



MPF-50 Heavy Duty Wire Prefeeding System



APPLICATIONS:

The Mechtrix MPF-50 Heavy Duty Wire Prefeeding System removes large and/or stiff wire from reels or barrels at a uniform rate and feeds it into an automatic wire processing machine. The MPF-50 has been specifically designed and configured for use with virtually all types of automatic wire processing machines.

METHOD OF OPERATION:

There are two MPF-50 Prefeeder control systems available. The Auto-Tune® models have an integrated PLC which automatically controls all of the operating parameters of the MPF-50 utilizing the patented Mechtrix Auto-Tune® motor speed setting system. Wire is removed from the reel by a variable speed, constant torque, direct drive DC drive motor and fed into the variable tension, vertical wire accumulation pulleys. The control automatically monitors each wire's processing characteristics, speed, length, cycle time, and dwell time as it is pulled from the accumulation pulleys by the wire processing machine. This cycle information is continuously updated allowing the speed of the MPF-50's feed motor to be continuously adjusted for smooth operation. A manual control system is also available for low speed or special applications where the operator can manually adjust the prefeeder's motor speed.

SPECIAL FEATURES:

- Infinitely adjustable pneumatic wire back-tension system accommodates a wide range of wire characteristics (size, weight, stiffness, etc.)
- Wire de-reeling speed is continually monitored and automatically adjusted to minimize the amount of stress on the wire (Auto-Tune® option).
- Specially designed In-line wire dampening device keeps wire contained within the pulleys and draw source.
- Simple set-up and change-over process with removable wire guards that make wrapping wire around pulleys fast and easy.
- Vertical design reduces floor space requirements.
- An integrated Barrel Feed Attachment to facilitate efficient removal of wire from a barrel.

RECOMMENDED ACCESSORIES:

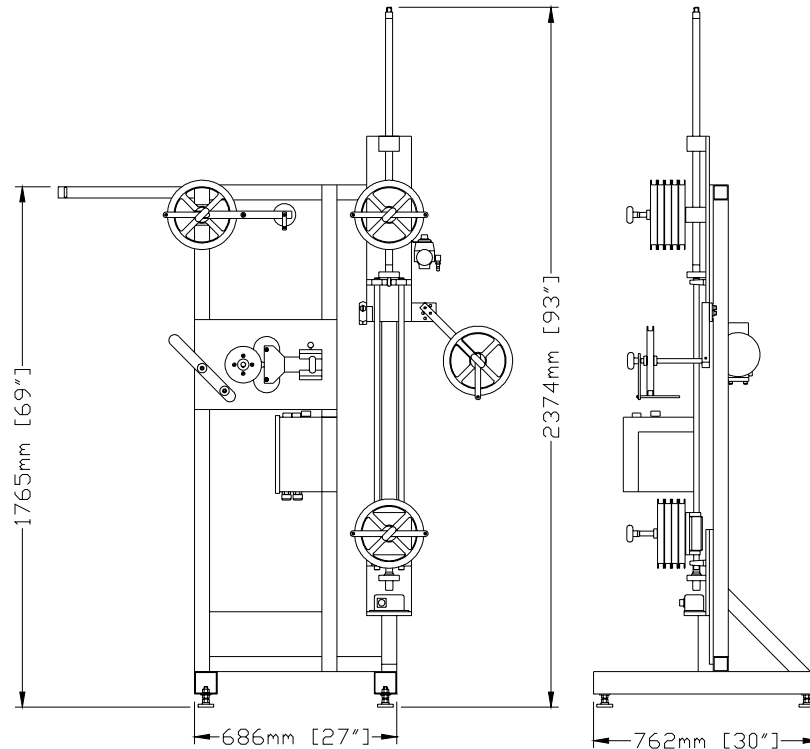
Wire Reel Stand:

The MPF-50 does not include an integrated wire reel stand as standard equipment. Mechtrix offers three reel stand choices based upon the customer's requirements.

- The 7581-500 Basic Reel Stand for reels up to 18" wide x 34" diameter (458mm x 864mm)
- The 26501-500 Reel Stand with Integrated Reel Lifting Device for reels up to 18" wide x 34" diameter (458mm x 864mm) and up to 400lbs (180kg)
- The 11951-500 Heavy Duty Reel Stand with Integrated Reel Starting and Braking device for reels up to 25" wide x 36" diameter (635mm x 915mm) and up to 650lbs (300kg)

Reel bore size and weight can reduce maximum reel size. Please consult Mechtrix for specific recommendations.

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MPF-50 CONFIGURATION OPTIONS:

Motor Sped Control:

- Auto-Tune® automatic motor speed adjustment
- Manual motor speed adjustment

Wire Pulley Configuration:

- V-style pulleys for round wires and cables up to 0.375" diameter (9.5mm)
- Flat-groove pulleys for flat or round wires and cables up to 0.600" diameter (15.2mm)

Feed Motor Choices:

- 1/2 HP, 110V, 1PH, 50/60HZ (1750 or 2500 RPM)
- 1/2 HP, 220V, 1PH, 50HZ (1750 or 2500 RPM)
- 1 HP, 110V, 1PH, 50/60HZ (1750 or 2500 RPM)
- 1 HP, 220V, 1PH, 50HZ (1750 or 2500 RPM)

TECHNICAL DATA:

Max Wire Reel Size and Weight:

- Maximum wire reel size is dependant upon the reel stand being used

Pneumatic Requirements

- 0.5 CFM@80PSI
- 14.1 l/min@0.5MPa

Wire Draw Source Max Capacity:

- 38ft
- 12m

MPF-50 Top Feed Speed:

- 15.3ft/sec
- 4.65m/sec

Machine Weight:

- 250lbs
- 114kg

Motor Type:

- DC-Motor

Motor Control Options:

- Integrated PLC with Auto-Tune®
- Manual motor speed control standard

Electrical Requirements:

- 110VAC, 12AMP, 60Hz
- 220VAC, 12AMP, 50Hz