

Yoke Industrial Corp.

N-602 POSITIONING ROPE GRAB—Instructions & Use

Manufactured by:

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YOKE N-602 Rope Grabs are 100% inspected for function, construction and material integrity and are designed to meet the performance requirements of ANSI Z359.1 and OSHA 1926 when used with Polysteel, Polyester or Nylon 5/8" (16mm) Rope and installed and maintained properly (see LIFELINES below).

NOTE: This Rope Grab is used as part of a complete personal fall protection system. All other components, subsystems, and connectors used in conjunction or attached to this Rope Grab should be compatible and meet the appropriate OSHA / ANSI / CSA requirements for the intended application. Substandard or non-approved components could compromise the reliability of the system and jeopardize the safety of the user.

THESE INSTRUCTIONS FOCUS ON THE CARE AND USE OF THIS ROPE GRAB AND ARE NOT A SUBSTITUTE FOR A FORMAL CLIMBING AND FALL PROTECTION TRAINING PROGRAM.

Equipment users must be fully trained in and conversant with all regulatory requirements applicable to the workplace in which the fall protection equipment is to be used. If in doubt contact your local OSHA or CSA office for clarification.

Such training should include information about local circumstances, rules and regulations applicable to the work situation, a hands-on opportunity to learn how to wear and attach equipment properly, instructions about:

DROP LINE & LIFE LINE: type & selection, strength, stretch, wear, degradation factors, use & maintenance.

HARNESS: type & selection, use & maintenance.

LANYARD, SAFETY SNAPS AND HARDWARE: type & selection, compatibility, use & maintenance.

ANCHOR POINTS: proper techniques and hardware for securing and connecting lanyards, drop lines or lifelines.

PHYSICS OF FALLING: calculating falling distance, hazards, assessing total fall arrest systems.

CAPACITY AND USE:

- Maximum total weight attached to Rope Grab is 310 lbs. Only one user is to be attached to a Rope Grab.
- Maximum arrest force capacity is 1800 lbs.
- Maximum lanyard length is 3 ft..
- A SHOCK ABSORBER MUST BE USED within your Fall Arrest System if you are attached to the Rope Grab by a lanyard.

INSTALLATION AND USE:

- THE ARROWS MUST POINT UP for the Rope Grab to function.
- The N-602 Rope grab must be threaded from the bottom of your lifeline.
- The life-line should be weighted or tied off at the bottom to assist in the positioning of the Rope Grab.
- Use 3-strand 5/8" (16mm) dia. Rope.(See LIFELINE section following).
- Depress the 'Bridge' of the Rope Grab and move the unit up and down the rope. The unit should lock immediately and firmly on release.
- Test the installation by pulling down on the ring to ensure that the mechanism locks onto the rope.
- The anchor point should be capable of supporting a 5000 lb (22.3kN) load and located directly above the user.
- Lanyards should be selected to meet the application with a 5000 lb (22.3kN) tensile strength on all components. ANSI Z359.1- a maximum 3 ft. (0.9m) lanyard.
- NOTE: When using a lanyard your fall distance is twice the length of the lanyard + the deployed length of the shock absorber + the stretch of the rope + maximum arrest distance of 54 inches (ANSI Z359.1-1992).
- Never allow rope or Rope Grab to contact any outside objects during use. Make sure that your possible fall path is free and clear of obstructions and hazards.
- Calculate your fall distance.
- Positioning the Rope Grab above user on the life line minimizes falling distance.
- Avoid swing falls by working directly below the anchor point whenever possible.
- **If Rope Grab is subject to an arrest it should be removed from service and discarded.**

INSPECTION:

- Inspect Rope Grab before each use.(also see LIFELINE INSPECTION below)
- All components must be free of dirt or debris and red rust.
- Check components for damage or wear that may affect the free movement and/or operation of the mechanism. If in doubt of condition do not use.
- Inspect gripping mechanism for proper operation by pivoting the bridge-ring-gripper assembly back and forth. Movement should be smooth with only the spring resistance. There should be no binding or gritty feeling.
- Do not attempt to alter or repair this Rope Grab.
- All other components of the fall protection system attached to and used in conjunction with this Rope Grab should be inspected as per manufacturers instructions and OSHA / ANSI / CSA guidelines.
- Record inspection results and keep on file.

MAINTENANCE:

- Clean and lubricate with light oil such as WD-40. Low pressure compressed air may be used. Wipe off excess oil to prevent contamination of the rope.

LIFELINES:

- **Note: Refer to ANSI Z359.1-1992 & CAN/CSA-Z259.2.1-95 for standards regulating lifelines.**
- **Size:** A 3-strand 5/8" (16mm) dia. rope with a minimum tensile of 5000 lbs. (22.2kN) is required. Undersize rope may not allow the Rope Grab to lock properly and may cause excessive stopping distance. Oversize rope will impede the mobility.
- **Type:** Lifeline ropes made from polyester fibers are recommended. Polyester has less stretch due to moisture absorption than nylon. Ropes made solely of polypropylene, polyethylene, or other olefins are not to be used. Ropes made from cotton, sisal, hemp, manila, or other plant fibers should not be used.
- **Strength:** Select a lifeline that when terminated and installed, will retain a minimum strength of 5,000 lbs. (22.2kN). Selection must take into account strength reduction factors such as sharp edges, and degrading factors.(i.e. Chemicals, oil etc.). A lifeline must retain its strength for it's working life.
- **ANSI Z359.1-92, 3.2.7.2.1** "Ropes used in vertical lifelines shall be made of virgin synthetic materials having strength, aging, abrasion resistance and heat resistance characteristics equivalent of superior to polyamides. Synthetic rope shall have an elastic elongation of not more than 22% at a load of 1800 lb (8 kN) when tested in accordance with Ref. 8.3.2 or 8.3.3 as applicable"
- **CSA-Z259.2.1, 4.3.1 (a)** "Lifelines be made of virgin synthetic fibers having characteristics consistent with those of polyamide or polyester fibers and have a breaking strength of not less than 27 kN." **CAN/CGSB-40.13 Clause 1.3:** "Polypropylene rope is for general purpose and may not be suitable for some specific applications. Polypropylene rope should not be used in situations where it is likely to receive extended exposure to sunlight or in situations relating to the preservation of human life such as lifelines of other life saving purposes. Polypropylene ropes with UV inhibitors are allowed if they meet the requirements of Clause 4.3.1a."

LIFELINE INSPECTION:

- A line having knots, frays, cuts, kinks, burn damage, or discolouring due to chemicals or heat should not be used.
- A lined 'fluffed' considerably by wear, or and area of concentrated wear, or discoloured to black in the interior of the strands may no longer have its rated strength and should be replaced. Discoloured areas with splinters or splinters indicate ultraviolet degradation and should not be used.
- Rope slices should be tight and without frays firmly holding the thimble. A cracked or distorted thimble may indicate that the lifeline has been impact loaded.

KNOW YOUR WORKPLACE: Assess the workplace for hazards such as heat, flames, chemical, electrical, environmental, sharp objects, unstable/uneven or slippery surfaces, or moving equipment. Identify the potential hazards and plan the installation to avoid dangerous paths and obstructions. Have an emergency rescue/contingency plan in place in the event that an accident may occur.

WARNING:

All users of fall protection equipment must be in good health, must not have a medical history of conditions that could be aggravated by a fall, must be mentally fit and must not be under the influence of alcohol or drugs. Inattention to these factors could cause falls, serious injury or death.

Any component that has arrested a fall must be immediately removed from service.

Do not attempt to repair damaged equipment. Remove from service immediately. Discard equipment if there is any evidence of excessive wear, damage or malfunction.