

Fabric Spreading Machine

Description. This is a machine to replace our current spreading system. The current system is past its service life and is greater than 20 years old. This machine is required to take unrolled rolls of fabric and spread them out on the cutting table. Once spread on the cutting table, fabric can be fed into the automated cutting machine.

Equipment Requirements. Stand alone computerized, cradle fed machine that provides a robust operating spreading system with rolls up to 2,200 lbs. Also, it must provide varying tension within a roll controlled by the angle of deflection of the fabric as it is fed into the machine; the machine should compensate accordingly.

a. Standard features.

1) Mechanical: Tilting deep “V” cradle feed system. Tensionless spreading of all fabrics, with automatic cloth tension control. All-wheel drive. Automatic spreading with hand-speed control handle for semi-automatic operation. Use standard guide track. Automatic chain tensioners. Automatic threading. Auto-elevating front end. Infra-red edge control with linear actuator. Speeds up to 110 yards / minute. Cradle mirror. Heavy duty rollers and bearings. And emergency stop switch on non-op side.

2) Controls: Touchscreen control unit that displays machine diagnostics and maintenance prompts. Material utilization package with splice recognition. PLC. Material file management. Step layer capability. And management reporting.

3) Electrical: Ply counter. Out-of-cloth sensor. AC motor drive system. Power supply is 220V, 3 Phase.

b. Basic specifications.

- 1) Roll weight – maximum pounds: 550
- 2) Roll diameter – maximum inches: 30
- 3) Material width – inches: 66 - 72
- 4) Speed – maximum yards per minute: 110
- 5) Load height – inches: 23
- 6) Number of wheels on table: 4
- 7) Number of wheels driven: 4

c. Frame height:

- 1) Tuck blades & catchers, no knife: 8.25 inches.
- 2) Knife, no attachments: 9.75 inches.
- 3) Knife with bracket for attachments: 9 inches.
- 4) Knife with roller attachments: 7 inches.
- 5) Knife with face-to-face attachment, tuck blades: 4.75 inches.
- 6) Knife with face-up attachment (2): 4 inches.
- 7) Knife angled for dedicated face-up work: 9 inches.

Vendor Requirements.

- a. Machine must be delivered as a standalone operation and plug and play ready.
- b. Must include full operation and maintenance instructions.