



# Commercial Bins



## World's Largest Free Span Bins

- Up to 1.94 Million Bushel
- Up to 156' Diameter

# Million Bushel Bins



# Comm



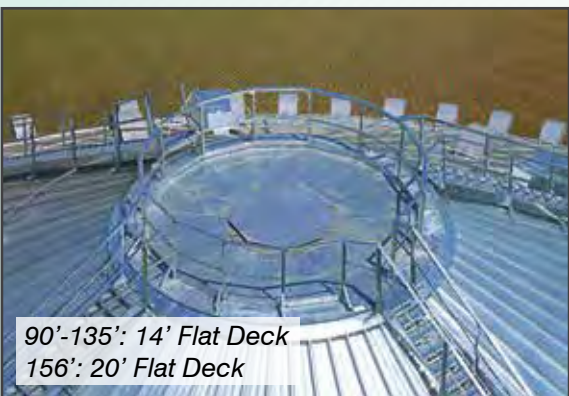
1.9 Million Bushel  
156' Diameter

More grain means more bushels, and that means bigger bins. We've answered the call for more storage with our 135' and 156' Commercial Bins. The 135' was the first ever fully-erected free-span bin to hold over one million bushels and the 156' is the largest free span bin in the world. With 1.4 & 1.9 million bushel capacities respectively, you can maximize your storage space, while minimizing the number of bins.



1.4 Million Bushel  
135' Diameter

Sukup million bushel bins also feature a 14' or 20' flat deck around the peak of the bin. This provides more area to attach catwalks and conveyors as well as more room to work, making it safer to service.



90'-135': 14' Flat Deck  
156': 20' Flat Deck

## Safety First - Sukup Safety Features



Sukup Commercial Bins come with a number of safety features including a standard Restraint Anchor (rated for 1800 lbs.) mounted near the manhole for use with a lifeline and safety harness. Starting in 2014, an additional Peak Anchor with rafter bracket for a knot passing pulley will also be available on roofs rated on 15,000 lbs. or greater. Besides these features, there are extensive safety sections at the Sukup website to help owners understand the hazards of grain storage, and replacement shields and decals are available at no charge.

## High Strength Steel - Sukup Sidewall Sheets

Sukup uses a minimum 70,000 to 75,000 PSI tensile strength steel to provide better hoop tension load carrying capacity. The 4" wide corrugations on Sukup sidewall sheets create less resistance and friction to allow grain to flow more easily. Sukup sheets are 44" high, so there are fewer rings, seams and bolts than bins with 32" sidewall sheets.



## Top Quality Bolts

Bolts on Sukup Commercial Bins are SAE Grade 8 with JS1000™ plating. The SAE Grade 8 ensures that Sukup bolts will hold up to the stresses placed on them.

Bolt Grade	Proof Load (psi)	Yield Strength (psi)	Tensile Strength (psi)
8	120,000	130,000	150,000
5	85,000	92,000	120,000
2	55,000	57,000	74,000

Corrosion Protection	Hours to Red Rust
JS1000™	1000
Polyseal	240
Zinc Dichromate	108
Zinc	72

The JS1000™ plating gives longer life for Sukup Commercial Bins.

## Double-Ended Stud Bolts



Double ended stud bolts eliminates water infiltration between laminated sheets & grain.

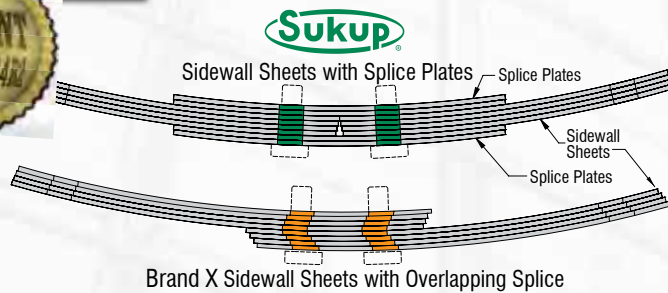


# Commercial Bins *[Better By Design™]*

## Laminated Splice Plate



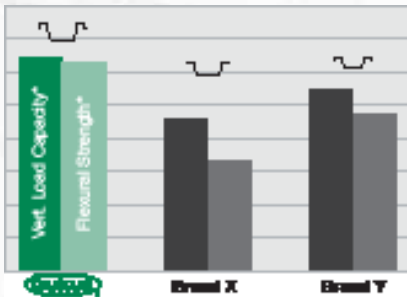
On larger commercial bins, our patented laminated splice plates reduce the risk of bolt shear. Instead of overlapping the edges of laminated sidewall sheets, we use a butt joint and specially designed splice plates. The design makes the bin easier to erect because the holes are properly aligned and eliminates gaps that can lead to leaking.



## Commercial Stiffeners

### - Sukup vs. The Competition

Not all stiffeners are designed alike, and not all stiffeners perform alike. Sukup commercial stiffeners are made from 70,000 PSI minimum tensile strength galvanized steel and were computer-engineered specifically to make them extra strong.

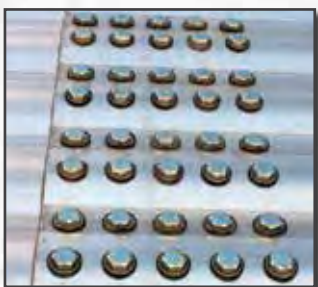


\* Effective load carrying capacities and flexural strength of the stiffeners were calculated based on American Iron and Steel Institute (AISI) Cold-Formed Steel Standards with 8 ga. ASTM A653 Grade 50 Steel.



Sukup stiffeners are externally-mounted only. External stiffeners provide excellent support and prevent the accumulation of grain and the resulting spoilage that can occur with internal stiffeners. Wind rings are used to provide greater rigidity to Sukup Commercial Bins when they are empty.

## Optimum Bolt Usage



The vertical bolt pattern on Sukup Commercial Bins has been evaluated for optimum performance and convenient erection. Sukup engineers use solid imaging computer design analysis to determine the proper bolt size to ensure the integrity of the seams while minimizing the number of bolts needed in order to speed erection and keep costs in line.

## Easy Access

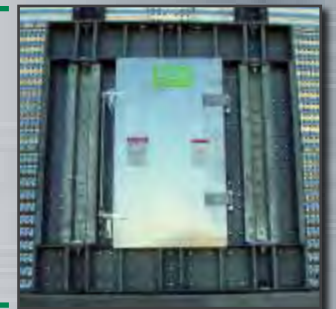
### Single Ring Door

A 44", single-ring door is available on shorter Sukup Commercial Bins. It features Hammer Head latches and the inner panels lay flat against the sidewall when open.



### Walk-Through Door

A 60" walk-through door is also available as a convenient option to help enter and exit with ease.



### Skid Steer Door

An optional Skid Steer door is also available for even greater access.



## Side Draw System



Sukup side draw systems are also an option on Commercial Bins. (As with any side draw, the grain must be emptied to a uniform height on the sidewall before refilling. Use only Sukup designed side draw units with Sukup Commercial Bins. Never add a side draw system to an existing bin.)



# Built to

Eugene Sukup started Sukup Manufacturing Co. in 1963. With the help of his two sons, Charles and Steve, he has grown this family-owned business into a leader in the grain storage and handling industry.



Sukup invested in the newest, most advanced bin production line in the world. Using the most accurate roll-forming machinery available results in great fitting, quality bins, that are efficiently and economically produced. That is why they offer a 5-year limited warranty.



## Exceptional Peak Load Rating



Sukup offers commercial roofs with 15,000, 30,000, 50,000 or 100,000 lb. peak load ratings. Roof ratings are pounds evenly distributed on peak ring as pure vertical load with uniformly distributed roof snow load calculated from 40 psf ground snow zone or 105 mph wind zone as defined by ASCE7-10 Code.

## 30,000 lb., 50,000 lb. and 100,000 lb. Roofs



The strength of the 30,000 lb. Sukup roof comes from double C-shaped channels forming I-beam rafters with C-shaped purlins. Rafters and purlins are manufactured from 70,000 psi tensile strength galvanized steel. The rafters in the 156' bin are constructed with 65,000 psi tensile strength I-beams.

## 50,000 & 100,000 lb. Peak Deck Sizes

- 10' across on 42'-48' bin
- 12' across on 54'-60' bin
- 16' across on 72'-135' bin
- 21' across on 156' bin

## 15K, 30K, 50K and 100K Load:

Our 50,000 and 100,000 lb. roof is constructed of I-beam rafters and an extra-heavy peak ring all manufactured here at Sukup Manufacturing Co. using the latest technology.



# be the Best *[from Base to Peak Lid]*

## Rigidized Roof Panels

Sukup's specially-designed roof panels are formed on a fully-automated, highly-advanced, single-pass roll forming system. This system maintains tight tolerances, ensuring an accurate fit for easier assembly and a tight seal between panels. The roll-forming process



includes a step to rigidize the full length of the roof panels every 4" to increase the stiffness of the panels, making them easier to handle. Sukup introduced their bins with the deepest roof ribs (3") incorporating multiple bends, giving added strength to the roof panels. Sukup even went the extra step of making



the ribs two different widths for a better overlap and fit. The inner or lower rib is slightly smaller than the upper, allowing the sheets to nest properly.

## Ladders, Cages, and Platforms

Sukup has available ladders, cages, landing platforms and stairs. Sukup ladders feature continuous handrails and rungs that are securely fastened, so they can't turn. Cages are also available for outside ladders for increased safety.



## Proper Ventilation - Sukup Roof Vents

Proper ventilation is an important part of maintaining grain quality. Sukup offers 18" fixed screen and 24" power roof exhausters.

*Exclusive 18" poly vents with hinged screen (patent pending) are extremely durable and feature a debris deflector to prevent damage to roof sheets from accumulating fines and trash.*



Sukup roof sheets are available pre-punched for 18" vents. Pre-punching the vent holes produces an extra-tall (1 1/8") extruded lip that works as a barrier, preventing moisture from leaking into the tank through the vent opening.



Sukup Power Roof Exhausters feature a totally enclosed 1750 RPM motor, fan blade, shutters, and galvanized housing for long lasting protection from the elements. We also offer an optional screen kit. Tapered poly eave vents are also available.



Commercial Bin Sizes				
Dia.	Max. Capacities Available (Bu.)	Standard Roof Peak Load (Lbs.)	Optional Roof Peak Load (Lbs.)	Peak Heights Avail.
36'	78,315	15,000	5,000* or 30,000	44' - 99'
42'	132,911	15,000	5,000*, 30,000 or 50,000	43'6" - 120'6"
48'	174,405	15,000	8,000*, 30,000 or 50,000	45'8" - 122'8"
54'	221,752	15,000	30,000 or 50,000	46'6"-123'6"
60'	275,029	15,000	30,000 or 50,000	48'9" - 125'9"
72'	399,673	30,000	15,000* or 50,000	51'5"-128' 5"
75'	434,658	30,000	15,000* or 50,000	52'1"-129'1"
78'	471,191	30,000	15,000* or 50,000	53'3"-130'3"
90'	632,999	30,000	15,000*; 50,000 or 100,000	57'2"-134'2"
105'	871,235	50,000	30,000* or 100,000	61'9"-138'9"
135'	1,472,119	50,000	100,000	70'11"-147'11"
156'	1,936,476	50,000	100,000	75'7"-148'11"

All roofs rated for 105 mph wind zone as defined by ASCE 7-10 code. Above roof peak loads meet ASCE 7-10 for unbalanced snow load with 40 psf ground snow load unless marked by asterisks. \*These roofs meet ASCE 7-10 for uniformly distributed snow load with 40 psf ground snow load.



# Bins [Specifications]

Model #	Max. Cap. Bu.*	Peak Height				Metric Tons**		
		15 & 30 K		50 K				
		Feet	Meters	Feet	Meters	Wheat	Corn	Rice
7809	160,982	56' 11"	17.35	-	-	4,378	4,089	3,289
7810	175,754	60' 7"	18.47	-	-	4,780	4,464	3,591
7811	190,526	64' 3"	19.58	-	-	5,181	4,839	3,893
7812	205,298	67' 11"	20.7	-	-	5,583	5,214	4,195
7813	220,078	71' 7"	21.82	-	-	5,985	5,589	4,496
7814	234,841	75' 3"	22.94	-	-	6,386	5,965	4,798
7815	249,613	78' 11"	24.05	-	-	6,788	6,340	5,100
7816	264,385	82' 7"	25.17	-	-	7,190	6,715	5,402
7817	279,157	86' 3"	26.29	-	-	7,592	7,090	5,704
7818	293,929	89' 11"	27.41	-	-	7,993	7,465	6,005
7819	308,701	93' 7"	28.52	-	-	8,395	7,840	6,307
7820	323,473	97' 3"	29.64	-	-	8,797	8,216	6,609
7821	338,244	100' 11"	30.76	-	-	9,198	8,591	6,911
7822	353,016	104' 7"	31.88	-	-	9,600	8,966	7,213
7823	367,788	108' 3"	32.99	-	-	10,002	9,341	7,514
7824	382,560	111' 11"	34.11	-	-	10,404	9,716	7,816
9009	219,999	60' 8"	18.49	57' 2"	17.42	5,983	5,588	4,495
9010	239,665	64' 4"	19.61	60' 10"	18.54	6,518	6,087	4,897
9011	259,332	68'	20.73	64' 6"	19.66	7,052	6,587	5,299
9012	278,999	71' 8"	21.84	68' 2"	20.78	7,587	7,086	5,700
9013	298,666	75' 4"	22.96	71' 10"	21.89	8,122	7,586	6,102
9014	318,332	79'	24.08	75' 6"	23.01	8,657	8,085	6,504
9015	337,999	82' 8"	25.2	79' 2"	24.13	9,192	8,585	6,906
9016	357,666	86' 4"	26.31	82' 10"	25.25	9,727	9,084	7,308
9017	377,332	90'	27.43	86' 6"	26.37	10,261	9,584	7,709
9018	396,999	93' 8"	28.55	90' 2"	27.48	10,796	10,083	8,111
9019	416,666	97' 4"	29.67	93' 10"	28.6	11,331	10,583	8,513
9020	436,332	101'	30.78	97' 6"	29.72	11,866	11,082	8,915
9021	455,999	104' 8"	31.9	101' 2"	30.84	12,401	11,582	9,317
9022	475,666	108' 4"	33.02	104' 10"	31.95	12,936	12,081	9,718
9023	495,332	112'	34.14	108' 6"	33.07	13,470	12,581	10,120
9024	514,999	115' 8"	35.26	112' 2"	34.19	14,005	13,080	10,522
10509	309,096	65' 4"	19.91	61' 9"	18.82	8,406	7,851	6300
10510	335,864	69'	21.03	65' 5"	19.94	9,134	8,530	6846
10511	362,633	72' 8"	22.15	69' 1"	21.06	9,862	9,210	7392
10512	389,401	76' 4"	23.27	72' 9"	22.17	10,590	9,890	7937
10513	416,170	80'	24.38	76' 5"	23.29	11,318	10,570	8483
10514	442,938	83' 8"	25.5	80' 1"	24.41	12,046	11,250	9029
10515	469,707	87' 4"	26.62	83' 9"	25.53	12,774	11,930	9574
10516	496,476	91'	27.74	87' 5"	26.64	13,502	12,610	10,120
10517	523,244	94' 8"	28.85	91' 1"	27.76	14,229	13,289	10,666
10518	550,013	98' 4"	29.97	94' 9"	28.88	14,957	13,969	11,211
10519	576,781	102'	31.09	98' 5"	30	15,685	14,649	11,757
10520	603,550	105' 8"	32.21	102' 1"	31.12	16,413	15,329	12,302
10521	630,318	109' 4"	33.32	105' 9"	32.23	17,141	16,009	12,848
10522	657,087	113'	34.44	109' 5"	33.35	17,869	16,689	13,394
10523	683,855	116' 8"	35.56	113' 1"	34.47	18,597	17,369	13,939
10524	710,624	120' 4"	36.68	116' 9"	35.59	19,325	18,049	14,485

Model #	Max. Cap. Bu.*	Pea				Metric Tons**		
		15 & 30 K		50 K				
		Feet	Meters	Feet	Meters	Wheat	Corn	Rice
13509	542,868	-	-	70' 11"	21.62	14,763	13,788	11,092
13510	587,118	-	-	74' 7"	22.73	15,967	14,912	11,996
13511	631,368	-	-	78' 3"	23.85	17,170	16,036	12,900
13512	675,618	-	-	81' 11"	24.97	18,373	17,160	13,804
13513	719,868	-	-	85' 7"	26.09	19,577	18,283	14,708
13514	764,118	-	-	89' 3"	27.2	20,780	19,407	15,612
13515	808,368	-	-	92' 11"	28.32	21,983	20,531	16,516
13516	852,618	-	-	96' 7"	29.44	23,187	21,655	17,420
13517	896,868	-	-	100' 3"	30.56	24,390	22,779	18,324
13518	941,118	-	-	103' 11"	31.67	25,593	23,903	19,228
13519	985,368	-	-	107' 7"	32.79	26,797	25,027	20,132
13520	1,029,618	-	-	111' 3"	33.91	28,000	26,150	21,036
13521	1,073,868	-	-	114' 11"	35.03	29,204	27,274	21,941
13522	1,118,118	-	-	118' 7"	36.14	30,407	28,398	22,845
13523	1,162,368	-	-	122' 3"	37.26	31,610	29,522	23,749
13524	1,206,618	-	-	125' 11"	38.38	32,814	30,646	24,653
15609	754,727	-	-	75' 7"	20,525	19,169	19,204	15,420
15610	813,814	-	-	79' 3"	22,132	20,669	20,708	16,627
15611	872,901	-	-	82' 11"	23,738	22,170	22,211	17,835
15612	931,989	-	-	86' 7"	25,345	23,671	23,715	19,042
15613	991,076	-	-	90' 3"	26,952	25,172	25,218	20,249
15614	1,050,164	-	-	93' 11"	28,559	26,672	26,722	21,456
15615	1,109,251	-	-	97' 7"	30,166	28,173	28,225	22,663
15616	1,168,339	-	-	101' 3"	31,773	29,674	29,729	23,871
15617	1,227,426	-	-	104' 11"	33,380	31,174	31,232	25,078
15618	1,286,514	-	-	108' 7"	34,986	32,675	32,736	26,285
15619	1,345,601	-	-	112' 3"	36,593	34,176	34,239	27,492
15620	1,404,689	-	-	115' 11"	38,200	35,677	35,743	28,700
15621	1,463,776	-	-	119' 7"	39,807	37,177	37,246	29,907
15622	1,522,863	-	-	123' 3"	41,414	38,678	38,750	31,114

**DANGER! DO NOT ENTER BIN!**

**If you must enter the bin:**  
Follow all applicable safety regulations. Shut off and lock out all power. Station another person outside the bin. Use a safety harness and safety line.

Purchase ladder and safety cages and use a safety harness. Maintain secure hand and foot hold when climbing. Metal is slippery when wet. Never carry items while climbing on bin.

Failure to heed these warnings will result in serious injury or death.

Sukup Manufacturing Co. provides this information to assist you in choosing the optimal equipment for your situation. Many factors, such as grain variety, maturity levels, cleanliness of the grain, various weather conditions, etc., can affect the performance of agricultural equipment and your results may vary. Thus, this information 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, expressed or implied, of how a particular Sukup unit will perform under your operating conditions. Because we are continuously improving Sukup products, changes may occur that may not be reflected in the specifications. Sukup Commercial Bins are designed for storage of free-flowing grain.

Note: Model # indicates bin diameter (in feet) and number of rings.  
 \* Max capacities are based on bins with no plenum and grain peaked at 28° angle of repose with 6% compaction.  
 \*\* Tonnage based on 6% compaction and the following grain densities: Wheat: 772 kg/m<sup>3</sup> (48 lbs/ft<sup>3</sup>), Corn: 721 kg/m<sup>3</sup> (45 lbs/ft<sup>3</sup>), Rice: 580 kg/m<sup>3</sup> (36 lbs/ft<sup>3</sup>).

# Material Handling

## Sukup Tower Dryers

- 12', 18', 24', 30' Diameters
- 46' - 120' Heights
- Dry up to 10,000 bu/hr.
- Positive unloading system removes grain from the dryer at a rate based on the grain temperature as it enters the cooling portion.



## Commercial Fans

Sukup Fans are #1 in the industry! Sukup is top in performance and reliability. Centrifugal fans available up to 60 hp. Axial fans available up to 44".



## Sukup Hopper Bins

- 15' - 48' diameter tanks available up to 24-rings.
- Capacities from 2200 bu. to 153,000 bu.
- 45° hopper.
- Exclusive inner apron on heavy-duty hoppers prevents grain from accumulating at the tank/hopper seam and allows grain to flow freely into the hopper.



## Drag Conveyors

We're making it easier and more cost-effective to handle grain. Sukup conveyors are constructed with heavy-gauge, galvanized steel. 1/2" UHMW flights on all conveyors prevent steel-to-steel contact. Removeable shaft, sprocket and bearings make it easy to maintain your Sukup conveyor. Optional abrasion-resistant steel liners guarantee your investment will last for years to come.



## Bucket Elevators

Sukup Bucket Elevators give you the capacity for expansion. Our bucket elevators have UHMW seals on all shafts, durable SOFR rubber belting, heavy-gauge trunking and heavy-duty angle iron framework at the head and boot sections to add strength. The low-impact elevator head shape minimizes the cracking and damaging of grain. Additionally, Sukup offers what our competitors will not; a bucket elevator built to your specifications.



Sukup Manufacturing Co. ■ [www.sukup.com](http://www.sukup.com)

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## Distribution Centers

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ph 217.268.3026  
fx 217.268.3522

Aurora, NE 68818  
1705 Hwy. 34 E.  
ph 402.694.5922  
fx 402.694.5921

Cameron, MO 64429  
7426 NE 352<sup>nd</sup> St.  
ph 816.649.2226  
fx 816.649.2225

Defiance, OH 43512  
7724 Rte. 66 N.  
ph 419.784.9871  
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Jonesboro, AR 72403  
204 Best Industrial Dr.  
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Watertown, SD 57201  
2701 Piper Ave.  
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