

# cross flow Grain Dryers



- QuadraTouch Pro<sup>™</sup> Controls
- Accurate Moisture Sensing
- Exclusive Quad Metering Rolls

# Why A Sukup<sup>®</sup> Grain Dryer?

**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 over 18 AE50 Awards\* – more than any other grain dryer manufacturer. Sukup Grain Dryers alone have earned eight AE50 Awards; Quad Metering Roll System, Grain Cross-Over<sup>™</sup> System, QuadraTouch<sup>™</sup> Controls, QuadraTouch Pro<sup>™</sup>, Sukup Single Phase Dryers, Sukup Modular Tower Dryers, Smart Loop<sup>™</sup>, and the Sukup Mixed-Flow Dryer. All eight 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. In order to be chosen for an AE50 Award, products must be truly new innovations that are expected to save producers time, costs and labor.

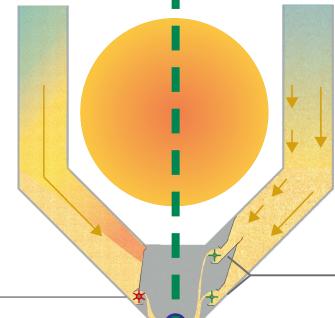
# QUALITY. EFFICIENCY. SPEED.

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

- All grain moves down the column at the same speed, the inner layers of grain are over-dried, and the outer layers are underdried.
- Metering roll speed varies depending upon an averaging of kernel temperatures.
- With the kernels on the inside much hotter than the outside, stress cracking of the grain occurs resulting in lower quality grain and fuel efficiency.

**ONE** metering roll per side.



#### EXCLUSIVE SUKUP DRYERS (WITH QUAD METERING ROLLS)

- The Quad (4) Metering Rolls pull the inner, hotter layer of grain down the column faster than the outer, cooler layer.
- Metering roll speed varies depending upon the actual moisture content of the discharged grain.
- This process produces more even moisture content of the dried grain, maintaining higher test weights, and overall quality while improving fuel efficiency.

TWO metering rolls per side.







**RIGHT** Closer view of the Sukup Quad Metering Rolls



# QUADRATOUCH PROTM

# The Sukup® QuadraTouch Pro™ control system creates: EASY START-UP & OPERATION

#### SIMPLE, MENU-DRIVEN SYSTEM

The Sukup QuadraTouch Pro<sup>™</sup> control system, standard on all Sukup Dryers, was designed to be easy to use with simple menus guiding you through dryer functions. Operator inputs are simple with a pop-up keypad for entering numbers. The QuadraTouch Pro<sup>™</sup> can be placed up to 200' away from the dryer using just an Ethernet cable.

#### THE QuadraTouch Pro™ IS A PLC-BASED SYSTEM.

The PLC (Programmable Logic Controller) is a rugged controller built to withstand harsh environments and offer superior electrical noise protection, eliminating nuisance shut downs, and providing you with a reliable system.

# COMPREHENSIVE INFORMATION WITH THE TOUCH OF A BUTTON

The easy to use Sukup QuadraTouch Pro™ control system gives you access to information critical for your operation.

	4:08 ,ill ♥ ■) Not Secure — mysukup.com
Sukup	
Sukup Automation Solution	Home / Sukup Demo Site / Portable Dryer Continuous Flow Dashboard
Sign In	CONTINOUS FLOW
Username	Change To Manual Operation
Farmer1	Load System
Password	Load Status
Remember me	Incoming Moisture 23.7%
Forget your password?  Sign In	♥ Plenum 4
	Fan 4 On
Create an account	Heat 4 On
© 2023 - Sokup Manufacturing Co.   Ver. 1.0.7655.24746	Plenum 4 Actual 199.4"F
	Plenum 4 Setpoint 200.0 1F 🕼
	♥ Plenum 3
	O Frendan S
	4:07
	Not Secure – mysukup.com
Home / Dryer1 Dashboard Avg.	
	-
Unload System	forme / Sukup Demo Site / Portable Dryer Continuous Flow Dashboard
Unload Status Unloading	
Unload Speed 30.0 W	AUTOMATIC OPERATION
	Pressure Control Mode VFD Controlling Spred Auto Control Type
CHARTS (MORE INFORMATION)	Blower Status Blower Purring
Manage Charts Manage Defaults	Airlock Status Arlock Burning
Discharge Temperature Discharge Temperature	Pressure Setpoint 3PSJ.
	System Pressure 3000PSL
	Blower Current 160.874 Amps
Discharge Moisture Sensor	Current VFD Speed S4.19Hr
	Current DBV Position

# MYSUKUP REMOTE WEB ACCESS

MySukup allows you to monitor and control your Sukup Dryer from a smart phone, tablet or PC.

#### FEATURES:

- Dryer shutdown alerts
- View dryer performance charts
- Ability to switch between manual and auto unload control
- Adjust moisture and/or temperature settings
- Shut dryer off remotely
- Set up mulitple users with permission to view only, or view and make changes

Must have internet access via Ethernet cable at QuadraTouch Pro™ control system to use. Requires yearly license fee. Please note that the dryer cannot be started remotely.





# Which Dryer Is Right For You?

# AXIAL VS CENTRIFUGAL

### **Pressure Performance**

Axial Fans perform best at low pressures and Centrifugal Fans perform best at higher pressures. Vacuum cooling requires higher pressures so Centrifugal Fans are the <u>practical solut</u>ion for that application.

### **Running Noise/Sound**

Even though we use 1750 RPM fans in our Axial Dryers (compared to the 3500 RPM fans used on Sukup® Grain Bins), the Centrifugal Dryer is quieter, so if you have neighbors close by, a Sukup Centrifugal Dryer may be the way to go.

# Sukup



Sukup Axial Dryer



Sukup Centrifugal Dryer

# **FEATURES**

### 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.
- Plenum Blowout door at back of dryer allows easy clean-out of the plenum.





## SAFETY

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

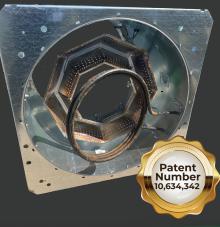
- Interlock switches prevent the dryer from operating if doors are open.
- Grain column and plenum high temp warnings.
- Air switch shuts the dryer down if no grain is present.
- Housing high limit prevents the heater from running if the fan shuts down.
- Motor overloads.
- Flame sensing shuts down the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

# **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.

#### 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 high-low controls.

Plenum temperature can be easily adjusted from the QuadraTouch Pro™.

# **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<sup>®</sup> has incorporated an AutoBatch<sup>™</sup> program into the controls. The AutoBatch<sup>™</sup> 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.

## **1. AUXILIARY CONTROL BOX**

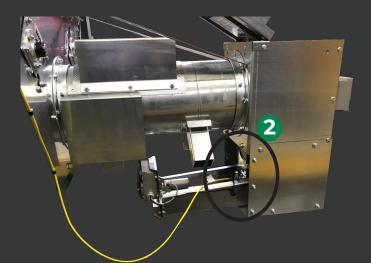
- Sukup dryers come standard with an Auxiliary Control Box
- Box features din rails to mount starters and overloads for fill and takeaway equipment such as augers.
- Has a terminal strip with signals to turn those auxiliary controls on and off as the dryer needs grain.

### 2. AUGER STATIC SAMPLER OPTIONAL

- The Static Moisture Sampler tests the grain as it leaves the dryer.
- It catches a sample of grain, measures the moisture and temperature then drops it.
- The moisture sensor is mounted vertically to minimize any fines buildup.









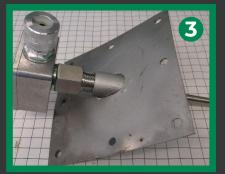
#### AUTOMATIC MOISTURE CONTROL IS STANDARD

Sukup was the first company to make true moisture sensing standard on its dryers. Sampling the grain moisture gives an accurate measure of drying progress and results in more consistent final moisture content.

- 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.

# 3. MULTIPOINT GRAIN TEMPERATURE SENSORS

- Dryers may use multipoint grain column sensors.
- Readings from the sensors are fed into control software, helping improve dryer performance.
- Dryer may be run in automatic based on average grain temperature in the drying chamber.
- This feature is most beneficial on dryers running in heat/cool mode.
- Standard on stacked dryers, optional on single-module dryers.





- Sukup<sup>®</sup>'s exclusive, patented Quad Metering Roll System reduces overdrying, 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.
- Easy-to-handle, single latch cleanout 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** RTD measures the air temperature inside the plenum and maintains actual plenum temperature as close as possible to your set point.

- 8 Patented Grain Moisture Sensor in the discharge tube measures the moisture content of outgoing grain for much more accurate results.
  - - Patent Number 9,933,383
- 9 OPTIONAL Static Sampler to mount moisture sensor vertically.
- **10** Your Sukup Dryer is personalized with the name of your farm.

Sensor in the wet holding bin monitors grain level to control fill operations.

- 2 Fill dryer from front or back.
- 14" grain columns feature perforated, galvanized screens standard. Stainless steel screens are optional.





DC shield removed to show detail

- 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.
- Easy-to-use QuadraTouch Pro<sup>™</sup> controls guide you through dryer operation. Control box case is weather-tight and lockable.
- QuadraTouch Pro<sup>™</sup> 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.

CSA Models are available.

# **AXIAL DRYERS** SINGLE FAN/HEATER DRYER SPECIFICATIONS

\*Drying capacities listed (in wet bushels/hour) are for No. 2 shelled yellow corn at the listed moisture contents. Full-heat capacity estimates are for grain discharged hot at 17% moisture, resulting in approximately 15% moisture after steeping and cooling. Capacities listed are estimates based on drying principles, testing results, and computer simulations. These are not to be used as a guarantee of dryer performance.

\*\*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.

Single phase dryers with fans 20hp + use Sukup Single Phase to Three Phase Power Converter. Amps noted in italics.

	Specifications	T8	T12	T16		T20	T24
ท่	Total grain holding cap. (Approx.)	220 Bu.	330 Bu.	440 Bu.		550 Bu.	660 Bu.
Π	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.
Ο	BTU/Hr. normal operating	up to 3 M	up to 5 M	up to	6 M	up to 10 M	up to 10 M
Σ	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
п	Unload auger HP	3 hp	3 hp	3	hp	5 hp	5 hp
	Plenum	Single	Single	Sir	igle	Single	Single
	Transport height**	13'4"	13'4"	13	'4"	13'4"	13'4"
HEATER	Installed height***	14'7"	14'7"	14'7"		14'7"	14'7"
	Installed length	17'	21'	25'		29'	33'
FAN/	Installed width	7'11"	7'11"	7'11"		7'11"	7'11"
	Weight w/wheels & wet holding bin	7000#	8200#	970	)0#	11,200#	12,300#
	Fuel Type	LP or NG	LP or NG	LP c	or NG	LP or NG	LP or NG
AXIAL	230v, 1ph Min./Max. Amps+	122/250	122/250	122/250		195/400	260/600
X	230v, 3ph Min./Max. Amps+	60/250	75/250		86/250	134/250	180/250
	460v, 3ph Min./Max. Amps+	30/100	37/100		43/100	68/100	90/250
ш	575v, 3ph Min./Max. Amps+	28/100	33/100		38/100	45/100	55/100
5	Est. Drying Capacities	Bushels/Hour*					
Z		T8	T12	T16		T20	T24
S	Full Heat - 20% - 15% Full Heat - 25% - 15%	up to 340 up to 210	up to 570 up to 350	up to 650 up to 405	up to 725 up to 450	up to 925 up to 575	up to 1050 up to 660



# **AXIAL DRYERS DUAL FAN/HEATER DRYERS**

#### Sukup<sup>®</sup> 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.
- I. Sukup 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.

- 2. 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 AXIAL FAN/HEATER SPECIFICATIONS**

	Specifications	T202	T242	T163	T203	T243	T283	*Drying c listed (in v
	Total grain holding cap. (Approx.)	550 Bu.	660 Bu.	440 Bu.	550 Bu.	660 Bu.	770 Bu.	hour) are 2 shelled
	Grain column thickness & length	14" x 20'	14" x 24'	14" x 16'	14" x 20'	14" x 24'	14" x 28'	corn at th
	Grain column holding capacity	475 Bu.	570 Bu.	380 Bu.	475 Bu.	570 Bu.	665 Bu.	moisture Full-heat
SIE	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	estimates discharge
	Fan hp & dia.							approxim
MOD	Top plenum	15 hp, 38"	20 hp, 38"	15 hp, 38"	15 hp, 44"	30 hp, 44"	30 hp, 44"	moisture
Ĕ	Bottom plenum	15 hp, 38"	20 hp, 38"	15 hp, 28"	15 hp, 28"	15 hp, 28"	20 hp, 28"	and coolin listed are
	Load auger HP	5 hp	7.5 hp	3 hp	5 hp	7.5 hp	7.5 hp	based on principles
2	Unload auger HP	5 hp	5 hp	3 hp	5 hp	5 hp	7.5 hp	results, ar simulation
	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	These are
FAN/HEAT	Transport height**	13'4"	13'4"	13'4"	13'4"	13'4"	13'4"	used as a dryer perf
<b></b>	Installed height***	14'7"	14'7"	14'7"	14'7"	14'7"	14'7"	**Transpo
5	Installed length	29'	33'	25'	29'	33'	37'3"	with wet h lowered.
3	Installed width	7'11"	7'11"	7'11"	7'11"	7'11"	7'11"	***Install
	Weight w/wheels & wet holding bin	11,200#	12,700#	9700#	11,200#	12,700#	14,200#	frame to f less legs.
	Fuel Type	LP or NG	LP or NG	LP or NG	LP or NG	LP or NG	LP or NG	<sup>+</sup> Min. Am
AXIAL	230v, 1ph Min./Max. Amps+	200/400	242/600	170/400	190/400	245/600	275/600	motors. N
	230v, 3ph Min./Max. Amps+	134/250	168/250	114/250	125/250	174/250	188/400	main swit 3ph min.
	460v, 3ph Min./Max. Amps+	63/100	78/250	57/100	63/100	87/250	94/250	3ph min.
	575v, 3ph Min./Max. Amps+	48/100	60/250	42/100	46/100	62/100	69/100	Single ph with fans
	Est. Drying Capacities			Bushels	s/Hour*			Sukup Sir to Three F
DUAL		T202	T242	T163	T203	T243	T283	Converter in italics.
	Full Heat - 20% - 15%	up to 1000	up to 1180	up to 740	up to 970	up to 1025	up to 1200	in nancs.
	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% Heat/Cool - 25% - 15%	up to 470 up to 300	up to 570	up to 440 up to 280	up to 580	up to 690 up to 435	up to 775	
	neay0001 - 25% - 15%	up to 300	up to 350	up to 260	up to 355	up to 435	up to 475	

capacities . wet bushels/ for No. yellow e listed contents. capacity s are for grain ed hot at 17% resulting in ately 15% after steeping ng. Capacities estimates n drying s, testing nd computer e not to be a guarantee of formance. ort height is nolding bin ed height is fill hopper, ps= FLA of all /lax. Amps = tch size. 208v, amp = 230v,amps x 1.15.

ase dryers 20hp + use

ngle Phase hase Power Amps noted

# **TWO & THREE MODULE AXIAL FAN/HEATER SPECIFICATIONS**

	Specifications	T165	T165	T205	T206	T	245	T246		
Ņ	Total grain holding cap. (Approx.)	850 Bu.	850 Bu.	1050 Bu.	1050 Bu.		i0 Bu.	1250 Bu.		
Π	Grain column thickness & length	14" x 16'	14" x 16'	14" x 20'	14" x 20'		x 24'	14" x 24'		TE
	Grain column holding capacity	760 Bu.	760 Bu.	950 Bu.	950 Bu.	114	0 Bu.	1140 Bu.	WI W	
MODELS	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		777
2	Fan hp & diameter - top module	(1) 15hp, 44"	(1) 20hp, 44"	(1) 30hp, 44"	(2) 15hp, 38"	(1) 40	hp, 44" (2	2) 20hp, 38"	* 9///*	
FAN/HEATER	- bottom module	(2) 10hp, 38"	(2) 10hp, 38"	(2) 15hp, 38"	(2) 15hp, 38"	(2) 20	hp, 38" (2	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	Si	ngle	50/50	RIMAN	
Ş	- bottom module	50/50	50/50	50/50	50/50	50	0/50	50/50		
	Transport height**	13'4"	13'4"	13'4"	13'4"	13	3'4"	13'4"		<b>MAN</b>
	Installed height***	26'3"	26'3"	26'3"	26'3"	26	5'3"	26'3"		AV2-
	Installed length	25'	25'	29'	29'		33'	33'		
	Installed width (less catwalks)	8'6"	8'6"	8'6"	8'6"		'6"	8'6"		
AXIAL	Weight w/wheels & wet holding bin	24,000#	24,000#	27,000#	27,000#		000#	30,000#		
	Fuel type	LP or NG	LP or NG	LP or NG	LP or NG		or NG	LP or NG		
MODULE	230v, 1ph Min./Max. Amps+	238/400		293/600	436/600		7/600	436/600		
Z	230v, 3ph Min./Max. Amps+		173/250	222/400	268/400		6/400	268/400		KA
	460v, 3ph Min./Max. Amps+		87/250	112/250	134/250		3/250	134/250		
Σ	575v, 3ph Min./Max. Amps+		48/100	82/250	89/250	98,	/250	109/250		SUKUP
	Est. Drying Capacities				s/Hour*	· ·				
S S	Full Heat - 20% - 15% Full Heat - 25% - 15%	up to 1440 up to 900	up to 1600 up to 1000	up to 2020 up to 1250	up to 2020 up to 1250		o 2450 o 1525	up to 2450 up to 1525		
F	Heat/Cool - 20% - 15% Heat/Cool - 25% - 15%	up to 970 up to 610	up to 1080 up to 680	up to 1380 up to 860	up to 1380 up to 860		0 1670 0 1030	up to 1670 up to 1030		
		Specification		T168	T208	<u> </u>	T209	T248	T249	
	N V	Total grain hold	ing cap. (Approx.)	1200 Bi	I. 1525 B	u.	1525 Bu.	1810 Bu.	1810 Bu.	
		Grain column th	ickness & length	14" x 16	5' 14" x 2	D'	14" x 20'	14" x 24'	14" x 24'	
		Grain column h	olding capacity	1140 Bi	i. 1450 B	u.	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	
-/31		Fan hp & diame	ter - top module	(1) 20 hp,	44" 🛛 (1) 30 hp,	44" (2	) 15 hp, 38"	(1) 40 hp, 44"	(2) 20 hp, 38"	-
			- middle modu				) 15 hp, 38"	(1) 40 hp, 44"		
	AXIAL FAN/HEATE		- bottom modu	( ) 1 /			) 15 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 H		5 hp	7.5 hp		7.5 hp	7.5 hp	7.5 hp	a.
		Plenum - top n		Single	Single		50/50	Single	50/50	-
I AK			lle module Im module	Single	Single		50/50	Single	50/50	
		- Dolla Transport heigh		50/50 13'4"	50/50 13'4"		50/50 13'4"	50/50 13'4"	50/50 13'4"	
		Installed heigh		37'8"	37'8"		37'8"	37'8"	37'8"	
		Installed lengt		25'	29'		29'	33'	33'	
		Ŭ	n (less catwalks)		8'6"		8'6"	8'6"	8'6"	-
Re l	WODDIE		Is & wet holding b			#	37,500#	42,000#	42,000#	
		Fuel type	is a wet notality b	LP or N			LP or NG	LP or NG	LP or NG	-
		230v, 3ph Min./	'Max Amns+	202/400			366/600	390/600	380/600	
		460v, 3ph Min./		101/250			183/250	195/250	190/250	-
			g Capacities				hels/Hou			
		Full Heat - 20%	- 15%	up to 238		50 1	up to 2950	up to 3600	up to 3600	
		Full Heat - 25% Heat/Cool - 20%		up to 147			up to 1830 up to 1810	up to 2250 up to 2225	up to 2250 up to 2225	
		Heat/Cool - 209		up to 146			up to 1810 up to 1125	up to 1380	up to 1380	
	(in wet bushels/hour) are for No. 2 shelled									

\*Drying capacities listed (in wet bushels/hour) are for No. 2 shelled yellow corn at the listed moisture contents. Full-heat capacity estimates are for grain discharged hot at 17% moisture, resulting in approximately 15% moisture after steeping and cooling. Capacities listed are estimates based on drying principles, testing results, and computer simulations. These are not to be used as a guarantee of dryer performance. \*\*Transport height is with wet holding bin lowered on upper unit. \*\*\*Italled height is frame to fill hopper, less legs. +Min. Amps = FLA of all motors. Max. Amps = main switch size. 208v, 3ph min. amps x 1.15. Single phase dryers with fans 20hp + use Sukup Single Phase to Three Phase Power Converter. Amps noted in italics.

# **CENTRIFIGUAL DRYERS** SINGLE FAN/HEATER DRYERS

### FEATURES

- Quad Metering Roll System
- QuadraTouch Pro<sup>™</sup> controls
- Sukup<sup>®</sup> belt-driven Dual Inlet Centrifugal Fans.
- Fuel-efficient Sukup "H" line burner.

### 1. 2/3-1/3 SPLIT PLENUM 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 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



# SINGLE MODULE FAN/HEATER SPECIFICATIONS

\*Drying capacities listed (in wet bushels/hour) are for No. 2 shelled yellow corn at the listed moisture contents. Full-heat capacity estimates are for grain discharged hot at 17% moisture, resulting in approximately 15% moisture after steeping

and cooling. Capacities listed are estimates based on drying principles, testing results, and computer simulations. These are not to be used as a guarantee of dryer performance. \*\*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. Single phase dryers with fans 20hp + use Sukup Single Phase to Three Phase Power Converter.

Amps noted in italics.

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
Est. Drying Capacities			Bushels	s/Hour*		
Full Heat - 20% - 15% Full Heat - 25% - 15%	up to 740 up to 450	up to 970 up to 600	up to 1025 up to 710	up to 740 up to 450	up to 970 up to 600	up to 1025 up to 710
Pressure Heat/Vacuum Cool - 20% - 15% Pressure Heat/Vacuum Cool - 25% - 15%				up to 395 up to 250	up to 520 up to 320	up to 620 up to 390

# **CENTRIFUGAL AND HYBRID DRYERS TWO MODULE & HYBRID FAN/HEATER DRYERS**

## **CENTRIFUGAL STACKED DRYERS**

Sukup<sup>®</sup> Centrifugal Dryers are available in a Double-Stacked configuration that features the patented Sukup Grain Cross-Over<sup>™</sup> 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.

### **1. 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 & HYBRID FAN/HEATER SPECIFICATIONS**

N	Specifications	TC165	TC205	TC245	TH165	TH205	TH245
MODELS	Total grain holding cap. (Approx.)	850 Bu.	1050 Bu.	1250 Bu.	850 Bu.	1050 Bu.	1250 Bu.
0	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.
FAN/HEATER	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
Ł	Fan hp and diameter - top module	30 hp	40 hp	50 hp	20 hp, 44" A	30 hp, 44" A	40 hp, 44" A
Ш Т	- bottom module	30 hp	40 hp	50 hp	30 hp C	40 hp C	50 hp C
Z	Load auger HP	3 hp	5 hp	7.5 hp	3 hp	5 hp	7.5 hp
<b>4</b>	Unload auger HP	3 hp	5 hp	5 hp	3 hp	5 hp	5 hp
	Plenum - top module	Single	Single	Single	Single	Single	Single
HYBRID	- bottom module	50/50	50/50	50/50	50/50	50/50	50/50
<u>}</u>	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"
2) 	Installed length	27'	31'	35'	27'	31'	35'
CENTRIFUGAL	Installed width (less catwalks)	8'6"	8'6"	8'6"	8'6"	8'6"	8'6"
Š	Weight w/wheels & wet holding bin	24,000#	27,000#	30,000#	24,000#	27,000#	30,000#
	Fuel type	LP or NG					
	230v, 1ph Min./Max. Amps+		390/600	470/800		280/600	340/600
Π	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
5	575v, 3ph Min./Max. Amps+	72/100	91/250	106/250	65/100	88/250	108/250
MODULE	Est. Drying Capacities			Bushels	s/Hour*		
	Full Heat - 20% - 15% Full Heat - 25% - 15%	up to 1600 up to 1000	up to 2020 up to 1250	up to 2450 up to 1525	up to 1600 up to 1000	up to 2020 up to 1250	up to 2450 up to 1525
TWO	Press. Heat/Vac Cool - 20% - 15% Press. Heat/Vac Cool - 25% - 15%	up to 970 up to 610	up to 1240 up to 775	up to 1500 up to 925	up to 970 up to 610	up to 1240 up to 775	up to 1500 up to 925

Drying capacities listed (in wet bushels/hour) are or No. 2 shelled yellow corn at the listed moisture contents. Full-heat capacity estimates are or grain discharged hot at 17% moisture, resulting

n approximately 15% moisture after steeping and cooling. Capacities isted are estimates based on drying principles, esting results, and computer simulations. These are not to be used as a guarantee of drver performance.

\*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 witch size. 208v, 3ph min. amp = 230v, 3ph min. mps x 1.15.

Single phase dryers with fans 20hp + use Sukup Single Phase to Three Phase Power Converter. mps noted in italics. . = Axial, C = Centrifugal

# **COMPLETE DRYING SOLUTIONS®**

#### SUKUP® DOUBLE RUN CONVEYORS

- Compact design
- Smooth, quiet operation.
- 1500-10,000 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 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.

### CYCLONE PNEUMATIC SYSTEM

- An excellent match to your Sukup Dryer with automated system controls that seamlessly integrate with the Quadra Touch Pro™.
- Moves grain from dryer to multiple bins efficiently.
- All components and accessories are top-quality, industrial-grade to withstand years of use.
- Comes with pre-assembled chain and paddles.



#### **GRAIN BINS**

Sukup Non-Stiffened bins were designed with the operator in mind and it shows in the many features standard on every Sukup Bin. From our patented anchor brackets to our extra-strong roofs; quality, strength and innovation have made Sukup Bins a top

choice across the countryside.

- 15'-48' diameter
- 3-10 rings tall
- SAE Grade 8.0 Hardware with JS1000® Hour Plating
- G115 Galvanized Roof Sheets
- Anchor Brackets Act as Short Stiffeners



Visit Sukup.com or scan the QR code to view the full line of products and features.



#### Sukup Manufacturing Co. • www.sukup.com

Box 677 ■ 1555 255th St. ■ Sheffield, IA 50475-0677 ■ ph 641.892.4222 fx 641.892.4629 ■ info@sukup.com

#### **Distribution Centers**

Arcola, IL 61910 980 E. State Rte. 133 ph 217.268.3026 illinois@sukup.com

Aurora, NE 68818 3 1705 Hwy. 34 E. ph 402,694,5922 nebraska@sukup.c Cameron, MO 64429 7426 NE 352nd St. ph 816.649.2226 missouri@sukup.com **Defiance, OH 43512** 7724 Rte. 66 N. ph 419.784.9871 ohio@sukup.com Jonesboro, AR 72403 204 Best Industrial Dr. ph 870.932.7547 arkansas@sukup.com Watertown, SD 57201 2701 Piper Ave. ph 605.882.6697 southdakota@sukup.cor

L1130-102023CE

and optional features are subject to change without no

© Copyright 2023 This information contained herein is the exclusive property of Sukup Manufacturing Co.