

# **SPECIFICATIONS & CAPACITIES**

MODELS	D600	D900	D1200	D1500	D1800	D2100	D2400	D3200
	D600h	D900h	D1200h	D1500h	D1800h	D2100h	D2400h	D3200h
Holding, Top + Bottom	743 + 276	1,112 + 413	1,453 + 584	1,794 + 754	2,135 + 925	2,476 + 1,095	2,817 + 1,266	3,751 + 1,685
Drying Section, bu (m³)	(26.2 + 9.7)	(39.2 + 14.6)	(51.2 + 20.6)	(63.2 + 26.6)	(75.2 + 32.6)	(87.3 + 38.6)	(99.3 + 44.6)	(132.2 + 59.4)
Additional Holding - Gravity	227 / 215	404 / 321	404 / 321	404 / 321	404 / 321	404 / 321	404 / 321	622 / 428
Fill / Level Auger, bu (m³)	(8.0 / 7.6)	(14.2 / 11.3)	(14.2 / 11.3)	(14.2 / 11.3)	(14.2 / 11.3)	(14.2 / 11.3)	(14.2 / 11.3)	(21.9 / 15.1)
Total Holding - Gravity Fill /	1,247 / 1,235	1,929 / 1,847	2,440 / 2,358	2,952 / 2,870	3,464 / 3,381	3,975 / 3,893	4,487 / 4,405	6,059 / 5,864
Level Auger, bu (m <sup>3</sup> )	(43.9 / 43.5)	(68.0 / 65.1)	(86.0 / 83.1)	(104.0 / 101.1)	(122.1 / 119.2)	(140.1 / 137.2)	(158.1 / 155.2)	(213.5 / 206.7)
Tier Length, (m)	16'-0" (4.9)	24'-0" (7.3)	24'-0" (7.3)	24'-0" (7.3)	24'-0" (7.3)	24'-0" (7.3)	24'-0" (7.3)	32'-0" (9.8)
Top Fan, HP (kW)	2 x 15 (11.2)	2 x 20 (14.9)	2 x 25 (18.6)	2 x 30 (22.4)	2 x 40 (29.8)	2 x 40 (29.8)	2 x 50 (37.3)	2 x 60 (44.7)
Bottom Fan, HP (kW)	10 (7.5)	10 (7.5)	15 (11.2)	25 (18.6)	30 (22.4)	40 (29.8)	50 (37.3)	60 (44.7)
Number of Tiers	9	9	12	15	18	21	24	24
Fill Height - Gravity Fill /	29'-10" / 27'-5"	32'-10" / 27'-5"	38'-10" / 33'-5"	44'-10" / 39'-5"	50'-10" / 45'-5"	56'-10" / 51'-5"	62'-10" / 57'-5"	65'-10" / 57'-5"
Level Auger, (m)¹	(9.1 / 8.4)	(10.0 / 8.4)	(11.8 / 10.2)	(13.7 / 12.0)	(15.5 / 13.8)	(17.3 / 15.7)	(19.2 / 17.5)	(20.1 / 17.5)
ALL-HEAT MODE	D600h	D900h	D1200h	D1500h	D1800h	D2100h	D2400h	D3200h
Avg / Max Burner Operating,	7.2 / 9.6	10.8 / 14.4	14.3 / 19.1	17.8 / 23.7	21.2 / 28.3	24.7 / 32.9	28.1 / 37.5	37.5 / 50.0
MMBTU/hr (kW thermal) <sup>2,6</sup>	(2,110 / 2,814)	(3,170 / 4,227)	(4,192 / 5,589)	(5,208 / 6,944)	(6,220 / 8,293)	(7,231 / 9,642)	(8,248 / 10,997)	(10,997 / 14,663)
Drying Capacity, Shelled Corn, 20%-15% <sup>3,4,5,6</sup> wet bu/hr (metric tonnes/hr) dry bu/hr (metric tonnes/hr)	up to 1,110 (27.5) 1,070 (25.5)	up to 1,700 (42.1) 1,640 (39.1)	up to 2,200 (54.5) 2,120 (50.6)	up to 2,690 (66.6) 2,600 (62.1)	up to 3,190 (79.0) 3,080 (73.5)	up to 3,690 (91.3) 3,560 (85.0)	up to 4,190 (103.7) 4,040 (96.4)	up to 5,630 (139.4) 5,420 (129.4)
Drying Capacity, Shelled Corn, 25%-15% <sup>3,4,5,6</sup> wet bu/hr (metric tonnes/hr) dry bu/hr (metric tonnes/hr)	up to 580 (15.3) 520 (12.4)	up to 880 (23.2) 790 (18.9)	up to 1,140 (30.1) 1,030 (24.6)	up to 1,390 (36.7) 1,260 (30.1)	up to 1,650 (43.5) 1,490 (35.6)	up to 1,900 (50.1) 1,720 (41.1)	up to 2,160 (57.0) 1,950 (46.5)	up to 2,900 (76.5) 2,620 (62.5)
HEAT + COOL MODE	D600	D900	D1200	D1500	D1800	D2100	D2400	D3200
	D600h	D900h	D1200h	D1500h	D1800h	D2100h	D2400h	D3200h
Avg / Max Burner Operating,	5.3 / 7.1	8.0 / 10.7	10.3 / 13.7	12.6 / 16.7	14.8 / 19.7	17.1 / 22.8	19.4 / 25.8	25.8 / 34.4
MMBTU/hr (kW thermal) <sup>2,6</sup>	(1,559 / 2,078)	(2,343 / 3,124)	(3,011 / 4,014)	(3,679 / 4,905)	(4,337 / 5,783)	(5,005 / 6,673)	(5,673 / 7,564)	(7,561 / 10,081)
Drying Capacity, Shelled Corn, 20%-15% <sup>3.5.6</sup> wet bu/hr (metric tonnes/hr) dry bu/hr (metric tonnes/hr)	up to 700 (17.3) 660 (15.4)	up to 1,060 (26.2) 1,000 (23.3)	up to 1,360 (33.7) 1,280 (29.8)	up to 1,660 (41.1) 1,560 (36.4)	up to 1,960 (48.5) 1,840 (42.9)	up to 2,260 (55.9) 2,120 (49.4)	up to 2,560 (63.4) 2,410 (56.2)	up to 3,430 (84.9) 3,230 (75.3)
Drying Capacity, Shelled Corn, 25%-15% <sup>3,5,6</sup> wet bu/hr (metric tonnes/hr) dry bu/hr (metric tonnes/hr)	up to 430 (11.3) 380 (8.9)	up to 660 (17.4) 580 (13.5)	up to 840 (22.2) 740 (17.2)	up to 1,020 (26.9) 900 (21.0)	up to 1,200 (31.7) 1,060 (24.7)	up to 1,390 (36.7) 1,220 (28.4)	up to 1,570 (41.4) 1,380 (32.2)	up to 2,100 (55.4) 1,860 (43.4)

<sup>1</sup> Add 24" (.61m) for a 24" dryer stand set, 36" (.92m) for a 36" dryer stand set, or 48" (1.22m) for a 48" dryer stand set.

<sup>2</sup> 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.

<sup>3</sup> Based on 240 deg F (116 deg C) plenum temperature for heat + cool operation, and 240 deg F (116 deg C) top plenum temperature / 180 deg F (82 deg C) bottom plenum temperature for all-heat operation. <sup>4</sup> Based on discharging grain from the dryer at 17.0% moisture.

<sup>5</sup> 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).
<sup>6</sup> 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.

> 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.

> > Your Authorized M-C Dealer is:



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# **GRAIN DRYER SPECIALISTS**

# DELTASERIES with SmartFlow technology MIXED-FLOW DRYERS

Model D2100h pictured above Photo courtesy of Gateway Building Systems West Fargo, North Dakota

MADE

PRODUCT



## PINNACLE 20 20 SYSTEM

200 - Alter Mart

#### **Experience the ease of** 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
- More Info Available within
- 2 Screen Touches Away
- Better Diagnostics

### SYSTEN

Want the simplest system available? M-C offers a manual control system without all the bells and whistles of Pinnacle 20|20. Ask your dealer for more information.

## SmartFlow technology. THE M-C ADVANTAGE

VS.

10

Discharge

The M-C tapered ducts evenly distribute drying air across the grain column resulting in the highest quality grain!

Competitor duct designs are straight, which may fail to dry uniformly across the grain column.



Anywhere in the World!



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(7)

A NORTH

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### **Features**

Enclosed Wet Hopper with gravity fill (level auger is available as an option) keeps the inside of the dryer clean and requires fewer filling cycles.

Pre-Heat Ducts direct airflow to the wet hopper thereby warming the grain before it enters the heat chamber leading to increased drying capacity.

External Heat Chamber ensures uniform temperature distribution, applies the highest temperatures to the wettest grain and eliminates the concern of damaged product by keeping the burner flame isolated.

SmartFlow<sup>™</sup> Technology is an M-C exclusive design which utilizes a tapered duct to evenly distribute drying air across the grain column resulting in the highest quality grain and maximum drying capacity.

High Efficiency Burner(s) with stainless steel and cast aluminum construction monitored by commerical-grade Fireye<sup>™</sup> flame controller(s).

Quiet Drying with commercial grade in-line centrifugal fans ensures reduced noise, increased efficiency, and avoids "stall" operation commonly observed with traditional centrifugal fans that operate in low pressure applications, such as a mixed-flow grain dryer.

AccuDry<sup>™</sup> 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.

10" U-Trough Unload Auger with ultra-convenient quick release door at the bottom of the dryer. A drag conveyor unload is available as an option.

Pinnacle 20|20, the standard dryer control system on all M-C dryers, features intuitive, dual 10" (25.4cm) HD touchscreens for ultimate control, customization and built-in backup.

M-C Trax, the industry-leading remote control application developed by M-C, allows operators to remain in front of their dryer at all times, from anywhere in the world!

