

# Sukup Grain Dryers



- QuadraTouch Pro™ Controls
- Accurate Moisture Sensing
- Exclusive Quad Metering Rolls

- Exclusive Grain Cross-Over™ System on Stacked Dryers

Sukup Manufacturing Co. doesn't just talk about innovative ideas to help you dry grain more efficiently, we actually deliver. Sukup holds more than 80 patents and 13 AE50 Awards - more than any other grain dryer manufacturer. Sukup Grain Dryers alone have earned five AE50 Awards; Quad Metering Roll System, Grain Cross-Over™ System, QuadraTouch™ Controls, single phase dryers, and modular tower dryers. All five innovations have lead to more efficient grain drying.

AE50 Awards are presented by the American Society of Agricultural and Biological Engineers for outstanding engineering innovations in agriculture. To be chosen for an AE50 Award, products must be truly new innovations that are expected to save producers time, costs and labor. Since our products are designed to make grain drying more efficient and provide the best value, Sukup is very honored to have received 13 AE50 Awards. It's proof that we're succeeding at our mission.



# Leading Through Innovation

### Traditional Dryers

- All grain moves down the column at the same speed, resulting in over-dried grain next to the inner wall.
- Metering roll speed varies depending upon an averaging of kernel temperatures.

- One metering roll per side.

- Hotter, drier grain next to the inner wall moves down the column faster due to the Quad (4) Metering Rolls.
- Metering roll speed varies depending upon the actual moisture content of the discharged grain.

- Two metering rolls per side.

U.S. Patent #5,992,044

## Quad Metering Rolls



### Speed & Quality

The patented Quad Metering Roll System, standard on all Sukup Portable Grain Dryers, has taken grain drying to the next level. You no longer have to sacrifice grain quality for speed. The Sukup Grain Dryer with Quad Metering Rolls gives you both.

### Traditional Dryers Stress Grain

In traditional dryers (with one metering roll per side) the inner layers are over-dried and the outer layers are under-dried, so blending must occur. It also means the kernels on the inside are much hotter, which can result in stress cracks and lower quality grain. There's only one dryer that can reduce moisture variation and maintain grain quality without blocking airflow or creating spots for debris to accumulate. That dryer is the Sukup Dryer with Quad Metering Rolls.

### Sukup Quad Metering Rolls Minimize Kernel Damage

By using two metering rolls in each dryer column, Sukup is able to pull the grain down the columns at different speeds. Sukup's Quad Metering Rolls pull the inner, hotter layer of grain down the column faster than the outer, cooler layer. The process produces more even moisture content of the dried grain, minimizes damage and maintains higher test weights and overall quality.





# Easy, Efficient, Accurate Control

## Simple, Menu-Driven System - QuadraTouch Pro™

The *QuadraTouch Pro™* control system featured on all Sukup Dryers was designed to be easy to use.

- Simple menus guide you through dryer functions for easy start-up and operation.
- Operator inputs are easy with a pop-up keypad for entering drying temps or discharge moisture set-points.
- PLC-based system is built to withstand harsh environments and has superior electrical noise protection, eliminating nuisance trips and providing a dependable system.



## Optional Remote Monitoring

Sukup offers two options for remote monitoring of your Sukup Dryer.

The **GSM Phone Modem** works with *QuadraTouch Pro™* controls and operates through GSM cell phone service. If the dryer shuts down, the GSM service sends a text message to a predetermined cell phone number, noting what the fault was. You can also text message the dryer and it will reply with current status, moisture, unload speed and temperature. Desired moisture content, plenum temperature and manual unload speed can also be adjusted from your cell phone.

**Remote Monitoring Software** can be installed on a PC or laptop to allow you to view the *QuadraTouch Pro™* control panel on the computer. Through the software, you can monitor dryer activity and adjust dryer controls and settings. As a safety precaution, the software does not allow you to start the dryer remotely.

*The GSM Phone Modem allows you to get status updates via text messages sent to your cell phone.*



## Unmatched Performance

Sukup Dryers' *QuadraTouch Pro™* controls were designed to eliminate around-the-clock monitoring and increase productivity and efficiency.

- Advanced algorithms used in the programming increase dryer efficiency, reduce large swings in temperature and discharge moisture, and help the dryer run more efficiently.
- The metering rolls are run by a highly reliable variable frequency drive and an AC motor, making for infinitely variable speed.



## Automatic Moisture Control is Standard

Sukup was the first company to make true moisture sensing standard on its dryers. Sampling the grain moisture, rather than temperature, gives a more accurate measure of drying progress and results in more consistent final moisture content. (For economical, temperature-based drying, ask about our Streamline Dryer.)

- Moisture content information is collected from the sensor located in the discharge tube.
- Critical adjustments are made to the metering roll speeds to maintain your desired discharge moisture content.
- As an option, you can add a Moisture Sensor Jump Auger Kit, which allows you to mount the moisture sensor vertically.



## Continuous Flow or Batch Mode

While most operators use continuous flow, there are a few who prefer to run in batch mode. For those people, Sukup has incorporated an AutoBatch™ program into the controls. The AutoBatch™ program allows you to perform heat/cool operations with a single fan unit. This can be beneficial when dried grain is being transferred to a bin without a full floor.

# Convenience, Safety, Performance

## Back-Up Control System

- Standard on all Sukup Grain Dryers.
- Allows manual control of all dryer functions with simple toggle switches.
- Back-up control system is completely independent of the *QuadraTouch Pro*™ controls and PLC.
- Sukup was the first to offer a truly independent back-up system.



## Easy Access

- Large 4' interior doors allow quick and easy access to the unload auger.
- Slide-out doors on each column allow easy, convenient access to the upper metering rolls.
- Large door at back of dryer allows easy clean-out of the plenum.



## Sukup Fans - Proven Performance

Whether you choose a Sukup Axial Dryer or a Sukup Centrifugal Dryer, you can be confident in the quality and performance of the fan and heater at the heart of the dryer.

Proven 1750 RPM\* Sukup Fans and Heaters supply the air and heat needed to make Sukup Dryers effective. Sukup fans and heaters are well-known for their high airflow, efficient operation and excellent quality.

\*T283 uses a 3450 RPM fan on the lower plenum.

## How do you know which Sukup Dryer is for you - Axial or Centrifugal?

The chart at right shows the difference in airflow at different levels of static pressure among different fan types. Vacuum cooling increases static pressure, so centrifugal fans are the practical solution for that application. Centrifugal fans are also quieter than axials, so if you have neighbors close by, a Centrifugal Dryer may be the way to go.



## Power Distribution Box

- The power distribution box is galvanized and sealed.
- All electrical components are protected against transient voltage, spikes and surges.
- A main disconnect is standard for safe installation and service of the unit.
- A large safety stop button on the outside of the control box allows for immediate shut-down in emergency situations.

## Safety

Sukup Grain Dryers are equipped with many safety features. Redundancies in the system ensure that no faults are left unchecked.

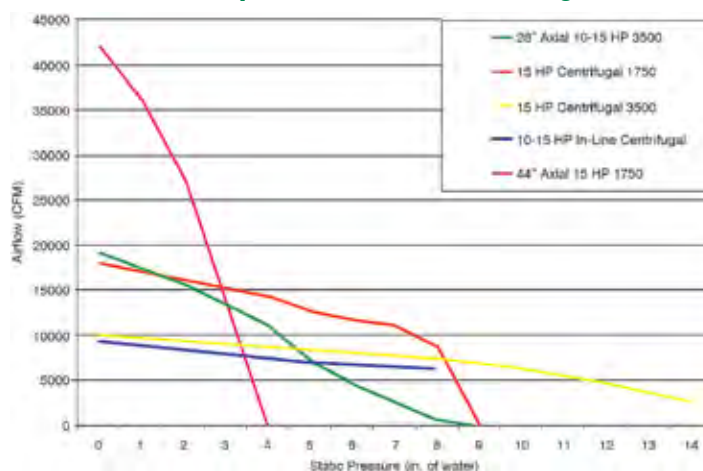
- Advanced self-diagnostic check.
- Interlock switches prevent the dryer from operating if doors are open.
- Grain column and plenum high temp warnings.
- Air switch shuts the dryer down if no grain is present.
- Housing high limit prevents the heater from running if the fan shuts down.
- Motor overloads.
- Flame sensing shuts down the flow of gas to the burner if no flame is present.



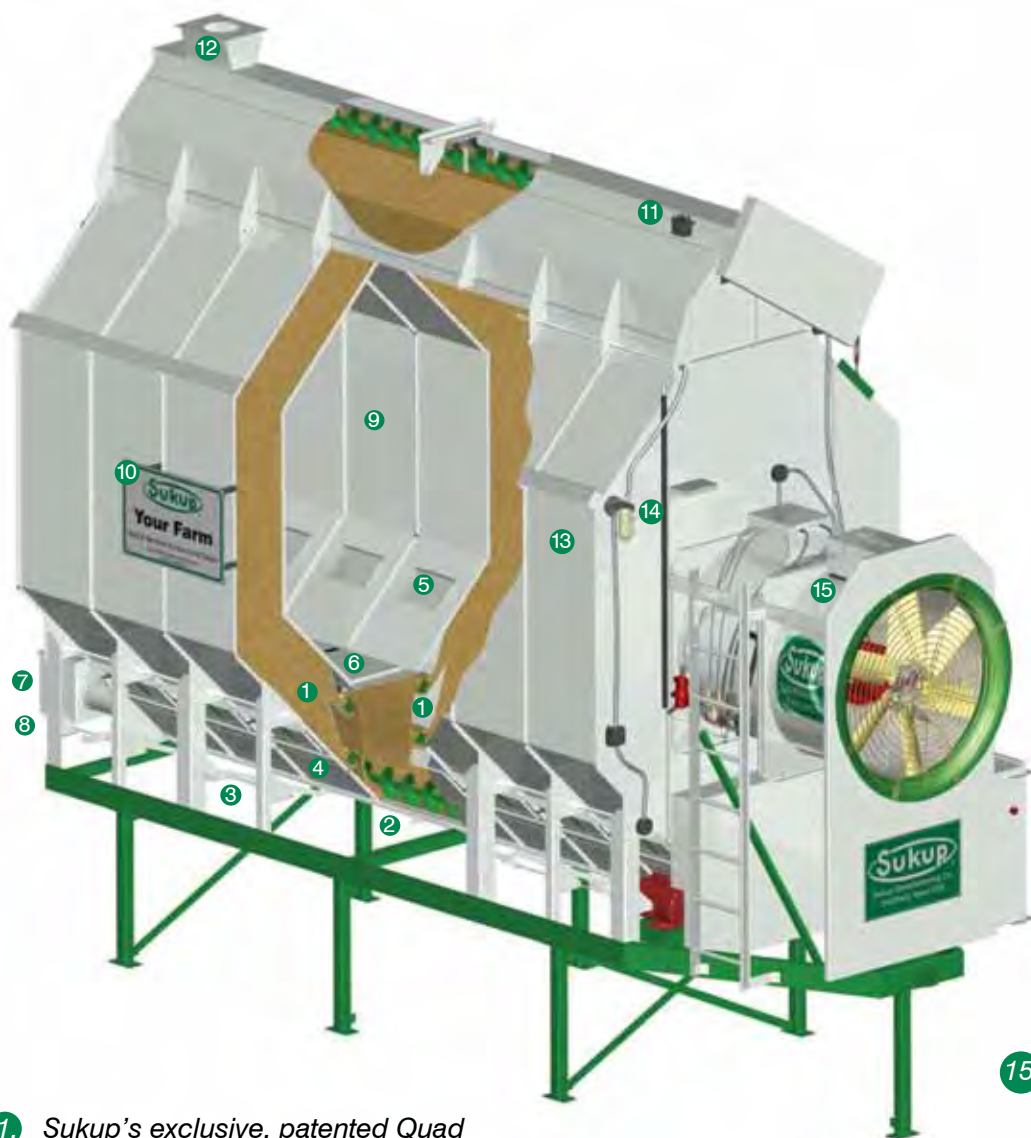
## Sukup Heaters - Efficient, Even Heat

- Exclusive two-way adjustable vaporizers on Sukup heaters allow operation over a wider range of outside temperatures.
- Electronic modulating valve heater controls provide computer-controlled gas flow to maintain the plenum temperature you select, which is more fuel efficient than on-off or hi-low controls.
- Plenum temperature can be easily adjusted from the control box.

## Fan Comparison - Axial v. Centrifugal







1. Sukup's exclusive, patented Quad Metering Roll System reduces over-drying, minimizes grain damage and maintains grain quality.
2. Unload auger is suspended by hanger bearings to eliminate pinch points and grain damage.
3. Unload auger clean-out doors feature cam-lock handles.
4. Easy-to-handle, single latch clean-out doors on outside of dryer allow fast column unloading and access to metering rolls.
5. Interior clean-out doors allow access to the top metering rolls.
6. 44" x 16" plenum access doors provide easy access to the unload auger.
7. Sensor in the discharge tube measures the actual moisture content of outgoing grain for much more accurate results.

8. Optional Moisture Sensor Jump Auger places the sensor in a vertical position, so fines can't interfere with sensing.
9. RTD measures the air temperature inside the plenum and maintains actual plenum temperature as close as possible to your set point.
10. Your Sukup Dryer is personalized with the name of your farm.
11. Sensor in the wet holding bin monitors grain level to control fill operations.
12. Fill dryer from front or back.
13. 14" grain columns feature perforated, galvanized screens standard. Stainless steel screens are optional.
14. Work light improves visibility and safety in poorly lit areas. It also serves as a "system on" indicator.



15. The air and heat for Sukup Dryers are supplied by Sukup Fans and Heaters - the best on the market.
16. Easy-to-use QuadraTouch Pro™ controls guide you through dryer operation. Control box case is weather-tight and lockable.
17. QuadraTouch Pro™ control box can be remotely located up to 200' from the dryer. All that's needed is an ethernet cord and 110v plug-in.
18. The Single Phase to Three Phase Power Converter may be added to any Sukup Dryer to allow you to run larger dryers on single phase.
19. Optional Sukup Screen Cleaner is a series of long-lasting UHMW paddles run by a single electric gear motor that swipes down the slanted portion of the screens, removing debris and improving airflow. (Patent pending)
20. CSA Models are available.

# Single Fan and Heater Dryers - Axial

Single Axial Fan/Heater Models	Specifications	T8	T12	T16		T20	T24
	Total grain holding cap. (approx.)	220 Bu.	330 Bu.	440 Bu.		550 Bu.	660 Bu.
	Grain column thickness & length	14" x 8'	14" x 12'	14" x 16'		14" x 20'	14" x 24'
	Grain column holding capacity	190 Bu.	285 Bu.	380 Bu.		475 Bu.	575 Bu.
	BTU/Hr. normal operating	up to 3 M	up to 5 M	up to 6 M		up to 10 M	up to 10 M
	Fan hp & dia.	15 hp, 28"	15 hp, 38"	15 hp, 44"	20 hp, 44"	30 hp, 44"	40 hp, 44"
	Load auger HP	3 hp	3 hp	3 hp		5 hp	7.5 hp
	Unload auger HP	3 hp	3 hp	3 hp		5 hp	5 hp
	Plenum	Single	Single	Single		Single	Single
	Transport height**	13'4"	13'4"	13'4"		13'4"	13'4"
	Installed height***	14'7"	14'7"	14'7"		14'7"	14'7"
	Installed length	17'	21'	25'		29'	33'
	Installed width	7'11"	7'11"	7'11"		7'11"	7'11"
	Weight w/wheels & wet holding bin	7000#	8200#	9700#		11,200#	12,300#
	Fuel Type	LP or NG	LP or NG	LP or NG		LP or NG	LP or NG
230v, 1ph Min./Max. Amps <sup>+</sup>	122/250	122/250	122/250		195/400	260/600	
230v, 3ph Min./Max. Amps <sup>+</sup>	60/250	75/250		86/250	134/250	180/250	
460v, 3ph Min./Max. Amps <sup>+</sup>	30/100	37/100		43/100	68/100	90/250	
575v, 3ph Min./Max. Amps <sup>+</sup>	28/100	33/100		38/100	45/100	55/100	
<b>Est. Drying Capacities</b>	<b>Bushels/Hour*</b>						
	T8	T12	T16		T20	T24	
Full Heat - 20% - 15%	up to 340	up to 570	up to 650	up to 725	up to 925	up to 1050	
Full Heat - 25% - 15%	up to 210	up to 350	up to 405	up to 450	up to 575	up to 660	

Sukup Manufacturing Co. provides the information contained within this brochure to assist you in choosing the optimal equipment for your situation. Many factors, such as grain variety, maturity levels, grain cleanliness, weather conditions and operation/management, can affect the performance of your dryer and results may vary. This information is calculated and is not a guarantee of product specifications or performance. Based on these factors, Sukup specifications should only be used as estimates, and not as a warranty, express or implied, of how a particular Sukup unit will perform under your operating conditions. Because we are continually advancing Sukup products, changes may occur that may not be reflected in the specifications.

\*Bushels/Hour listed are wet bushels, No. 2 shelled yellow corn at listed moisture content with grain discharged hot at 17%, resulting in about 15% moisture after steeping and cooling, and are estimates based on drying principles, field results and computer simulation.

\*\*Transport height is with wet holding bin lowered.

\*\*\*Installed height is frame to fill hopper, less legs.

<sup>+</sup>Min. Amps= FLA of all motors. Max. Amps = main switch size. 208v, 3ph min. amp = 230v, 3ph min. amps x 1.15. 208v max. amps are same as 230v, 3ph. Single phase dryers with fans 20hp + use Sukup Single Phase to Three Phase Power Converter. Amps noted in italics.





**Sukup Dual Fan and Heater Grain Dryers allow you the choice of full-heat drying or heat/cool drying.**

- Upper and lower fans/heaters are controlled individually for greater flexibility.
- 50/50 split plenum dryers are best suited to full-heat drying or heat/cool where discharged grain must be near ambient temperature.
- 50/50 dryers are available in 20' and 24' sizes.
- Sukup 2/3 - 1/3 Dryers can operate in full-heat mode, where the grain is dumped hot into a cooling bin or heat/cool mode, where the bottom 1/3 of the dryer is used as a cooling chamber and discharged grain is approximately 20-30° above ambient.
- 2/3 - 1/3 dryers are available in 16', 20', 24' or 28'.

# Dual Fan and Heater Dryers - Axial



Specifications	T202	T242	T163	T203	T243	T283
	Total grain holding cap. (approx.)	550 Bu.	660 Bu.	440 Bu.	550 Bu.	660 Bu.
Grain column thickness & length	14" x 20'	14" x 24'	14" x 16'	14" x 20'	14" x 24'	14" x 28'
Grain column holding capacity	475 Bu.	570 Bu.	380 Bu.	475 Bu.	570 Bu.	665 Bu.
BTU/Hr. normal operating	up to 10 M	up to 10 M	up to 6 M	up to 10 M	up to 10 M	up to 11 M
Fan hp & dia.						
Top plenum	15 hp, 38"	20 hp, 38"	15 hp, 38"	15 hp, 44"	30 hp, 44"	30 hp, 44"
Bottom plenum	15 hp, 38"	20 hp, 38"	15 hp, 28"	15 hp, 28"	15 hp, 28"	20 hp, 28"
Load auger HP	5 hp	7.5 hp	3 hp	5 hp	7.5 hp	7.5 hp
Unload auger HP	5 hp	5 hp	3 hp	5 hp	5 hp	7.5 hp
Plenum	50/50 Split	50/50 Split	2/3-1/3 Split	2/3-1/3 Split	2/3-1/3 Split	2/3-1/3 Split
Transport height**	13'4"	13'4"	13'4"	13'4"	13'4"	13'4"
Installed height***	14'7"	14'7"	14'7"	14'7"	14'7"	14'7"
Installed length	29'	33'	25'	29'	33'	37'3"
Installed width	7'11"	7'11"	7'11"	7'11"	7'11"	7'11"
Weight w/wheels & wet holding bin	11,200#	12,700#	9700#	11,200#	12,700#	14,200#
Fuel Type	LP or NG	LP or NG	LP or NG	LP or NG	LP or NG	LP or NG
230v, 1ph Min./Max. Amps <sup>+</sup>	200/400	242/600	170/400	190/400	245/600	275/600
230v, 3ph Min./Max. Amps <sup>+</sup>	134/250	168/250	114/250	125/250	174/250	188/400
460v, 3ph Min./Max. Amps <sup>+</sup>	63/100	78/250	57/100	63/100	87/250	94/250
575v, 3ph Min./Max. Amps <sup>+</sup>	48/100	60/250	42/100	46/100	62/100	69/100
<b>Est. Drying Capacities</b>	<b>Bushels/Hour*</b>					
	<b>T202</b>	<b>T242</b>	<b>T163</b>	<b>T203</b>	<b>T243</b>	<b>T283</b>
Full Heat - 20% - 15%	up to 1000	up to 1180	up to 740	up to 970	up to 1025	up to 1200
Full Heat - 25% - 15%	up to 620	up to 740	up to 450	up to 600	up to 710	up to 775
Heat/Cool - 20% - 15%	up to 470	up to 570	up to 440	up to 580	up to 690	up to 775
Heat/Cool - 25% - 15%	up to 300	up to 350	up to 280	up to 355	up to 435	up to 475

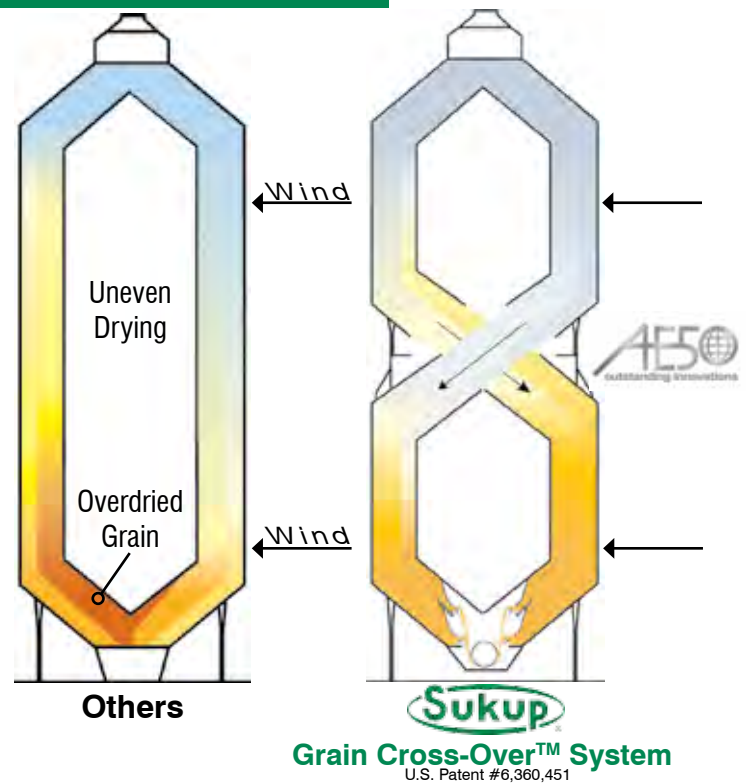
\*Bushels/Hour listed are wet bushels, No. 2 shelled yellow corn at listed moisture content with grain discharged hot at 17%, resulting in about 15% moisture after steeping and cooling, and are estimates based on drying principles, field results and computer simulation.  
 \*\*Transport height is with wet holding bin lowered.  
 \*\*\*Installed height is frame to fill hopper, less legs.  
 +Min. Amps= FLA of all motors. Max. Amps = main switch size. 208v, 3ph min. amp = 230v, 3ph min. amps x 1.15. 208v max. amps are same as 230v, 3ph.  
 Single phase dryers with fans 20hp + use Sukup Single Phase to Three Phase Power Converter. Amps noted in italics.

**Dual Axial Fan/Heater Models**

# Patented Grain Cross-Over™

## A Sukup Stack Dryer Exclusive

Sukup has developed the patented Grain Cross-Over™ System to help eliminate overdrying and balance the moisture content of dried grain in a stacked dryer configuration. This exclusive, innovative system switches the grain from one side of the dryer to the other as it passes from module to module.



## Switching sides balances moisture two ways

A cold fall wind can greatly cool one side of the dryer, resulting in wetter grain and uneven drying. By switching the grain from one side of the dryer to the other, you balance the exposure that each portion of grain has to these conditions.

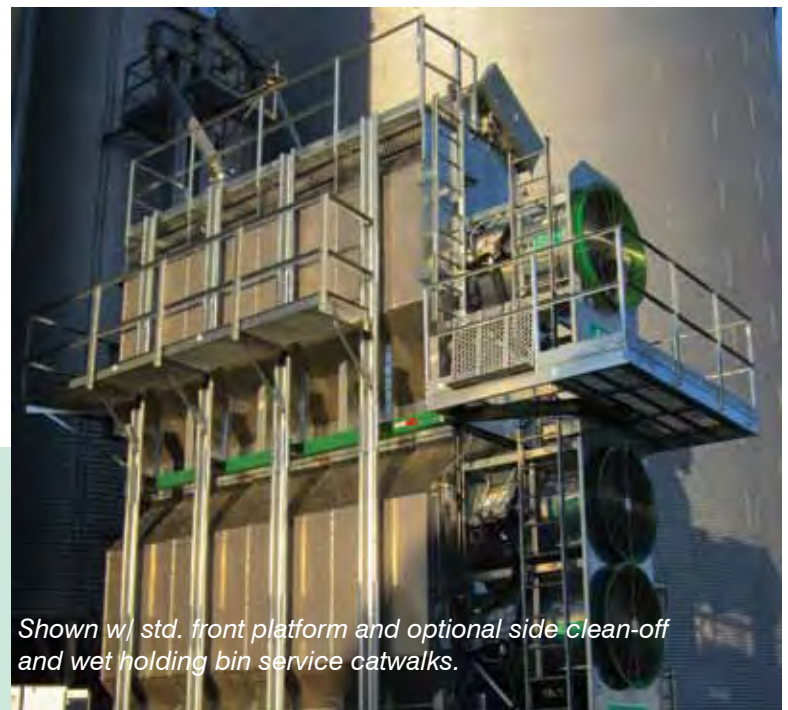
### With the Grain Cross-Over™ System;

- Inner, hotter layer of grain in top module becomes outer, cooler layer in bottom module
- Helps prevent grain from overdrying
- More consistent moisture content
- Reduces variation in moisture content between inner and outer portions of columns and the two sides of dryer.



## Optional Equipment

- Field-installed auxiliary motor control kits
- Two module stacked CSA models available.
- Stainless steel outer screens
- Fan inlet covers
- Wet holding bin service catwalk (pictured at right)
- Side clean-off catwalk (stack dryers only)



*Shown w/ std. front platform and optional side clean-off and wet holding bin service catwalks.*



## Two Module Axial Fan/Heater Models

Specifications	T165	T165	T205	T206	T245	T246
Total grain holding cap. (approx.)	850 Bu.	850 Bu.	1050 Bu.	1050 Bu.	1250 Bu.	1250 Bu.
Grain column thickness & length	14" x 16'	14" x 16'	14" x 20'	14" x 20'	14" x 24'	14" x 24'
Grain column holding capacity	760 Bu.	760 Bu.	950 Bu.	950 Bu.	1140 Bu.	1140 Bu.
BTU/Hr. normal operating	up to 13 M	up to 13 M	up to 16.5 M	up to 16.5 M	up to 20 M	up to 20 M
Fan hp & diameter - top module	(1) 15hp, 44"	(1) 20hp, 44"	(1) 30hp, 44"	(2) 15hp, 38"	(1) 40hp, 44"	(2) 20hp, 38"
- bottom module	(2) 10hp, 38"	(2) 10hp, 38"	(2) 15hp, 38"	(2) 15hp, 38"	(2) 20hp, 38"	(2) 20hp, 38"
Load auger HP	3 hp	3 hp	5 hp	5 hp	7.5 hp	7.5 hp
Unload auger HP	3 hp	3 hp	5 hp	5 hp	5 hp	5 hp
Plenum - top module	Single	Single	Single	50/50	Single	50/50
- bottom module	50/50	50/50	50/50	50/50	50/50	50/50
Transport height**	13'4"	13'4"	13'4"	13'4"	13'4"	13'4"
Installed height***	26'3"	26'3"	26'3"	26'3"	26'3"	26'3"
Installed length	25'	25'	29'	29'	33'	33'
Installed width (less catwalks)	8'6"	8'6"	8'6"	8'6"	8'6"	8'6"
Weight w/wheels & wet holding bin	24,000#	24,000#	27,000#	27,000#	30,000#	30,000#
Fuel type	LP or NG	LP or NG	LP or NG	LP or NG	LP or NG	LP or NG
230v, 1ph Min./Max. Amps+	238/400		293/600	436/600	317/600	436/600
230v, 3ph Min./Max. Amps+		173/250	222/400	268/400	246/400	268/400
460v, 3ph Min./Max. Amps+		87/250	112/250	134/250	123/250	134/250
575v, 3ph Min./Max. Amps+		48/100	82/250	89/250	98/250	109/250
<b>Est. Drying Capacities</b>	<b>Bushels/Hour*</b>					
Full Heat - 20% - 15%	up to 1440	up to 1600	up to 2020	up to 2020	up to 2450	up to 2450
Full Heat - 25% - 15%	up to 900	up to 1000	up to 1250	up to 1250	up to 1525	up to 1525
Heat/Cool - 20% - 15%	up to 970	up to 1080	up to 1380	up to 1380	up to 1670	up to 1670
Heat/Cool - 25% - 15%	up to 610	up to 680	up to 860	up to 860	up to 1030	up to 1030



## Three Module Axial Fan/Heater Models

Specifications	T168	T208	T209	T248	T249
Total grain holding cap. (approx.)	1200 Bu.	1525 Bu.	1525 Bu.	1810 Bu.	1810 Bu.
Grain column thickness & length	14" x 16'	14" x 20'	14" x 20'	14" x 24'	14" x 24'
Grain column holding capacity	1140 Bu.	1450 Bu.	1450 Bu.	1720 Bu.	1720 Bu.
BTU/Hr. normal operating	up to 20 M	up to 25 M	up to 25 M	up to 30 M	up to 30 M
Fan hp & diameter - top module	(1) 20 hp, 44"	(1) 30 hp, 44"	(2) 15 hp, 38"	(1) 40 hp, 44"	(2) 20 hp, 38"
- middle module	(2) 20 hp, 44"	(1) 30 hp, 44"	(2) 15 hp, 38"	(1) 40 hp, 44"	(2) 20 hp, 38"
- bottom module	(2) 10hp, 38"	(2) 10 hp, 38"	(2) 15 hp, 38"	(2) 20 hp, 38"	(2) 20 hp, 38"
Load auger HP	5 hp	7.5 hp	7.5 hp	7.5 hp	7.5 hp
Unload auger HP	5 hp	7.5 hp	7.5 hp	7.5 hp	7.5 hp
Plenum - top module	Single	Single	50/50	Single	50/50
- middle module	Single	Single	50/50	Single	50/50
- bottom module	50/50	50/50	50/50	50/50	50/50
Transport height**	13'4"	13'4"	13'4"	13'4"	13'4"
Installed height***	37'8"	37'8"	37'8"	37'8"	37'8"
Installed length	25'	29'	29'	33'	33'
Installed width (less catwalks)	8'6"	8'6"	8'6"	8'6"	8'6"
Weight w/wheels & wet holding bin	33,000#	37,500#	37,500#	42,000#	42,000#
Fuel type	LP or NG	LP or NG	LP or NG	LP or NG	LP or NG
230v, 3ph Min./Max. Amps+	202/400	304/400	366/600	390/600	380/600
460v, 3ph Min./Max. Amps+	101/250	152/250	183/250	195/250	190/250
<b>Est. Drying Capacities</b>	<b>Bushels/Hour*</b>				
Full Heat - 20% - 15%	up to 2380	up to 2950	up to 2950	up to 3600	up to 3600
Full Heat - 25% - 15%	up to 1475	up to 1830	up to 1830	up to 2250	up to 2250
Heat/Cool - 20% - 15%	up to 1460	up to 1810	up to 1810	up to 2225	up to 2225
Heat/Cool - 25% - 15%	up to 915	up to 1125	up to 1125	up to 1380	up to 1380



# Full Heat or Efficient Pressure Heat/Vacuum Cool

## Centrifugal Dryer Features

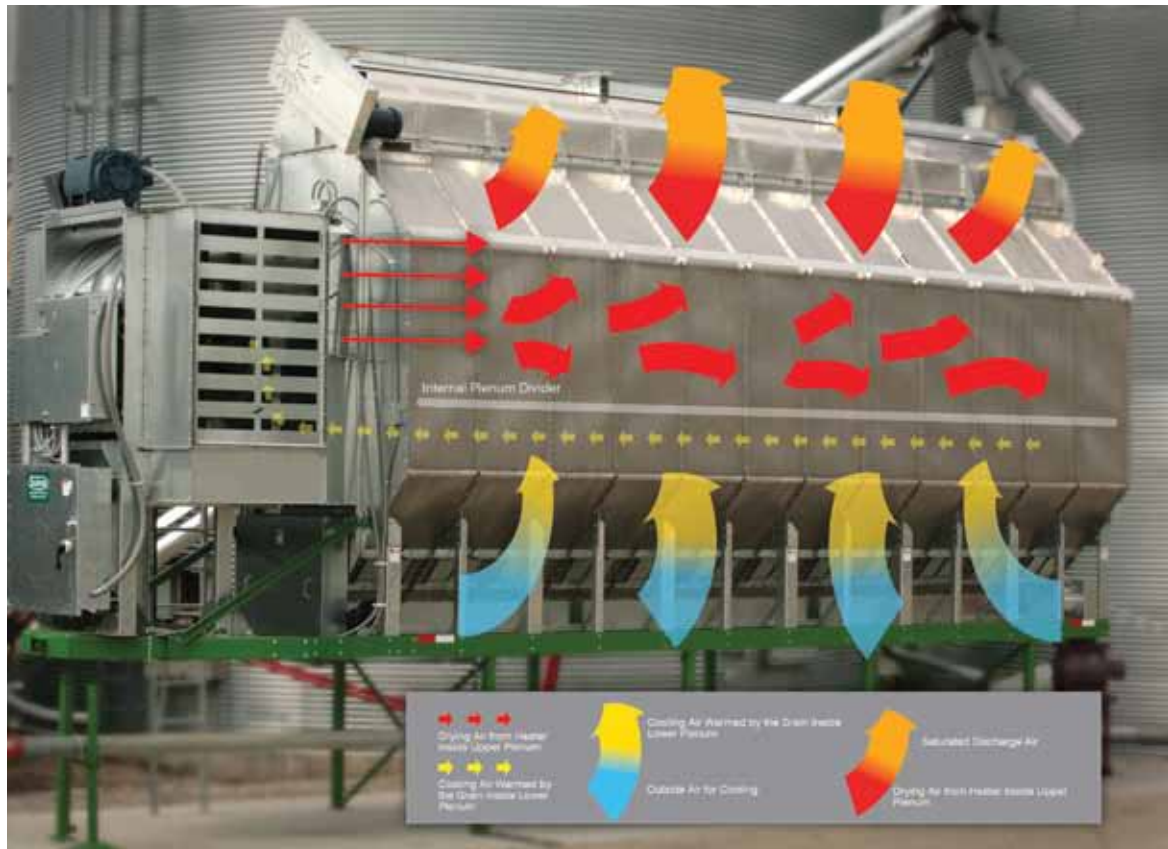
- Quad Metering Roll System
- **QuadraTouch Pro™** controls
- Sukup belt-driven Dual Inlet Centrifugal Fans.
- Sukup dual centrifugal burners.

## 2/3-1/3 Split Plenum Centrifugal Dryers

- Can be equipped to operate in pressure heat/vacuum cool mode.
- More efficient than traditional pressure heat/pressure cool dryers.
- Heat given off by the cooling grain is cycled back into the drying process.
- Less fuel is required to raise the drying air temperature.

## Single Plenum Centrifugal Dryers

- Operate in full heat mode.
- Same features as our single plenum axial dryers, but with the added benefit of quieter operation.



Single Centrifugal Fan/Heater Models	Specifications	TC16	TC20	TC24	TC163	TC203	TC243
	Total grain holding cap. (approx.)	440 Bu.	550 Bu.	660 Bu.	440 Bu.	550 Bu.	660 Bu.
	Grain column thickness & length	14" x 16'	14" x 20'	14" x 24'	14" x 16'	14" x 20'	14" x 24'
	Grain column holding capacity	380 Bu.	475 Bu.	570 Bu.	380 Bu.	475 Bu.	570 Bu.
	BTU/Hr. normal operating	up to 6 M	up to 10 M	up to 10 M	up to 6 M	up to 10 M	up to 10 M
	Fan hp (dual inlet)	30 hp	40 hp	50 hp	30 hp	40 hp	50 hp
	Load auger HP	3 hp	5 hp	7.5 hp	3 hp	5 hp	7.5 hp
	Unload auger HP	3 hp	5 hp	5 hp	3 hp	5 hp	5 hp
	Plenum	Single	Single	Single	2/3 - 1/3	2/3 - 1/3	2/3 - 1/3
	Transport height**	13'4"	13'4"	13'4"	13'4"	13'4"	13'4"
Installed height***	14'7"	14'7"	14'7"	14'7"	14'7"	14'7"	
Installed length	27'	31'	35'	27'	31'	35'	
Installed width	7'11"	7'11"	7'11"	7'11"	7'11"	7'11"	
Weight w/wheels & wet holding bin	9900#	11,500#	12,800#	10,000#	11,600#	12,900#	
Fuel type	LP or NG	LP or NG	LP or NG	LP or NG	LP or NG	LP or NG	
230v, 1ph Min./Max. Amps+	175/400	230/400	275/600	175/400	230/400	275/600	
230v, 3ph Min./Max. Amps+	100/250	140/250	160/250	100/250	140/250	160/400	
460v, 3ph Min./Max. Amps+	50/100	70/100	80/250	50/100	70/100	80/250	
575v, 3ph Min./Max. Amps+	40/100	56/100	65/100	43/100	56/100	65/100	
<b>Est. Drying Capacities</b>	<b>Bushels/Hour*</b>						
Full Heat - 20% - 15%	up to 740	up to 970	up to 1025	up to 740	up to 970	up to 1025	
Full Heat - 25% - 15%	up to 450	up to 600	up to 710	up to 450	up to 600	up to 710	
Pressure Heat/Vacuum Cool - 20% - 15%				up to 395	up to 520	up to 620	
Pressure Heat/Vacuum Cool - 25% - 15%				up to 250	up to 320	up to 390	



# Cool - Centrifugal & Hybrid Dryers

## Centrifugal Stacked Dryers

Sukup Centrifugal Dryers are available in a Double-Stacked configuration that features the patented Sukup Grain Cross-Over™ System.

- Top module operates in full heat mode.
- Bottom module can operate either in full heat or pressure heat/vacuum cool mode.
- Panels within the plenum area are easily removed or replaced to switch between modes.
- Louvers open completely for full-heat drying.
- Louver openings are variable to adjust output grain temperature during pressure heat/vacuum cool drying.

## Hybrid Stacked Dryers

- An economical way to reap the benefits of a full heat/vacuum cool configuration.
- Axial on top module, centrifugal on bottom.
- The axial module always runs in full heat, so you use less horsepower to get the same airflow.
- Centrifugal module allows you to vacuum cool for maximum efficiency.



Two Module Centrifugal & Hybrid Fan/Heater Models	Specifications	TC165	TC205	TC245	TH165	TH205	TH245
	Total grain holding cap. (approx.)	850 Bu.	1050 Bu.	1250 Bu.	850 Bu.	1050 Bu.	1250 Bu.
	Grain column thickness & length	14" x 16'	14" x 20'	14" x 24'	14" x 16'	14" x 20'	14" x 24'
	Grain column holding capacity	760 Bu.	950 Bu.	1140 Bu.	760 Bu.	950 Bu.	1140 Bu.
	BTU/Hr. normal operating	up to 13 M	up to 16.5 M	up to 20 M	up to 13 M	up to 16.5 M	up to 20 M
	Fan hp and diameter - top module	30 hp	40 hp	50 hp	20 hp, 44" A	30 hp, 44" A	40 hp, 44" A
	- bottom module	30 hp	40 hp	50 hp	30 hp C	40 hp C	50 hp C
	Load auger HP	3 hp	5 hp	7.5 hp	3 hp	5 hp	7.5 hp
	Unload auger HP	3 hp	5 hp	5 hp	3 hp	5 hp	5 hp
	Plenum - top module	Single	Single	Single	Single	Single	Single
- bottom module	50/50	50/50	50/50	50/50	50/50	50/50	
Transport height**	13'4"	13'4"	13'4"	13'4"	13'4"	13'4"	
Installed height***	26'3"	26'3"	26'3"	26'3"	26'3"	26'3"	
Installed length	27'	31'	35'	27'	31'	35'	
Installed width (less catwalks)	8'6"	8'6"	8'6"	8'6"	8'6"	8'6"	
Weight w/wheels & wet holding bin	24,000#	27,000#	30,000#	24,000#	27,000#	30,000#	
Fuel type	LP or NG	LP or NG	LP or NG	LP or NG	LP or NG	LP or NG	
230v, 1ph Min./Max. Amps+		390/600	470/800		280/600	340/600	
230v, 3ph Min./Max. Amps+	160/400	220/400	270/400	160/250	220/400	270/400	
460v, 3ph Min./Max. Amps+	80/250	114/250	133/250	80/250	110/250	135/250	
575v, 3ph Min./Max. Amps+	72/100	91/250	106/250	65/100	88/250	108/250	
<b>Est. Drying Capacities</b>	<b>Bushels/Hour*</b>						
Full Heat - 20% - 15%	up to 1600	up to 2020	up to 2450	up to 1600	up to 2020	up to 2450	
Full Heat - 25% - 15%	up to 1000	up to 1250	up to 1525	up to 1000	up to 1250	up to 1525	
Press. Heat/Vac Cool - 20% - 15%	up to 970	up to 1240	up to 1500	up to 970	up to 1240	up to 1500	
Press. Heat/Vac Cool - 25% - 15%	up to 610	up to 775	up to 925	up to 610	up to 775	up to 925	

\*Bu/hr (bushels per hour) listed are wet bushels, No. 2 shelled yellow corn at listed moisture content with grain discharged hot at 17%, resulting in about 15% moisture after steeping and cooling, and are estimates based on drying principles, field results and computer simulations. \*\*Transport height is with wet holding bin lowered on upper unit \*\*\*Installed height is frame to fill hopper, less legs. \*Min. Amps= FLA of all motors. Max. Amps = main switch size. 208v, 3ph min. amp = 230v, 3ph min. amps x 1.15. 208v max. amps are same as 230v, 3ph. A = Axial C = Centrifugal



# Complete Drying Solutions®

## Large-Scale Drying

Sukup manufactures two lines of tower dryers - modular, for quick, easy installation or stick-built for commercial-grade drying.

- Efficient heat/vacuum cool drying.
- Grain exchangers move grain from inside of column to outside for more even moisture content.
- **QuadraTouch Pro™** controls standard.

## Modular Tower Dryers

- 10'6" dia.
- 1000-1500 bu/hr. capacity

## Commercial-Grade Tower Dryers

- 12', 18', 24' diameters
- Dry up to 7000 bu/hr.

## Cyclone Pneumatic System

- An excellent match to your Sukup Dryer
- Moves grain from dryer to multiple bins efficiently.
- All components and accessories are top-quality, industrial-grade to withstand years of use.



## Sukup Double Run Conveyors

- Compact design
- Smooth, quiet operation.
- 4000-10,000 bu/hr capacities



## Hopper Bottom Bins

The design of Sukup Hopper Bottom Bins is one of the strongest in the industry.

Sukup offers two hopper types.

- Heavy-Duty Hoppers may be used as working bins.
- Medium-Duty Hoppers (pictured below) may be used for short-term wet holding tanks to feed your Sukup Dryer and may also be used to store cool, dry grain for an extended period of time.

Sukup Medium-Duty Hoppers feature legs formed in the extra-strong Sukup stiffener profile. The legs extend up the bottom two bin rings, providing additional support for the sidewalls.



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