BOLTED BIN SYSTEMS







PROVEN & DEPENDABLE™

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BOLTED BIN SYSTEMS



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From receiving to load-out, each day your facility moves, weighs, loads, and samples millions of tons of material. The success of your operation relies not only on the quality of the commodity but the dependability of the equipment used to keep it moving. InterSystems' bulk material handling systems offer the speed and reliability you need to satisfy customers and grow profits.

From a modest beginning in 1959 as a maker of cardboard doors for rail boxcars, InterSystems has evolved into a worldwide manufacturer of a full line of bulk material handling equipment. Placing a customer-centric focus on the engineering and manufacturing process, InterSystems' product solutions include bucket elevators, bulk weighers, enclosed belt conveyors, en-masse and self-cleaning en-masse conveyors, gravity screeners, truck probes, automatic samplers, micro ingredient systems, bolted bin systems and distributors. Purchased by GSI in 2014, InterSystems' material handling equipment can be found around the world at grain elevators, in processing plants and at port facilities handling a wide variety of commodities including grains, powders, rock and wood pellets.

InterSystems believes that "custom" is standard, displaying a willingness to change in order to meet the needs of your specific applications with a solution. Behind each product line is an engineer leading a team dedicated to design improvements which promote efficiency and keep current with changes in industry regulations. Our in-house customer service team is on-call to assist with replacement parts or installation questions and can deploy a field technician to analyze problems and recommend solutions. InterSystems does it all while maintaining industry-leading delivery times.

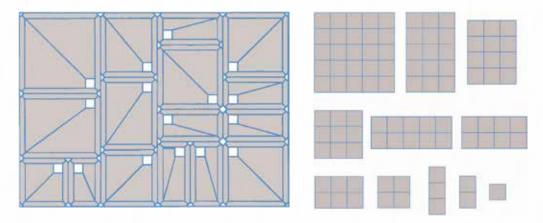


UNLIMITED POSSIBILITIES

With a seemingly endless number of square and rectangular combinations, InterSystems' modular Bolted Bins offer the ultimate in flexibility for storage of batching ingredients or commodities. The bolt-together design allows for efficient shipping and assembly anywhere in the world. Bins can be constructed out of carbon, galvanized or stainless steel, and painted with our standard 2-part poly or other finishes as requested to fit the specific requirements of your operation. The options for wall design (single wall, twin wall or corrugated wall) provide the right combination of features for almost any application. InterSystems' bolted bins are designed to withstand any seismic or wind load requirements, and are strong enough to hold up to 173 tons of material per individual bin. Bin system accessories are available and include support structures, access ladders, safety railings, gates, collection hoppers and weigh hoppers.

BIN COMBINATIONS & ARRANGEMENTS

With InterSystems' flexible design, you can specify virtually any bin arrangement and size that you require.



BOLTED BIN DIVISIONS

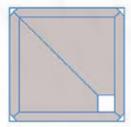
Each single bin can be split to accomodate multiple product or capacity needs.



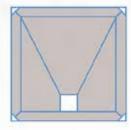
BOLTED BIN SYSTEMS

UNIQUE HOPPER DESIGN

Hoppers are available in a wide variety of designs and sizes. To meet your exact requirements, you can specify the minimum wall slope, along with the size, shape and location of the discharge.

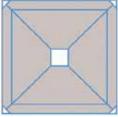


Corner Draw

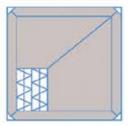


Side Draw

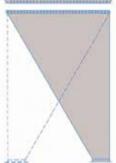




Center Draw



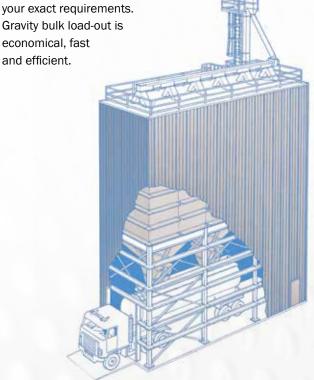
Live Bottom



BULK LOAD-OUT STATIONS

Whether you are shipping by bulk truck or rail cars, InterSystems has the size and capacity of overhead bolted bins to fit your exact requirements.

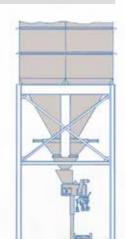
Gravity bulk load-out is



BATCHING STATIONS

PACKAGING & PROCESS BINS

Bolted bin systems are well-suited for a wide variety of applications such as for grinding and packaging lines. Their clear span supporting structure provides easy access to the process equipment below.



BATCHING & BLENDING PLANTS

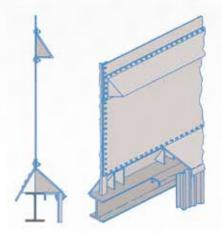
Batching plants are another ideal application for InterSystems bolted bin systems. Scales can be efficiently fed from tightly-clustered overhead bins. After a batch of material has been collected in the scale, it can then be dropped by gravity into a mixer.





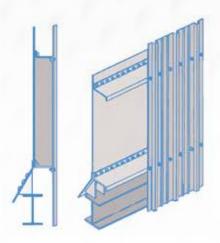
WALL DESIGN

Bin walls are available from 2 feet to 10 feet wide in 3-inch increments.



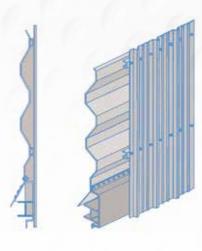
STANDARD EXTERIOR WALL DESIGN

Our standard bin wall design can be provided with either the "Z" type channels or 60° sloped baffles as shown. All interior walls come with 60° sloped baffles. Double wall designs are also available without interior baffles for a smooth surface.



ENCLOSED BIN WALL DESIGN

Our "Z" type panel channels make ideal girts on which to mount steel enclosure paneling.



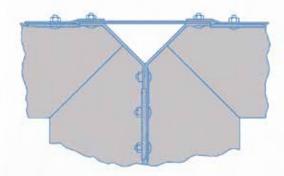
CORRUGATED WALL DESIGN

The corrugated bin wall design eliminates the need for horizontal stiffeners. Optional channel girts can be added on the exterior walls for the application of enclosure paneling.

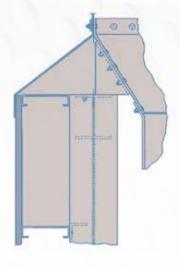
CORNER DESIGN

45° BIN CORNER

The $45\,^\circ$ corner design provides self-cleaning characteristics when storing materials that do not flow well. It is structurally strong and is well-suited for plant designs that must support headhouse structures above the bin system.

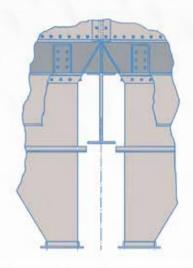


DESIGN DETAILS



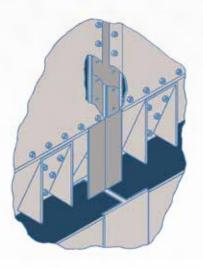
BIN WALL FLASHING

A significant benefit of the bin wall flashing is the ability to easily provide a weather-tight connection between the bin cluster and the surrounding building structure.



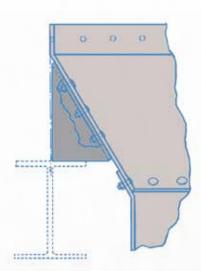
HOPPER STARTER STRIPS

The hopper starter strip provides a simple bolted connection between the hopper and side wall of a bin. Its unique design provides structural support for the bin and allows you to change hopper configurations at any time in the future.



EXTERIOR VERTICAL SEAMS

All exterior vertical seams are fitted with a 2" wide gasket strip and are covered with a metal vertical flashing seam strip. This ensures a dust-tight and water-tight seam.



HOPPER GUSSETS

Heavy duty gussets are bolted to the starter strip and provide the support for the bin system. This design allows the bins to be easily assembled on top of a typical structural steel support frame.



MANHOLES AND VENTS

Manholes are available in either sealed or vented designs. Both are equipped with hinged covers and safety grates.



BOLTED BIN SQ.	SECTIONS HIGH	TONS PER BIN	METRIC TONS PER BIN	CUBIC FEET PER BIN	CUBIC METERS PER BIN	A	В	С	D	10'0" HOPPER CLR. (A) E	16'0" HOPPER CLR. (B) E	22'0" HOPPER CLR. (C) E	28'0" HOPPER CLR. (D) E
8'	1	6.3	5.7	315	8.9	8'0"	8"	9'11"	4'11"	19'11"	28'11"	31'11"	37'11"
	2	11.1	10.1	555	15.7	8'0"	8"	9'11"	8'8"	19'11"	28'11"	31'11"	37'11
	3	15.9	14.4	795	22.5	8'0"	8"	9'11"	12'5"	19'11"	28'11"	31'11"	37'11"
	4	20.7	18.8	1035	29.3	8'0"	8"	9'11"	16'2"	19'11"	28'11"	31'11"	37'11"
	5	25.5	23.1	1275	36.1	8'0"	8"	9'11"	19'11"	19'11"	28'11"	31'11"	37'11"
	6	30.3	27.5	1515	42.9	8'0"	8"	9'11"	23'8"	19'11"	28'11"	31'11"	37'11"
	7	35.1	31.8	1755	49.7	8'0"	8"	9'11"	27'5"	19'11"	28'11"	31'11"	37'11"
	8	39.9	36.2	1995	56.5	8'0"	8	9'11"	31'2"	19'11"	28'11"	31'11"	37'11"
	9	44.7	40.5	2235	63.3	8'0"	8"	9'11"	34'11"	19'11"	28'11"	31'11"	37'11"
	10	49.5	44.9	2475	70.1	8'0"	8"	9'11"	38'8"	19'11"	28'11"	31'11"	37'11"
	11	54.3	49.3	2715	76.9	8'0"	8"	9'11"	42'5"	19'11"	28'11"	31'11"	37'11"
	12	59.1	53.6	2955	83.7	8'0"	8"	9'11"	46'2"	19'11"	28'11"	31'11"	37'11"
	13	63.9	58.0	3195	90.5	8'0"	8"	9'11"	49'11"	19'11"	28'11"	31'11"	37'11"
	14	68.7	62.3	3435	97.3	8'0"	8"	9'11"	53'8"	19'11"	28'11"	31'11"	37'11"
	15	73.5	66.7	3675	104.0	8'0"	8"	9'11"	57'5"	19'11"	28'11"	31'11"	37'11"
	16	78.3	71.0	3915	110.8	8'0"	8"	9'11"	61'2"	19'11"	28'11"	31'11"	37'11"
						1 11 /		70.70					
10'	1	9.8	8.9	492	13.9	10'0"	10"	13'6"	4'11"	23'6"	29'6	35'6"	41'6"
	2	17.3	15.7	867	24.5	10'0"	10"	13'6"	8'8"	23'6"	29'6"	35'6"	41'6"
	3	24.8	22.5	1242	35.2	10'0"	10"	13'6"	12'5"	23'6"	29'6"	35'6"	41'6"
	4	32.3	29.3	1617	45.8	10'0"	10"	13'6"	16'2"	23'6"	29'6"	35'6"	41'6"
	5	39.8	36.1	1992	56.4	10'0"	10"	13'6"	19'11"	23'6"	29'6"	35'6"	41'6"
	6	47.3	42.9	2367	67.0	10'0"	10"	13'6"	23'8"	23'6"	29'6"	35'6"	41'6"
	7	54.8	49.7	2742	77.6	10'0"	10"	13'6"	27'5"	23'6"	29'6"	35'6"	41'6"
	8	62.3	56.5	3117	88.3	10'0"	10"	13'6"	31'2"	23'6"	29'6"	35'6"	41'6"
	9	69.8	63.4	3492	98.9	10'0"	10"	13'6"	34'11"	23'6"	29'6"	35'6"	41'6"
	10	77.3	70.2	3867	109.5	10'0"	10"	13'6"	38'8"	23'6"	29'6"	35'6"	41'6"
	11	84.8	77.0	4242	120.1	10'0"	10"	13'6"	42'5"	23'6"	29'6"	35'6"	41'6"
	12	92.3	83.8	4617	130.7	10'0"	10"	13'6"	46'2"	23'6"	29'6"	35'6"	41'6"
	13	99.8	90.6	4992	141.3	10'0"	10"	13'6"	49'11"	23'6"	29'6"	35'6"	41'6"
	14	107.3	97.4	5367	152.0	10'0"	10"	13'6"	53'8"	23'6"	29'6"	35'6"	41'6"
	15	114.8	104.2	5742	162.6	10'0"	10"	13'6"	57'5"	23'6"	29'6"	35'6"	41'6"
	16	122.3	111.0	6117	173.2	10'0"	10"	13'6"	61'2"	23'6"	29'6"	35'6"	41'6"
	4	440	10.0	700	00.0	4.010"	40"	40140"	414.411	00144"	2014.41	20144"	441441
	1	14.2	12.8	708	20.0	12'0"	12"	16'10"	4'11"	26'11"	32'11"	38'11"	44'11"
	2	25.0	22.6	1248	35.3	12'0"	12"	16'10"	8'8"	26'11"	32'11"	38'11"	44'11"
	3	35.8	32.4	1788	50.5	12'0"	12"	16'10"	12'5"	26'11"	32'11"	38'11"	44'11"
	4	46.6	42.2	2328	65.8	12'0"	12"	16'10"	16'2"	26'11"	32'11"	38'11"	44'11"
	5	57.4	52.0	2868	81.1	12'0"	12"	16'10"	19'11"	26'11"	32'11"	38'11"	44'11"
	6	68.2	61.8	3408	96.4	12'0"	12"	16'10"	23'8"	26'11"	32'11"	38'11"	44'11"
	7	79.0	71.6	3948	111.7	12'0"	12"	16'10"	27'5"	26'11"	32'11"	38'11"	44'11"
12'	8	89.8	81.4	4488	124.2	12'0"	12"	16'10"	31'2"	26'11"	32'11"	38'11"	44'11"
	9	100.6	91.2	5028	139.5	12'0"	12"	16'10"	34'11"	26'11"	32'11"	38'11"	44'11"
	10	111.4	101.0	5568	151.9	12'0"	12"	16'10"	38'8"	26'11"	32'11"	38'11"	44'11"
	11	122.2	110.8	6108	167.2	12'0"	12"	16'10"	42'5"	26'11"	32'11"	38'11"	44'11"
	12	133.0	120.6	6648	182.5	12'0"	12"	16'10"	46'2"	26'11"	32'11"	38'11"	44'11"
	13	143.8	130.4	7188	197.8	12'0"	12"	16'10"	49'11"	26'11"	32'11"	38'11"	44'11"
	14	154.6	140.2	7728	213.1	12'0"	12"	16'10"	53'8"	26'11"	32'11"	38'11"	44'11"
	15	165.4	150.0	8268	228.4	12'0"	12"	16'10"	57'5"	26'11"	32'11"	38'11"	44'11"
	16	176.2	159.8	8808	243.7	12'0"	12"	16'10"	61'2"	26'11"	32'11"	38'11"	44'11"

STANDARD BIN DESIGN Plan View D В→ **←**В Top of Structural 60° 14 SQ → **End View** Grade

Many other sizes and capacities are available.



40-SERIES™ GRAIN BIN

When determining the best system for your operation, we know that what's protected inside the bin is what counts most. Each GSI bin is efficiently designed to handle maximum loads for unmatched strength. All GSI bins are constructed using the highest-strength steel available.



TOWERS AND CATWALKS

GSI offers a full line of structures to support material handling equipment. Built to perform for the long haul, GSI QuickBolt™ Towers and Catwalks are engineered to your facility's layout, taking wind, seismic and snow loading into consideration. GSI structures feature bolt-up assembly and hot-dipped galvanized finish.



ZIMMERMAN TOWER DRYERS

Not all tower dryers are created equal. What sets Zimmerman dryers apart is over 50 years of innovative design expertise and industry proven drying principles. The result is an easy-to-operate, easy-to-maintain, durable, fuel-efficient grain dryer, supported by an expert dealer network.



PREMIUM TRAINING, SERVICE AND SUPPORT

InterSystems reaches a worldwide market and numerous industries with expertise in the manufacturing of material handling products and industrial sampling systems. Purchased by GSI in 2014, InterSystems is based in Omaha, Nebraska and operates out of a 200,000 square foot state-of-the-art manufacturing facility. InterSystems is ISO 9001 and 14001 certified.









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