





## 65 years of high quality, reliability and efficiency

For more than 65 years we have been the proud supplier of drying and storage equipment for the agricultural sector. We have a wealth of experience and expertise, and create valuable solutions for customers across Europe.

One of the longest established companies within the grain drying and storage industry, we offer optimal, efficient solutions to agriculture and industry.



### US manufacturing facilities and ownership

Sukup Europe is owned by an American family-owned company, Sukup Manufacturing Co. in Iowa.

A young farmer called Eugene Sukup invented the world's first stirring augur for steel grain silos in 1963. Ever since then, Sukup has produced equipment that makes the farmer more efficient. Today, Sukup is the world's fastest growing manufacturer of grain silos and the world's largest family-owned producer of grain drying and storage equipment.

Until 2015, our company was called DanCom. Today, we are Sukup Europe. A strong ownership structure underpins our business. We manage our business model and agenda at the local level and remain to this day firmly anchored in our agricultural origins. Since 2007, our headquarters has been close to the motorway at Hedensted in Denmark.

As a Sukup customer, we guarantee you quality, reliability and efficiency – every time.



### A solid background in Danish agriculture

DanCorn was founded at Klejsgaard near Juelsminde in 1955. Klejsgaard purchased its first combine harvester and needed to optimise grain drying and storage.

Since then, we have done our utmost to exploit practical agricultural skills and combine them with state-of-the-art product development. Hans Hansen's parents founded the company. Hans Hansen is now an active member of the Board and an important part of Sukup Europe's DNA.





## State-of-the-art manufacturing facilities in the US

Sukup Manufacturing operates 75,000 m2 of state-of-the-art manufacturing facilities under one roof close to the group headquarters at Sheffield, Iowa in the US.

Sukup opened its brand new grain bin manufacturing facilities in 2001. Sukup maintains close ties between the factory and customers' needs.

Sukup Europe has spacious warehousing facilities at Heden-

sted in Denmark. Our facilities meet our customers' needs for rapid delivery and installation of grain drying and storage equipment.

We at Sukup Europe maintain close links with our customers and pride ourselves on producing unique and innovative solutions for agricultural customers across Europe.

## Basnaes Manor: A large plant that



Farm Manager at Basnaes Manor, Preben Olsen:

"We have invested in a futureproof solution that gives us a wide berth when it comes to handling grain. The construction project was complex. There were many tasks to resolve under way. The construction phase was soon over and the new plant was ready in time for harvest. Sukup Europe did a really great job. We got the silos we asked for."







## Lyngbygaard Manor: A turnkey project

Niels Joergen Boenlykke, Owner

"We invested in a new grain plant comprising three silos. Each stores up to 1000 tons of grain. Sukup took care of construction work, applications and so on. The plant was erected and runs to our complete satisfaction. We love the colour of our silos. People tell us they think our silos are







### Standard equipment for the Sukup silos

- Big inlet with lid at the top of the silo
- Roof ladder with railing and non-skid steps
- Chemical anchor bolts for precise and strong anchoring
- Flexible sealant between silo and foundation
- Large external access door fitted with safety device
- Large external ladder with safety cage
- Internal inspection ladder
- Large roof manhole with safety railing and safety switch



- Sukup quality product from USA
- EUROCODES approved
- Silo diameter: 4.6 m 47,5 m
- Height of the silo wall: 4.5 m 26.8 m
- Capacity from 51 t to 34.720 t of wheat with external stiffeners
- Strong construction
- Designed with regards to the Eurocode
- Grain storage at a low price
- Well-tested construction
- Galvanized steel construction
- $\,\blacksquare\,$  Minimum work efforts during filling and unloading
- Spiral staircase and roof ladder
- Rest platform and accessibility that comply with the regulations

The silos are delivered in industrial quality with strong external stiffeners and delivered in sections for easy and quick on-site assembly. The roof is designed in lightweight sections with shaped stiffeners for stiffness and easy assembly.

The silos are extremely strong and can therefore be fitted with catwalks and conveyor systems without the need of additional stiffening. Aeration and drying equipment including floors, fans, roof vents, stirring system, loading and unloading equipment, external level sensors, equipment for temperature monitoring are available options.

To get the best possible aeration, a fully perforated floor can be supplied. The floors are available for either grain or rapeseed. The rapeseed floor can also be used for aerating grain.

To control the storage stability of the grain, temperature monitoring devices are available. The temperature should be measured in different locations and different heights in the silo.











### Sizes

Sukup's silo program covers many different sizes and for every purpose. Smaller and larger silos than those shown in the table are also avalilable.

On page 10 and 13 of this brochure are shown a few examples. Ask us for more information to cover the complete program.

For more details please check www.sukup-eu.com





### News

### The world's largest stirring silo

Content with stirring 1.616 t. Diameter 60 feet = 18.24 m.

Height: 14.58 m.

This unique silo comes with 5 stirring augers to ensure a perfect mixing of the dried grain and a homogenous quality of the dried crops.





### When the colour matters...

Sukup silos are also available with a painted surface. The hot dip galvanized silo sheets are degreased where-upon they are painted with a durable powder coating.

You may choose between all standard 1.625 RAL colors – this means that we can always adapt the silo project to your specific requirement.

RAL colours:



Anthracite



Black



Red







Green

Green Umbra

White







### Sukup Stirring System

With the Sukup stirring system you can easily dry and store moist grain in up to 7,5 m grain depth in our outdoor storage bins.

The drying process must be activated as soon as an even grain layer (0.5-1 m) is in the bin.

Warm air is introduced through the fully perforated floor. The lowest grain layer is dried during constant stirring via the 2-5 pcs. vertical stirring augers mounted on the horizontal cross-tube. Uniform drying of the grain is achieved by the action of the vertical augers stirring back and forth along the horizontal cross-tube.

The cross tube rotate slowly horizontal around the silo. This forces the down augers to move in and out on the cross tube. The down augers rotate and bring the dried grain from the bottom of the silo to the top. This secures a complete mixing of the crop.

- Drying of storage silos
- Homogeneous drying
- Large capacity
- Simple operation
- Even distribution in the silo
- Minimal maintenance
- Well-proven and patented equipment
- Simple construction and design
- Complete mixing of different grains
- $\,\blacksquare\,$  Minimum operational effort required





All stirring systems are CE-approved and preassembled and tested at Sukup's own workshop in Hedensted.

### Fan and Heating

The fan must be powerful enough to push the air through the grain layer. All heating sources normally used for drying grain in flat storage can be used. This can be oil, gas, hot water etc.

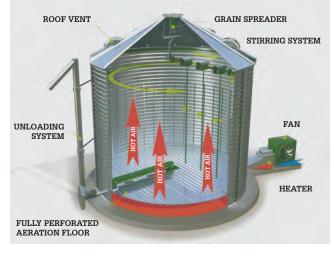
### Grain Spreader

In order to ensure an efficient and even distribution of the grain in the silo, a grain spreader is mounted directly below the inlet at the top of the bin. The grain spreader adjustment is infinitely variable to spread the grain evenly and homogeneously in the silo.

### **Stirring System**

The system has a horizontal hanging cross tube with 2-5 down augers, which ensure complete stirring and mixing of grain in the silo. Warm air is supplied while the silo is being stirred, thereby achieving a completely uniform drying of the grain.

The airflow through the grain is increased by up to  $33\,\%$  because of the stirring. When the grain is stirred, "wet" spots in the bin are avoided. It is also possible to make a perfect mixture of e.g. barley and wheat in the silo.







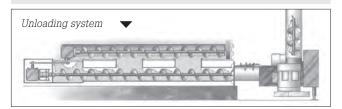


### **Unloading system**

The Sukup unloading system for steel silos consist of an unloading auger with a drive unit, a center sump and a number of intermediate sumps operated by an external handle.

The drive unit is available in 3 different models:
(1) a horizontal drive unit with an extension facility, (2) a 25° incline drive unit or (3) a vertical drive unit to enable vertical unloading directly into a truck or conveyor system.

In addition to the unloading auger, a sweep auger can be mounted which enables the silo to self-empty almost 100 %.



- Flexible construction
- For silos with a diameter from 4.6 to 32.0 m
- Available in 6" (152 mm), 8" (203 mm) and 10" (254 mm)
- Capacities up to 35, 65 and 100 tons/h



### Sukup HD-Floors

Sukup HD-Floors is delivered with half of the distance between the stiffeners, which in return results in a significantly stronger flooring than traditional aeration floors.

All Sukup HD-Floors are delivered with improved clearing by the fan opening, this result in lesser air resistance and gives a better aeration of the crops.

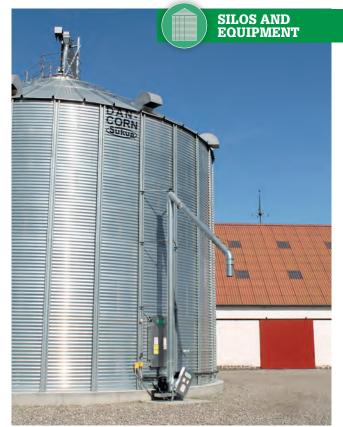
The HD-Floors can be delivered with  $\emptyset$ 2,39mm and  $\emptyset$ 1,27mm perforations, suitable for grain and rape seeds.

SuperWave TM Supports









### **Emptying the silo**

- The unloading auger is activated, the centre sump is opened with the remote control. The centre sump leaves a cone of grain in the silo.
- The intermediate sumps are opened with the remote control and the grain above the sweep auger unloads.
- The sweep auger is activated. After only one rotation, the silo is almost 100 % empty.
- Sukup unload systems are as standard delivered with extra big emergency outlet close to the silo center outlet.



Sukup sweep auger mounted with the standard wheel



The sweep auger can also be delivered with extra reduced speed on the drive wheel, ratio 16:1









### Sukup Control Panels

A good Sukup silo installation includes a control panel adapted to your specific wishes and requirements. Our control panels are available for all project sizes from one single silo to large commercial installations with conveyor system and dryer.

All control panels are tested before delivery in order to make sure that everything works perfectly.

All control panels are manufactured according to the Danish legislation.

### Sukup control panels:

- Standard control panel for simple installations
- PLC / PC solutions for all silo installations with several silos and conveyor system

### Standard control panel for drying silo

Contains starters for fan, grain spreader, stirring system, unloading system and the option to build in a starter for 3 external motors. Including time management of the stirring system and unloading system and the option to control the heating source.



 $\mbox{PLC}$  /  $\mbox{PC}$  control panel for all sizes of silo installations with more silos and conveyor system.

Advanced control panel with touch screen from which the whole installation can be controlled and observed. Including starters for all motors of the installation. Flows are shown and started from the user surface.

## Sukup control panels provides you with the opportunity to:

- Go into more detailed overviews showing the control of the intermediate processes of the installation
- Read historic operational data
- Build in e.g. temperature surveillance in storage silos
- Remote control / surveillance of the installation from your office through the Internet
- Get access to troubleshooting, service and updating of the program via the Internet.



### Automatic Drying Process

### NEW!

An Automatic Drying Process is integrated into the control system. The process monitors current moisture content in the grain.

When the moisture content falls to a pre-set level, the drying process shuts down automatically to avoid unnecessary energy consumption.

The system removes the need to check moisture content in the silo and simplifies work processes.









## Sukup Hopper silo

- Designed and manufactured in the USA
- Diameter from 4.57 to 10,97 m
- Capacity from 59 to 1.730 tons of wheat
- Volume from 78 to 2.277 m3
- 45° / 60° cone shaped hopper

### Extra Accessories:

- Strong Roller-Gate outlet slide
- External ladder with safety cage
- Roof ladder to the top of the silo
- Inspection door in the roof sheet
- Inspection door in the sidewall sheet
- Inspection door in the cone sheet

Sukup hopper silo is an excellent wet holding silo for Sukup dryers, truck loading silo and self emptying storage silo.

The hopper silo is made of galvanized sheets in order to extend its lifetime. The hopper silo is delivered with a top ring on which an industrial lid for e.g. conveyor system or catwalk can be mounted.

With its 78 cm the rack-and-pinion steered Roller-Gate outlet slide on the hopper silo ensures sufficient space for mounting conveyor system.



### Accessories

Standard roof vents on the roof, industrial lid as well as full level sensors.

























### Diameter

Diameter									
Volume weight 0.76 t	ton/m3. With 1	max. 6% comp	oression in hi	gher grain la	yers. Require	e refilling afte	r drying.		
Silo diameter (m)	7,32	8,23	9,14	10,06	10,97	12,80	14,60	16,41	18,24
Eave Height 6,73	m								
Type	2406	2706	3006	3306	3606	4206	4806	5406	6006
Silo total height	8,93	9,17	9,47	9,78	10,11	10,64	11,17	11,79	12,34
Max. Content (ton)	246	315	393	480	578	803	1069	1391	1751
With aeration (ton)	235	301	376	460	554	770	1026	1336	1684
With stirring (ton)	194	245	302	366	435	592	770	963	1142
Eave Height 7,85	m								
Type	2407	2707	3007	3307	3607	4207	4807	5407	6007
Silo total height	10,05	10,29	10,59	10,90	11,23	11,76	12,29	12,90	13,46
Max. Content (ton)	283	362	451	551	663	917	1220	1581	1985
With aeration (ton)	272	348	434	531	639	884	1177	1526	1919
With stirring (ton)	230	291	359	435	518	705	917	1163	1379
Eave Height 8,97	m								
Type	2408	2708	3008	3308	3608	4208	4808	5408	6008
Silo total height	11,17	11,41	11,71	12,02	12,35	12,88	13,41	14,02	14,58
Max. Content (ton)	320	410	510	622	745	1033	1369	1770	2220
With aeration (ton)	309	396	493	602	721	1000	1326	1717	2153
With stirring (ton)	266	337	416	504	601	818	1064	1355	1616



## Sizes – Hopper silo

Diameter 4,57									
Туре	1503	1504	1505	1506	1507	1508	1509	1510	1511
Hopper silo total height	7,85	8,69	9,80	10,92	12,03	13,15	14,26	15,38	16,49
Max. content (m3)	78,2	97,5	116,7	136,0	155,2	174,5	193,8	213,0	232,3
Max. Content (ton)	59,5	74,1	88,7	103,3	118	132,6	147,3	161,9	176,5
Diameter 5,49									
Туре	1803	1804	1805	1806	1807	1808	1809	1810	1811
Hopper silo total height	8,69	9,52	10,64	11,75	12,84	13,98	15,10	16,19	17,33
Max. content (m3)	118,4	146,2	173,9	201,6	229,3	257,1	257,1	312,5	340,3
Max. Content (ton)	90,0	111,1	132,2	153,2	174,3	195,4	195,4	237,5	258,6
Diameter 6,40									
Туре	2103	2104	2105	2106	2107	2108	2109	2110	2111
Hopper silo total height	9,42	10,26	11,37	12,49	13,60	14,72	15,83	16,95	18,06
Max. content (m3)	169	206,7	244,5	282,2	320,0	357,7	395,5	433,5	471,0
Max. Content (ton)	128,4	157,1	185,8	214,5	243,2	271,9	300,5	329,2	357,9
Diameter 7,32									
Туре	2403	2404	2405	2406	2407	2408	2409	2410	2411
Hopper silo total height	10,01	11,13	12,24	13,36	14,48	15,62	16,74	17,86	18,97
Max. content (m3)	231	280	329	379	428	477	526	576	625

Above models are examples only. Ask us for more information to cover the complete program.

250

212,8

For more details please check  $\boldsymbol{www.sukup\text{-}eu.com}$ 

175,6



Max. Content (ton)



475

437,8

288

325,3

362,5

399,8



## **Commercial Installations**

We have more than 60 years of experience within the line of project engineering and construction of installations for grain handling, storage and conveying.

We offer small and XL projects - and everything in between! Our Project Department ensures the highest quality standards from receiving the order until the installation is ready for operation. The same project manager will follow your project from A–Z.

- An industrial quality silo
- Silo diameter from 10.97 to 47.50 m
- Capacity from 800 t to 53,500 tons of wheat
- Well-tested construction
- External stiffeners provide for maximum strength
- Galvanized steel construction
- Minimum effort required for loading and unloading
- Grain storage without access for birds and animals
- Aeration system
- Optimal use of the developed space
- $\blacksquare$  Stairs and catwalks = safe access
- Designed to meet your demands
- Grain storage at a low price
- Regulation safety devices fitted

### Silo unloading

With a sweep auger of highest quality that can empty the silo with a capacity up to 200 t/h.

Can be equipped with different accessories as ex. cleaning brushes.

### Accessories

- Temperature monitoring system
- Full/empty sensors
- Sprinkling system



## **Reinforced Construction**

The diameter of industrial steel silos is typically quite large and therefore it might be necessary to divide the roof sheets into more sections. The roof sheets are mounted on strong steel rafters. This means that the load capacity of the roof is increased giving the option to mount heavy equipment like catwalks and heavy conveyor systems above the silo. Furthermore it is possible to mount a large number of sensor cables for temperature monitoring.





















#	of Rings	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
I	Eave height	10.08	11.2	12.32	13.44	14.55	15.67	16.79	17.91	19.02	20.14	21.26	22.38	23.5	24.61	25.73	25.85

Model	Total height	Max Content (m³)	Model	Total height	Max Content (m³)	Model	Total height	Max Content (m³)	Model	Total height	Max Content (m³)
4209	14.00	1427	4809	14.53	1891	5409	15.14	2427	6009	15.7	3038
4210	15.11	1569	4810	15.65	2077	5410	16.26	2662	6010	16.81	3328
4211	16.23	1712	4811	16.76	2262	5411	17.37	2897	6011	17.93	3619
4212	17.35	1854	4812	17.88	2448	5412	18.49	3132	6012	19.05	3909
4213	18.47	1996	4813	19.00	2634	5413	19.61	3367	6013	20.17	4199
4214	19.58	2138	4814	20.12	2820	5414	20.73	3603	6014	21.29	4490
4215	20.70	2281	4815	21.23	3006	5415	21.84	3838	6015	22.4	4780
4216 4217	21.82 22.94	2423 2565	4816 4817	22.35 23.47	3191 3377	5416 5417	22.96 24.08	4073 4308	6016 6017	23.52 24.64	5070 5360
4218	24.05	2707	4818	24.59	3563	5418	25.2	4543	6018	25.76	5651
4219	25.17	2850	4819	25.70	3749	5419	26.31	4778	6019	26.87	5941
4220	26.29	2992	4820	26.82	3934	5420	27.43	5013	6020	27.99	6231
4221	27.41	3134	4821	27.94	4120	5421	28.55	5249	6021	29.11	6522
4222	28.52	3276	4822	29.06	4306	5422	29.67	5484	6022	30.23	6812
4223	29.64	3419	4823	3.02	4492	5423	30.78	5719	6023	31.34	7102
4224	30.76	3561	4824	31.29	4678	5424	31.9	5954	6024	32.46	7393
7209	16.79	4499	7509	17.07	4911	7809	17.35	5351	9009	18.49	7307
7210	17.91	4917	7510	18.19	5364	7810	18.47	5842	9010	19.61	7960
7211	19.02	5335	7511	19.30	5818	7811	19.58	6332	9011	20.73	8613
7212	20.14	5753	7512	20.42	6271	7812	20.70	6823	9012	21.84	9266
7213	21.26	6171	7513	21.54	6725	7813	21.82	7314	9013	22.96	9919
7214	22.38	6589	7514	22.66	7179	7814	22.94	7804	9014	24.08	10573
7215	23.50	7007	7515	23.77	7632	7815	24.05	8295	9015	25.20	11226
7216 7217	24.61 25.73	7425 7843	7516 7517	24.89 26.01	8086 8539	7816 7817	25.17 26.29	8786 9276	9016 9017	26.31 27.43	11879 12532
7218	26.85	8262	7518	27.13	8993	7818	27.41	9767	9018	28.55	13185
7219	27.97	8680	7519	28.24	9446	7819	28.52	10258	9019	29.67	13838
7220	29.08	9098	7520	29.36	9900	7820	29.64	10748	9020	30.78	14492
7221	30.20	9516	7521	30.48	10354	7821	30.76	11239	9021	31.90	15145
7222	31.32	9934	7522	31.60	10807	7822	31.88	11729	9022	33.02	15798
7223	32.44	10352	7523	32.72	11261	7823	32.99	12220	9023	34.14	16451
7224	33.55	10770	7524	33.83	11714	7824	34.11	12711	9024	35.26	17104
10509	19.91	10266	13509	21.62	18030	15609	23.04	21358			
10510	21.03	11155	13510	22.73	19500	15610	24.16	23031	Taller ea	ve heights t	han
10511	22.15	12044	13511	23.85	20969	15611	25.27	24703	mentione	ed in the ca	rt are
10512	23.27	12933	13512	24.97	22439	15612	26.39	26375	available	in some sit	tuations.
10513	24.38	13822	13513	26.39	23909	15613	27.51	28047			
10514	25.50	14711	13514	27.20	25378	15614	28.63	29719	Model #	indicates si	lo
10515	26.62	15600	13515	28.32	26848	15615	29.74	31391		(in feet) an	
10516 10517	27.74 28.85	16489 17378	13516 13517	29.44 30.56	28318 29787	15616 15617	30.86	33064 34736	number (	,	
10518	29.97	18267	13518	31.67	31257	15618	33.1	36408			
10510	31.09	19156	13519	32.79	32726	15619	34.21	38080			
10519	32.21	20045	13520	33.91	34196	15620	35.33	39752			
10520	33.32	20043	13520	35.03	35666	15621	36.45	41425			
10521	34.44	21823	13522	36.14	37135	15622	37.57	43097			
10522	35.56	22713	13523	37.26	38605	10022	07.07	10007			
10524	36.68	23602	13524	38.38	40075						
10021	00.00	20002	10021	55.55	10070						

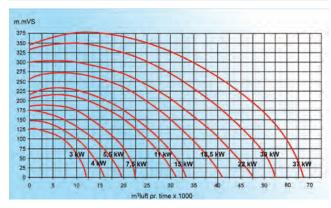


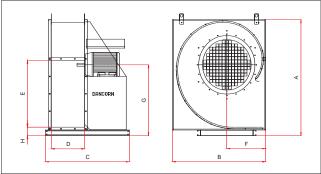


### **Fans**

### Fans type D

- 7.5-37 kW fan size
- Galvanized corrosion resistant finish
- High efficiency
- Low noise
- Low power consumption
- Statically and dynamically balanced
- Low self-heating
- Large air quantity
- With suction from right or left side
- Air discharge horizontally or downwards









## Fans type D

- is developed to provide a large air quantity and the ability to overcome high back pressures.
   Important qualities for every silo installation, floor storage and aeration system.
- fan impeller is developed using the latest technology resulting in a highly efficient output.
- is made in a modern design, which makes the fan perfect for every installation.

Fans type D is a strong construction made of galvanized sheet to ensure the fan a long life.

The dimensioned sketch shows a fan with inlet from the right.

Output and dimensions for fans provided by the manufacturer.

### **OUTPUT AND DIMENSIONS FOR FANS:**

	Ţ .						
Туре	D10	D15	D20	D25	D30	D40	D50
Motor 1500 rpm. kW	7,5	11,0	15,0	18,5	22,0	30,0	37,0
Motor 1500 rpm. hk	10,0	15,0	20,0	25,0	30,0	40,0	50,0
m3 air by 80 mm w.c.	19.000	27.000	32.000	37.000	44.500	54.000	62.000
m3 air by 120 mm w.c.	16.800	23.000	28.000	33.800	41.500	48.500	57.000
m3 air by 150 mm w.c.	14.000	20.000	25.000	31.200	38.300	46.000	53.000
A mm height	1415	1580	1580	1780	1780	1940	1940
B mm length	1195	1320	1320	1425	1425	1660	1660
C mm width	1180	1210	1280	1245	1305	1400	1400
D mm width	450	480	550	515	575	560	630
E mm height	820	920	920	1040	1040	1100	1100
F mm length	475	535	535	595	595	670	670
G mm height centre	855	980	980	1090	1090	1195	1195
H mm height	90	120	120	120	120	130	130
Inlet	Ø600	Ø700	Ø700	Ø800	Ø800	Ø800	Ø800
Weight incl. electrical motor	211	310	350	420	460	740	760





### **Hot Water Radiators**

- Safe heating source
- Low operational costs
- No fire protection required
- Hot-dip galvanized
- Long life
- Tested for compressive strength up to 4 bar/ 9 bar depending on the model.
- Can be used in combination with a straw burner
- Many different sizes available

You get a safe and favorable heating source when connecting a hot water radiator to a central heating system.

If a very high air temperature is required two radiators can be connected in series. For example twin radiators can be mounted on a continuous flow mobile dryer.

The quoted heating outputs are approximate due to the different air quantity, pump size, pipe dimension, pipe length etc.





### OUTPUT AND DIMENSIONS OF THE HOT WATER RADIATOR:

Calorifier	Output (kW)	Dimens	ion (mm)	Weight	Pumpsize	Supply flow	Airflow
Туре	(KVV)	Height	Width	(kg)	(l/min)	temperature (°C)	(m <sup>3</sup> /h)
VG-34	47	700	750	150	76	90	10.000
VG-36	70	1.050	750	240	114	90	10.000
VG-44	63	700	1.000	230	100	90	10.000
VG-46	95	1.050	1.000	305	152	90	10.000
VG-54	78	700	1.250	250	126	90	10.000
VG-56	122	1.050	1.250	375	190	90	10.000
TTC-200	200	1.620	1.700	73	100	90	12.000
TTC-300	300	1.620	1.700	107	50	90	12.000
VK-500	500	1.165	2.400	-	500	95	28.000
VK-600	600	1.500	1.580	-	500	95	35.000
VK-750	750	1.165	2.400	-	500	95	45.000
VK-900	900	2.000	2.000	-	500	95	56.000

Calculated from the parameters above.











## Mobile (

### Suitable for:

- Grain drying
- Room heating
- Defrosting frost protection
- Drying out after cleaning the stables
- Pre-heating of seed potatoes

Accessory package with chimney (2 m), rain cover and filter package.



# Indirect oil heater type OKLIMA

Our oil heater type Oklima has indirect heating, at which the heat emits to the air via a heat exchanger while the damaging products from the incineration are lead through the chimney.

Fuel oil, diesel oil or petroleum can be used as fuel for indirect oil heaters. Oil heaters require 230/440 V connection.

The heater can be controlled manually or by means of an external signal from a hygrostat, thermostat, timer or dryer control. The heater can be supplied with oil from the built-in tank (RS heaters) or be connected to an external tank.

Our indirect oil heaters type Oklima are equipped with DANFOSS controls, oil pump and a stainless steel combustion chamber in order to ensure the best operation and long life.

### OUTPUT AND DIMENSIONS FOR OIL HEATERS:

Туре	Brutto output	Brutto output	Net output	Net outout	Air output consump	Tank capacity	Fuel	Weight	Length	Width	Height
	Kcal / h	kW/h	Kcal / h	kW/h	m <sup>3</sup> / h	Litre	Kg/h	Kg	mm	mm	mm
SE120	27.534	32	23.294	27	1.150	42	2,70	48	1215	440	670
SE200	47.318	55	42.350	49	2.000	65	4,64	80	1435	555	940
SE300	73.119	85	63.979	74	3.300	105	7,17	110	1740	690	1025
PH400	94.616-	110 - 75	85.155-	99 - 66	5.500	135	9,27-	149	1840	770	1220
	64.533		57.452				6,33				
Jumbo110	94.999	110,46	88.159	102,51	9.000	-	8,74	200	1.765	800	1.214
Jumbo145	124.455	144,72	115.992	134,87	12.000	-	11,45	254	1.905	890	1.354
Jumbo185	159.563	185,54	147.117	171,07	13.000	-	14,68	270	2.013	912	1.414
Jumbo235	202.715	235,72	186.498	216,86	17.000	-	18,65	351	2.245	982	1.584
Farm110	94.999	110,46	88.159	102,51	8.500	-	8,74	122	1.110	950	768
Farm145	124.455	144,72	115.992	134,87	11.000	-	11,45	158	1.220	1.080	838
Farm185	159.563	185,54	147.117	171,07	12.000	-	14,68	163	1.324	1.140	858
Farm235	202.715	235,72	186.498	216,86	16.200	-	18,65	233	1.514	1.310	938
Accessory pack	age with chi	mney (2 m)	, rain cover	and filter p	ackage.						•





## •

### Mobile Continuous flow dryer

- Capacities up to 45 t/h
- Plug and play, delivered ready for operation
- Suitable for drying of all crop types
- Flexible
- Easy to clean
- Simple and automatic operation
- Future-proof can be extended to Stack dryer



### What makes the difference?

- The only dryer on the market with quad metering roll system to ensure a homogenous and careful drying.
- The most advanced and user-friendly controller provides a trouble-free, no-hassle operation of the dryer.
- The drying process is controlled by measuring the actual water content.
- Large savings due to the low installation and operational costs.
- Grain exchangers in the stack dryer ensure optimum quality.
- Option: radiator for additional energy saving.

### KAPACITET T/H HVEDE, 19-15% 100 C EKSEMPLER:

Model	Tørring + Køling	Fuld varme
DC12	-	19,5
DCC163	13,0	26,0
DCC243	19,5	39,0
DC283	27,5	45,5
DCC245	39,0	78,1







▲ DC 12 mobile dryer with axial fan



## Stack dryer

- Capacities greater than 100 t/h
- Suitable for all crops
- Can be delivered as 2 and 3 module dryer
- Each module are delivered pre assembled from factory ready to stack on site
- Same Quad metering roll system as the mobile dryers
- Same QuadraTouch Pro control system as the mobile dryers
- Grain Cross-Over system are standard in stack dryers.
   This secures an optimal drying process and top grain quality



## Mixed Flow Grain Dryer

Capacity up to 140 t/hour including cooling Energy-saving via integrated heat recovery Low noise

Simple, fully automatic operation  $\mbox{QuadraTouch Pro}^{\mbox{\scriptsize TM}} \mbox{ Control}$ 







### **Tower Dryers**

Sukup designs and delivers a line of commercial Tower Dryers.

Capacities up to 200 t/h



### **Tower Dryer Advantages**

- Efficient and simple design
- Large drying capacity, 30 t/h 200 t/h
- Suitable for drying of grain, canola, corn etc.
- Energy saving
- Heat recovery is a standard feature
- Low noise
- Stainless steel outer screens, nuts, and bolts
- Two clean-out doors per panel in grain exchange section allow for easy removal of debris
- High quality ATEX approved motors
- Heat recovery is standard and ensures an energy friendly drying process
- Quadra Touch control system is user-friendly and ensures an efficient operation of the dryer
- Access doors from the platforms allow easy cleaning
- Maxon burners in industrial quality is standard
- Entry areas in outer screens and reducer cone allow access to the burner area for easy interior cleaning
- Grain turners move the grain from the inside of the column to the outside for more even moisture content and consistent grain temperature.
- Industrial grade inline centrifugal blowers quietly provide high airflow even with vacuum cooling.
- The fan construction and position ensure a low noise operation. The special designed unloading system ensures homogenous unloading of the dryer.
   Continuous measurement of the water content at the top and at the bottom ensures a more accurate and automatic control of the water content of the crops.
- The fuel ramp is supplied with Siemens and Maxon components and is of course fully modulated for easy adjustment of and equal drying air temperature





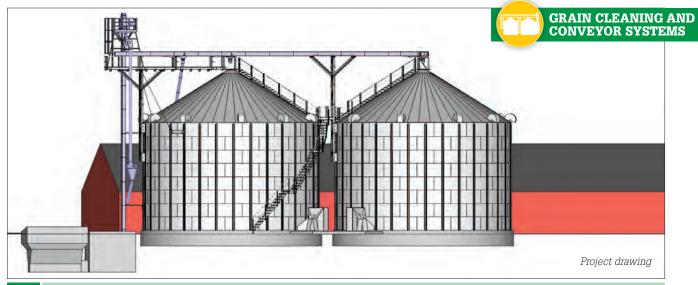
### Fully automatic control system



The dryers are delivered with QuadraTouch-/QuadraTouch Pro user control systems dependent on the model

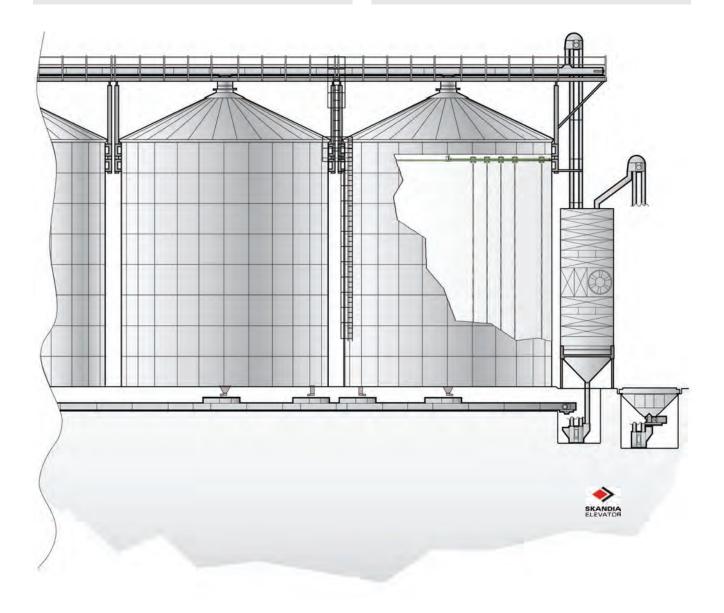






## Transportation of grain is logistics

We take our starting point in your requirements during the planning of the grain transportation – both in new installations and when an extention of an existing installation is needed. We have no preference towards our suppliers – therefore we always offer unique solutions from different suppliers.







# A conveyor system that fit to the request

Our conveyor system is made by standard elements, which can be easily adapted to every installation. They are characterized by large capacity in spite of small external dimensions, quick and easy assembly, because all connections are bolt flanges and with an effective use of the transportation length.

- Galvanized corrosion resistant finish
- Easy assembly
- Long life
- Easy adaption of elevator height
- Capacities from 20 600 t/h
- Low operational costs
- Superior quality
- Easy service

Our conveyor systems are perfect for vertical transportation of grain, peas, canola/rape seed, pellets, powder, mixed feed etc. They are characterized by long durability and reliability and by a low power consumption compared to the output.



Service platform and ladder with safety cage on elevator pipe for free-standing bucket elevator.

### Belt conveyor for flat storage

With capacities from 20 to 600 t/h we can deliver the best belt conveying solution.

Our belt conveyors can transport the material both ways and with 30° inclination – however with reduced capacity. The belt conveyor is suited for careful transportation of most materials.



### Advantages

- Modular system offering flexible solutions based on standard components
- Low power consumption
- Safe and clean conveying
- Belt conveyor with 60 and 80 t/h galvanized for outside assembly
- One-way or two-way conveying



## **Options**

- Tripper carriage which can be moved on the belt conveyor length in order to discharge on both sides of the belt
- Inlet which can operate on the conveyor
- Cover and dust guard below belt
- Speed guard for belt speed
- Several hoppers on same belt
- Wiper to clean the belt







## Cleaned grain – better quality

GRAIN CLEANING AND CONVEYOR SYSTEMS

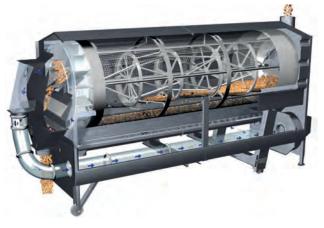
Invest in a grain cleaner and you will be guaranteed a high quality end product. It prolongs the lifetime of your conveyor system by eliminating sand and other impurities that erode machinery. Less time spent on cleaning and unnecessary breakdowns in high season due to deposits on paddles.

Capacity from 30-200 t/hour





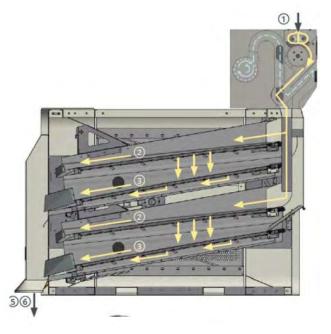




## Cylindrical Seed Cleaner

A cylindrical seed cleaner is a simple, compact unit that can pre- clean grain at a rate of up to 80 t/hour. The seed cleaner's mesh screens remove various sizes of foreign bodies while the cleaner blows out dust and lighter particles.

## Industrial Cylindrical









# The incredible grain auger...

The MKX auger is supplied with a practical mechanically driven hopper to dump the grain in and a wide transport wheel kit that ensures a stable working situation.

The height of the auger is easily adjusted by one or two hydraulic cylinders.

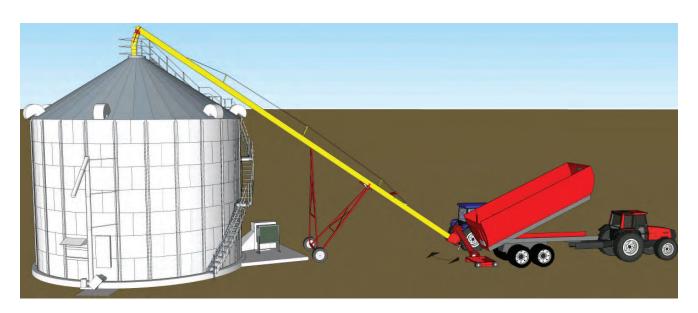
- Canadian high quality auger with the world's largest capacities
- Well tested construction
- For tractor PTO
- Suited for filling large grain stores and outside bins
- Mobile can be used on several farms



## Capacity

 $\begin{array}{lll} \mbox{MKX 80:} & \mbox{up to 110 tons wheat/hour ( 8" = 203 mm)} \\ \mbox{MKX 100:} & \mbox{up to 160 tons wheat/hour (10" = 254 mm)} \\ \mbox{MKX 130:} & \mbox{up to 280 tons wheat/hour (13" = 330 mm)} \\ \mbox{MKX 160:} & \mbox{up to 550 tons wheat/hour (16" = 406 mm)} \\ \end{array}$ 







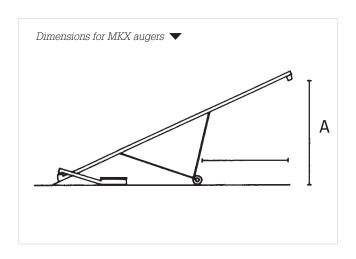


## MKX auger

TYPE	LENGTH (m)	<b>EFFECT</b> PTO-hp		ONS IN MM /highest)
			А	В
MK 80 X 71	21,5	50	3800 / 14140	10200 / 8250
MKX 100 X 63	18,9	60	3500 / 12300	7800 / 9100
MKX 100 X 73	21,9	70	3800 / 14400	8700 / 10800
MKX 100 X 83	24,9	80	3500 / 16500	9800 / 12900
MKX 130 X 74	22,2	130	3500 / 12300	7800 / 9100
MKX 130 X 84	25,2	140-160	3800 / 14400	8700 / 10800
MKX 130 X 94	28,2	150-170	3500 / 16500	9800 / 12900
MKX 130 X 114	34,2	170-190	3800 / 14400	8700 / 10800
MKX 160 X 85	25,5	180	3300 / 10800	6500 / 7800
MKX 160 X 105	31,5	210	3500 / 12300	7800 / 9100
MKX 160 X 125	37,5	230	3800 / 14400	8700 / 10800

Complete auger incl. wide undercarriage with wheels, swing hopper and PTO. Excl. flexible outlet.

<sup>\*)</sup> Not standard stock item - longer delivery time must be expected.



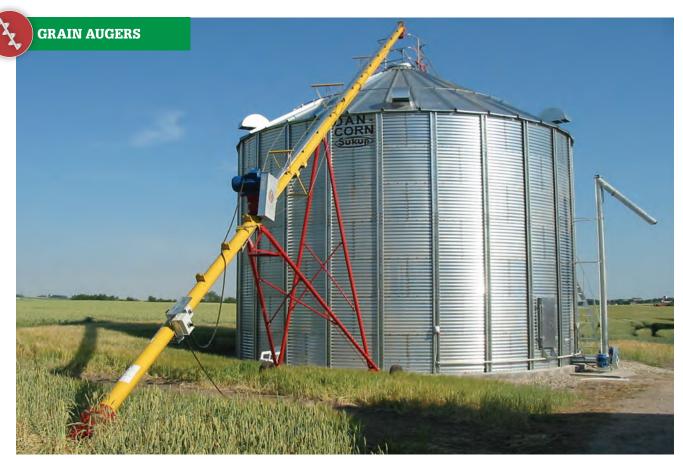


### Accessories for MKX auger

Flexible outlet spout in poly material: 8-10", 5 parts, l: 900 mm Flexible outlet spout in poly material: 13", 5 parts, l: 1250 mm Flexible outlet spout in poly material: 16"







## •

### Strong mobile auger

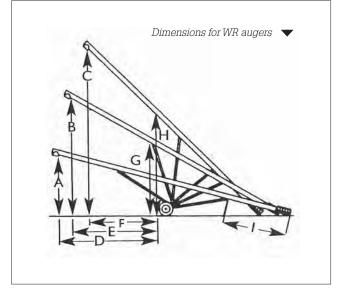
- Flexible
- Canadian high quality auger with high capacity
- For electrical motor or tractor PTO drive
- Suited for filling large grain stores and outside bins
- Value for money

N T

### Capacity

AUGER	15°	30°	<b>40</b> °
DIAMETER	INCLINE	INCLINE	INCLINE
8" (203 mm)	70	53	45
10" (254 mm)	120	92	78
13" (330 mm)	160	120	104

Capacity may vary due to the protection net.



LENGTH	Α	В	С	D	E	F	G	H	I
26'/ 8,0 m	1950	3840	5450	3270	2870	2200	2350	3440	2080
31'/ 9,5 m	2330	4590	6530	4170	3640	2810	2680	3890	2330
36'/ 11,0 m	2740	5270	7550	4930	4320	3390	3040	4350	2700
41'/ 12,5 m	2910	6130	8680	5670	4960	3840	3490	4960	3090
51'/ 15,5 m	3610	7600	10640	7020	6130	4810	4300	6040	3890
61'/ 18,5 m	3540	8610	12460	8310	7400	5770	5220	7370	4910
71'/ 21,5 m	3890	10030	14290	9620	8540	6840	5970	8360	5600

The auger is delivered unassembled in a galvanized transportation frame.





## WRX auger

























TYPE	DIAMETER	LENGTH	MOTOR
WRX 80x36	8" (203 mm)	11,0 m	7,5 kW
WRX 80x41	8" (203 mm)	12,5 m	7,5 kW
WRX 80x51	8" (203 mm)	15,5 m	11,0 kW
WRX 80x61	8" (203 mm)	18,5 m	11,0 kW
WRX 80x71	8" (203 mm)	21,5 m	15,0 kW
WRX 100x31	10" (254 mm)	9,5 m	11,0 kW
WRX 100x41	10" (254 mm)	12,5 m	15,0 kW
WRX 100x51	10" (254 mm)	15,5 m	18,5 kW
WRX 100x61	10" (254 mm)	18,5 m	18,5 kW
WRX 100x71	10" (254 mm)	21,5 m	22,0 kW
WRX 130x31	13" (330 mm)	9,5 m	18,5 kW
WRX 130x36	13" (330 mm)	11,0 m	22,0 kW
WRX 130x41	13" (330 mm)	12,5 m	22,0 kW
Accessories for WRX	augers		

Support wheel kit for 8", 10" & 13" WRX

Cone shaped special outlet Ø160-Ø300 for 6", 8", 10" & 13" outlet

Big poly hopper. Height x diameter 50 cm x 125 cm

Hopper 35 gr. for 8", 10" & 13" WRX 92X92 cm

PTO kit for WRX 80x51 and smaller

PTO kit for WRX 80x61 and larger

Flexible outlet spout in poly material: 8", 10" & 13"

Delivered without electrical motor and operation box.

<sup>\*)</sup> Not standard stock item - longer delivery time must be expected.









### Cost-efficient auger with large capacity

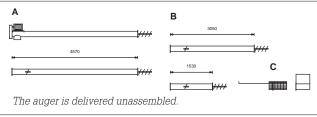
A UT auger consists of one basic section (A) with outlet spout and drive unit, extensions (B) available in 3 different lengths and lower section with inlet basket or inlet hopper (C).

	MAX. CAPACITY			
TYPE	<b>0</b> º	15°	35°	45°
6"- 152 mm	34	29	22	18
8"- 203 mm	60	51	39	33
10"- 254 mm	102	87	66	56
13"- 330 mm	162	138	105	89

Capacity may vary due to the protection net.

6" (152 MM) AUGER	MOTOR SIZE	
Auger type UT 6" x 5,0 m	1,5 kW	
Auger type UT 6" x 6,5 m	2,2 kW	
Auger type UT 6" x 8,0 m	3,0 kW	
Auger type UT 6" x 9,5 m	4,0 kW	
Auger type UT 6" x 11,0 m	4,0 kW	
Auger type UT 6" x 12,5 m	5,5 kW	
Auger type UT 6" x 14,0 m	5,5 kW	
Auger type UT 6" x 15,5 m	7,5 kW	
10" (254 MM) AUGER	MOTOR SIZE	
Auger type UT 10" x 5,0 m	3,0 kW	
Auger type UT 10" x 6,5 m	4,0 kW	
Auger type UT 10" x 8,0 m	5,5 kW	
Auger type UT 10" x 9,5 m	7,5 kW	
Auger type UT 10" x 11,0 m	7,5 kW	

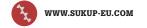




The UT augers are delivered with motor mount, pulley, capacity regulation, bearing for auger flighting, protection screen and mounting fittings.

8" (203 MM) AUGER	MOTOR SIZE	
Auger type UT 8" x 5,0 m	3,0 kW	
Auger type UT 8" x 6,5 m	3,0 kW	
Auger type UT 8" x 8,0 m	4,0 kW	
Auger type UT 8" x 9,5 m	5,5 kW	
Auger type UT 8" x 11,0 m	5,5 kW	
Auger type UT 8" x 12,5 m	7,5 kW	
Auger type UT 8" x 14,0 m	7,5 kW	
Auger type UT 8" x 15,5 m	11,0 kW	
Auger type UT 8" x 17,0 m	15,0 kW	*
Auger type UT 8" x 18,5 m	15,0 kW	*
13" (330 MM) AUGER	MOTOR SIZE	
Auger type UT 13" x 6,5 m	15,0 kW	*
Auger type UT 13" x 8,0 m	18,5 kW	*
Auger type UT 13" x 9,5 m	18,5 kW	*
Auger type UT 13" x 11,0 m	22,0 kW	*
Auger type UT 13" x 12,5 m	22,0 kW	*

\*) Not standard stock item - longer delivery time must be expected.







## **Accessories for UT augers**

Flexible outlet spout in poly material: 6"	Length 90 cm 5-part
Flexible outlet spout in poly material: 8-10"	Length 90 cm 5-part
Flexible outlet spout in poly material: 13"	Length 125 cm 5-part
Wire strengtheners for 6", 8" & 10" UT augers	
Extra mounting fittings for 6", 8", 10" & 13" UT	
Big poly hopper	Height x diameter 50 cm x 125 cm
Big poly hopper for 13" auger	
Handy steel hopper with flight supp. bearing for 6", 8" & 10" auger	
Lid for 6" & 8" inlet hopper Ø200	
Lid for 10" inlet hopper Ø250	
Cone shaped special outlet Ø160-Ø300 for 6", 8", 10" & 13" outlet	
Inlet hopper for auger screw foot with supp. bearing for 6", 8" & 10" auger	







## Type B-16 to be mounted on the rear of your wagon

With the Westfield auger for grain and fertilizers on your wagon, you can easily and quickly handle large quantities of grain and fertilizers. The auger is mounted quickly with only one assembly bolt and without use of any tools.

Fold easy and quick to transport position incl. hydraulic motor, electric operated start/stop function mounted at the end of the outlet tube.

The auger is delivered incl. remote control.

Capacity: Dimensions:

25 - 30 t/h The length in working position is 4.7 m.







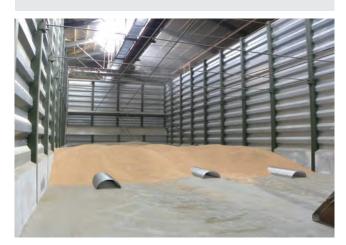
### Half round Side Ducts

- Hot-galvanized sheet metal
- Great mould accuracy and very high support capacity
- Easy assembly on a even floor
- 1.5 2.0 mm perforations, round holes
- Favorable for on-floor flat storage solution
- The side duct comes in 3 sizes

The GP side duct with closed or open top is a universal duct suited for all types of crop drying and ventilation.

The GP-900 side duct is suited for duct lengths up to 8-10 m in seed and 10-12 m in grain (drying).

The GP-1600 side duct is suited for duct lengths up to 10 - 12 m in seed and 12 - 18 m in grain (drying).



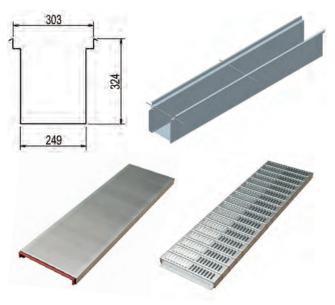
Duct distance during drying: Grain 100 cm. Seed 80 cm

	S-900	S-1600	S-2500
Height	24 cm	32 cm	40 cm
Width	48 cm	64 cm	80 cm
Length	92 cm	92 cm	92 cm
Efficient length	85 cm	85 cm	85 cm

## **Drive-Over Side Ducts**

- Drive-over safe, withstands 10-14 tons of axle pressure
- Quick loading and unloading
- Also for canola and grass seed without hessian
- Suited forself-installation
- Available with embedding troughs
- Slotted orfully perforated surface, up to 26% open area

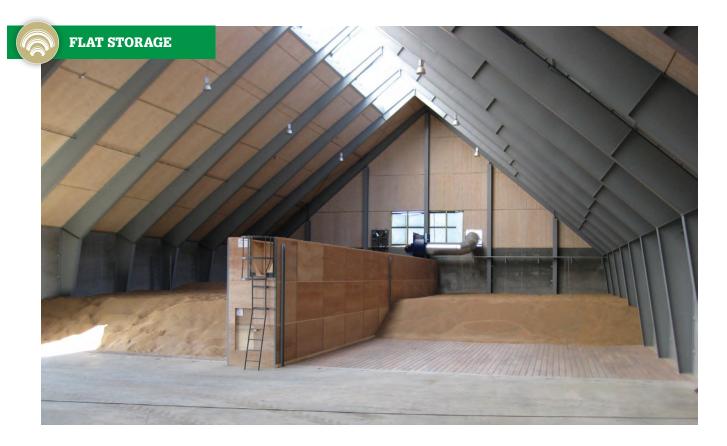
During filling of the crops it is possible to drive directly into the flat storage with the vehicle and unload, and afterwards push the crops in place with a front loader.



Our special embedding troughs make the task of concrete casting easier as well as making the ducts extremely easy to clean. These troughs are 20, 30 or 40 cm deep and made of galvanized steel. The center distance for grain is approx. 70-75 cm and for seed approx. 60-65 cm.







## Flach & Le-Roy Drive-On Floors

- The original Flach & Le-Roy crop drying ventilation systems – 10 years of warranty
- You may dry all kinds of crops
- Excellent air distribution ideal for difficult-to-dry crops
- High-strength, durable floors can withstand 10 tons axle weight
- Simple filling and unloading
- Easy assembly, ideal for self-installation
- Very easy cleaning and large security for clean crops during handling process
- Can be placed on existing concrete floor
- Low build-in height of ready floor

The floor construction comprises high specification kiln dried hardwood boards mounted on pressure-treated bearers providing a highly stable, strong and durable floor. Each top board is separated by a perforated steel mesh enabling excellent air distribution over the entire floor area.



Flach & Le-Roy main air ducts are manufactured using the same high-grade timber as in the floors and designed for maximum air distribution efficiency to ensure that air is delivered precisely where it is needed.

























# From first call to finished project



1. First call



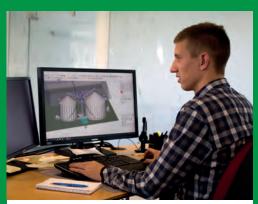
2. Solutions/models



3. Project proposals



4. Building permission



5. Approved order



6. Assembly



7. Hand-over



8. Service



## Countrywide service

Our fully equipped service vans contain all the spare parts we need to repair any American grain bin and drying system. Our fleet of vans covers the entire country, effectively reducing unnecessary production downtime to a minimum.

We have a strong team of experienced specialist technicians. We do our utmost to train and educate our employees. We seek to ensure that they have the latest know-how within their field.



### Central warehouse

Our central warehouse is located next to our headquarters at Hedensted. We have a total of 11,000 m2 at our disposal here. Along with our technicians, our foreign distributors also have stocks. You never have to wait months for delivery, and you do not have to pre-book to be certain that you have everything you need for harvesting.

We recommend that you contact us as soon as you realise that you need something. We will ensure that we have the goods you need.



### Maintenance service scheme

Our beneficial maintenance service scheme ensures that you get the best service at the best price.

We check your plant during the off-season to save you time and prevent breakdowns in the high season.

Our service checks include monitoring that systems are calibrated and maintained correctly so that they are ready for the harvest.



# Sukup Europe A/S

Quality, strength and efficiency



The company was founded in 1955 at Klejsgaard, when we bought our first combine and the need for grain drying and storage was a reality. Since then, we have endeavored to use our practical experience from our own farm with the latest ideas in our product innovation.

We are today one of the oldest companies within our field. The first 60 years the company was operating under the name DanCorn, and today we are promoted as Sukup Europe. The sales are today both being done through dealers and as direct sale to end-users. Hereby we secure the use of our many years of experience in the development and assembly of grain and seed handling plants.

### We are here to assist you and answer your questions.

Get in contact with our UK Sales Manager John Statt. Phone: +44 128 376 0445 - Mail: jst@sukupeu.com

