

## **SPECIFICATIONS & CAPACITIES**

| MODELS <sup>1</sup>  | E300<br>(E300 / E300h) | <b>E400</b><br>(E400 / E400h) | <b>E500</b><br>(E500 / E500h) | <b>E600</b> (E600 / E600h) | <b>E700</b><br>(E700 / E700h) |
|--|------------------------|-------------------------------|-------------------------------|----------------------------|-------------------------------|
| Dryer Holding + Additional Holding = Total Holding Capacity, bu (m³)   | 205 + 95 = 300         | 275 + 125 = 400               | 345 + 155 = 500               | 415 + 185 = 600            | 485 + 215 = 700               |
|  | (7.2 + 3.3 = 10.5)     | (9.7 + 4.4 = 14.1)            | (12.2 + 5.5 = 17.7)           | (14.6 + 6.5 = 21.1)        | (17.1 + 7.6 = 24.7)           |
| Grain Column Thickness, (cm)   | 14" (35.6)             | 14" (35.6)                    | 14" (35.6)                    | 14" (35.6)                 | 14" (35.6)                    |
| Overall Height <sup>2</sup> / Width, (m)   | 15'-3" (4.6) / 7'-4"   | 15'-3" (4.6) / 7'-4"          | 15'-3" (4.6) / 7'-4"          | 15'-3" (4.6) / 7'-4"       | 15'-3" (4.6) / 7'-4"          |
|  | (2.2)                  | (2.2)                         | (2.2)                         | (2.2)                      | (2.2)                         |
| Grain Column / Overall Length³, (m)  | 12'-0" (3.7) / 21'-6"  | 16'-0" (4.9) / 25'-6"         | 20'-0" (6.1) / 31'-7"         | 24'-0" (7.3) / 35'-7"      | 28'-0" (8.5) / 39'-7"         |
|  | (6.6)                  | (7.8)                         | (9.6)                         | (10.8)                     | (12.1)                        |
| Level Auger Motor Size, HP (kW)  | 3 (2.2)                | 3 (2.2)                       | 3 (2.2)                       | 3 (2.2)                    | 3 (2.2)                       |
| Unload Auger Motor Size, HP (kW)   | 1.5 (1.1)              | 1.5 (1.1)                     | 1.5 (1.1)                     | 1.5 (1.1)                  | 2 (1.5)                       |
| Number of Fans   | 1 Centrifugal Fan      | 1 Centrifugal Fan             | 1 Centrifugal Fan             | 1 Centrifugal Fan          | 1 Centrifugal Fan             |
| 3-ph Fan Motor Size, HP (kW)   | 15 (11.2)              | 20 (14.9)                     | 25 (18.6)                     | 30 (22.4)                  | 40 (29.8)                     |
| 3-ph Electrical Full Load Amps,  | 80 / 74 / 36 / 37      | 97 / 89 / 43 / 43             | 112 / 102 / 50 / 48           | 127 / 116 / 57 / 54        | 160 / 146 / 72 / 66           |
| 208V / 230V / 460V / 575V (380V)   | (42)                   | (52)                          | (59)                          | (68)                       | (86)                          |
| 1-ph Fan Motor Size, HP (kW)   | 1 x 15 (11.2)          | 2 x 10 (7.5)                  | 2 x 15 (14.9)                 | 2 x 15 (14.9)              | N/A                           |
| 1-ph Electrical Full Load Amps, 230V   | 118                    | 131                           | 180                           | 180                        | N/A                           |
| ALL-HEAT MODE  | E300 / E300h           | E400 / E400h                  | E500 / E500h                  | E600 / E600h               | E700 / E700h                  |
| Avg / Max Operating Burner Capacity,   | 2.92 / 3.89            | 3.89 / 5.18                   | 4.86 / 6.48                   | 5.83 / 7.78                | 6.77 / 9.02                   |
| MMBTU/hr (kW thermal) <sup>4</sup>   | (856 / 1,140)          | (1,140 / 1,518)               | (1,424 / 1,899)               | (1,709 / 2,280)            | (1,984 / 2,643)               |
| Capacity, Shelled Corn, 20%-15% <sup>5,6,7,8</sup> wet bushels/hr (wet metric tonnes/hr) dry bushels/hr (dry metric tonnes/hr) | up to                  | up to                         | up to                         | up to                      | up to                         |
|  | 575 (14.2)             | 760 (18.8)                    | 945 (23.4)                    | 1,145 (28.3)               | 1,330 (32.9)                  |
|  | 550 (13.1)             | 730 (17.4)                    | 910 (21.7)                    | 1,100 (26.3)               | 1,280 (30.5)                  |
| Capacity, Shelled Corn, 25%-15% <sup>5,6,7,8</sup> wet bushels/hr (wet metric tonnes/hr) dry bushels/hr (dry metric tonnes/hr) | up to                  | up to                         | up to                         | up to                      | up to                         |
|  | 300 (7.9)              | 400 (10.6)                    | 495 (13.1)                    | 595 (15.7)                 | 690 (18.2)                    |
|  | 270 (6.4)              | 360 (8.6)                     | 445 (10.6)                    | 535 (12.8)                 | 625 (14.9)                    |
| HEAT + COOL MODE   | E300                   | E400                          | E500                          | E600                       | E700                          |
| Avg / Max Operating Burner Capacity,   | 1.99 / 2.65            | 2.65 / 3.53                   | 3.24 / 4.32                   | 3.89 / 5.18                | 4.51 / 6.02                   |
| MMBTU/hr (kW thermal) <sup>4</sup>   | (583 / 777)            | (777 / 1,035)                 | (950 / 1,266)                 | (1,140 / 1,518)            | (1,322 / 1,765)               |
| Capacity, Shelled Corn, 20%-15% <sup>5,7,8</sup> wet bushels/hr (wet metric tonnes/hr) dry bushels/hr (dry metric tonnes/hr)   | up to                  | up to                         | up to                         | up to                      | up to                         |
|  | 330 (8.2)              | 435 (10.8)                    | 540 (13.4)                    | 650 (16.1)                 | 755 (18.7)                    |
|  | 310 (7.2)              | 410 (9.6)                     | 510 (11.9)                    | 610 (14.2)                 | 710 (16.6)                    |
| Capacity, Shelled Corn, 25%-15% <sup>5,7,8</sup> wet bushels/hr (wet metric tonnes/hr) dry bushels/hr (dry metric tonnes/hr)   | up to                  | up to                         | up to                         | up to                      | up to                         |
|  | 200 (5.3)              | 260 (6.9)                     | 330 (8.7)                     | 390 (10.3)                 | 460 (12.1)                    |
|  | 175 (4.1)              | 230 (5.4)                     | 290 (6.8)                     | 345 (8.0)                  | 405 (9.4)                     |

<sup>&</sup>lt;sup>1</sup> Dryer models can be configured as heat + cool or all-heat (E300, E400, E500, E600, E700) or all-heat only (E300h, E400h, E500h, E600h, E700h).

The information contained herein is intended to assist our customers in selecting the grain drying system that they believe best meets their unique preferences and needs. The performance figures and capacities presented in this document are only estimates, based on calculated simulations, and do not constitute express or implied warranties. Many factors influence the grain drying process, including ambient temperature, relative humidity, grain variety, grain quality, grain temperature, dryer operating temperatures, dryer add-ons and accessories, and dryer condition, maintenance and operation.



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At Mathews Company, we continuously strive to improve our products. Accordingly, changes may occur that are not reflected in the specifications and capacities contained in this brochure.



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Your Authorized M-C Dealer is:





**LEARN MORE** 

Grain Sile Specialis

<sup>&</sup>lt;sup>2</sup> Add 24" (.61m) for a 24" dryer stand set or 36" (.92m) for a 36" dryer stand set.

Add 1-07(.30m) if remote cabinet is mounted to the dryer.

Operating burner capacities are based on a 150 deg F (83 deg C) temperature rise for average and 200 deg F (111 deg C) temperature rise for maximum.

Based on 220 deg F (104 deg C) heat plenum(s) temperature.

Capacities in metric tonnes/hr are based on a grain bulk density of: 749 kg/m3 (wet @ 25% moisture), 703 kg/m3 (wet @ 20% moisture), 677 kg/m3 (dry @ 17% moisture), 661 kg/m3 (dry @ 15% moisture).





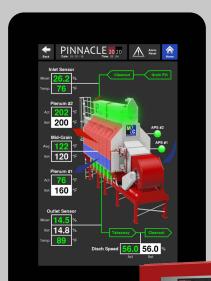
The **MISSION** of Mathews Company is to design and build innovative, high-quality equipment by way of engineering excellence and world class manufacturing. Our goal is building relationships that last with our dealers, customers, and employees.

# PINNACLE 20 20

### **CONTROL** SYSTEM

# Experience the ease of available dual touch screens with Pinnacle 20|20

- PLC-Based Dryer Control System
- Dual 10" (25.4 cm) HD Touchscreens
- Easy User Interface
- 24 VDC Control Safety Circuit



#### **Quick Glance**

- Easier to Navigate
- · Bright, Easy to See Graphics
- All Dryer Controls Are Within 2 Screen Taps

model E600 pictured above

- Built-In Backup
- Better Diagnostics

#### **High Quality, Affordably Priced**

ECO Series models are available to dry grain with your choice of heat and cool models or all-heat only models. With its 15'-3" (4.6 m) overall height, the ECO Series fits easily into those installations with height restrictions. The technologically advanced design allows for increased holding capacity and maximum airflow for the highest-quality dried grain. Efficient and affordable, this profile dryer offers a great value on a quality product.

High efficiency burner(s) featuring stainless steel construction with cast aluminum manifold results in high efficiency, low emission operation. Heat and Cool models have two burners, and All-Heat models have one burner.

**Quiet drying** with a single, centrifugal beltdriven fan reduces noise, while producing maximum airflow.

**Long lasting screens** are available in stainless steel, aluminum or galvanized and in multiple sizes for different types of grain drying.

**14" (35.6 cm) grain columns** provide maximum holding capacity.

**Full length level auger** works with a motorized grain level control bindicator, for positive, reliable grain flow into the dryer.

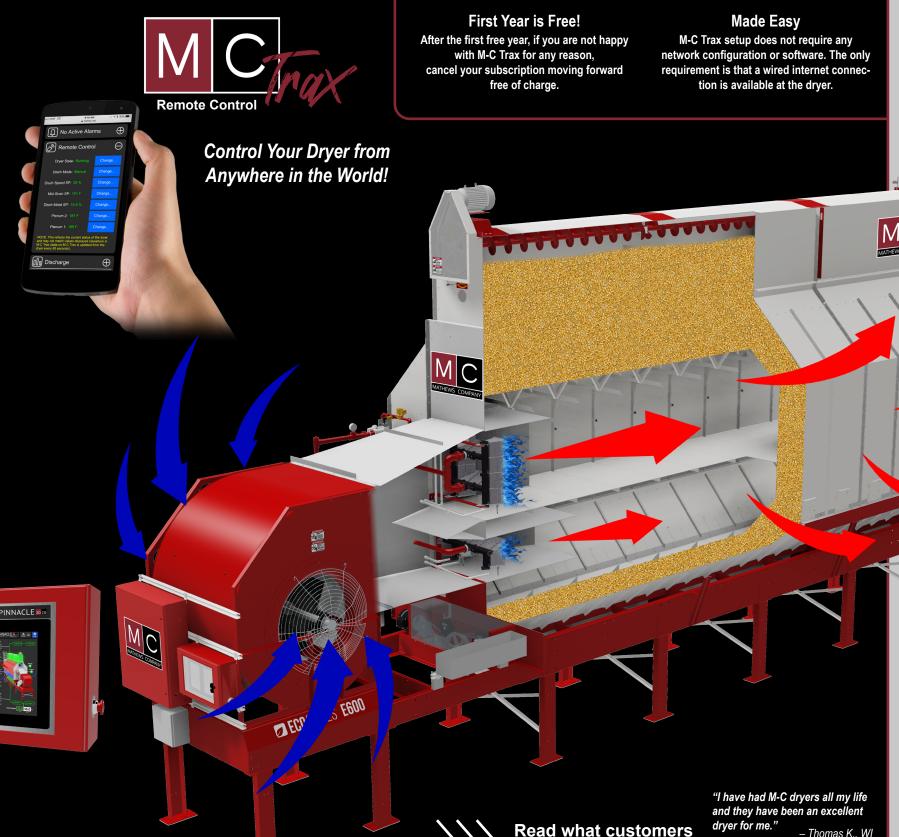
Large, enclosed wet grain hopper keeps the inside environment clean and the drying columns full, requiring fewer filling cycles.

**Quick drain ports** allow for easy, fast unloading, if necessary.

High-voltage electrical system with a NEMA rated high-voltage cabinet and main disconnect to protect motor starters, thermal overloads, and electrical components from weather and dirt.

**Pinnacle 20|20**, the standard dryer control system on all M-C dryers, features an intuitive, 10" (25.4cm) HD touchscreen for ultimate control, customization and usability.

AccuDry™ moisture-based control is an available option featuring DryerMaster™ technology which measures incoming and discharged grain moisture to control the discharge rate of the dryer, ensuring precise and uniform grain moisture.



are saying

"Delivery and installation process

- Robert V., Ontario, Canada

was very smooth and timely."