

Akron Type M grain storage solutions





Preserving quality.



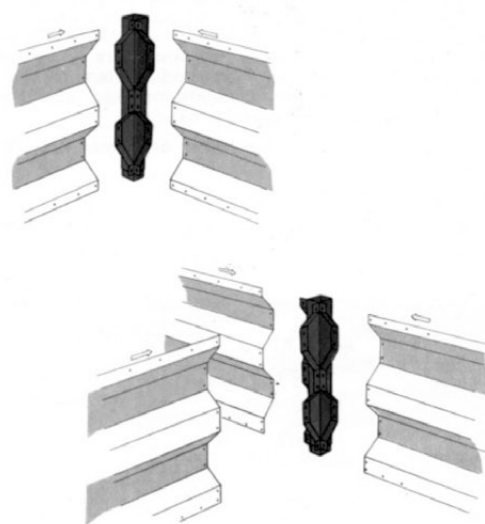
Akron Type M grain storage bins

Akron grain storage Type M is an innovative modular storage solution which can be adapted to fit into nearly any rectangular space. The system enables a high degree of flexibility in regard to storage volumes, outlet options and the management of several different types of grain in one installation. The modular design allows for full flexibility in the design of multi-bin storage, using any combination of flat floor, air sweep or hopper bins. With a wide range of aeration options and no hidden compartments between individual bins, the Type M is the best option for safe and financially sound storage of high quality grain.

High durability materials and innovative design

The wall panels of the Type M system are galvanized for maximum durability and are manufactured in six widths ranging from 0.7 m to 3.0 m, with a standard height of 840 mm. Individual bins can be built in sizes up to 3.0 x 6.0 metres. By using thicker panels for the lower levels, bins can be constructed in heights up to approximately 25 metres.

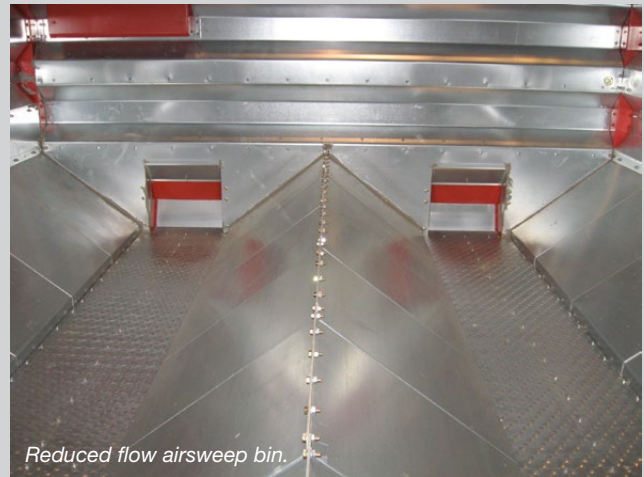
The specifically designed corner posts are available in five main versions, with corrugated flanges welded on different sides. Posts with two flanges are used in outer corners, while posts with three or four flanges are used to connect two or more bins together without hidden spaces between the walls. A selection of special posts are available for e.g. mounting hoppers. All posts are as standard delivered in painted or galvanized finish.



Self-supporting and easy to assemble

The Type M storage bin is entirely self-supporting and can even be used as the supporting structure for the complete building. Outer wall cladding can be fitted on sheeting rails bolted directly to the corner posts using special brackets. The roof structure can be assembled and finished on the ground and then simply lifted onto the storage bins.

The modular nature of the Type M system means that even large storage solutions are delivered in relatively small consignments. Erection is easy and requires very few tools. In combination with the sturdy construction and minimal maintenance needs, this makes the Type M ideal for installation inside existing buildings as well as outdoor.



Airsweep bins

Type M air sweep bins combine maximum use of available space with ease of emptying. The air sweep floor has small, slanted holes through which air flows, continuously aerating the grain and giving safe storage temperatures both for wet and dry materials. As the grain is not in contact with the floor, absorption of rising ground dampness and condensation is effectively prevented.

Full floor and reduced air flow versions

Bins with air sweep floors are available in two versions: with the full floor area covered with air sweep perforation or as a “reduced air flow” version with blank laterals shedding the grain to narrower bands of air sweep floor. The main advantage of the latter design is that the airflow required to empty the bin is reduced, hence the name. Full air sweep floors have one outlet, while reduced air flow floors have two.

Airsweep bins can be constructed in sizes up to 3 x 3 metres without internal tie rods. With tie rods, bins up to 3 x 6 metres are possible. All bins can be provided with manholes for easy access.

Akron fans guarantee correct airflow

The air flow necessary for the air sweep needs to be provided from underneath the bin floor. Normally this is achieved by raising the floor 450 mm from the ground. The space under the bin is connected to a larger air duct which provides air for the whole storage installation. Using one large air supply saves energy, and enables larger capacity for a single bin when required. Akron is a leading fan manufacturer, which enables unsurpassed optimisation for the Type M storage system. Our fans are continuously developed for higher efficiency and low power consumption.

Nominal dimensions for Akron Type M air sweep bins											
No of sections	Height ¹⁾ (m)	Volume (m ³) for specific bin sizes, m x m									
		2,09x2,09	2,09x2,59	2,09x3,09	2,59x3,09	2,59x4,18	2,59x5,18	3,09x3,09	3,09x4,18	3,09x5,18	3,09x6,18
5	4,65	18,3	22,7	27,1	33,6	45,5	56,3	40,1	54,2	67,2	80,2
6	5,49	22,0	27,3	32,5	40,3	54,6	67,6	48,1	65,1	80,7	96,2
7	6,33	25,7	31,8	38,0	47,1	63,7	78,9	56,1	75,9	94,1	112,3
8	7,17	29,4	36,4	43,4	53,8	72,8	90,2	64,2	86,8	107,6	128,3
9	8,01	33,0	40,9	48,8	60,5	81,8	101,4	72,2	97,6	121,0	144,4
10	8,85	36,7	45,5	54,2	67,2	90,9	112,7	80,2	108,5	134,5	160,4
11	9,69	40,4	50,0	59,7	73,9	100,0	124,0	88,2	119,3	147,9	176,4
12	10,53	44,0	54,6	65,1	80,7	109,1	135,2	96,2	130,2	161,3	192,5

1) All heights include 450 mm additional space under the air sweep floor.



Hopper bins

Type M hopper bins allow fast emptying and are suitable for all kinds of grain storage, both for dry grain and as buffer storage of wet grain prior to drying. The hoppers are delivered painted or all-galvanized and are available in welded versions or in flat packages for final assembly on site.



Hoppers for all bin sizes

Hoppers are normally slanted at 45°, with 60° versions available for certain sizes. Bins up to 4 x 3 metres in size are fitted with one hopper, while larger bins use a dual-hopper configuration. Optionally, hoppers can be fitted with aeration laterals as well as manholes for easy access.

Standard outlet

All hoppers have a standard outlet size of 180 x 180 mm. Adapters are provided for the connection of the most common conveyors. Special designs can be constructed and manufactured upon request.

Nominal dimensions for Akron Type M hopper bins

No of sections	Height excl hopper (m)	Volume (m³) for specific bin sizes, m x m									
		1,59x3,09	2,09x2,09	2,09x2,59	2,09x3,09	2,59x2,59	2,59x3,09	3,09x3,09	3,09x4,18	3,09x5,18	3,09x6,18
5	4,65	22,9	19,7	24,8	30,1	30,8	37,4	44,6	63,0	74,7	89,2
6	5,49	27,0	23,3	29,4	35,5	36,4	44,1	52,6	73,9	88,2	105,2
7	6,33	31,1	27,0	33,9	41,0	42,0	50,8	60,6	84,7	101,6	121,3
8	7,17	35,3	30,7	38,5	46,4	47,7	57,5	68,7	95,6	115,1	137,3
9	8,01	39,4	34,4	43,0	51,8	53,3	64,3	76,7	106,4	128,5	153,4
10	8,85	43,5	38,0	47,6	57,2	58,9	71,0	84,7	117,3	142,0	169,4
11	9,69	47,6	41,7	52,1	62,7	64,6	77,7	92,7	128,1	155,4	185,4
12	10,53	51,8	45,4	56,6	68,1	70,2	84,4	100,7	139,0	168,8	201,5
Hopper height (m)		1,44	0,94	1,19	1,44	1,19	1,44	1,44	2,00	1,44	1,44



Lorry loading bins

Type M lorry loading bins provide fast and easy loading of lorries, minimizing both waiting and loading times. Although specifically designed for use in Type M storage installations, Akron's lorry loading bins are also suitable as stand-alone products or as part of storage solutions from other manufacturers.

Stable construction

The lorry loading bins are designed for highest stability. The sturdy construction is based on the innovative design of the storage bins, with galvanized wall elements and painted corner posts, legs and hopper. Legs and corner posts can be delivered with galvanized finish as an option.

Flexible design fits all needs

The loading of grain bulk lorries requires plenty of space. Type M lorry loading bins are available in several sizes between 4x3 and 6x3 m. The larger sizes use four outlets, while the smaller use two. It is also possible to insert a dividing wall, allowing two loading lanes and thus loading of two types of grain simultaneously.

The standard outlet size is 300 x 300 mm. Opening and closing functions can be manual or motorized, either direct controlled or connected to a PLC.

As an option, the lorryloading bins can be fitted with aeration laterals and integrated radial fan.



Nominal dimensions for Akron Type M lorryloading bins					
No of sections	Total height ¹⁾ (m)	Volume (m³) for specific bin sizes, m x m			
		4 x 3	4,5 x 3	5 x 3	6 x 3
1	6,85	18,2	20,4	23,0	28,0
2	7,69	29,1	32,6	36,5	44,0
3	8,53	39,9	44,7	49,9	60,1
4	9,37	50,8	56,9	63,4	76,2
5	10,21	61,6	69,0	76,8	92,2
6	11,05	72,4	81,1	90,2	
7	11,89	83,3	93,3	103,7	
8	12,73		105,4	117,1	
9	13,57		117,6		
10	14,41		129,7		
Lane width (m)		3,99	4,49	4,99	5,99
External width (m)		4,27	4,77	5,27	6,27
External length (m)		3,18	3,18	3,18	3,18
1) All heights include 4,5 m free height under the outlet.					



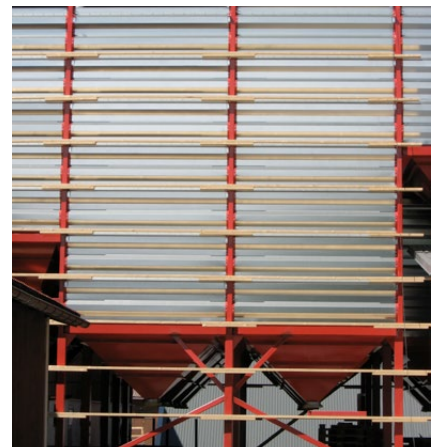
Top : Roof being lifted in place after final assembly, including inner flooring, side panels, conveyors and aeration equipment.

Mid left : Akron Type M storage with hopper and lorryloading bins under construction.

Mid right : Roof assembly. After assembly on the ground, the roof is lifted onto the top of the storage bins.

Bottom left : Wooden sheeting rails mounted on brackets on the corner posts.

Bottom right : Hopper bins with sheeting rails in place, ready for mounting of outer wall panels or cladding.



AKRON is Sweden's leading grain handling solutions provider, serving agricultural and industrial customers globally since 1935. Our trademarks Akron and Svegma guarantee the highest quality, availability and functionality. Our product range is developed internally and covers all agricultural and industrial grain handling needs, from transportation and loading solutions to drying, storage and state-of-the-art operational control. Our head office and manufacturing plant is located in Järpås, Sweden. Our products are used all over the world.

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