



SQ SERIES DRYERS

**SUPERB**

**ENERGY MISER**

# SQ



SM

**FULL HEAT CONTINUOUS FLOW DRYERS**

**FULL HEAT CONTINUOUS FLOW DRYERS USING TWO TEMPERATURE ZONES**

**SQ D Series**  
Full Heat – Single Zone



**SQ M Series**  
Modified Full Heat – Single Zone or Two-Zone  
Pressure Heat / Pressure Cool



**SQ E Series**  
Modified Full Heat – Single Zone or Two-Zone  
Pressure Heat / Pressure Cool  
Pressure Heat / Vacuum Cool



**SQ A Series**  
Modified Full Heat – Single Zone or Two-Zone  
Pressure Heat / Pressure Cool  
Pressure Heat / Vacuum Cool  
Hot Air Return Ducts



**CONTINUOUS FLOW DRYERS WITH LOUVERS**

**CONTINUOUS FLOW DRYERS WITH LOUVERS AND HOT AIR RETURN DUCTS**



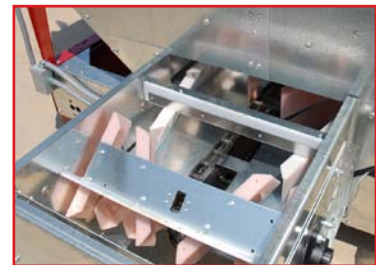
# EVENFLO® UNLOADING SYSTEM

## Unique EVENFLO® Unloading System Is Part of Brock's Difference by Design

- Gentle handling of the grain using the EVENFLO® System's efficient, slow-moving drag-style conveyor.
- Patented conveyor unloading system replaces auger and metering rolls.
- Even unloading of grain columns with improved ability to pass most debris.
- More durable and safer to operate than auger systems.



Take-up adjustments are located at both ends of the conveyor. This feature helps you to easily adjust the chain if needed.

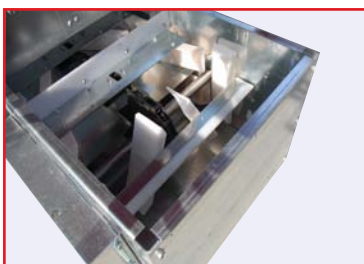


## How Does the Brock EVENFLO® Dryer Unloading System Work?



- The top portion of the chain conveyor passes by the column of dried grain, continuously removing grain from the column.
- Grain is then carried to square holes allowing the grain to fall through to the bottom trough.
- Paddles on the conveyor move the dried grain to the dryer discharge.

The EVENFLO® System's uniform unloading of grain dryer columns provides consistent drying results. Slow, straight-line movement of grain is also ideal for sensor accuracy in monitoring exit moisture content.



Clean up between crops or at the end of the drying season is easy:

- The top cover of the conveyor assembly can be removed for safer, easier cleaning.
- No meter rolls to clean.

Low horsepower, variable-speed AC motor is used to economically power the EVENFLO System.



**SUPERB**

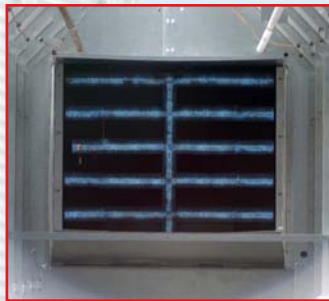
**ENERGY MISER®**

**FEATURES FOR MEETING YOUR**



### **Stainless Steel Outer Skins**

Stainless steel outer 18-gauge perforated skins are standard on all SUPERB ENERGY MISER® SQ Series Dryers for a lifetime of satisfaction. With proper care and maintenance, stainless steel perforated skins offer long life and high asset retention value.



### **Efficient Full Flame-Wall Burner**

Brock's full flame-wall burner with stainless steel baffles provides a generous square footage of flame surface and distributes heat evenly to all the grain columns. Using a shorter flame, this fuel-efficient Brock burner burns cleanly and provides uniform plenum temperatures to help maintain top grain quality.



### **Unobstructed Heat Movement**

The SQ Series Dryer's unique built-in vaporizer is located out of the burner's airflow to ensure uniform heat distribution.

### **Moisture Equalizers**

Patented Brock MOISTURE EQUALIZER® System maintains grain quality by moving the hottest and driest grain through the dryer faster for greater drying uniformity and less over-drying.



### **Vertical Access Plenum Door**

A 42- x 22-inch (107- x 56-cm) vertical access door is provided for easy access to the dryer's plenum areas. A door safety switch is standard on all SUPERB ENERGY MISER Low-Profile Dryers. If the door is opened during operation, the dryer will shut down.



### **Perforated Wet Garner Bin**

The drying process starts in the perforated wet garner bin. Heated air is routed from the dryer through this temporary grain holding area to pre-heat and begin drying the wet grain.





## Variable Width Grain Column

A narrower upper grain column allows moisture-saturated drying air to escape. This variable width design dries more effectively than a larger holding capacity with a wider grain column.



## Super Quiet Drying

The SQ Series Dryers use a super quiet double-width, double-inlet centrifugal blower as standard equipment. This blower provides maximum airflow and efficiency while minimizing sound levels.



## Cool Air Control

Adjustable cooling louvers help control grain temperature by regulating the amount of cool air used for vacuum-cooling mode.



## Easy Access for Service

Access entrances at both the top and bottom of the dryer make it easy to service industrial-grade plumbing, burner, fan, motor, bearings, belts, linear limits, and the front of the unloading system.



Upper Service Access Area



Lower Service Access Area





**DRYER SPECIFICATIONS**

MODEL	SQ8	SQ12	SQ16	SQ20	SQ24	SQ28	SQ32	SQ36	SQ40
<b>Total Fan HP</b>	10	10	15	20	25	30	40	50	50
<b>Auger Load HP</b>	2	3	3	5	5	7.5	7.5	10	10
<b>Chain Unload HP</b>	2	2	2	2	2	2	2	2	2
<b>Column Length</b>	8' 2"	12' 3"	16' 4"	20' 5"	24' 6"	28' 7"	32' 8"	36' 9"	40' 10"
<b>Overall Length</b>	19'	23' 1"	27' 2"	31' 3"	36' 4"	40' 5"	44' 6"	48' 7"	52' 8"
<b>Overall Height</b>	14' 2"	14' 2"	14' 2"	14' 2"	14' 2"	14' 2"	14' 2"	14' 2"	14' 2"
<b>Bushels Held</b>	163	245	326	408	490	572	654	734	815
<b>SQ-A/E DRYERS</b>									
<b>Overall Width (SQ-A Dryers)</b>	NA	NA	10' 2"	10' 2"	10' 2"	10' 2"	10' 2"	10' 2"	10' 2"
<b>Overall Width (SQ-E Dryers)</b>	NA	NA	7' 9"	7' 9"	7' 9"	7' 9"	7' 9"	7' 9"	7' 9"
<b>Burner Rating* (SQ-A, E Dryers)</b>	NA	NA	4.3	6.6	7.5	7.9	9.5	12.6	13.4
<b>SQ-D/M DRYERS</b>									
<b>Overall Width (SQ-D, M Dryers)</b>	7' 4"	7' 4"	7' 4"	7' 4"	7' 4"	7' 4"	7' 4"	7' 4"	7' 4"
<b>Burner Rating* (SQ-D, M Dryers)</b>	4.4	4.8	6.3	8.5	10.9	11.9	14.4	15.9	16.5

SUPERB ENERGY MISER® SQ Series Dryers use the following model descriptions:

- A – Continuous flow dryer with louvers and hot air return duct and capable of full heat, pressure heat/pressure cool drying or pressure heat/vacuum cool drying.
- E – Continuous flow dryer with louvers and capable of full heat drying, pressure heat/pressure cool drying or pressure heat/vacuum cool drying.
- D – Continuous flow dryer capable of full heat drying.
- M – Continuous flow dryer using two temperature zones and capable of either full heat or pressure heat/pressure cool drying.

\*Maximum burner capacity in million BTUs/hour

**DRYING CAPACITY – WET BUSHELS PER HOUR**

DRYER MODELS	SQ8	SQ12	SQ16	SQ20	SQ24	SQ28	SQ32	SQ36	SQ40
<b>Full Heat - Single Zone (Model D)</b>									
Corn 25.5% to 15.5%	248	351	466	591	740	830	969	1066	1153
<b>Full Heat - Single Zone (Model D)</b>									
Corn 20.5% to 15.5%	405	579	770	976	1211	1371	1601	1761	1905
<b>Modified Full Heat - Single Zone (Models M,E,A) (doors in divider floor)</b>									
Corn 25.5% to 15.5%	N/A	N/A	447	567	710	796	930	1023	1107
<b>Modified Full Heat - Single Zone (Models M,E,A) (doors in divider floor)</b>									
Corn 20.5% to 15.5%	N/A	N/A	740	937	1163	1316	1537	1691	1830
<b>Pressure Heat - Two-Zone (Model M)</b>									
Corn 25.5% to 15.5%	N/A	N/A	422	535	670	751	877	965	1044
<b>Pressure Heat - Two-Zone (Model M)</b>									
Corn 20.5% to 15.5%	N/A	N/A	687	871	1091	1223	1428	1571	1700
<b>Pressure Heat &amp; Cool - Two-Zone (Models M,E,A)</b>									
Corn 25.5% to 15.5%	N/A	N/A	261	332	416	467	542	600	647
<b>Pressure Heat &amp; Cool - Two-Zone (Models M,E,A)</b>									
Corn 20.5% to 15.5%	N/A	N/A	401	508	637	714	833	916	991
<b>Pressure Heat &amp; Vacuum Cool - Two-Zone (Models E,A)</b>									
Corn 25.5% to 15.5%	N/A	N/A	294	366	454	519	595	673	740
<b>Pressure Heat &amp; Vacuum Cool - Two-Zone (Models E,A)</b>									
Corn 20.5% to 15.5%	N/A	N/A	435	541	654	758	879	983	1077
<b>Pressure Heat &amp; Vacuum Cool - Two-Zone w/ Hot Air Return Ducts (Model A)</b>									
Corn 25.5% to 20.5%	N/A	N/A	288	358	419	499	580	657	724
<b>Pressure Heat &amp; Vacuum Cool - Two-Zone w/ Hot Air Return Ducts (Model A)</b>									
Corn 20.5% to 15.5%	N/A	N/A	435	541	654	758	879	983	1077

DRYING MODES OF SQ DRYER MODELS	Models of SQ Dryers			
Mode Description	D	M	E	A
Full Heat - Single Zone	X	*1	*1	*1
Modified Full Heat - Single Zone		X	X	X
Pressure Heat - Two-Zone		X	X	X
Pressure Heat & Cool - Two-Zone		X	X	X
Pressure Heat & Vacuum Cool - Two-Zone			X	X
Pressure Heat & Vacuum Cool - Two-Zone w/ Hot Air Return Ducts				X
Automatic Batch - Dry & Cool or Automatic Batch-Full Heat	X	X	X	X

\*1 - Full Heat Single Zone by removing the plenum floor and hot air return ducts. With Full Heat Drying, final moisture shown is after cooling has taken place in the bin. Discharge moisture of the grain from the dryer will be determined by the grain's temperature, steep time in the cooling bin and the CFM / Bushel of the cooling bin.

Drying capacities are the result of a combination of field tests and averages of customer-reported capacities. These capacities should be attainable in one pass with mature, unfrozen, clean grain (maximum of 2% fines) when operating the dryer at the recommended drying temperature. Drying capacities will vary depending upon weather conditions, hybrid variety, grain maturity and cleanliness of the grain.

Capacities for two-zone full heat drying will vary based on plenum temperatures in each zone plus air flow settings and desired exit grain temperatures. Rated capacities for two-zone full heat drying are based on a maximum of 150° F. exit grain temperature from the dryer.

Operation data reports are available from the factory with projections on fuel costs and drying capacities.

# ADVANCED ELECTRONIC GRAIN DRYING CONTROLS



## QUANTUM® Controller A Proven Record Of Reliability

Brock's advanced QUANTUM® Dryer Controller option offers total dryer management through a moisture-based controller popular for farm and commercial use:

- Easy to setup and use to provide accuracy for controlling moisture during the grain drying process.
- Includes a patented “moving moisture target” feature for full-heat drying. In this control mode:
  - Control the final moisture of the grain reaching the bin and manage the grain’s moisture content as it moves through the dryer.
  - Monitor moisture level fluctuations in incoming and out-going grain as well as outgoing grain temperature changes.
- Regulate the discharge speed of grain to match unloading system capacity.
- Prevent over-drying by automatically reducing plenum heat if the unloading rate limit is exceeded.
- Easy 24/7 remote connectivity using a Web browser and a personal computer, smartphone or tablet to monitor your dryer.



Web-based Monitoring Ability



## SPECTRUM® Controller

Brock's SPECTRUM® Dryer Controller is a temperature-based controller and is the standard dryer controller for Brock's SQ Dryer Series. It is mounted in a lighted, industrial-grade control panel that is weather- and dust-proof and has dual doors.

The SPECTRUM® Controller is also easily upgradable to convert it to the more full-featured QUANTUM® Dryer Controller.

## BROCK'S SOLUTIONS FOR ON-FARM GRAIN STORAGE, HANDLING, CONDITIONING & DRYING



Grain Storage Bins



HARVEST-TIME® Unloading System



TRI-CORR® Drying Floor System



Bin Aeration Fans



### BROCK GRAIN SYSTEMS

A Global Division of CTB, Inc.  
 Frankfort, IN • Milford, IN • Kansas City, MO  
 Phone: 800.541.7900 or +1.574.658.4191  
 Internet: [www.GrainDryers.com](http://www.GrainDryers.com)  
 E-mail: [Dryers@GrainDryers.com](mailto:Dryers@GrainDryers.com)