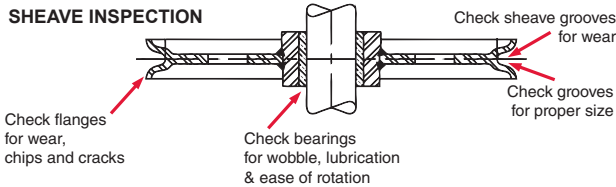
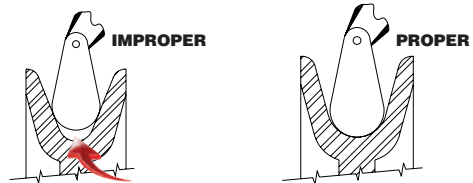


## SHEAVE INSPECTION



### CHECKING GROOVE SIZE FOR PROPER SIZE



### SHEAVE INSPECTION Minimum groove radii for worn sheave tolerances per "Wire Rope User's Manual" (third edition)

NOMINAL WIRE ROPE SIZE (in.)	RADII (in.)	NOMINAL WIRE ROPE SIZE (in.)	RADII (in.)
1/4	.128	3/4	.384
5/16	.160	7/8	.448
3/8	.192	1	.513
7/16	.224	1-1/8	.577
1/2	.256	1-1/4	.641
9/16	.266	1-3/8	.705
5/8	.320	1-1/2	.769

### SHEAVE FLEET ANGLE\*

- Fleet Angle is the entrance and exit angle of the wire rope relative to the sheave
- Fleet angle should be no more than 1-1/2 degrees



\* NOTE: "Wire Rope User's Manual" allows 2 degrees on grooved winch drums.

FOR ADDITIONAL INFORMATION REFER TO THE CROSBY GENERAL CATALOG

## BLOCK HOOK INSPECTION

### CROSBY RECOMMENDS AS A MINIMUM:

- A visual inspection for cracks, nicks, wear, gouges and deformation as part of a comprehensive documented inspection program, should be conducted by trained personnel in compliance with the schedule in ASME B30.10.
- For hooks used in frequent load cycles or pulsating load, or exposed to corrosive conditions (Road Salt, etc.) the hook and thread should be periodically inspected by Magnetic Particle or Dye Penetrant.

### LUBRICATION OF HOOK BEARINGS:

**Anti Friction** — Every 14 days for frequent swiveling; every 45 days for infrequent swiveling.

**Bronze Thrust Bushing or No Bearing** — Every 16 hours for frequent swiveling; every 21 days for infrequent swiveling.

### ASME B30.10 INSPECTION FREQUENCY

- Initial Inspection** - prior to use, all new, altered, modified, or repaired hooks shall be inspected to verify compliance with the applicable provisions in ASME B30.10 by a designated person. Written records are not required.
- Frequent Inspection** - shall include observations during operation by a designated person. Written records are not required.
  - Normal service - monthly. Normal service is operating at less than 85 percent of rated load except for isolated instances.
  - Heavy service - weekly to monthly. Heavy service is operating at 85 to 100 percent of rated load as a regular specified procedure.
  - Severe service - daily to weekly. Severe service is heavy service coupled with abnormal operating conditions.
- Periodic Inspection** - a complete visual inspection by a designated person. Disassembly may be required. Periodic inspection interval shall not exceed one year except as approved by a qualified person. Written records are required. (See definition of services above).
  - Normal service - yearly with equipment in place.
  - Heavy service - semi-annually, with equipment in place unless external conditions indicate need for disassembly.
  - Severe service - quarterly with equipment in place unless external conditions indicate the need for disassembly. Detailed inspection may show the need for a non-destructive test.

Note: Hooks that do not meet manufacture or ASME B30.10 requirements should be removed from service. Hooks shall not be returned to service until approved by a qualified person.

FOR ADDITIONAL INFORMATION REFER TO ASME B30.10 AND OSHA 1910.179 OVERHEAD GANTRY CRANES