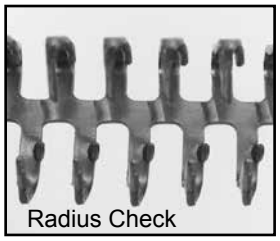
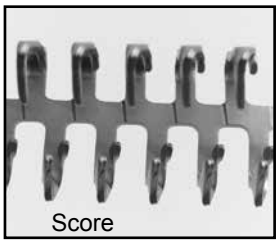
ALLIGATOR® LACING

# Alligator® Lacing Overview

## Advantages of the Alligator® Lacing System:

- Low profile
- Hammer applied; Does not require special installation tools
- Can be installed in the Clipper® Roller Lacer® and Pro Lacers with appropriate combs, if so desired.


Radius Check


Score

## Two Styles of Alligator Lacing:

**Conveyor Belt Lacing:** Features a “radius check” reference point to aid in trimming strips for narrower belt widths.

**Transmission Lacing:** For flat power transmission belts up to 12" (300 mm) wide. Lacing is scored, so it can break away to custom-fit belts narrower than the packaged fastener length.

### ALLIGATOR® LACING SELECTION CHART

| Lacing Size | For Belts with Mechanical Fastener Ratings Up To: | | Belt Thickness Range | | Minimum Pulley Diameter | | Corrugated Hinge Pin Diameter | |
|---|---|---|---|---|---|---|---|---|
| | P.I.W. | kN/m | in. | mm | in. | mm | in. | mm |
| 00 | 25 | 4.3 | up thru 1/16 | up thru 1.6 | 1 | 25 | 3/64 | 1.2 |
| 1 | 45 | 7.8 | 1/16–3/32 | 1.6–2.4 | 1-1/2 | 38 | 1/16 | 1.6 |
| 7 | 50 | 8.7 | 3/32–9/64 | 2.4–3.6 | 2 | 51 | 1/16 | 1.6 |
| 15 | 65 | 11.4 | 1/8–5/32 | 3.2–4.0 | 2-1/2 | 64 | 3/32 | 2.4 |
| 20 | 95 | 16.6 | 5/32–3/16 | 4.0–4.8 | 3 | 76 | 7/64 | 2.8 |
| 25 | 100 | 17.5 | 3/16–7/32 | 4.8–5.6 | 4 | 102 | 1/8 | 3.2 |
| 27 | 100 | 17.5 | 7/32–9/32 | 5.6–7.1 | 5 | 127 | 1/8 | 3.2 |
| 35 | 150 | 26 | 9/32–5/16 | 7.1–7.9 | 7 | 178 | 9/64 | 3.6 |
| 45 | 165 | 28 | 5/16–3/8 | 7.9–9.5 | 9 | 229 | 3/16 | 4.8 |
| 55 | 175 | 30 | 3/8–7/16 | 9.5–11.1 | 12 | 305 | 13/64 | 5.2 |
| 65 | 200 | 35 | 7/16–1/2 | 11.1–12.7 | 14 | 356 | 13/64 | 5.2 |

### METAL SELECTION CHART

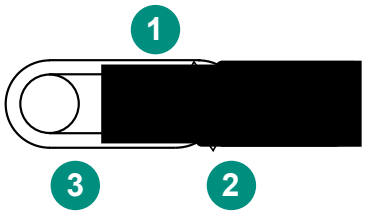
| Metal Type | Application |
|---|---|
| Steel | Suitable for most applications. Sizes 00, 1, and 7 are plated for rust and corrosion resistance. |
| 316 Stainless Steel | Provides extra resistance to abrasion, magnetic attraction, and corrosion from acids and chemicals. Also excellent for high sanitary requirements. |

### PIN SELECTION CHART

| Metal Type | Application |
|---|---|
| Corrugated Steel or Stainless Steel | Rigid pin with corrugation to prevent pin from migrating out of the splice. |
| Nylon Covered Steel or Stainless Cable | Available in coil lengths. Ideal for applications with crowned pulleys or with troughing idlers. |
| Steel or Stainless Steel Rocker Pins | Used with Transmission Lacing. Two-piece design creates a rocking action to reduce wear and friction on the fastener loops. Furnished with Transmission Belt Lacing sizes 15 - 65. Corrugated pins are furnished with Transmission Belt Lacing sizes 00, 1 and 7. |

# Identifying a Properly Installed Alligator® Lacing Splice

1. Lacing should be flush with belt surface.
2. Points should slightly penetrate opposite side of belt.
3. Loops of lacing should not be crushed and will easily accept the hinge pin.




# Troubleshooting

## Lacing Teeth Do Not Fully Penetrate Belt and Clinch Over

Be sure to use a soft piece of wood under the fastener when first applying lacing. This allows the teeth to fully penetrate the belt.

Ensure the following installation procedures have been followed. *NOTE:* Steps 1-4 are performed using the soft piece of wood as a backing plate.

1. From **top side** of belt, install end two teeth on both belt edges halfway in.
2. Flip belt over and install fastener teeth on bottom side of belt halfway in across **entire** splice width.
3. Flip belt back over and finish installing remaining teeth on top side of belt.
4. Repeat on bottom side of belt.
5. Use a hardened steel plate and final set the lacing.

## Hinge Pin is Difficult to Insert

Be sure to use gauge pin and clips when applying Alligator Lacing. This will ensure a uniform loop across the entire width.

Loops may have been crushed with direct hammer blows. Use caution when installing fasteners and do not hit the loops.

Failure to follow proper lacing installation sequence as described above in Steps 1-5 can cause points on non-bar side of lacing to wander and not penetrate correctly. This can cause a distortion in the loop area, making pin insertion very difficult.