

# UNIGUARD MEASURING INSTRUCTIONS FOR Machine Guards HORIZONTAL BELT GUARD (HBG)



#### Guard Type: HBG – Base Mounted Side by Side Belt/Chain Guard

#### Complete these forms in their entirety:

- •"Uniguard Customers Name" is who is purchasing the guard from us.
- •"Uniguard Customers Contact" information allows us to contact the correct person if questions arise during production
- •"Equipment Mfg. & Model" allows us to capture information for future production.
- "Quantity" needed to quote
- •"Equipment Numbers" allows the customer to know where the guard is to be installed within their facility

#### Things to consider:

- Spacers can be added to either side when needed to accommodate offset base.
- Can current guard be removed without removing the sheaves? If yes, design the guard to be installed without removing the sheaves.
- Corner cut-outs can be made when the baseplate has obstructions (note these in the "Notes" section of the form.
- Solid bottoms can be added when the foundation base is open, or guard extends past the front of

#### **Options:**

- Slip-on-Back utilizes a 0.25" HDPE with either shaft holes or shaft slots. The entire guard is lifted above the back (requires overhead clearance) and the guard is lowered with the back slipping into a track.
- Fixed Back back is attached to the guard with shaft slots requiring the entire guard to be lifted up and lowered over the shaft during installation.
- Flanged Back works best for Z1 shaft configuration. Shaft holes will require sheave removal while shaft slots will not require sheave removal. Flanged back can be attached to equipment for additional support when needed.
- Removable fronts are a great option to facilitate belt replacement.
- · Lifting handles should be added for larger guards
- Inspection windows can be added for belt inspection.



# MEASURING INSTRUCTIONS FOR HORIZONTAL BELT GUARD (HBG)



#### **Measuring Instructions**

**1.** Determine and record both driven and drive shaft centerlines from foundation base, shaft diameters and sheave diameters as shown.











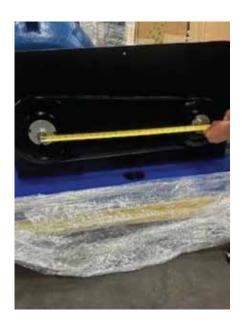


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#### **Measuring Instructions**

2. You can determine the shaft centers from the front when possible, from behind the existing guard or behind the equipment. Remember that this dimension is normally at the optimal running position when measured perpendicular to the mounting surface. Discuss the frequency that maintenace changes the belts and how much positive and negative movement they require to change the belts. Note, chains normally do not need an adjustment factor. Most applications don't require both the drive and the driven units to have adjustments as the driven units are normally fixed. The motor adjustment fields records the movement both directions and is not the sum of the two. Example: +/-2.0" equals a plus 2.0" and a minus 2.0" or total of 4.0" motor adjustment, not 2.0".







3. Determine the overall guard width.

Measure the current guard width. If there is a Z1 configuration and there are no front obstructions, remember to add additional width to the Uniguard width as our guards are made from polyethylene as noted on our forms. A Z2 or Z3 configuration will be limited to the distance between the equipment and may need special consideration and use of 0.25" HDPE materials.





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#### **Measuring Instructions**

- **4.** Calculate the guard height. This is calculated by utilizing the larger of the two shaft/sheave configurations, adding the distance from the foundation to the shaft centerline plus ½ of the sheave diameter plus 2.0" clearance above the sheave.
- **5.** Calculate the overall guard length as follows: 2.0" clearance plus ½ of the left sheave diameter plus the distance between the two shafts plus ½ the right sheave diameter plus 2.0" clearance plus the positive motor adjustment. Guards can be tapered down to lower height when needed to make lighter or clear obstructions.

Ex: Drive sheave: 6.0" Shaft centerline: 8.0"

Driven sheave:18.0"Shaft centerline: 10.0"

Shaft centers:24.0" Motor adj: +/- 2.0"

Overall length = 2.0 + 6.0/2 + 24 + 18.0/2 + 2.0 + 2.0 = 42.0"

Overall height = 10.0 + 18.0/2 + 2 = 21.0"









