

# Handling of Roving

**Flexstrand®**



225 Yield Roving



Variety of Yields

## Filament Winding and Pultrusion Lines

Glass is FRAGILE! Handled correctly and with care, high strength Mechanically Strong parts will result. Please keep the following simple rules in mind when handling this Cost Effective Reinforcing material. Careless handling and processing will result in poor parts, lost efficiencies and money down the drain.

### Receiving:

- Limit stacking to two (2) pallets high.
- Do not drop or strike pallets when moving them.
- Re-stack and re-palletize partially used packages carefully.
- Space packages insuring sufficient packages to support the weight placed on them.

### Creels:

Ceramic guides should be used whenever and wherever possible. Acceptable alternatives are Stainless steel (polished); Chrome steel; Brass, and UHMWPE.

Keep guides clean from dirt, accumulated binder, and resin. Inspect frequently for breaks and sharp edges. **Glass will not pass over a sharp corner without filament breakage. Fuzz and roving breakage WILL result.**

Guides should be placed directly (4" – 6" above) over the center of the package.

Limit guides to one (1) roving per eye. **Roving rubbing on roving causes filament breakouts and fuzz.**

Keep packages free from dirt and resin. Poor transfer, knots, and breakouts will result from these conditions.

Align creels directly behind the pultruder and in the primary pulling direction of the filament winder.

Limit the numbers of turns roving must travel as it goes through the creel. 90° bends are detrimental to the roving and will create fuzz and broken filaments.

Remove all fuzz and broken filaments at every opportunity. **AGAIN, Glass is Highly Abrasive. It will cause breakouts and more fuzz when it rubs on itself.**

Tube feeding devices should have flared ends and allow for transfer directly from the center of each package.

Creels should allow for two packages at each station allowing for efficient convey.

Eliminate any roving cross over during transfer.

### General Handling:

DO NOT use packages as step stools. Although ideal height to load creels, damage to the package and roving will result causing break outs and limit clean transfer.

Do Not place packages on the floor.

Pick up packages around the outside. Grabbing packages from the inside will distort the roving and limit clean transfer.

Do not lay packages on their sides.