

Syntron® HP Electromechanical Feeders

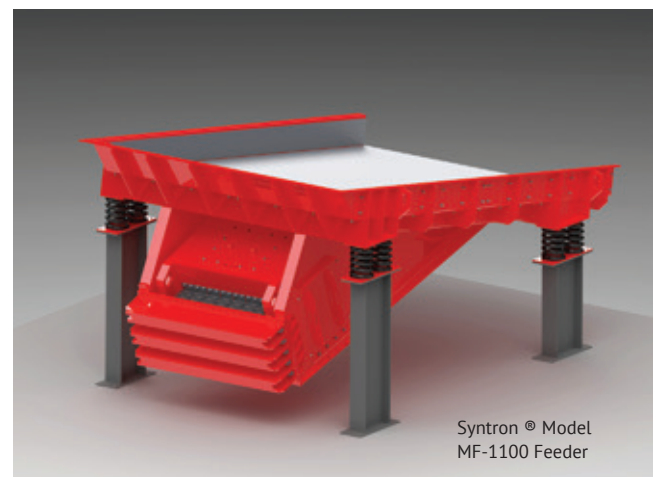
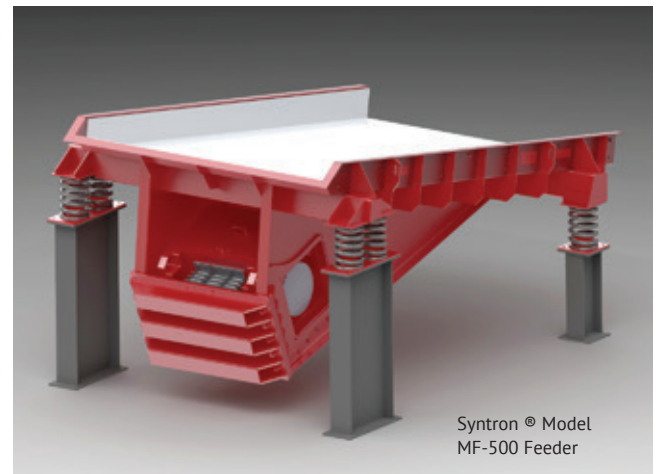
HP High Performance Electromechanical Feeders

Lowering Project Cost While Boosting Productivity

Built with the Coal Industry in mind, our Syntron® quality products are synonymous with dependability and durability. We continue to listen to your needs and provide technology that is innovative, quality focused, and backed with the Syntron® value you demand and expect. With their robust two-mass, spring connected and sub-resonant tuned features, our feeders provide structural strength and durable components. This combination and the added feature of the deep wing plates forming a bridge between the inlet and discharge suspension supports make our Syntron® product the work horse in coal facilities around the globe.

What's different?

Trough to exciter relationship is key to feeder performance. This new exciter optimizes design fundamentals that are crucial when providing the highest performing feeders in the industry. Our methodology creates improved capacity and higher travel speeds in a more compact area, whereby lowering overall project cost. The exciter is connected to the trough with corrosion resistant polymeric springs, which are more stable under varying conditions. Our springs are compressed for improved load stability, and when combined with optimized motor placement, results in improved feed angles and straight line motion. The exciter is then properly balanced with many different trough options including bolt-together construction for ease of installation in tunnels and other confined areas.





HP Electromechanical Feeder Features

- Smaller feeder footprint, reducing initial construction and component cost
- Lighter weight for comparable capacity
- Lower energy consumption
- NEW! Two-Mass Direct Drive technology
- Added trough options such as:
 - One-piece stainless liner
 - Bolt-together troughs for confined areas

NEW! Two-Mass Direct Drive

Our three new feeder models – MF-300, MF-500 and MF-1100 – are made using the new Two-Mass Direct Drive. This drive provides reliable service using a rotary vibrator to minimize components. Belts and pulleys, which commonly require adjustment and replacement due to wear, are eliminated. The new Two-Mass Direct Drive is also maintenance friendly and requires minimal time for thrust adjustment or replacement.

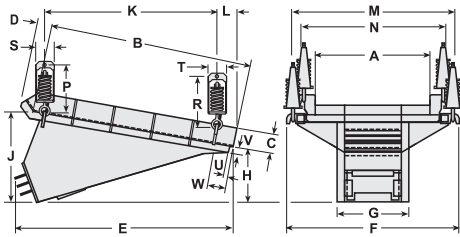
Reduced Project Cost

Prep plants are currently increasing belt width to increase capacity, thus requiring larger feeders. Syntron Material Handling's new high performance feeders will provide the capacity needed *while minimizing*:

- Energy
- Space
- Initial feeder cost
- Size of prep plant structure
- Feeder trough size

HP High Performance Feeder Specifications

MODEL MF-300-DD



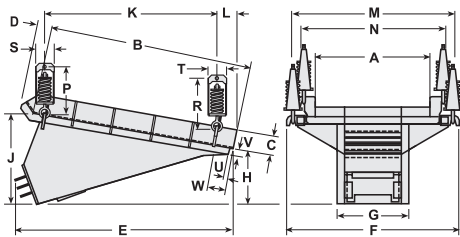
| Approx. Trough W x L | Approx. Capacity tph ◆ | HP | KW | Approx. Current (460V) | Control Model | Net Wt. (lb) | Net Wt. (kg) | Approx. Ship Wt. (lbs) Feeder/Control | Approx. Ship Wt. (kg) Feeder/Control |
|----------------------|---|----|----|------------------------|---------------|--------------|--------------|---------------------------------------|--------------------------------------|
| 36 x 72 | 600 | 4 | 3 | 4.4 amps | VF-5D2 | 2300 | 1043 | 2900 | 1315 |
| 48 x 84 | 1000 | 4 | 3 | 4.4 amps | VF-5D2 | 2600 | 1179 | 3200 | 1451 |

Please request a certified drawing for installation.

◆ Based on feeder with 10° down slope, below-deck drive unit, installed with proper hopper transition and skirt board arrangement, feeding coal weighing 55 pounds per cubic foot. 460/575 Volt 60 Hz three-phase. 380/415 Volt 50 Hz three-phase.

| | A | B | C | D | E | F | G | H | J | K | L | M | N | P | R | S | T | U | V | W |
|----|------|------|-----|---------------------------------|---------------------|------|-----|---------------------------------|----------------------------------|---------------------------------|---------------------------------|------|------|------|------|-----|-----|----|----|---------------------------------|
| in | 36 | 72 | 8 | 10 ⁹ / ₁₆ | 84 | 59 | 30 | 24 ¹ / ₁₆ | 36 ⁵ / ₈ | 65 ¹ / ₁₆ | 8 ³ / ₈ | 54 | 45 ½ | 21 ¾ | 19 | 8 | 7 ¼ | 2 | 2 | 9 7/ ₁₆ |
| mm | 914 | 1829 | 203 | 268 | 2134 | 1499 | 762 | 611 | 930 | 1653 | 213 | 1372 | 1156 | 552 | 483 | 203 | 184 | 51 | 51 | 240 |
| in | 48 | 84 | 8 | 8 5/ ₁₆ | 86 5/ ₁₆ | 71 | 30 | 36 ¾ | 37 ¹¹ / ₁₆ | 71 ³ / ₁₆ | 6 ¹³ / ₁₆ | 66 | 57 ½ | 21 ¾ | 21 ¾ | 8 | 8 | 1 | 2 | 7 ¹³ / ₁₆ |
| mm | 1219 | 2134 | 203 | 211 | 2192 | 1803 | 762 | 933 | 957 | 1808 | 173 | 1676 | 1461 | 552 | 552 | 203 | 203 | 25 | 76 | 198 |

MODEL MF-500-DD



| Approx. Trough W x L | Approx. Capacity tph ◆ | HP | KW | Approx. Current (460V) | Control Model | Net Wt. (lb) | Net Wt. (kg) | Approx. Ship Wt. (lbs) Feeder/Control | Approx. Ship Wt. (kg) Feeder/Control |
|----------------------|---|----|-----|------------------------|---------------|--------------|--------------|---------------------------------------|--------------------------------------|
| 72 x 120 | 2300 | 9 | 6.7 | 10.0 amps | VF-10D2 | 7300 | 3311 | 7900 | 3583 |
| 72 x 126 | 2400 | 9 | 6.7 | 10.0 amps | VF-10D2 | 7400 | 3356 | 8000 | 3628 |

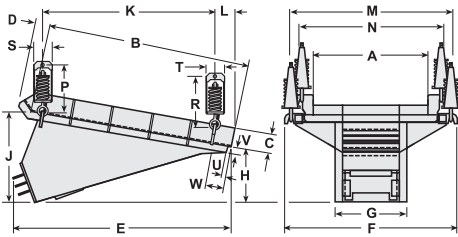
Please request a certified drawing for installation.

◆ Based on feeder with 10° down slope, below-deck drive unit, installed with proper hopper transition and skirt board arrangement, feeding coal weighing 55 pounds per cubic foot. 460/575 Volt 60 Hz three-phase. 380/415 Volt 50 Hz three-phase.

| | A | B | C | D | E | F | G | H | J | K | L | M | N | P | R | S | T | U | V | W |
|----|------|------|-----|-----|---------------------------------|------|-----|--------------------------------|--------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|-----|--------------------------------|--------------------------------|-----|-----|-----|---------------------|
| in | 72 | 120 | 8 | 4 | 131 ³ / ₄ | 97 | 38 | 27 ¹ / ₄ | 49 ¹ / ₈ | 102 ³ / ₄ | 13 ⁷ / ₁₆ | 91 ⁷ / ₁₆ | 82 ³ / ₁₆ | 31 | 20 ¹ / ₄ | 11 ³ / ₄ | 8 | 6 | 4 | 15 3/ ₁₆ |
| mm | 1829 | 3048 | 203 | 102 | 3346 | 2464 | 965 | 692 | 1248 | 2610 | 341 | 2323 | 2088 | 787 | 514 | 298 | 203 | 152 | 102 | 386 |
| in | 72 | 126 | 8 | 4 | 131 ³ / ₄ | 97 | 38 | 27 ¹ / ₂ | 49 ³ / ₈ | 102 ⁵ / ₈ | 14 ⁵ / ₁₆ | 91 ⁷ / ₁₆ | 82 ³ / ₁₆ | 31 | 20 ¹ / ₄ | 11 ³ / ₄ | 8 | 6 | 4 | 15 3/ ₁₆ |
| mm | 1829 | 3200 | 203 | 102 | 3346 | 2464 | 965 | 699 | 1254 | 2607 | 364 | 2323 | 2088 | 787 | 514 | 298 | 203 | 152 | 102 | 386 |

Many other trough sizes are available. Capacities vary depending on drive unit location, material characteristics, material density, trough length and width, trough liner type, feeder installation, skirt boards and hopper transitions. Cad drawings are available. Please call Syntron Material Handling for expert help with your application.

MODEL MF-1100-DD



| Approx. Trough W x L | Approx. Capacity tph | HP | KW | Approx. Current (460V) | Control Model | Net Wt. (lb) | Net Wt. (kg) | Approx. Ship Wt. (lbs) Feeder/Control | Approx. Ship Wt. (kg) Feeder/Control |
|----------------------|----------------------|----|-------|------------------------|---------------|--------------|--------------|---------------------------------------|--------------------------------------|
| 96 x 144 | 3700 | 20 | 14.92 | 21.8 amps | VF-20D2 | 14800 | 6713 | 15500 | 7030 |
| 96 x 156 | 4100 | 20 | 14.92 | 21.8 amps | VF-20D2 | 15100 | 6849 | 16000 | 7257 |

Please request a certified drawing for installation.

◆ Based on feeder with 10° down slope, below-deck drive unit, installed with proper hopper transition and skirt board arrangement, feeding coal weighing 55 pounds per cubic foot. 460/575 Volt 60 Hz three-phase. 380/415 Volt 50 Hz three-phase.

| | A | B | C | D | E | F | G | H | J | K | L | M | N | P | R | S | T | U | V | W |
|----|------|------|-----|-----|----------------------------------|---------------------------------|------|----------------------------------|---------------------------------|-----------------------------------|--------------------------------|------|---------------------------------|-----|--------------------------------|--------------------------------|--------------------------------|-------------------------------|-----|-----|
| in | 96 | 144 | 10 | 10 | 160 ³ / ₁₆ | 127 ¹ / ₈ | 56 | 33 ¹¹ / ₁₆ | 58 ⁷ / ₁₆ | 106 ¹³ / ₁₆ | 25 ¹ / ₈ | 122 | 111 ¹ / ₄ | 36 | 36 ¹ / ₄ | 12 ¹ / ₂ | 11 ³ / ₄ | 6 ¹ / ₄ | 4 | 27 |
| mm | 2438 | 3658 | 254 | 254 | 4069 | 3229 | 1422 | 856 | 1484 | 2713 | 638 | 3099 | 2826 | 914 | 921 | 318 | 298 | 159 | 102 | 686 |
| in | 96 | 156 | 10 | 10 | 163 ⁷ / ₈ | 127 ¹ / ₈ | 56 | 31 ⁵ / ₁₆ | 58 ⁷ / ₁₆ | 118 ⁵ / ₈ | 25 ¹ / ₈ | 122 | 111 ¹ / ₄ | 36 | 36 ¹ / ₄ | 12 ¹ / ₂ | 11 ³ / ₄ | 6 ¹ / ₄ | 4 | 27 |
| mm | 2438 | 3962 | 254 | 254 | 4162 | 3229 | 1422 | 795 | 1484 | 3013 | 638 | 3099 | 2826 | 914 | 921 | 318 | 298 | 159 | 102 | 686 |

Many other trough sizes are available. Capacities vary depending on drive unit location, material characteristics, material density, trough length and width, trough liner type, feeder installation, skirt boards and hopper transitions. Cad drawings are available. Please call Syntron Material Handling for expert help with your application.