

## Questions and Answers

### Domestic USA Reel Design and Application

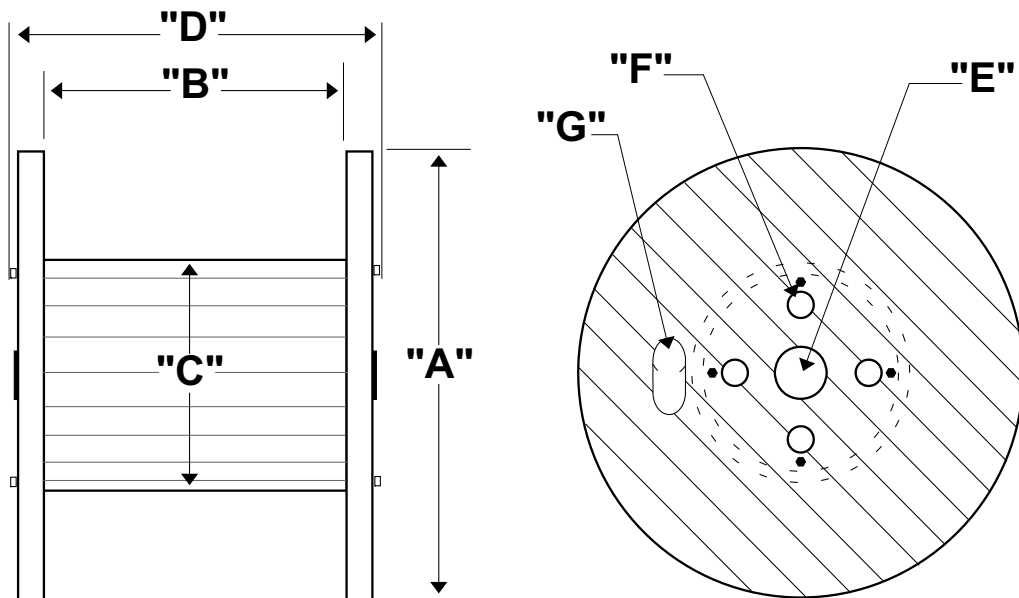
**Question:** Where do I find standard reel sizes and protective coverings?

**Answer:** NEMA WC 26 / EEMAC 201 the BINATIONAL WIRE AND CABLE PACKAGING STANDARD contains reels and packaging for use in the United States and Canada.

**Question:** How do I specify a specific reel size?

**Answer:** Reels are designated by the dimensions (in inches) of the Flange x Inside Traverse x Drum, i.e.: 96x48x56.

Where A = Reel Flange (F)



- B = Inside Traverse (T)
- C = Drum Diameter (D)
- D = Overall Width (OAW)
- E = Arbor Hole
- F = Drive Holes
- G = Test Hole in left flange of reel

**Question: How do I specify the maximum reel width that will fit my reel truck?**

Answer: The designation OAW is used to indicate the maximum desired overall reel width, i.e.: OAW 63.

**Question: How do I specify the maximum reel flange diameter that will fit my reel truck?**

Answer: The designation OAF is used to indicate the maximum desired overall flange, i.e.: OAF 96. In addition, a statement addressing the gross weight handling capability of the installers equipment or the gross weight associated with local construction permits will effect the reel size and length.

**Question: What is a reusable wood reel?**

Answer: A Class 1 (Standard duty) or Class 2 (Heavy duty) wood reel returned to the reel manufacturer for refurbishing as new is recognized as a reusable wood reel. The high cost experienced by the end user for disposing of wood reels previously recognized as nonreturnable led to the establishment of the reusable reel program. Where an end user has a sufficient quantity of reels to make it economically profitable for a reel manufacturer to pick up the reels, they will be picked up at the users end point without cost. The reels upon refurbishing to the level of new reels are then sold back to cable manufacturers at the price of new reels.

**Question: What information is stenciled on the reel flange?**

Answer: A wood reel has the following information stenciled on each flange.

1. The name of the cable supplier.
2. The class of the reel.
3. A reel rolling direction arrow.
4. The reel dimensions as Flange X Inside Traverse X Drum
5. The identification of the reel manufacturer.
6. The date that the reel was assembled by the reel manufacturer.

On reels with flanges less than 40 inches, Only items 4, 5, and 6 are normally supplied.

**Question: Are reels shipped with cable protruding through the test hole?**

Answer: This is not standard practice. Users must specify the requirement to field test cables on the shipping reel.

**Question: What safeguards should be taken in handling and storing reels?**

Answer: Reels should not be handled in any way that would result in damage to the cable or to the reel.

- The preferred method to lift the reel is to use an arbor shaft and slings.
- Fork lift trucks having adequate capacity can lift the reels from the side flange avoiding damage to the reel covering.
- Hooks or forks are not to be applied to the cable to lift the reel.
- Reel should not be dropped from any height.
- Reels should only be rolled in a direction to tighten the cable wind. Surfaces on which reels are to be rolled should be flat, clear of debris and protrusions which could damage the cable if straddled by the reel flange.
- Reels should be stored with both flanges on solid, hard surfaces and in a manner to prevent damage to the reel or cable.

- Reels should not be stored near or come in contact with chemical spills, oils, or other harmful materials injurious to the cable or reel.
- Loose bolts should be tightened before handling a wood reel.
- Factory applied reel coverings should remain in place until removal is necessary for cable installation.
- Laying reels on their side and picking the reels up by a toggle bolt device inserted into the arbor hole (E) is not recommended.

**Question:** What type of reel wrap is normally used?

Answer: Reel wrap is determined by the type of cable to be protected and the type of shipping and storage the cable will be subjected to.

**Normal reel wraps are:**

- Solid Film Fiberboard laminate also known as NEMA WC 26, Class 2, Protector.
- Solid Fiberboard also known as NEMA WC 26, Class 3, Heavy Duty.
- Wood Lagging or a Double Wrap of Solid Fiberboard also known as NEMA WC 26, Class 4, Extra Heavy Duty.
- Wood Lagging greater than 2 inches in thickness known as NEMA WC 26, Class 5, Export (not containerized).

**Question:** What are the most common reusable reels?

Answer: In 1999, the Okonite Company purchased over 85,000 wood and plywood reels and spools of which more than 76,000 were in the reusable wood reel category. The greatest number of reusable reels were sized as follows:

F	T	D	Class	OAW	Arbor	Weight
38	18	10	2	22.5"	3"	68 lbs.
54	32	26	1	37"	3"	164 lbs.
58	32	28	1	3"	3"	187 lbs.
30	18	12	2	21.5"	3"	39 lbs.
42	24	17	1	28"	3"	80 lbs.

Cable manufacturers literature can be referenced for reel footage capacities.

**Question:** How is a reel size selected for shipment?

- Answer:
1. The cable's construction and overall diameter set the minimum drum dimension, "C", meeting the cable's bending characteristics. NEMA WC26 establishes the minimum drum diameters for various cable categories.
  2. The length requested is checked against the nearest standard reel size. Each cable manufacturer has standardize clearances between the last turn of cable and the edge of the flange.
  3. The gross cable weight is checked against the selected reels loading weight.

**Question:** Are the reels used for overseas cable shipments the same design as domestic reels?

Answer: Yes. The overall reel wrap can be more substantial, the inside cable end is not shipped protruding from the test hole and the wood may be treated to suit specific country requirements. The inside cable end can be made accessible using special designed reels.

*Frank H. Rocchio*