, minimizes downtime and maintenance costs and extends the life of the unit.



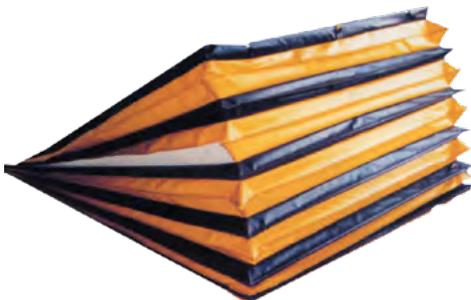
LIFT TABLE ENCLOSURE QUESTIONS / QUOTE REQUESTS
815-316-5122

design features

- **SINGLE OR MULTIPLE SIDED**
one, two, three and four sided enclosures are available for Lift and Tilt tables.
- **MATERIAL**
premium quality vinyl coated polyester. On four-sided units a mesh breathing fabric is sewn into opposite sides on a convolution near the top, to allow for the influx & expulsion of air as the enclosure cycles up & down.
- **EXTENSION STRAPS**
eases pressure on the stitching by creating uniform extension at each convolution.
- **MOUNTING FLANGE**
flange is included for installation

options

- **MAINTENANCE STRAPS**
to hold the enclosure up against the underside of the table for ease of access when performing maintenance.
- **ZIPPERS**
for retrofits where the enclosure may not be easily slipped over the table
- **HOOK & LOOP MOUNTING**
instead of flange
- **HI-TEMPERATURE FABRIC**
specialty fabrics are in stock for unique applications
- **RESTRICTED SPACE & LOW RETRACTION**
almost any width can be fabricated to satisfy special situations.



1 EXTENSION STRAP



2 MESH BREATHING FABRIC

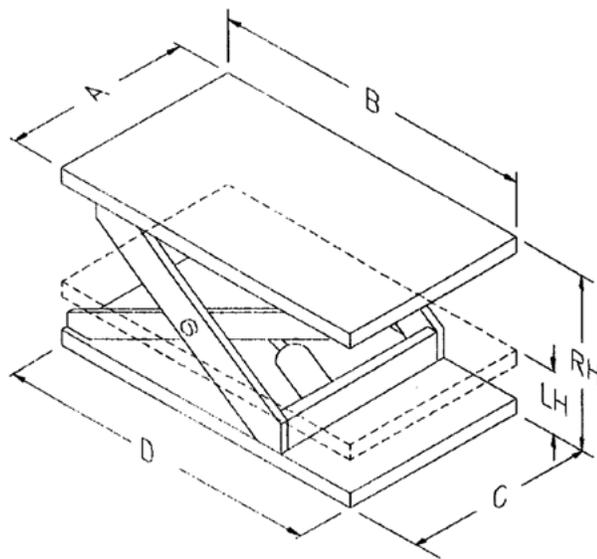
Please complete this form and email or fax to your desired location. See pages 17-18 for contact info.

COMPANY (complete address)

Name _____
Title _____
E-mail _____
Phone _____ Fax _____ Date ____/____/____

DIMENSIONS

A _____
B _____
C _____
D _____
Raised Height _____
Lowered Height _____
Number of Units _____



MOUNTING

Inside Mount Outside Mount

ENVIRONMENT

Brief description _____

QUESTIONS? 815-316-5122

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-  Manufacturing / Distribution
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MAKING OUR CUSTOMERS SUCCESSFUL

For over 65 years, Hennig Worldwide has been defining Excellence in Machine Protection, creating regional jobs, serving their local communities, and supporting the global needs of machine tool customers.

Specializing in chip management, machine protection, facility safety, and generator enclosures, Hennig products optimize production and keep your facility clean and safe.

MACHINE PROTECTION

Telescopic Steel Covers
Modular Face Shields (XYZ Shields)
Bellows
Aprons & Roll Up Covers
Walk-On Covers
Wiper Systems
Telescopic Springs
Cable Conduits

CHIP SOLUTIONS

Chip Conveyors
Chip Disc Filtration (CDF)
Coolant Tanks
Turnkey Chip Management
Conveyor Networks

ENCLOSURES & FACILITY SAFETY

GENSET Enclosures
Machine Enclosures
Platforms and Stairs
Guarding and Fencing
3D Printer Enclosures
Additive Manufacturing Enclosures
Walk-On Pit Covers
Scissor Lift Bellows
Machine Roof Bellow Covers
Special Fabrications

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