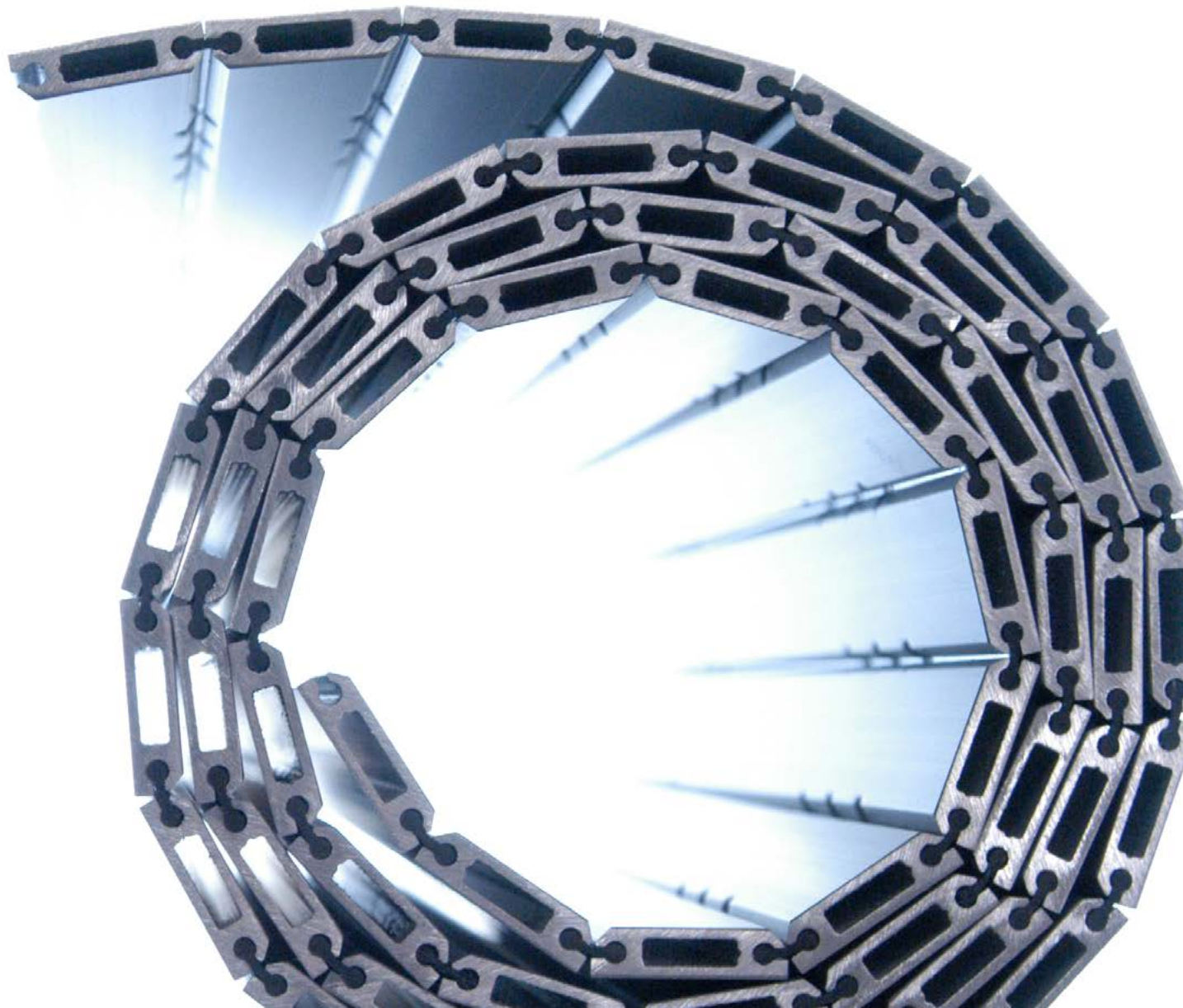


# APRONS & ROLL-UPS

STANDARD APRONS | ROLL-UP APRONS | WALK-ON COVERS | PIT COVERS | SERVICE & REPAIR



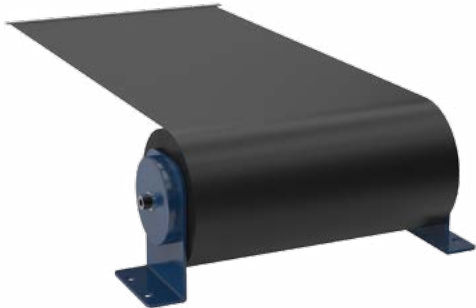
# APRONS

## materials & configurations

All apron covers are available as a retractable roll-up apron or as a non-roll-up version. Materials and design are selected based on the environment.

\* Available as a walk-on cover

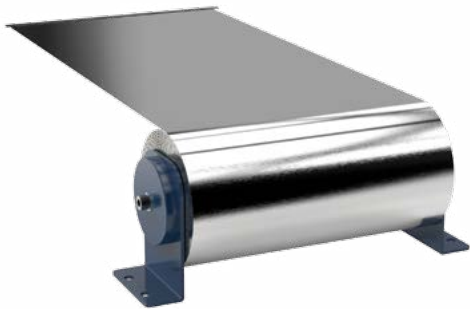
*See page 10 for technical data & properties.*



### COATED FABRIC

High-tensile polyimide fabric coated with polyurethane

- Highly resistant to wear
- Tear-resistance of approx. 500 kg over a width of 5 cm
- Can be used at temperatures ranging between  $-40^{\circ}\text{C}$  and  $+120^{\circ}\text{C}$
- Special cover bands coated with viton on one side, for contact temperatures of up to  $400^{\circ}\text{C}$
- Resistant against universal oils, greases and coolants, generally used in the manufacturing process



### STAINLESS STEEL\*

Durable, corrosion-resistant stainless steel sheets assembled in sections

- Withstands high ambient temperatures
- Can be assembled in sections for easy replacement of damaged areas
- Completely resistant to penetration of contaminants (oils, coolant, swarf, chemicals, etc)
- Walk-on versions available using extruded aluminum tubing for support

## TYPICAL MOUNTING CONFIGURATIONS *Special mounting devices & combinations available upon request.*

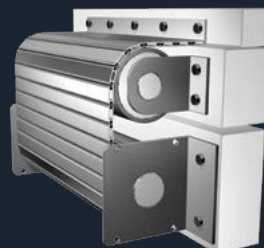
A



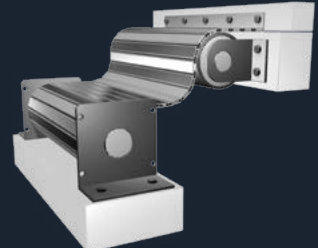
B



C



D





## ALUFLEX / GS20

Aluminum profiles with polyurethane hinges

- Aluflex: High flexibility in both directions (25 mm bend radius)
- GS20: When rolled out, creates a flush surface (ideal for wipers)
- Resistant to high temperatures
- Resistant to corrosion
- Special coatings available depending on application (eg, hard anodized)

**See page 5-6 for details**

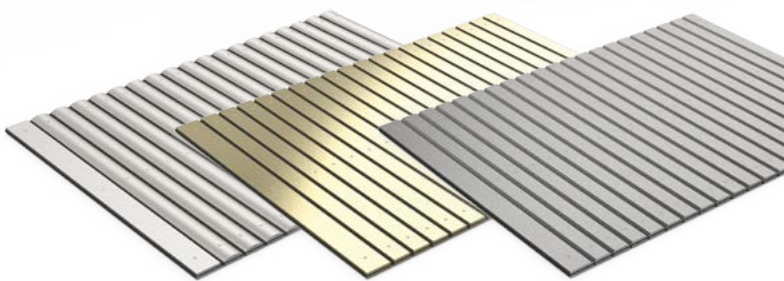


## AGS SERIES (MINI, I\*, II\*, III\*)

Anodized aluminum profiles & hinges

- Withstands high ambient temperatures
- High strain resistance even in long lengths
- Walk-on versions available (types I, II, III)

**See page 7-8 for details**



## SERIES 53

Polyurethane / aluminum coated polyester sheets with steel, brass, or aluminum lamellas

- Suited for extreme working conditions
- Sufficient protection against high volumes of swarf
- Highly resistant against oil, grease, coolants and hot swarf
- Small coil radius / space saving design

**See page 9 for details**

## STANDARD END PIECES *Special and custom end pieces available upon request.*



normal bar



straight end piece



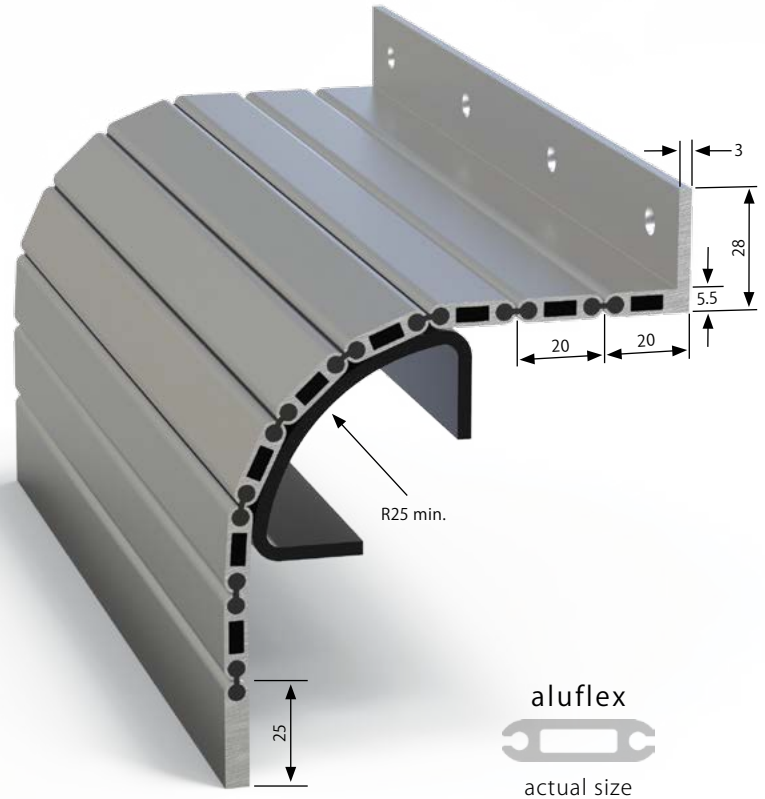
angle bracket

# APRONS

aluflex (hinge type)

## ALUFLEX

- Light, highly flexible hinge-type aluminum apron, particularly suited for the protection of machine parts which are not permanently exposed to hot chips
- Made of anodized aluminum precision profiles which are positively interlocked with polyurethane hinges (joints)
- The symmetric design of the aluminum profile enclosing the flexible hinges assures a high flexibility in both bending directions
- A simple but effective connection technique enables the users to easily assemble the aprons themselves. Profiles and hinges are available to lengthen existing aprons
- Splash-proof

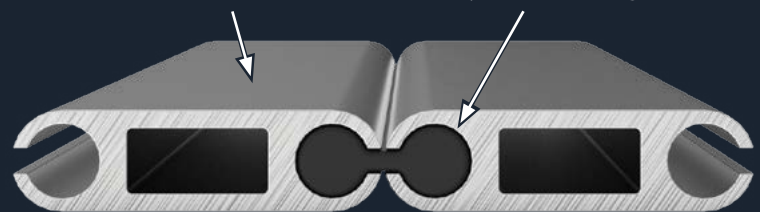


Symmetric design allows for high flexibility in both directions



Aluminum Extrusion

Polyurethane Hinge

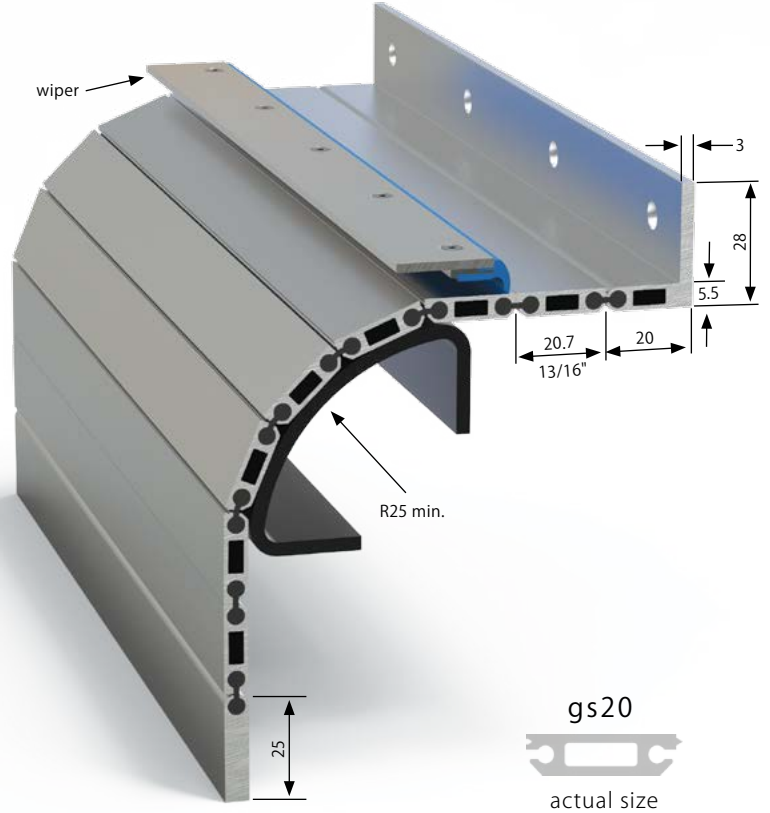




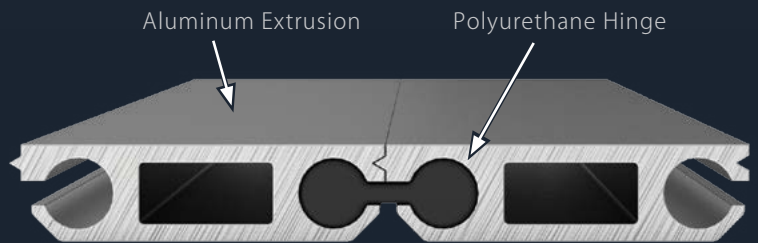
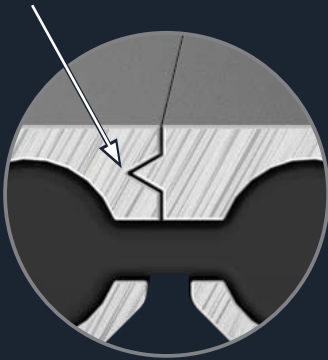
# gs20 (hinge type)

## GS20

- Light aluminum apron with a rigid interlock
- When rolled-out, creates flush surface which can be wiped clean using one of Hennig's wiper systems
- With the interlock, the polyurethane hinges are additionally protected
- High torsional stiffness
- Not recommended for horizontal deployment with simultaneous chip production
- Acceleration of 1.5 g and speed of 150 m/min are feasible



Locking design provides a flush surface suitable for wiper systems



# APRONS

## AGS mini, I, II, III

- Made of anodized aluminum precision profiles which are perfectly interlocked.
- Stable and flexible protection when space is limited.
- Special hinges prevent coarse dirt from entering and allow self-cleaning during the movement.
- Withstands high ambient temperatures up to 500°C.
- Resistant to corrosion by using anodized aluminum.
- High strain resistance, even in long lengths.
- Especially suitable for roll-up mechanisms.
- Walk-on versions available for AGS I, II, III
- Interchangeability of individual profiles.
- Side guides not required.
- The AGS mini, AGS I, AGS II, and AGS III differ in their profile cross sections and loading capacity.
- Standard version comes with protruding rivets - 2mm on each side. (AGS I and AGS II are available with protruding or flat head rivets.)

**See page 11 for Quote Request Worksheet**

ags mini



actual size

ags I



actual size

ags II

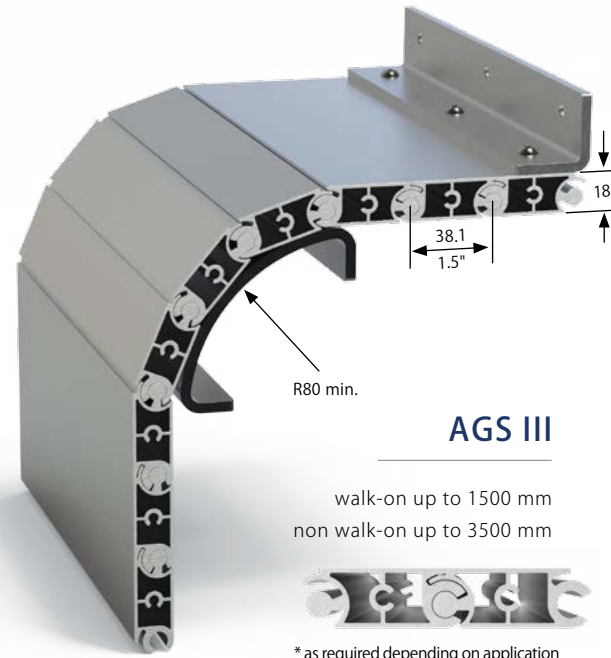
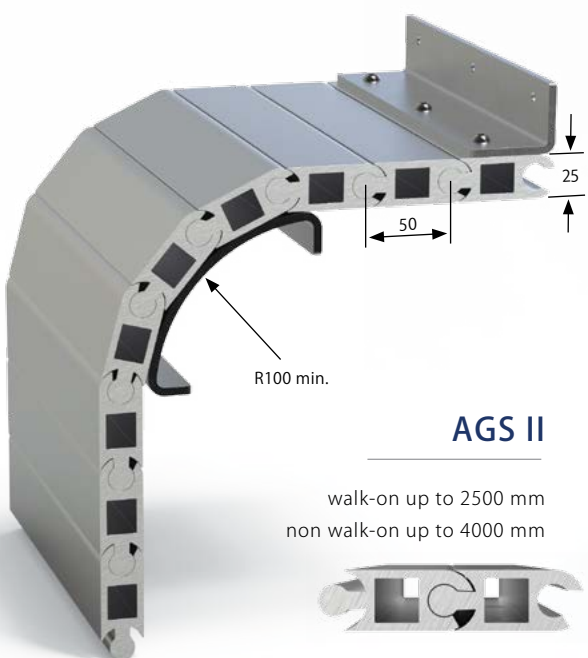


actual size

ags III



actual size



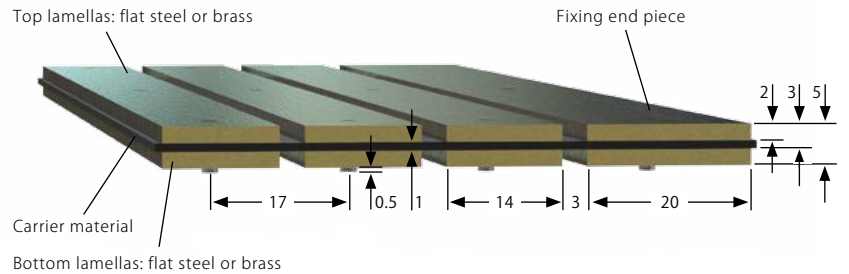
# APRONS

## series 53 (metal clad aprons)

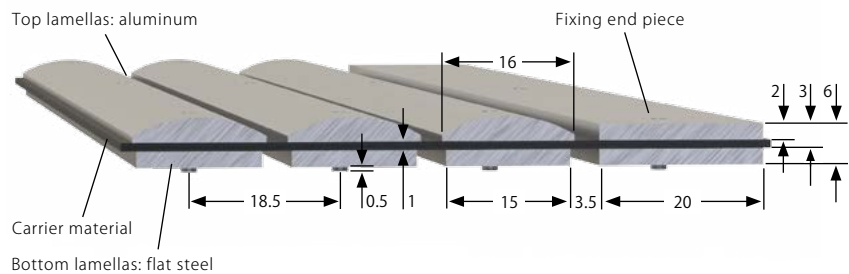
These apron covers are highly flexible and designed for optimum protection against swarf and falling work pieces, especially suited for extreme working conditions.

- Sufficient protection in case of high volumes of swarf (e.g. at lathe tool posts)
- Two-layer carrier material: PUR coated fabric at the bottom, aluminum-coated glass fiber fabric at the top (heat resistance)
- Reinforced on both sides with steel, brass or aluminum lamellas, this type of apron is a robust cover element
- Highly resistant against oil, grease, coolants and hot swarf (contact temperature of up to + 300°C)
- Splash-proof according to IP 54
- Small coil radius. Space saving. Easy assembly.
- Fastening is possible alternatively with angles, hinges or other fittings

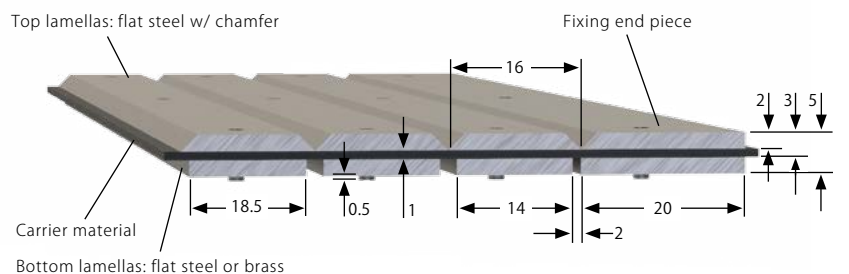
### TYPE 53-1



### TYPE 53-2









### TYPE 53-4








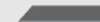





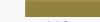


## TECHNICAL DETAILS (ALL APRON TYPES)

### aluflex / gs20 / ags series

TYPE		ALUFLEX	GS20	AGS mini	AGS I	AGS II	AGS III
MATERIAL	Profile/Hinge						
		AL/PUR	AL/PUR	AL/-	AL/-	AL/-	AL/-
	Width x Thickness (mm)	20 x 5.5	20.7 x 5.5	22.4 x 6.7	34.9 x 13.8	68.3 x 25	38.1 x 18
TECHNICAL DATA	Return / Coil Radius (min)	25	25	30	42	100	80
	Net Weight (N/m <sup>2</sup> )	80	80	120	240	380	270
	Max. Intermittent Contact Temp. (°C)	150	350	500	500	500	500
	Max. Permanent Contact Temp. (°C)	120	120	200	500	500	500
PROPERTIES	Water Tightness (according to IP 54)	●	●	◐	◐	◐	◐
	Resistance to emulsions	◐	◐	●	●	●	●
	Suited for chip production areas	○	●	○	○	○	○
	Resistance to corrosion	●	●	●	●	●	●

### series 53

TYPE		53-1	53-1	53-1	53-2	53-4	53-4
MATERIAL	Top (side of swarf)						
		ST 14x2	ST 14x2	MS 14x2	AL 16x3	ST 16x2	ST 16x2
	Bottom (side of slideway)						
		ST 14x2	MS 14x2	MS 14x2	ST 15x2	ST 14x2	MS 14x2
	Carrier (hinge) material	PUR/AL	PUR/AL	PUR/AL	PUR/AL	PUR/AL	PUR/AL
	Thickness (mm)	5.5	5.5	5.5	6.5	5.5	5.5
TECHNICAL DATA	Return Radius (min)	40	40	40	40	40	40
	Net Weight (N/m <sup>2</sup> )	280	280	280	290	300	300
	Max. Intermittent Contact Temp. (°C)	300	300	300	300	300	300
	Max. Permanent Contact Temp. (°C)	120	120	120	120	120	120
	Coil Radius ≥ R 25	25	25	25	25	25	25
PROPERTIES	Water Tightness (according to IP 54)	●	●	●	●	●	●
	Resistance to emulsions	◐	◐	◐	◐	◐	◐
	Suited for swarf production areas	●	●	●	○	●	●

● Excellent ◐ Good ○ Suited under certain conditions ST=Steel MS=Brass AL=Aluminum PUR=Polyurethane



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For over 50 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, and facility safety, Hennig products optimize production and keep your shop floor clean and safe.

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### **MACHINE PROTECTION**

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

### **CHIP SOLUTIONS**

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

### **FACILITY SAFETY**

- Walk-On Pit Covers
- Scissor Lift Bellows
- Rooftop Systems
- Platforms and Enclosures
- Guarding and Fencing
- Special Fabrications