JOB DESCRIPTION – WINDING MACHINES

Job Description:

Employee needs:

- Ability to follow a multi-step process from beginning to end without making mistakes or missing a step. Must be detail oriented.
- Ability to accurately record production numbers and meet set quotas.
- Ability to work well with others in a manufacturing environment.
- Willingness to be a part of the team.
- Physically able to stand in one location and work for periods of time longer than 30 minutes.

Requirements:

- Must be able to work from 2:30 p.m. to 1:00 a.m. Monday – Thursday
- Must be able to lift 90 pounds.
- Must be able to read a tape measure or measuring stick.

Reports To:

- Employee reports to the Lead Person for the Winding Area for daily assignments and training.
- If they are unavailable, you will report to the Production Manager or the Assistant Production Manager.
- For payroll questions or HR issues you may go to the HR Office.

JOB PROCEDURES

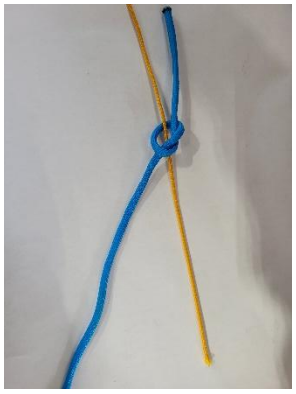
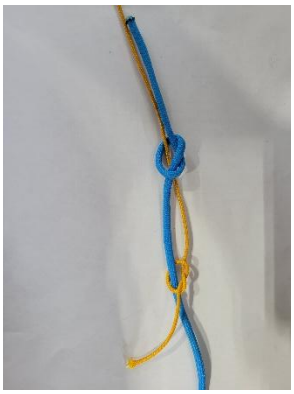
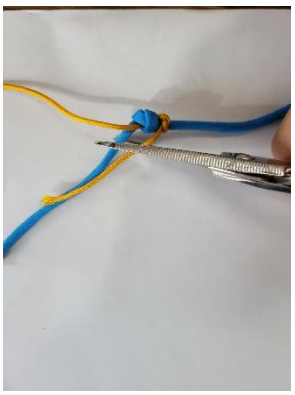
Winding Machines

Make sure machine is off prior to making any adjustments to any machine.

Roblon

1. Determine size of rope – And if winding for Core or Jacket
2. Plug in the air line and turn main power switch on.
3. Set the machine up- Decide whether its S or Z Twist, change Gears and Belts for rope size and twist per meter (Use Winding Guide Information Sheets)

4. Add or subtract threads for Core or Jacket (Use Winding Guide Information Sheets) Splice raw nylon thread using two raspberry knots.

5. Set Roblon capacity and the gap setting (Use Winding Guide Information Sheets)
6. Press Start.
7. Watch Nylon Thread Rack for the spool with the least amount of nylon on it. (This makes sure you do not run out)
8. When a spool gets low enough to see its colors, stop machine, replace it with a full spool. Tie the two ends together using the raspberry knot and cut off any extra nylon around the knot. Start machine and continue.
9. At the end of the shift, unplug the air line, and turn the main power off.

Braider Bobbin Winder

1. Determine size of rope – And if winding for Core or Jacket
2. Load 2 S and 2 Z spools onto the creel, Use the Appropriate Bobbin for each twist.
   a. Yellow for S Twist
   b. Red for Z Twist
3. Turn main power switch to On
4. Set Braider Bobbin Capacity (Using Winding Guide Information sheets)
5. Set Gap setting – (Using Winding Guide information.)
6. Press On. – If thread is not free flowing onto the bobbins, check the tensioners and adjust speed accordingly.
7. Once bobbin is full – Remove bobbin, – Reset the capacity – Replace bobbin and repeat.
8. At the end of the work shift, make sure main power switch is turned off.

Core Braiding Machine

1. Determine size of rope – Set up gear size, Spring Tension and Rope Guide Collar (Use Winding Guide Information Sheets).
2. 12 Bobbins are needed – 6 – S Twist and 6 – Z Twist
3. To replace bobbins: Place paracord on the left side of cup. [Figure 1} Then run 3' up inside the rope. – Press auto stop – jog machine so bobbin to be replaced is up front. Remove bobbin - Leaving a 3' ear. Let dangle into the center of the rope..[Figure 2]

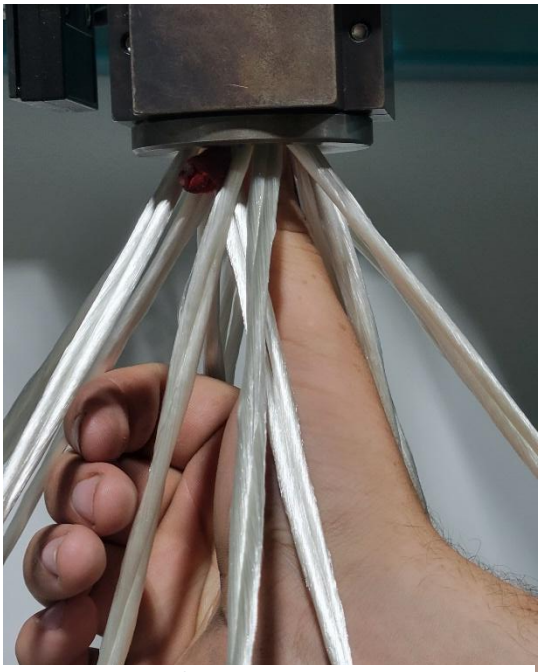


Figure 1 Core Braiding

Figure 2 Core Braiding

4. Replace bobbin. Tie paracord to new end of bobbin yarn. Pull paracord up through center until your knot comes out on top of the rope. [Figure 3] Make one (1) full rotation using the forward button to lock new strand into place. Remove paracord (cut off as close to core as possible. Close the doors and start the machine, let run until machine hits the shutoff switch (determined by size of rope using Winding Guide Information sheets)
5. Continue by repeating step 3 and 4
6. At the end of the work shift, make sure main power switch is turned off.

Figure 3 Core Braiding

Jacket Braiding Machine

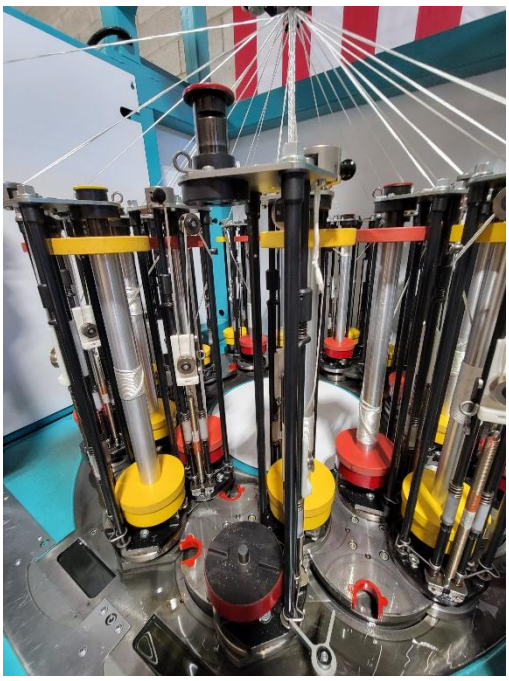


Figure 4 Jacket Braiding

1. Determine size of rope – Set up gear size, Spring Tension and Rope Guide Collar (Use Winding Guide Information Sheets)
2. 24 Bobbins are need – 12 – S Twist and 12 – Z Twist
3. To replace bobbins: Remove empty bobbins from carriage.[Figure 4]
4. Replace with a matching full bobbin and tie new bobbin strands to previous bobbin strands. [Figure 5] Repeat until all 24 (12 – S and 12 – Z) bobbins have been replaced.

Figure 5 Jacket Braiding

5. Raise the rope guide. Remove rope guide, this will allow the knots to work up and through the rope guide holder. [Figure 6] Replace rope guide once all knots have gone through. Lower rope guide back to previous position. Tape both sides to be cut out later [Figure 7]

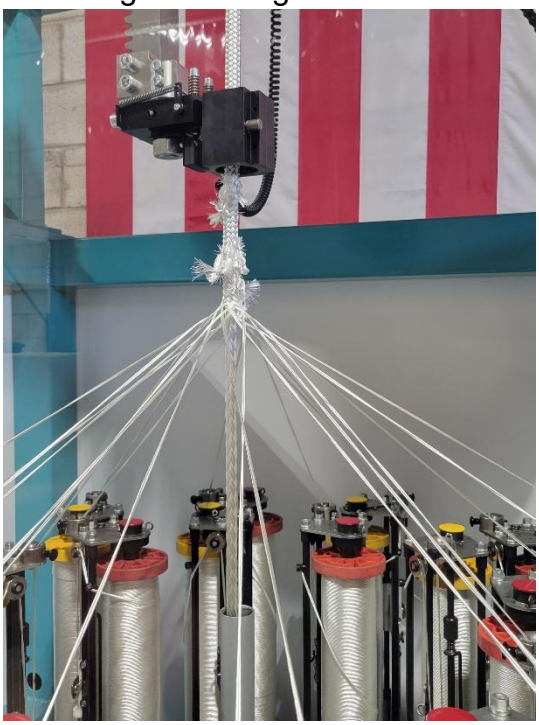


Figure 6 Jacket Braiding

6. Start the machine and stand by until knots reach the tensioner, raise tensioner so knots may pass and then return it to its previous position. [Figure 8]
7. Once knots are through the machine, run machine until bobbins run out. [Figure 9]
8. Repeat steps 3-6
9. At the end of your work shift, make sure main power switch is turned off

Figure 7 Jacket Braiding

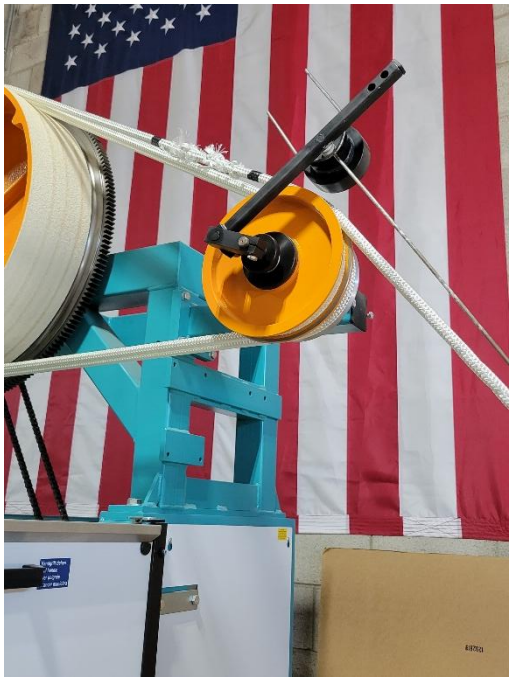


Figure 8 Jacket Braiding

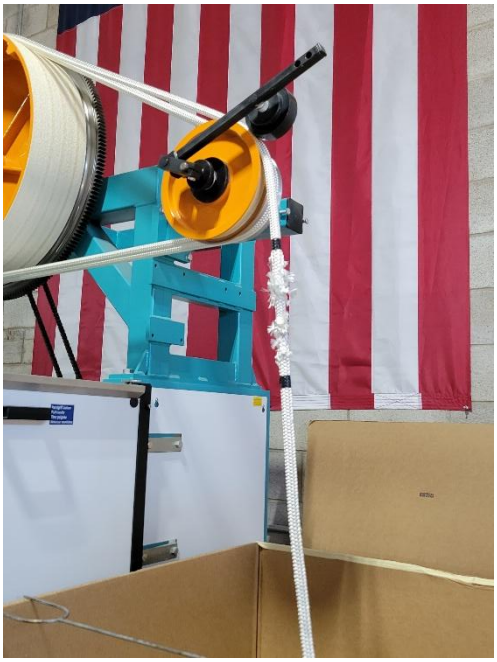


Figure 9 Jacket Braiding

Core splice for Jacket Machine

1. When the machine runs out of core, remove the empty gaylord, replace it with a full one.

2. Take the end of the old core and butt it up to the end of the new core, tape them together so they won't come apart. [Figure 10]
3. Once taped, start the machine and watch your splice feed through the bottom core sensor and up through the rope guide (if the splice is too thick, remove the rope guide collars so splice may pass through) [Figure 11] Core Splice)

Figure 10 Core Splice

Figure 11 Core Splice3

4. Once the new core has ran through the rope guide, tape the jacket marking where the splice is located. [Figure 12 and Figure 13] (Replace rope guide collar if removed)

Figure 12 Core Splice

5. Start the machine and run it until the splice is through the tensioner, making sure it doesn't get hung up on it. [Figure 14] Once through the tensioner, the core swap is complete, continue running the machine.

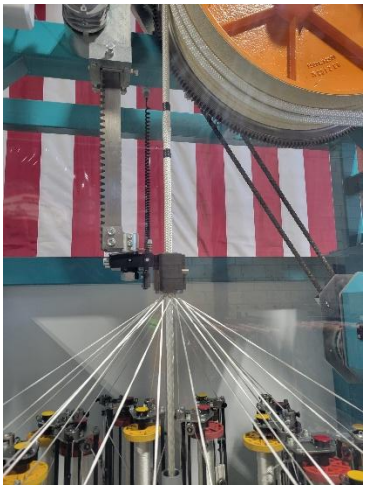


Figure 13 Core Splice4

Figure 14 Core Splice5