



 **SUPERIOR**

GRAIN DRYERS

Continuous Mixed-Flow Under Fan

SUPERIOR GRAIN DRYERS

HIGHER QUALITY GRAINS, HALF THE ENERGY

- **BIGGER** - A larger holding capacity allows for drying capabilities ranging from 690 bushels per hour to 8,300 bushels per hour.
- **BETTER AERATION** - Under-fan models provide airflow throughout the dryer to eliminate hot and cold spots for better grain quality, lower operating costs and less chance of fire.
- **STRONGER** - Superior mixed-flow dryers are all G90 galvanized to minimize rust and wear.
- **EVEN HEATING** - Grain is slowly heated over a longer period of time to reduce stress cracking, which results in higher quality grain and higher test weights.
- **EFFICIENT** - The mixed-flow design uses almost half the CFM and BTUs of conventional screen dryers, resulting in higher efficiency with increased test weights.

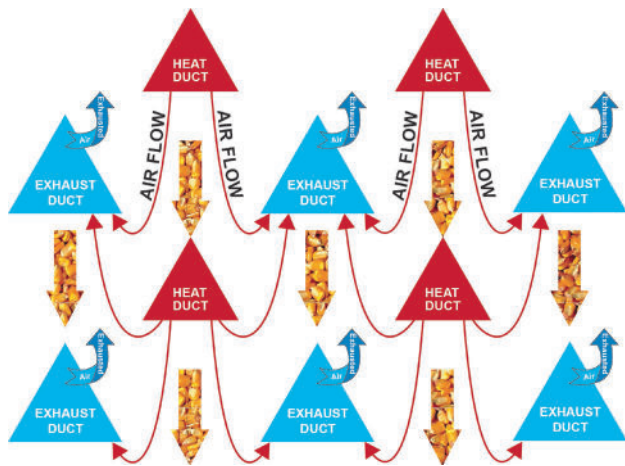


The quality of your grain should reflect the hard work you put into it.



MIXED-FLOW DESIGN

- Conditions grain from all sides and keep all seeds the same temperature throughout the drying process.
- Retains grain longer while maintaining a high rate of bushels per hour output.



EASY OPERATION, TOTAL CONTROL

- The **Dryer Master (DM510)** comes standard with all dryers and provides more detailed drying information as well as automated control. It electronically monitors any aspect of the dryer or drying process.

LOW COST, HIGH EFFICIENCY

- The Schedule 80 **internal vaporizer** is the safest and most efficient in the industry. Its two-inch line vaporizes the propane over more surface area.
- **Fuel-Efficient Maxon Burner** requires less than a pound of propane to produce one million BTUs per linear foot, keeping your energy costs low.
- **Two Vapor Regulators** ensure correct burner pressure. A double-valve body between the primary and secondary regulators provide step-down pressure and ensures that propane enters the burner at the correct pressure.

EASY IN, EASY OUT

- **Gravity Fill** is standard on 16'-32' dryer models. With no motor or moving parts, it's an efficient, low-maintenance filling solution.
- **Leveling Drag** is a low-profile filling option if height is a restriction.
- **2-to-1 Transition** is standard on all dryers. Two drag chain conveyors carry conditioned grain from the bottom of the dryer toward the unloading point.
- **Cross-Drag Conveyor** is available in multiple length sections. It connects to the dryer's two drag chain conveyors and carries conditioned grain away from the dryer for storage or transportation.
- **Platforms** include a 33-inch-wide catwalk covering both sides of the top. The end platforms are 30 inches deep and run the full 8-foot width of the dryer. Optional side platforms are 33 inches wide and extend the length of the dryer.



LOW MAINTENANCE, EASY EXPANSION

- **Single-Phase Power** or **Three-Phase Power** options to fit any farm situation. Capabilities ranging from 690 to 8,300 bushels per hour, they can fit small family farms to large commercial elevators.
- **Easy Expansion** allows your dryer to grow with your operation. Models start at 10 tiers and can be easily expanded onsite by adding additional (up to 26) tiers.
- **Drop-Door Cleanouts** flip the handle on the over-center cam locks, and makes cleaning with an air hose easy. Everything can be blown out from top to bottom. The door also acts as an emergency cleanout.
- **Control Panel Temperature Regulator** includes a heater and cooling fan to regulate the temperature and protects the unit from overheating or moisture buildup that could damage the control panel's components.
- **Panel Circuit Transformer** protects against power surges and feedback.

QUALITY PROCESS, QUALITY GRAIN

- **True Burner Transition** mixes air properly to help eliminate hot or cold spots.
- **Corner Venting** is the largest in the industry, preventing hot spots from forming in the dryer's corners.
- **Drag Chain Conveyors** have durable, ultra-high-molecular-weight polyethylene paddles that are gentler on recently conditioned grain.

SAFE DRYING, SAFE OPERATION

- **Flame Rod** converts energy from the flame into an electrical signal, eliminating false positive readings and providing more accurate flame sensing.
- **Liquid Gas Float Switch** forces all liquid propane to vaporize before being released to the vapor train, resulting in better fuel efficiency and better performance.
- **True Piloted Gas Train** automatically shuts off after the burner is lit and won't reignite if the main flame goes out preventing gas from filling the dryer.

"Our Superior mixed-flow grain dryer has already saved us over \$30,000 so far this year... drying high-moisture corn, soybeans, wheat and barley with great results!"

- Evan Montgomery (Thompson, ND)

SUPERIOR MIXED-FLOW GRAIN DRYER SPECIFICATIONS

| Superior Dryer Model | BPH 5 Pt. | BPH 10 Pt. | Motor Size Std | Motor Size Spclty. | No. of Fans | Total Fan HP Std. | Total Fan HP Spclty. | BU Total Holding | Leveling Drag Ht. (ft.) | Gravity Fill Ht. (ft.) |
|----------------------|-----------|------------|----------------|--------------------|-------------|-------------------|----------------------|------------------|-------------------------|------------------------|
| 1610 | 1063 | 691 | 10 | 15 | 4 | 40 | 60 | 1361 | 35 | 36 |
| 1611 | 1170 | 761 | 10 | 15 | 4 | 40 | 60 | 1468 | 37 | 38 |
| 1612 | 1276 | 829 | 10 | 15 | 4 | 40 | 60 | 1574 | 39 | 40 |
| 1613 | 1383 | 899 | 10 | 15 | 4 | 40 | 60 | 1681 | 41 | 42 |
| 1614 | 1489 | 968 | 10 | 15 | 4 | 40 | 60 | 1787 | 43 | 44 |
| 1615 | 1595 | 1037 | 15 | 20 | 4 | 60 | 80 | 1893 | 45 | 46 |
| 1616 | 1702 | 1106 | 15 | 20 | 4 | 60 | 80 | 2000 | 47 | 48 |
| 1617 | 1808 | 1175 | 15 | 20 | 4 | 60 | 80 | 2106 | 49 | 50 |
| 1618 | 1914 | 1244 | 15 | 20 | 4 | 60 | 80 | 2212 | 51 | 52 |
| 1619 | 2021 | 1314 | 20 | 30 | 4 | 80 | 120 | 2319 | 53 | 54 |
| 1620 | 2127 | 1383 | 20 | 30 | 4 | 80 | 120 | 2425 | 55 | 56 |
| 1621 | 2233 | 1451 | 20 | 30 | 4 | 80 | 120 | 2531 | 57 | 58 |
| 1622 | 2340 | 1521 | 20 | 30 | 4 | 80 | 120 | 2638 | 59 | 60 |
| 1623 | 2446 | 1590 | 30 | 30 | 4 | 120 | 120 | 2744 | 61 | 62 |
| 1624 | 2552 | 1659 | 30 | 30 | 4 | 120 | 120 | 2850 | 63 | 64 |
| 1625 | 2659 | 1728 | 30 | 30 | 4 | 120 | 120 | 2957 | 65 | 66 |
| 1626 | 2765 | 1797 | 30 | 30 | 4 | 120 | 120 | 3063 | 67 | 68 |
| 2400 Series | | | | | | | | | | |
| 2410 | 1595 | 1037 | 10 | 15 | 6 | 60 | 90 | 2042 | 35 | 39 |
| 2411 | 1755 | 1141 | 10 | 15 | 6 | 60 | 90 | 2202 | 37 | 41 |
| 2412 | 1914 | 1244 | 10 | 15 | 6 | 60 | 90 | 2361 | 39 | 43 |
| 2413 | 2074 | 1348 | 10 | 15 | 6 | 60 | 90 | 2521 | 41 | 45 |
| 2414 | 2233 | 1451 | 10 | 15 | 6 | 60 | 90 | 2680 | 43 | 47 |
| 2415 | 2393 | 1555 | 15 | 20 | 6 | 90 | 120 | 2840 | 45 | 49 |
| 2416 | 2552 | 1659 | 15 | 20 | 6 | 90 | 120 | 2999 | 47 | 51 |
| 2417 | 2712 | 1763 | 15 | 20 | 6 | 90 | 120 | 3159 | 49 | 53 |
| 2418 | 2871 | 1866 | 15 | 20 | 6 | 90 | 120 | 3318 | 51 | 55 |
| 2419 | 3031 | 1970 | 20 | 30 | 6 | 120 | 180 | 3478 | 53 | 57 |
| 2420 | 3190 | 2074 | 20 | 30 | 6 | 120 | 180 | 3637 | 55 | 59 |
| 2421 | 3350 | 2178 | 20 | 30 | 6 | 120 | 180 | 3797 | 57 | 61 |
| 2422 | 3509 | 2281 | 20 | 30 | 6 | 120 | 180 | 3956 | 59 | 63 |
| 2423 | 3669 | 2385 | 30 | 30 | 6 | 180 | 180 | 4116 | 61 | 65 |
| 2424 | 3829 | 2489 | 30 | 30 | 6 | 180 | 180 | 4276 | 63 | 67 |
| 2425 | 3988 | 2592 | 30 | 30 | 6 | 180 | 180 | 4435 | 65 | 69 |
| 2426 | 4148 | 2696 | 30 | 30 | 6 | 180 | 180 | 4595 | 67 | 71 |

* Total Height Under Fan Dryer Includes 6.5ft Stand. Dryer Width: 8ft 2in (all models)

** 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.

Drying clean corn (average test weight of 54lbs per bu.) from 20% to 15% at 200 deg. F, with 60 deg. F ambient air temperature and 50% relative humidity.

PLEASE NOTE: This information is intended to assist customers in selecting the Superior grain drying system based on their individual 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.

SUPERIOR MIXED-FLOW GRAIN DRYER SPECIFICATIONS

| Superior Dryer Model | BPH 5 Pt. | BPH 10 Pt. | Motor Size Std | Motor Size Spclty. | No. of Fans | Total Fan HP Std. | Total Fan HP Spclty. | BU Total Holding | Leveling Drag Ht. (ft.) | Gravity Fill Ht. (ft.) |
|----------------------|-----------|------------|----------------|--------------------|-------------|-------------------|----------------------|------------------|-------------------------|------------------------|
| 3212 | 2552 | 1659 | 10 | 15 | 8 | 80 | 120 | 3148 | 39 | 45 |
| 3213 | 2765 | 1797 | 10 | 15 | 8 | 80 | 120 | 3361 | 41 | 47 |
| 3214 | 2978 | 1936 | 10 | 15 | 8 | 80 | 120 | 3574 | 43 | 49 |
| 3215 | 3190 | 2074 | 15 | 20 | 8 | 120 | 160 | 3786 | 45 | 51 |
| 3216 | 3403 | 2212 | 15 | 20 | 8 | 120 | 160 | 3999 | 47 | 53 |
| 3217 | 3616 | 2350 | 15 | 20 | 8 | 120 | 160 | 4212 | 49 | 55 |
| 3218 | 3829 | 2489 | 15 | 20 | 8 | 120 | 160 | 4425 | 51 | 57 |
| 3219 | 4041 | 2627 | 20 | 30 | 8 | 160 | 240 | 4637 | 53 | 59 |
| 3220 | 4254 | 2765 | 20 | 30 | 8 | 160 | 240 | 4850 | 55 | 61 |
| 3221 | 4467 | 2904 | 20 | 30 | 8 | 160 | 240 | 5063 | 57 | 63 |
| 3222 | 4679 | 3041 | 20 | 30 | 8 | 160 | 240 | 5275 | 59 | 65 |
| 3223 | 4892 | 3180 | 30 | 30 | 8 | 240 | 240 | 5488 | 61 | 67 |
| 3224 | 5105 | 3318 | 30 | 30 | 8 | 240 | 240 | 5701 | 63 | 69 |
| 3225 | 5317 | 3456 | 30 | 30 | 8 | 240 | 240 | 5913 | 65 | 71 |
| 3226 | 5530 | 3595 | 30 | 30 | 8 | 240 | 240 | 6126 | 67 | 73 |
| 4000 Series | | | | | | | | | | |
| 4016 | 4254 | 2765 | 15 | 20 | 10 | 150 | 200 | 4999 | 47 | N/A |
| 4017 | 4520 | 2938 | 15 | 20 | 10 | 150 | 200 | 5265 | 49 | N/A |
| 4018 | 4786 | 3111 | 15 | 20 | 10 | 150 | 200 | 5531 | 51 | N/A |
| 4019 | 5052 | 3284 | 20 | 30 | 10 | 200 | 300 | 5797 | 53 | N/A |
| 4020 | 5317 | 3456 | 20 | 30 | 10 | 200 | 300 | 6062 | 55 | N/A |
| 4021 | 5583 | 3629 | 20 | 30 | 10 | 200 | 300 | 6328 | 57 | N/A |
| 4022 | 5849 | 3802 | 20 | 30 | 10 | 200 | 300 | 6594 | 59 | N/A |
| 4023 | 6115 | 3975 | 30 | 30 | 10 | 300 | 300 | 6860 | 61 | N/A |
| 4024 | 6381 | 4148 | 30 | 30 | 10 | 300 | 300 | 7126 | 63 | N/A |
| 4025 | 6647 | 4321 | 30 | 30 | 10 | 300 | 300 | 7392 | 65 | N/A |
| 4026 | 6913 | 4493 | 30 | 30 | 10 | 300 | 300 | 7658 | 67 | N/A |
| 4800 Series | | | | | | | | | | |
| 4816 | 5105 | 3318 | 15 | 20 | 12 | 180 | 240 | 5999 | 47 | N/A |
| 4817 | 5424 | 3526 | 15 | 20 | 12 | 180 | 240 | 6318 | 49 | N/A |
| 4818 | 5743 | 3733 | 15 | 20 | 12 | 180 | 240 | 6637 | 51 | N/A |
| 4819 | 6062 | 3940 | 20 | 30 | 12 | 240 | 360 | 6956 | 53 | N/A |
| 4820 | 6381 | 4148 | 20 | 30 | 12 | 240 | 360 | 7275 | 55 | N/A |
| 4821 | 6700 | 4355 | 20 | 30 | 12 | 240 | 360 | 7594 | 57 | N/A |
| 4822 | 7019 | 4562 | 20 | 30 | 12 | 240 | 360 | 7913 | 59 | N/A |
| 4823 | 7338 | 4770 | 30 | 30 | 12 | 360 | 360 | 8232 | 61 | N/A |
| 4824 | 7657 | 4977 | 30 | 30 | 12 | 360 | 360 | 8551 | 63 | N/A |
| 4825 | 7976 | 5184 | 30 | 30 | 12 | 360 | 360 | 8870 | 65 | N/A |
| 4826 | 8295 | 5392 | 30 | 30 | 12 | 360 | 360 | 9189 | 67 | N/A |