FCHT AND NCHT SERIES

COMMERCIAL HOPPER TANKS





PROVEN & DEPENDABLE™

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Designed for today's modern grain producers and distributors, GSI's commercial hopper tanks provide years of reliable service with convenient features and benefits you won't find with other grain storage systems. Whether you're looking for wet or dry grain holding, overhead unloading systems, blending bins or long term grain storage, GSI can supply just the right tank to handle the job.

FCHT

The FCHT series, with 4.00" corrugation, is available with a 45 degree hopper slope and is designed to cover a more specific "intermediate" range of capacities, providing the strength and reliability of a stiffened commercial tank and the cost advantage of a series designed for a specific limited size and capacity range.



NCHT

The NCHT series, with 2.66" corrugation, is designed for those applications where routine clean-out is required. The NCHT is a heavy-duty hopper tank for either wet grain, dry grain or for some specialty applications. NCHT hopper tanks are available in 40 degree, 45 degree, and 60 degree hoppers to meet many different requirements.



	HOPPER TANK COMPARISONS							
	FCHT	NCHT						
Diameter Range	18' - 24'	12' - 36'						
Capacity Range	3,366 - 14,959 bu.	1,776 - 49,654 bu.						
Corrugation	4"	2.66"						
Stiffeners	2 per sidewall sheet	2 per sidewall sheet						
Legs	Structural Welded	Structural Welded						
Material Capabilities	52 lbs./cu. ft.	52 lbs./cu. ft.						
Roof Style	Grain Bin	Grain Bin						
Roof Peak Loads	6,000 lbs.	6,000 lbs.						
Opening	16"	16" to 22"						
Hopper Angles	45°	40°, 45°, 60°						

OVERLAPPING ROOF PANELS

GSI offers one of the strongest structural roof support systems in the industry featuring galvanized rafter systems spanning from eave to peak. Roof ribs are taller, fully double-lapped and have four extra reinforcing ledges providing increased strength and unbeatable weather protection.

2.66" OR 4.00" CORRUGATED SIDEWALL

The 2.66" corrugated sidewall design is used on GSI's NCHT tanks. The smaller corrugation, together with the 65,000 PSI (450 MPa) tensile steel, provides an all-around stronger bin. FCHT sidewall is also manufactured using high strength steel but in a wider 4.00" corrugation. Using the wider corrugation provides optimum support for tank sizes available in the FCHT range. Panels are assembled using graded, zinc-plated, dichromate coated bolts with sealing washers for a tight, weather resistant seal.

HEAVY WIND RINGS

For additional support with taller tanks or higher wind areas, GSI manufactures galvanized steel rings that attach directly to the tank stiffeners. The rings strengthen the tank shell providing reinforcement against damaging wind.

STRONG SIDEWALL STIFFENERS

Stiffeners are manufactured from high tensile strength steel, up to 70,000 PSI (483 MPA), and completely galvanized for durability. GSI stiffeners feature strong splice joints with large cross sectional areas, both critical elements of vertical stiffeners, and are installed two-post (two per sidewall panel) externally to bear directly on the base columns.

HOPPER STRENGTH

Hopper strength is extremely critical to the life of the tank. Each hopper panel is precision fabricated from high-strength commercial galvanized steel and designed for maximum support. Hoppers are available in a variety of slopes to match the correct tank size and required application. Both 45 and 40 degree hoppers are generally used with most dry whole grain products. The 45 degree hoppers are also often used for "wet holding." A 60 degree hopper is used for "wet holding" or other applications where it is better suited.



GSI commercial hopper tanks start at the concrete foundation with heavy structural wide-flanged columns, factory welded to thick steel base plates. Bolted to the top of each column are heavy compression angle segments, key components that join the columns, the hopper assembly and the tank body together as one complete unit.











OPTIMUM VENTILATION

The hinged grill vent features a vertically-mounted, large mesh, wire-formed screen to keep out pests and swings open freely to allow easy release of trash buildup. GSI also provides roof panels with an exclusive factory pre-punched, extruded lip for each vent.

HIGH PERFORMANCE AERATION SYSTEMS

For commercial hopper tank conditioning, sturdy 14 gauge corrugated and perforated aeration tubes may be added for longer term storage. The system is designed to provide solid attachment to the hopper and allow flow of grain around the tube. Combined with a GSI inline centrifugal or vane-axial fan, GSI's aeration systems offer unbeatable grain conditioning efficiency and performance.

SPECIALLY DESIGNED ROLLER VALVE

An optional roller valve assembly is designed to attach directly to the hopper discharge collar. Roller valve gates are equipped with machined rack and pinion gear sets controlled by either a hand or chain wheel. The roller valve is completely galvanized, simple to operate and provides years of trouble free service.

EASY ACCESS DOOR

A standard 24" diameter round access door is located in the second ring of all GSI commercial hopper tanks. A heavy steel ring is fully welded to the sidewall and cold galvanize treated, making it one of the most durable and strongest doors available. The tight-sealing, inner door panel swings easily out of the way when open and latches securely with dual wedge-lock handles when closed.

LADDERS, PLATFORMS & LADDER CAGES

Sturdy sidewall ladders, ladder cages and platforms provide easy access when entering, exiting or inspecting the tank. Ladder sections are die-formed from galvanized steel and come in 22" or 44" lengths. All ladder cages are completely galvanized, bolt directly to the prepunched sidewall ladder and feature a bell opening at the bottom of the cage allowing ample space when entering and exiting the ladder. Both ladders and platforms incorporate special slip-resistant features for a better grip. GSI also manufactures optional, full circle roof rings for additional convenience when working on or inspecting the tank roof.

Also available are GSI's X-Series Ladders, Platforms and Ladder Cages

X-Series ladders feature step-through platforms and are mounted 90 degrees to the sidewall to eliminate toe hazards such as stiffeners, windrings, and other bracketry. X-Series ladder and stair packages are designed to meet OSHA specifications.



FCHT - 45° HOPPER

DIAMETER (FEET)	RINGS	MAX. CAPACITY (BU.)	EAVE HEIGHT (FEET)	PEAK HEIGHT (FEET)	CAPACITY (CUBIC FT.)	HOPPER CLEARANCE	METRIC TONS 800 KG/M^3	METRIC TONS 721 KG/M^3	METRIC TONS 640 KG/M^3	EAVE HEIGHT (METERS)	PEAK HEIGHT (METERS)	MAXIMUM CAP. (CUBIC METERS)
	3	3,366	22'4"	27'5"	4,189	34"	95	86	76	6.78	8.34	119
	4	4,152	26'0"	31'1"	5,167	34"	118	107	95	7.90	9.45	147
	5	4,939	29'8"	34'9"	6,146	34"	140	127	112	9.02	10.57	175
18	6	5,725	33'4"	38'5"	7,125	34"	162	146	130	10.13	11.69	202
	7	6,512	37'0"	42'1"	8,103	34"	185	166	148	11.25	12.81	230
	8	7,298	40'8"	45'9"	9,082	34"	207	186	165	12.37	13.92	258
	9	8,084	44'4"	49'5"	10,060	34"	229	206	183	13.49	15.04	285
	3	4,806	23'8"	29'7"	5,981	32"	136	123	109	7.19	9.01	170
	4	5,876	27'4"	33'3"	7,313	32"	167	150	133	8.31	10.13	208
	5	6,947	31'0"	36'11"	8,645	32"	196	177	157	9.42	11.25	245
21	6	8,017	34'8"	40'7"	9,977	32"	227	205	182	10.54	12.36	283
	7	9,088	38'4"	44'3"	11,309	32"	257	232	206	11.66	13.48	321
	8	10,158	42'0"	47'11"	12,641	32"	287	259	230	12.78	14.60	358
	9	11,228	45'8"	51'7"	13,973	32"	318	286	254	13.89	15.72	396
	3	6,571	24'7"	31'5"	8,177	31"	186	168	149	7.47	9.56	232
	4	7,969	28'3"	35'1"	9,917	31"	225	203	180	8.59	10.68	281
	5	9,367	31'11"	38'9"	11,656	31"	265	239	212	9.70	11.79	331
24	6	10,765	35'7"	42'5"	13,396	31"	304	274	243	10.82	12.91	380
	7	12,163	39'3"	46'1"	15,136	31"	344	310	275	11.94	14.03	429
	8	13,561	42'11"	49'9"	16,876	31"	383	345	306	13.06	15.15	478
	9	14,959	46'7"	53'5"	18,615	31"	423	381	338	14.17	16.26	528

NCHT - 45° HOPPER

DIAMETER		MAX. CAPACITY	EAVE HEIGHT	PEAK HEIGHT	CAPACITY	HOPPER	METRIC TONS	METRIC TONS	METRIC TONS	EAVE HEIGHT	PEAK HEIGHT	MAXIMUM CAP. (CUBIC
(FEET)	RINGS	(BU.)	(FEET)	(FEET)	(CUBIC FT.)	CLEARANCE	800 KG/M^3	721 KG/M^3	640 KG/M^3	(METERS)	(METERS)	METERS)
	6	1,825	24'2"	27'7"	2,271	32"	52	47	42	7.36	8.40	65
	7	2,079	26'10"	30'3"	2,587	32"	60	54	48	8.17	9.21	74
	8	2,334	29'6"	32'11"	2,904	32"	67	60	53	8.98	10.02	83
	9	2,587 2,842	32'2" 34'10"	35'7" 38'3"	3,220 3,537	32" 32"	74 81	67 73	60 65	9.79 10.61	10.84 11.65	92 101
12	11	3,096	37'6"	40'11"	3,853	32"	88	79	70	11.42	12.46	110
	12	3,350	40'2"	43'7"	4,168	32"	95	86	76	12.23	13.27	119
	13	3,604	42'10"	46'3"	4,485	32"	102	92	82	13.05	14.09	128
	14	3,858	45'6"	48'11"	4,801	32"	110	99	88	13.86	14.90	136
	15	4,113	48'2"	51'7"	5,118	32"	117	105	93	14.67	15.71	145
	16	4,367	50'10"	54'3"	5,434	32"	124	112	100	15.48	16.53	154
	3	1,776	17'6"	21'10"	2,210	32"	51	46	41	5.36	6.65	63
	4	2,173	20'2"	24'6"	2,705	32"	62	56	50	6.18	7.46	77
	5 6	2,571 2,968	22'10" 25'6"	27'2" 29'10"	3,199 3,693	32" 32"	73 84	66 76	59 68	6.99 7.80	8.27 9.09	91 105
	7	3,365	28'2"	32'6"	4,187	32"	95	86	76	8.61	9.09	119
	8	3,762	30'10"	35'2"	4,682	32"	107	97	86	9.43	10.71	133
	9	4,159	33'6"	37'10"	5,176	32"	118	107	95	10.24	11.52	147
15	10	4,556	36'2"	40'6"	5,670	32"	129	117	104	11.05	12.34	161
13	11	4,954	38'10"	43'2"	6,164	32"	140	127	112	11.86	13.15	175
	12	5,351	41'6"	45'10"	6,659	32"	151	137	121	12.68	13.96	189
	13 14	5,748 6,145	44'2" 46'10"	48'6" 51'2"	7,153 7,647	32" 32"	163 174	147 157	131 140	13.49 14.30	14.78 15.59	203 217
	15	6,542	49'6"	53'10"	8,141	32"	185	167	148	15.12	16.40	231
	16	6,939	52'2"	56'6"	8,636	32"	196	177	157	15.93	17.21	245
	17	7,337	54'10"	59'2"	9,130	32"	207	187	166	16.74	18.03	259
	18	7,734	57'6"	61'10"	9,624	32"	219	198	176	17.55	18.84	273
	10	1,134	5/ 6	61 10	3,024	32	213	190	1/0	11.55	10.04	213
	5	3,866	24'6"	29'10"	4,811	32"	110	99	88	7.46	9.02	137
	5 6 7	3,866 4,438 5,010	24'6" 27'2" 29'10"	29'10" 32'6" 35'2"	4,811 5,523 6,235	32" 32" 32"	110 126 142	99 114 128	88 101 114	7.46 8.28 9.09	9.02 9.83 10.64	137 157 177
	5 6 7 8	3,866 4,438 5,010 5,582	24'6" 27'2" 29'10" 32'6"	29'10" 32'6" 35'2" 37'10"	4,811 5,523 6,235 6,947	32" 32" 32" 32"	110 126 142 158	99 114 128 143	88 101 114 127	7.46 8.28 9.09 9.90	9.02 9.83 10.64 11.46	137 157 177 197
	5 6 7 8 9	3,866 4,438 5,010 5,582 6,154	24'6" 27'2" 29'10" 32'6" 35'2"	29'10" 32'6" 35'2" 37'10" 40'6"	4,811 5,523 6,235 6,947 7,658	32" 32" 32" 32" 32"	110 126 142 158 174	99 114 128 143 157	88 101 114 127 140	7.46 8.28 9.09 9.90 10.72	9.02 9.83 10.64 11.46 12.27	137 157 177 197 217
	5 6 7 8 9	3,866 4,438 5,010 5,582 6,154 6,726	24'6" 27'2" 29'10" 32'6" 35'2" 37'10"	29'10" 32'6" 35'2" 37'10" 40'6" 43'2"	4,811 5,523 6,235 6,947 7,658 8,370	32" 32" 32" 32" 32" 32"	110 126 142 158 174 190	99 114 128 143 157 172	88 101 114 127 140 152	7.46 8.28 9.09 9.90 10.72 11.53	9.02 9.83 10.64 11.46 12.27 13.08	137 157 177 197 217 238
18	5 6 7 8 9 10	3,866 4,438 5,010 5,582 6,154 6,726 7,298	24'6" 27'2" 29'10" 32'6" 35'2" 37'10" 40'6"	29'10" 32'6" 35'2" 37'10" 40'6" 43'2" 45'10"	4,811 5,523 6,235 6,947 7,658 8,370 9,082	32" 32" 32" 32" 32" 32" 32"	110 126 142 158 174 190 207	99 114 128 143 157 172 186	88 101 114 127 140 152 165	7.46 8.28 9.09 9.90 10.72 11.53 12.34	9.02 9.83 10.64 11.46 12.27 13.08 13.89	137 157 177 197 217 238 258
18	5 6 7 8 9	3,866 4,438 5,010 5,582 6,154 6,726	24'6" 27'2" 29'10" 32'6" 35'2" 37'10"	29'10" 32'6" 35'2" 37'10" 40'6" 43'2"	4,811 5,523 6,235 6,947 7,658 8,370 9,082 9,793 10,505	32" 32" 32" 32" 32" 32" 32" 32" 32"	110 126 142 158 174 190 207 223 239	99 114 128 143 157 172 186 201 215	88 101 114 127 140 152 165 178 191	7.46 8.28 9.09 9.90 10.72 11.53	9.02 9.83 10.64 11.46 12.27 13.08 13.89 14.71 15.52	137 157 177 197 217 238 258 278 298
18	5 6 7 8 9 10 11 12 13	3,866 4,438 5,010 5,582 6,154 6,726 7,298 7,870 8,442 9,013	24'6" 27'2" 29'10" 32'6" 35'2" 37'10" 40'6" 43'2" 45'10"	29'10" 32'6" 35'2" 37'10" 40'6" 43'2" 45'10" 48'6" 52'2" 53'10"	4,811 5,523 6,235 6,947 7,658 8,370 9,082 9,793 10,505 11,217	32" 32" 32" 32" 32" 32" 32" 32" 32" 32"	110 126 142 158 174 190 207 223 239 255	99 114 128 143 157 172 186 201 215 230	88 101 114 127 140 152 165 178 191 204	7.46 8.28 9.09 9.90 10.72 11.53 12.34 13.15 13.97 14.78	9.02 9.83 10.64 11.46 12.27 13.08 13.89 14.71 15.52 16.33	137 157 177 197 217 238 258 278 298 318
18	5 6 7 8 9 10 11 12 13 14	3,866 4,438 5,010 5,582 6,154 6,726 7,298 7,870 8,442 9,013 9,586	24'6" 27'2" 29'10" 32'6" 35'2" 37'10" 40'6" 43'2" 45'10" 48'6" 51'2"	29'10" 32'6" 35'2" 37'10" 40'6" 43'2" 45'10" 48'6" 52'2" 53'10"	4,811 5,523 6,235 6,947 7,658 8,370 9,082 9,793 10,505 11,217 11,929	32" 32" 32" 32" 32" 32" 32" 32" 32" 32"	110 126 142 158 174 190 207 223 239 255 271	99 114 128 143 157 172 186 201 215 230 244	88 101 114 127 140 152 165 178 191 204 217	7.46 8.28 9.09 9.90 10.72 11.53 12.34 13.15 13.97 14.78 15.59	9.02 9.83 10.64 11.46 12.27 13.08 13.89 14.71 15.52 16.33 17.15	137 157 177 197 217 238 258 278 298 318 338
18	5 6 7 8 9 10 11 12 13 14 15	3,866 4,438 5,010 5,582 6,154 6,726 7,298 7,870 8,442 9,013 9,586 10,157	24'6" 27'2" 29'10" 32'6" 35'2" 37'10" 40'6" 43'2" 45'10" 48'6" 51'2" 53'10"	29'10" 32'6" 35'2" 37'10" 40'6" 43'2" 45'10" 48'6" 52'2" 53'10" 56'6"	4,811 5,523 6,235 6,947 7,658 8,370 9,082 9,793 10,505 11,217 11,929 12,640	32" 32" 32" 32" 32" 32" 32" 32"	110 126 142 158 174 190 207 223 239 255 271 287	99 114 128 143 157 172 186 201 215 230 244 259	88 101 114 127 140 152 165 178 191 204 217	7.46 8.28 9.09 9.90 10.72 11.53 12.34 13.15 13.97 14.78 15.59 16.41	9.02 9.83 10.64 11.46 12.27 13.08 13.89 14.71 15.52 16.33 17.15 17.96	137 157 177 197 217 238 258 278 298 318 338 358
18	5 6 7 8 9 10 11 12 13 14 15 16	3,866 4,438 5,010 5,582 6,154 6,726 7,298 7,870 8,442 9,013 9,586 10,157 10,730	24'6" 27'2" 29'10" 32'6" 35'2" 37'10" 40'6" 43'2" 45'10" 48'6" 51'2" 53'10" 56'6"	29'10" 32'6" 35'2" 37'10" 40'6" 43'2" 45'10" 48'6" 52'2" 53'10" 56'6" 59'2" 61'10"	4,811 5,523 6,235 6,947 7,658 8,370 9,082 9,793 10,505 11,217 11,929 12,640 13,353	32" 32" 32" 32" 32" 32" 32" 32"	110 126 142 158 174 190 207 223 239 255 271 287 303	99 114 128 143 157 172 186 201 215 230 244 259 273	88 101 114 127 140 152 165 178 191 204 217 230 243	7.46 8.28 9.09 9.90 10.72 11.53 12.34 13.15 13.97 14.78 15.59 16.41 17.22	9.02 9.83 10.64 11.46 12.27 13.08 13.89 14.71 15.52 16.33 17.15 17.96 18.77	137 157 177 197 217 238 258 278 298 318 338 358 379
18	5 6 7 8 9 10 11 12 13 14 15 16 17	3,866 4,438 5,010 5,582 6,154 6,726 7,298 7,870 8,442 9,013 9,586 10,157 10,730 11,301	24'6" 27'2" 29'10" 32'6" 35'2" 37'10" 40'6" 43'2" 45'10" 48'6" 51'2" 53'10" 56'6" 59'2"	29'10" 32'6" 35'2" 37'10" 40'6" 43'2" 45'10" 48'6" 52'2" 53'10" 56'6" 59'2" 61'10"	4,811 5,523 6,235 6,947 7,658 8,370 9,082 9,793 10,505 11,217 11,929 12,640	32" 32" 32" 32" 32" 32" 32" 32"	110 126 142 158 174 190 207 223 239 255 271 287 303 319	99 114 128 143 157 172 186 201 215 230 244 259 273 288	88 101 114 127 140 152 165 178 191 204 217 230 243 256	7.46 8.28 9.09 9.90 10.72 11.53 12.34 13.15 13.97 14.78 15.59 16.41 17.22 18.03	9.02 9.83 10.64 11.46 12.27 13.08 13.89 14.71 15.52 16.33 17.15 17.96 18.77 19.58	137 157 177 197 217 238 258 278 298 318 338 358
18	5 6 7 8 9 10 11 12 13 14 15 16 17 18	3,866 4,438 5,010 5,582 6,154 6,726 7,298 7,870 8,442 9,013 9,586 10,157 10,730 11,301 11,873	24'6" 27'2" 29'10" 32'6" 35'2" 37'10" 40'6" 45'10" 48'6" 51'2" 53'10" 56'6" 59'2" 61'10"	29'10" 32'6" 35'2" 37'10" 40'6" 43'2" 45'10" 48'6" 52'2" 53'10" 56'6" 59'2" 61'10" 64'6" 67'2"	4,811 5,523 6,235 6,947 7,658 8,370 9,082 9,793 10,505 11,217 11,929 12,640 13,353 14,064 14,775	32" 32" 32" 32" 32" 32" 32" 32" 32" 32"	110 126 142 158 174 190 207 223 239 255 271 287 303 319 335	99 114 128 143 157 172 186 201 215 230 244 259 273 288 302	88 101 114 127 140 152 165 178 191 204 217 230 243 256 268	7.46 8.28 9.09 9.90 10.72 11.53 12.34 13.15 13.97 14.78 15.59 16.41 17.22 18.03 18.84	9.02 9.83 10.64 11.46 12.27 13.08 13.89 14.71 15.52 16.33 17.15 17.96 18.77 19.58 20.40	137 157 177 197 217 238 258 278 298 318 338 358 379 399 419
18	5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	3,866 4,438 5,010 5,582 6,154 6,726 7,298 7,870 8,442 9,013 9,586 10,157 10,730 11,301 11,873 6,266	24'6" 27'2" 29'10" 32'6" 35'2" 37'10" 40'6" 43'2" 45'10" 48'6" 51'2" 53'10" 56'6" 59'2" 61'10"	29'10" 32'6" 35'2" 37'10" 40'6" 43'2" 45'10" 48'6" 52'2" 53'10" 56'6" 59'2" 61'10" 64'6" 67'2"	4,811 5,523 6,235 6,947 7,658 8,370 9,082 9,793 10,505 11,217 11,929 12,640 13,353 14,064 14,775 7,797	32" 32" 32" 32" 32" 32" 32" 32" 32" 32"	110 126 142 158 174 190 207 223 239 255 271 287 303 319 335	99 114 128 143 157 172 186 201 215 230 244 259 273 288 302	88 101 114 127 140 152 165 178 191 204 217 230 243 256 268	7.46 8.28 9.09 9.90 10.72 11.53 12.34 13.15 13.97 14.78 15.59 16.41 17.22 18.03 18.84	9.02 9.83 10.64 11.46 12.27 13.08 13.89 14.71 15.52 16.33 17.15 17.96 18.77 19.58 20.40	137 157 177 197 217 238 258 278 298 318 338 358 379 399 419
18	5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 6 7	3,866 4,438 5,010 5,582 6,154 6,726 7,298 7,870 8,442 9,013 9,586 10,157 10,730 11,301 11,873 6,266 7,044	24'6" 27'2" 29'10" 32'6" 35'2" 37'10" 40'6" 43'2" 45'10" 51'2" 53'10" 56'6" 59'2" 61'10" 28'7" 31'3"	29'10" 32'6" 35'2" 37'10" 40'6" 43'2" 45'10" 48'6" 52'2" 53'10" 56'6" 59'2" 61'10" 64'6" 67'2" 34'7" 37'3"	4,811 5,523 6,235 6,947 7,658 8,370 9,082 9,793 10,505 11,217 11,929 12,640 13,353 14,064 14,775 7,797 8,766	32" 32" 32" 32" 32" 32" 32" 32" 32" 32"	110 126 142 158 174 190 207 223 239 255 271 287 303 319 335	99 114 128 143 157 172 186 201 215 230 244 259 273 288 302 160 180	88 101 114 127 140 152 165 178 191 204 217 230 243 256 268 142 160	7.46 8.28 9.09 9.90 10.72 11.53 12.34 13.15 13.97 14.78 15.59 16.41 17.22 18.03 18.84 8.71 9.52	9.02 9.83 10.64 11.46 12.27 13.08 13.89 14.71 15.52 16.33 17.15 17.96 18.77 19.58 20.40 10.53 11.34	137 157 177 197 217 238 258 278 298 318 338 358 379 399 419
18	5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	3,866 4,438 5,010 5,582 6,154 6,726 7,298 7,870 8,442 9,013 9,586 10,157 10,730 11,301 11,873 6,266	24'6" 27'2" 29'10" 32'6" 35'2" 37'10" 40'6" 43'2" 45'10" 48'6" 51'2" 53'10" 56'6" 59'2" 61'10"	29'10" 32'6" 35'2" 37'10" 40'6" 43'2" 45'10" 48'6" 52'2" 53'10" 56'6" 59'2" 61'10" 64'6" 67'2"	4,811 5,523 6,235 6,947 7,658 8,370 9,082 9,793 10,505 11,217 11,929 12,640 13,353 14,064 14,775 7,797	32" 32" 32" 32" 32" 32" 32" 32" 32" 32"	110 126 142 158 174 190 207 223 239 255 271 287 303 319 335	99 114 128 143 157 172 186 201 215 230 244 259 273 288 302	88 101 114 127 140 152 165 178 191 204 217 230 243 256 268	7.46 8.28 9.09 9.90 10.72 11.53 12.34 13.15 13.97 14.78 15.59 16.41 17.22 18.03 18.84	9.02 9.83 10.64 11.46 12.27 13.08 13.89 14.71 15.52 16.33 17.15 17.96 18.77 19.58 20.40	137 157 177 197 217 238 258 278 298 318 338 358 379 399 419
18	5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 6 7 8 9	3,866 4,438 5,010 5,582 6,154 6,726 7,298 7,870 8,442 9,013 9,586 10,157 10,730 11,301 11,873 6,266 7,044 7,823 8,601 9,379	24'6" 27'2" 29'10" 32'6" 35'2" 37'10" 40'6" 43'2" 45'10" 48'6" 51'2" 53'10" 56'6" 59'2" 61'10" 28'7" 31'3" 33'11" 36'7" 39'3"	29'10" 32'6" 35'2" 35'2" 40'6" 43'2" 45'10" 48'6" 52'2" 53'10" 56'6" 59'2" 34'7" 37'3" 39'11" 42'7" 45'3"	4,811 5,523 6,235 6,947 7,658 8,370 9,082 9,793 10,505 11,217 11,929 12,640 13,353 14,064 14,775 7,797 8,766 9,735 10,703 11,672	32" 32" 32" 32" 32" 32" 32" 32" 32" 32"	110 126 142 158 174 190 207 223 239 255 271 287 303 319 335 178 200 222 243 265	99 114 128 143 157 172 186 201 215 230 244 259 273 288 302 160 180 200 219 239	88 101 114 127 140 152 165 178 191 204 217 230 243 256 268 142 160 178 195 212	7.46 8.28 9.09 9.90 10.72 11.53 12.34 13.15 13.97 14.78 15.59 16.41 17.22 18.03 18.84 8.71 9.52 10.33 11.14 11.96	9.02 9.83 10.64 11.46 12.27 13.08 13.89 14.71 15.52 16.33 17.15 17.96 18.77 19.58 20.40 10.53 11.34 12.15 12.96 13.78	137 157 177 197 217 238 258 278 298 318 338 358 379 399 419 221 249 276 304 331
18	5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 6 7 8 9	3,866 4,438 5,010 5,582 6,154 6,726 7,298 7,870 8,442 9,013 9,586 10,157 10,730 11,301 11,873 6,266 7,044 7,823 8,601 9,379 10,158	24'6" 27'2" 29'10" 32'6" 35'2" 37'10" 40'6" 43'2" 45'10" 56'6" 51'2" 53'10" 56'6" 59'2" 61'10" 28'7" 33'31" 33'11" 36'7" 39'3" 41'11"	29'10" 32'6" 35'2" 37'10" 40'6" 43'2" 45'10" 48'6" 52'2" 53'10" 56'6" 59'2" 61'10" 64'6" 67'2" 34'7" 37'3" 39'11" 45'3" 47'11"	4,811 5,523 6,235 6,947 7,658 8,370 9,082 9,793 10,505 11,217 11,929 12,640 13,353 14,064 14,775 7,797 8,766 9,735 10,703 11,672 12,641	32" 32" 32" 32" 32" 32" 32" 32" 32" 32"	110 126 142 158 174 190 207 223 239 255 271 287 303 319 335 178 200 222 243 265 287	99 114 128 143 157 172 186 201 215 230 244 259 273 288 302 160 180 200 219 239 259	88 101 114 127 140 152 165 178 191 204 217 230 243 256 268 142 160 178 195 212 230	7.46 8.28 9.09 9.90 10.72 11.53 12.34 13.15 13.97 14.78 15.59 16.41 17.22 18.03 18.84 8.71 9.52 10.33 11.14 11.96	9.02 9.83 10.64 11.46 12.27 13.08 13.89 14.71 15.52 16.33 17.15 17.96 18.77 19.58 20.40 10.53 11.34 12.15 12.96 13.78 14.59	137 157 177 197 217 238 258 278 298 318 338 358 379 419 221 249 276 304 331 358
	5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 6 7 8 9 10	3,866 4,438 5,010 5,582 6,154 6,726 7,298 7,870 8,442 9,013 9,586 10,157 10,730 11,301 11,873 6,266 7,044 7,823 8,601 9,379 10,158 10,937	24'6" 27'2" 29'10" 32'6" 35'2" 37'10" 40'6" 43'2" 45'10" 56'6" 59'2" 61'10" 28'7" 31'3" 33'11" 36'7" 41'11" 44'7"	29'10" 32'6" 35'2" 37'10" 40'6" 43'2" 45'10" 48'6" 52'2" 53'10" 56'6" 59'2" 61'10" 64'6" 67'2" 34'7" 37'3" 39'11" 42'7" 45'3" 47'11" 50'7"	4,811 5,523 6,235 6,947 7,658 8,370 9,082 9,793 10,505 11,217 11,929 12,640 13,353 14,064 14,775 7,797 8,766 9,735 10,703 11,672 12,641 13,610	32" 32" 32" 32" 32" 32" 32" 32" 32" 32"	110 126 142 158 174 190 207 223 239 255 271 287 303 319 335 178 200 222 243 265 287 309	99 114 128 143 157 172 186 201 215 230 244 259 273 288 302 160 180 200 219 239 259 279	88 101 114 127 140 152 165 178 191 204 217 230 243 256 268 142 160 178 195 2212 230 247	7.46 8.28 9.09 9.90 10.72 11.53 12.34 13.15 13.97 14.78 15.59 16.41 17.22 18.03 18.84 8.71 9.52 10.33 11.14 11.96 12.77 13.58	9.02 9.83 10.64 11.46 12.27 13.08 13.89 14.71 15.52 16.33 17.15 17.96 18.77 19.58 20.40 10.53 11.34 12.15 12.96 13.78 14.59 15.40	137 157 177 197 217 238 258 278 298 318 338 358 379 399 419 221 249 276 304 331 358 386
18	5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 6 7 8 9 10 11 11 12 13 14 15 16 17 18 19 19 19 19 19 19 19 19 19 19 19 19 19	3,866 4,438 5,010 5,582 6,154 6,726 7,298 7,870 8,442 9,013 9,586 10,157 10,730 11,301 11,873 6,266 7,044 7,823 8,601 9,379 10,158 10,937 11,715	24'6" 27'2" 29'10" 32'6" 35'2" 37'10" 40'6" 43'2" 45'10" 51'2" 53'10" 56'6" 59'2" 61'10" 28'7" 33'11" 36'7" 39'3" 41'11" 44'7" 47'3"	29'10" 32'6" 35'2" 37'10" 40'6" 43'2" 45'10" 48'6" 52'2" 53'10" 56'6" 59'2" 61'10" 64'6" 67'2" 34'7" 37'3" 39'11" 42'7" 45'33" 50'7" 53'3"	4,811 5,523 6,235 6,947 7,658 8,370 9,082 9,793 10,505 11,217 11,929 12,640 13,353 14,064 14,775 7,797 8,766 9,735 10,703 11,672 12,641 13,610 14,579	32" 32" 32" 32" 32" 32" 32" 32" 32" 32"	110 126 142 158 174 190 207 223 239 255 271 287 303 319 335 178 200 222 243 265 287 309 331	99 114 128 143 157 172 186 201 215 230 244 259 273 288 302 160 180 200 219 239 259 279 299	88 101 114 127 140 152 165 178 191 204 217 230 243 256 268 142 160 178 195 212 230 247 265	7.46 8.28 9.09 9.90 10.72 11.53 12.34 13.15 13.97 14.78 15.59 16.41 17.22 18.03 18.84 8.71 9.52 10.33 11.14 11.96 12.77 13.58 14.40	9.02 9.83 10.64 11.46 12.27 13.08 13.89 14.71 15.52 16.33 17.15 17.96 18.77 19.58 20.40 10.53 11.34 12.15 12.96 13.78 14.59 15.40 16.22	137 157 177 197 217 238 258 278 298 318 338 358 379 399 419 221 249 276 304 331 358 366 413
	5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 6 7 8 9 10 11 11 12 13 14 15 16 17 18 19 19 10 11 11 11 11 11 11 11 11 11 11 11 11	3,866 4,438 5,010 5,582 6,154 6,726 7,298 7,870 8,442 9,013 9,586 10,157 10,730 11,301 11,873 6,266 7,044 7,823 8,601 9,379 10,158 10,937 11,715 12,493	24'6" 27'2" 29'10" 32'6" 35'2" 37'10" 40'6" 43'2" 45'10" 48'6" 51'2" 53'10" 56'6" 59'2" 61'10" 28'7" 33'311" 36'7" 39'3" 41'11" 47'3" 49'11"	29'10" 32'6" 35'2" 37'10" 40'6" 43'2" 45'10" 48'6" 52'2" 53'10" 56'6" 59'2" 61'10" 64'6" 67'2" 34'7" 37'3" 39'11" 42'7" 45'3" 47'11" 50'7" 53'3" 55'11"	4,811 5,523 6,235 6,947 7,658 8,370 9,082 9,793 10,505 11,217 11,929 12,640 13,353 14,064 14,775 7,797 8,766 9,735 10,703 11,672 12,641 13,610 14,579 15,547	32" 32" 32" 32" 32" 32" 32" 32" 32" 32"	110 126 142 158 174 190 207 223 239 255 271 287 303 319 335 178 200 222 243 265 287 309 331 353	99 114 128 143 157 172 186 201 215 230 244 259 273 288 302 160 180 200 219 239 259 279 299 318	88 101 114 127 140 152 165 178 191 204 217 230 243 256 268 142 160 178 195 212 230 247 265 283	7.46 8.28 9.09 9.90 10.72 11.53 12.34 13.15 13.97 14.78 15.59 16.41 17.22 18.03 18.84 8.71 9.52 10.33 11.14 11.96 12.77 13.58 14.40 15.21	9.02 9.83 10.64 11.46 12.27 13.08 13.89 14.71 15.52 16.33 17.15 17.96 18.77 19.58 20.40 10.53 11.34 12.15 12.96 13.78 14.79 15.40 16.22 17.03	137 157 177 197 217 238 258 278 298 318 338 358 379 399 419 221 249 276 304 331 358 386 443 441
	5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 6 7 8 9 10 11 11 12 13 14 15 16 17 18 19 19 19 19 19 19 19 19 19 19 19 19 19	3,866 4,438 5,010 5,582 6,154 6,726 7,298 7,870 8,442 9,013 9,586 10,157 10,730 11,301 11,873 6,266 7,044 7,823 8,601 9,379 10,158 10,937 11,715	24'6" 27'2" 29'10" 32'6" 35'2" 37'10" 40'6" 43'2" 45'10" 51'2" 53'10" 56'6" 59'2" 61'10" 28'7" 33'11" 36'7" 39'3" 41'11" 44'7" 47'3"	29'10" 32'6" 35'2" 37'10" 40'6" 43'2" 45'10" 48'6" 52'2" 53'10" 56'6" 59'2" 61'10" 64'6" 67'2" 34'7" 37'3" 39'11" 42'7" 45'33" 50'7" 53'3"	4,811 5,523 6,235 6,947 7,658 8,370 9,082 9,793 10,505 11,217 11,929 12,640 13,353 14,064 14,775 7,797 8,766 9,735 10,703 11,672 12,641 13,610 14,579	32" 32" 32" 32" 32" 32" 32" 32" 32" 32"	110 126 142 158 174 190 207 223 239 255 271 287 303 319 335 178 200 222 243 265 287 309 331	99 114 128 143 157 172 186 201 215 230 244 259 273 288 302 160 180 200 219 239 259 279 299	88 101 114 127 140 152 165 178 191 204 217 230 243 256 268 142 160 178 195 212 230 247 265	7.46 8.28 9.09 9.90 10.72 11.53 12.34 13.15 13.97 14.78 15.59 16.41 17.22 18.03 18.84 8.71 9.52 10.33 11.14 11.96 12.77 13.58 14.40	9.02 9.83 10.64 11.46 12.27 13.08 13.89 14.71 15.52 16.33 17.15 17.96 18.77 19.58 20.40 10.53 11.34 12.15 12.96 13.78 14.59 15.40 16.22	137 157 177 197 217 238 258 278 298 318 338 358 379 399 419 221 249 276 304 331 358 366 413
	5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 6 7 8 9 10 11 11 12 13 14 15 16 17 18 19 10 10 11 11 11 11 11 11 11 11 11 11 11	3,866 4,438 5,010 5,582 6,154 6,726 7,298 7,870 8,442 9,013 9,586 10,157 10,730 11,301 11,873 6,266 7,044 7,823 8,601 9,379 10,158 10,937 11,715 12,493 13,271	24'6" 27'2" 29'10" 32'6" 35'2" 37'10" 40'6" 43'2" 45'10" 48'6" 59'2" 61'10" 28'7" 31'3" 33'11" 36'7" 39'3" 41'11" 44'7" 47'3" 49'11" 52'7"	29'10" 32'6" 35'2" 37'10" 40'6" 43'2" 45'10" 48'6" 52'2" 53'10" 64'6" 67'2" 34'7" 37'3" 39'11" 42'7" 45'3" 47'11" 50'7" 53'3" 55'11"	4,811 5,523 6,235 6,947 7,658 8,370 9,082 9,793 10,505 11,217 11,929 12,640 13,353 14,064 14,775 7,797 8,766 9,735 10,703 11,672 12,641 13,610 14,579 15,547 16,515 17,484 18,453	32" 32" 32" 32" 32" 32" 32" 32" 32" 32"	110 126 142 158 174 190 207 223 239 255 271 287 303 319 335 178 200 222 243 265 287 309 331 353 375	99 114 128 143 157 172 186 201 215 230 244 259 273 288 302 160 180 200 219 239 259 279 299 318 338 358 377	88 101 114 127 140 152 165 178 191 204 217 230 243 256 268 142 160 178 195 212 230 247 265 283 300	7.46 8.28 9.09 9.90 10.72 11.53 12.34 13.15 13.97 14.78 15.59 16.41 17.22 18.03 18.84 8.71 9.52 10.33 11.14 11.96 12.77 13.58 14.40 15.21 16.02	9.02 9.83 10.64 11.46 12.27 13.08 13.89 14.71 15.52 16.33 17.15 17.96 18.77 19.58 20.40 10.53 11.34 12.15 12.96 13.78 14.59 15.59 15.50 16.22 17.03 17.84	137 157 177 197 217 238 258 278 298 318 338 358 379 399 419 221 249 276 304 331 358 368 413 441 468
	5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 6 7 8 9 10 11 12 13 14 15 16 17 18 19 10 10 11 11 12 13 14 15 16 16 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	3,866 4,438 5,010 5,582 6,154 6,726 7,298 7,870 8,442 9,013 9,586 10,157 10,730 11,301 11,873 6,266 7,044 7,823 8,601 9,379 10,158 10,937 11,715 12,493 13,271 14,050 14,828 15,607	24'6" 27'2" 29'10" 32'6" 35'2" 37'10" 40'6" 43'2" 45'10" 56'6" 59'2" 61'10" 28'7" 33'11" 39'3" 41'11" 44'7" 47'3" 49'11" 55'3" 55'3" 55'3" 57'11"	29'10" 32'6" 35'2" 37'10" 40'6" 43'2" 45'10" 48'6" 52'2" 53'10" 56'6" 59'2" 61'10" 64'6" 67'2" 34'7" 37'3" 39'11" 42'7" 45'3" 47'11" 50'7" 53'3" 55'11" 58'7" 61'3" 63'11"	4,811 5,523 6,235 6,947 7,658 8,370 9,082 9,793 10,505 11,217 11,929 12,640 13,353 14,064 14,775 7,797 8,766 9,735 10,703 11,672 12,641 13,610 14,579 15,547 16,515 17,484 18,453 19,422	32" 32" 32" 32" 32" 32" 32" 32" 32" 32"	110 126 142 158 174 190 207 223 239 255 271 287 303 319 335 178 200 222 243 265 287 309 331 353 375 397 419 441	99 114 128 143 157 172 186 201 215 230 244 259 273 288 302 160 180 200 219 239 259 279 299 318 338 358 377 397	88 101 114 127 140 152 165 178 191 204 217 230 243 256 268 142 160 178 195 212 230 247 265 283 300 318 335 353	7.46 8.28 9.09 9.90 10.72 11.53 12.34 13.15 13.97 14.78 15.59 16.41 17.22 18.03 18.84 8.71 9.52 10.33 11.14 11.96 12.77 13.58 14.40 15.21 16.02 16.83 17.65 18.46	9.02 9.83 10.64 11.46 12.27 13.08 13.89 14.71 15.52 16.33 17.15 17.96 18.77 19.58 20.40 10.53 11.34 12.15 12.96 13.78 14.59 15.40 16.22 17.03 17.84 18.65 19.47 20.28	137 157 177 197 217 238 258 278 298 318 338 358 379 399 419 221 249 276 304 331 358 386 413 441 468 496 523 550
	5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 6 7 8 9 10 11 12 13 14 15 16 17 18 19 10 11 11 11 11 11 11 11 11 11 11 11 11	3,866 4,438 5,010 5,582 6,154 6,726 7,298 7,870 8,442 9,013 9,586 10,157 10,730 11,301 11,873 6,266 7,044 7,823 8,601 9,379 10,158 10,937 11,715 12,493 13,271 14,050 14,828	24'6" 27'2" 29'10" 32'6" 35'2" 37'10" 40'6" 43'2" 55'12" 55'12" 55'2" 61'10" 28'7" 31'3" 33'11" 36'7" 39'3" 41'11" 44'7" 49'11" 55'3" 55'3" 55'3" 55'3"	29'10" 32'6" 35'2" 37'10" 40'6" 43'2" 45'10" 48'6" 52'2" 53'10" 56'6" 59'2" 61'10" 64'6" 67'2" 33'1" 39'11" 42'7" 45'3" 47'11" 50'7" 55'3" 55'11" 61'3" 63'11"	4,811 5,523 6,235 6,947 7,658 8,370 9,082 9,793 10,505 11,217 11,929 12,640 13,353 14,064 14,775 7,797 8,766 9,735 10,703 11,672 12,641 13,610 14,579 15,547 16,515 17,484 18,453	32" 32" 32" 32" 32" 32" 32" 32" 32" 32"	110 126 142 158 174 190 207 223 239 255 271 287 303 319 335 178 200 222 243 265 287 309 331 353 375 397 419	99 114 128 143 157 172 186 201 215 230 244 259 273 288 302 160 180 200 219 239 259 279 299 318 338 358 377	88 101 114 127 140 152 165 178 191 204 217 230 243 256 268 142 160 178 195 212 230 247 265 283 300 318 335	7.46 8.28 9.09 9.90 10.72 11.53 12.34 13.15 13.97 14.78 15.59 16.41 17.22 18.03 18.84 8.71 9.52 10.33 11.14 11.96 12.77 13.58 14.40 15.21 16.02 16.83 17.65	9.02 9.83 10.64 11.46 12.27 13.08 13.89 14.71 15.52 16.33 17.15 17.96 18.77 19.58 20.40 10.53 11.34 12.15 12.96 13.78 14.59 15.40 16.22 17.03 17.03 17.84 18.65 19.47	137 157 177 197 217 238 258 278 298 318 338 358 379 399 419 221 249 276 304 331 358 366 413 441 468 496 523



SPECIFICATIONS

COMMERCIAL HOPPER TANKS

NCHT - 45° HOPPER - CONTINUED

		MAX.	EAVE	PEAK						EAVE	PEAK	MAXIMUM
DIAMETER	DINOC	CAPACITY	HEIGHT	HEIGHT	CAPACITY	HOPPER	METRIC TONS	METRIC TONS	METRIC TONS	HEIGHT	HEIGHT	CAP. (CUBIC
(FEET)	RINGS	(BU.)	(FEET)	(FEET)	(CUBIC FT.)	CLEARANCE	800 KG/M^3	721 KG/M^3	640 KG/M^3	(METERS)	(METERS)	METERS)
	5 6	7,460 8,477	27'5" 30'1"	34'3" 36'11"	9,284 10,549	32" 32"	211 240	190 216	169 192	8.35 9.16	10.44 11.25	263 299
	7	9,497	32'9"	39'7"	11,815	32"	268	242	215	9.97	12.06	335
	8	10,514	35'5"	42'3"	13,080	32"	297	268	238	10.79	12.87	371
	9	11,531 12,548	38'1" 40'9"	44'11"	14,345 15,610	32" 32"	326 355	294 320	261 284	11.60 12.41	13.69 14.50	407 443
	11	13,565	43'5"	50'3"	16,876	32"	383	345	306	13.22	15.31	478
	12	14,583	46'1"	52'11"	18,141	32"	412	371	330	14.04	16.13	514
24	13 14	15,600 16,617	48'9" 51'5"	55'7" 58'3"	19,406 20,672	32" 32"	441 469	397 423	353 376	14.85 15.66	16.94 17.75	550 586
	15	17,634	54'1"	60'11"	21,937	32"	498	449	399	16.48	18.56	622
	16	18,651	56'9"	63'7"	23,202	32"	526	474	421	17.29	19.38	658
	17 18	19,668 20,685	59'5" 62'1"	66'3" 68'11"	24,467 25,732	32" 32"	555 584	500 526	444 467	18.10 18.91	20.19 21.00	693 729
	19	21,702	64'9"	71'7"	26,998	32"	613	552	490	19.73	21.81	765
	20	22,719	67'5"	74'3"	28,263	32"	641	578	513	20.54	22.63	801
	21 22	23,737 24,754	70'1" 72'9"	76'11" 79'7"	29,528 30,794	32" 32"	670 698	604 629	536 559	21.35 22.16	23.44 24.25	837 872
					7 3 5 1 A 1 A 1 A	7.50						
	6 7	11,100 12,387	31'7" 34'3"	39'3" 41'11"	13,814 15,415	32" 32"	317 353	283 315	252 280	9.60 10.42	11.96 12.77	392 437
	8	13,674	36'11"	44'7"	17,016	32"	389	348	309	11.23	13.59	482
	9	14,961	39'7"	47'3"	18,618	32"	425	381	338	12.04	14.40	528
	10 11	16,248 17,534	42'3" 44'11"	49'11" 52'7"	20,219 21,820	32" 32"	462 498	414 446	368 396	12.86 13.67	15.21 16.02	573 618
	12	18,821	47'7"	55'3"	23,422	32"	534	479	425	14.48	16.84	664
27	13	20,108	50'3"	57'11"	25,023	32"	571	512	454	15.29	17.65	709
	14 15	21,395 22,681	52'11" 55'7"	60'7" 63'3"	26,625 28,226	32" 32"	607 643	545 578	484 513	16.11 16.92	18.46 19.28	754 800
	16	23,968	58'3"	65'11"	29,827	32"	679	610	541	17.73	20.09	845
	17	25,255	60'11"	68'7"	31,429	32"	716	642	570	18.55	20.90	890
	18	26,542	63'7"	71'3"	33,030	32"	752	675	600	19.36	21.71	936
	19 20	27,829 29,116	66'3" 68'11"	73'11" 76'7"	34,631 36,233	32" 32"	788 824	708 740	629 657	20.17 20.98	22.53 23.34	981 1,027
	6	14,163	33'0"	41'8"	17,624	32"	400	360	360	10.06	12.68	500
	7	15,751	35'8"	44'4"	19,601	32"	445	401	401	10.87	13.50	556
	8	17,340	38'4"	47'0"	21,578	32"	490	441	441	11.68	14.31	612
	9	18,929 20,517	41'0" 43'8"	49'8" 52'4"	23,555 25,532	32" 32"	535 580	482 522	482 522	12.50 13.31	15.12 15.93	668 723
	11	22,106	46'4"	55'0"	27,509	32"	624	562	562	14.12	16.75	779
00	12	23,695	49'0"	57'8"	29,487	32"	669	603	603	14.94	17.56	835
30	13 14	25,283 26,872	51'8" 54'4"	60'4" 63'0"	31,464 33,440	32" 32"	714 759	643 684	643 684	15.75 16.56	18.37 19.19	891 947
	15	28,461	57'0"	65'8"	35,440	32"	804	724	724	17.37	20.00	1,003
	16	30,049	59'8"	68'4"	37,394	32"	848	764	764	18.19	20.81	1,059
	17 18	31,638 33,226	62'4" 65'0"	71'0" 73'8"	39,371 41,348	32" 32"	893 938	805 845	805 845	19.00 19.81	21.62 22.44	1,115 1,171
	19	34,815	67'8"	76'4"	43,325	32"	982	886	886	20.62	23.25	1,227
	20	36,403	70'4"	79'0"	45,302	32"	1027	926	926	21.44	24.06	1,283
	6	18,887	36'4"	46'8"	23,503	36"	533	480	427	11.06	14.22	666
	7	20,809	39'0"	49'4"	25,895	36"	587	529	470	11.87	15.03	734
	8 9	22,731 24,653	41'8" 44'4"	52'0" 54'8"	28,288 30,680	36" 36"	642 696	578 627	513 557	12.68 13.49	15.84 16.65	802 869
	10	26,576	47'0"	57'4"	33,072	36"	750	676	600	14.31	17.47	937
	11	28,498	49'8"	60'0"	35,464	36"	804	725	644	15.12	18.28	1,005
	12 13	30,421 32,343	52'4" 55'0"	62'8" 65'4"	37,857 40,249	36" 36"	859 913	774 823	730	15.93 16.74	19.09 19.90	1,072 1,140
36	14	34,265	57'8"	68'0"	42,641	36"	967	872	774	17.56	20.72	1,208
	15	36,188	60'4"	70'8"	45,034	36"	1,021	921	817	18.37	21.53	1,276
	16 17	38,110 40,033	63'0" 65'8"	73'4" 76'0"	47,426 49,819	36" 36"	1,075 1,129	969 1,018	860 903	19.18 20.00	22.34 23.16	1,343 1,411
	18	41,955	68'4"	78'8"	52,211	36"	1,129	1,018	903	20.81	23.16	1,411
	19	43,878	71'0"	81'4"	54,603	36"	1,238	1,116	990	21.62	24.78	1,547
	20	45,800	73'8"	84'0"	56,996	36"	1,292	1,164	1,034	22.43	25.59	1,614
	21 22	47,723 49,645	76'4" 79'0"	86'8" 89'4"	59,388 61,781	36" 36"	1,346 1,401	1,213 1,262	1,077 1,121	23.25 24.06	26.41 27.22	1,682 1,750
	22	73,043	130	UU +	01,101	30	±, + ∪±	1,202	<u> </u>	27.00	21.22	1,700

NCHT - 40° HOPPER

DIAMETER (FEET)	RINGS	MAX. CAPACITY (BU.)	EAVE HEIGHT (FEET)	PEAK HEIGHT (FEET)	CAPACITY (CUBIC FT.)	HOPPER CLEARANCE	METRIC TONS 800 KG/M^3	METRIC TONS 721 KG/M^3	METRIC TONS 640 KG/M^3	EAVE HEIGHT (METERS)	PEAK HEIGHT (METERS)	MAXIMUM CAP. (CUBIC METERS)
	6	10,747	28'5"	36'2"	13,374	28"	304	274	243	8.65	11.01	379
	7	12,034	31'1"	38'10"	14,976	28"	341	307	273	9.46	11.82	425
	8	13,321	33'9"	41'6"	16,577	28"	376	339	301	10.28	12.63	470
	9	14,608	36'5"	44'2"	18,178	28"	413	372	330	11.09	13.45	515
	10	15,894	39'1"	46'10"	19,780	28"	449	405	359	11.90	14.26	561
	11	17,181	41'9"	49'6"	21,381	28"	486	438	389	12.72	15.07	606
	12	18,468	44'5"	52'2"	22,982	28"	521	470	417	13.53	15.89	651
27	13	19,755	47'1"	54'10"	24,584	28"	558	503	446	14.34	16.70	697
	14	21,042	49'9"	57'6"	26,185	28"	594	535	475	15.15	17.51	742
	15	22,328	52'5"	60'2"	27,786	28"	631	568	505	15.97	18.32	787
	16	23,615	55'1"	62'10"	29,388	28"	667	601	534	16.78	19.14	833
	17	24,902	57'9"	65'6"	30,989	28"	703	633	562	17.59	19.95	878
	18	26,189	60'5"	68'2"	32,591	28"	739	666	591	18.41	20.76	923
	19	27,476	63'1"	70'10"	34,192	28"	776	699	621	19.22	21.57	969
	20	28,763	65'9"	73'6"	35,793	28"	812	732	650	20.03	22.39	1,014
	6	13.678	29'7"	38'2"	17,022	28"	386	348	309	9.01	11.63	483
	7	15,267	32'3"	40'10"	18,999	28"	431	389	345	9.82	12.44	538
	8	16,856	34'11"	43'6"	20,976	28"	476	429	381	10.63	13.26	594
	9	18,444	37'7"	46'2"	22,953	28"	521	470	417	11.45	14.07	650
	10	20.033	40'3"	48'10"	24,930	28"	565	509	452	12.26	14.88	706
	11	21,621	42'11"	51'6"	26,907	28"	610	550	488	13.07	15.70	762
	12	23,210	45'7"	54'2"	28,884	28"	655	591	524	13.88	16.51	818
30	13	24,799	48'3"	56'10"	30,861	28"	700	631	560	14.70	17.32	874
	14	26,388	50'11"	59'6"	32,838	28"	745	672	596	15.51	18.13	930
	15	27,976	53'7"	62'2"	34,815	28"	790	712	632	16.32	18.95	986
	16	29,565	56'3"	64'10"	36,792	28"	834	752	667	17.14	19.76	1,042
	17	31,153	58'11"	67'6"	38,768	28"	879	792	703	17.95	20.57	1,098
	18	32,742	61'7"	70'2"	40,745	28"	924	833	739	18.76	21.39	1,154
	19	34,330	64'3"	72'10"	42,722	28"	969	873	775	19.57	22.20	1,210
	20	35,919	66'11"	75'6"	44,699	28"	1,014	914	811	20.39	23.01	1,266
	6	18.050	32'2"	42'6"	22,462	32"	510	460	408	9.79	12.95	637
	7	19,972	34'10"	45'2"	24,854	32"	564	508	451	10.60	13.76	704
	8	21,894	37'6"	47'10"	27,246	32"	618	557	494	11.41	14.57	772
	9	23,816	40'2"	50'6"	29,638	32"	672	606	538	12.22	15.38	840
	10	25,739	42'10"	53'2"	32,030	32"	726	655	581	13.04	16.20	907
	11	27,661	45'6"	55'10"	34.423	32"	781	704	625	13.85	17.01	975
36	12	29,584	48'2"	58'6"	36,815	32"	835	753	668	14.66	17.01	1,043
36	13	31,506	50'10"	61'2"	39,207	32"	889	801	711	15.47	18.63	1,111
	14	33,428	53'6"	63'10"	41,600	32"	943	850	755	16.29	19.45	1,178
	15	35,351	56'2"	66'6"	43,992	32"	998	899	798	17.10	20.26	1,178
	16	37,273	58'10"	69'2"	46,385	32"	1,052	948	842	17.10	21.07	1,314
	17		61'6"	71'10"	-							
		39,196			48,777	32"	1,106	997	885	18.73	21.89	1,382
	18	41,118	64'2"	74'6"	51,169	32"	1,160	1,045	928	19.54	22.70	1,449



NCHT - 60° HOPPER

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DIAMETER (FEET)	RINGS	MAX. CAPACITY (BU.)	EAVE HEIGHT (FEET)	PEAK HEIGHT (FEET)	CAPACITY (CUBIC FT.)	HOPPER CLEARANCE	METRIC TONS 800 KG/M ³	METRIC TONS 721 KG/M ³	METRIC TONS 640 KG/M ³	EAVE HEIGHT (METERS)	PEAK HEIGHT (METERS)	MAXIMUM CAP. (CUBIC METERS)
	3	2,052	22'7"	26'9"	2,553	32"	59	53	47	6.87	8.15	73
	4	2,449	25'3"	29'5"	3,047	32"	70	63	56	7.68	8.97	87
	5	2,846	27'11"	32'1"	3,541	32"	81	73	65	8.49	9.78	101
	6	3,243	30'7"	34'9"	4,036	32"	92	83	74	9.31	10.59	115
	7	3,640	33'3"	37'5"	4,530	32"	104	94	83	10.12	11.40	129
	8	4,037	35'11"	40'1"	5,024	32"	115	104	92	10.93	12.22	143
	9	4,435	38'7"	42'9"	5,518	32"	126	114	101	11.74	13.03	157
15	10	4,832	41'3"	45'5"	6,013	32"	137	124	110	12.56	13.84	171
13	11	5,229	43'11"	48'1"	6,507	32"	148	133	119	13.37	14.65	185
	12	5,626	46'7"	50'9"	7,001	32"	160	144	128	14.18	15.47	199
	13	6,023	49'3"	53'5"	7,495	32"	171	154	137	15.00	16.28	213
	14	6,420	51'11"	56'1"	7,990	32"	182	164	146	15.81	17.09	227
	15	6,818	54'7"	58'9"	8,484	32"	193	174	154	16.62	17.91	241
	16	7,215	57'3"	61'5"	8,978	32"	204	184	163	17.43	18.72	255
	17	7,612	59'11"	64'1"	9,472	32"	216	195	173	18.25	19.53	269
	18	8,009	62'7"	66'9"	9,967	32"	227	205	182	19.06	20.34	283
	5	4,342	30'6"	35'7"	5,404	32"	123	111	99	9.28	10.83	154
	6	4,914	33'2"	38'3"	6,115	32"	140	126	112	10.09	11.65	174
	7	5,486	35'10"	40'11"	6,827	32"	156	140	125	10.91	12.46	194
	8	6,058	38'6"	43'7"	7,539	32"	172	155	138	11.72	13.27	214
	9	6,630	41'2"	46'3"	8,251	32"	188	169	150	12.53	14.08	234
	10	7,202	43'10"	48'11"	8,962	32"	204	184	163	13.34	14.90	254
	11	7,774	46'6"	51'7"	9,674	32"	220	198	176	14.16	15.71	274
18	12	8,345	49'2"	54'3"	10,385	32"	236	213	189	14.97	16.52	295
	13	8,918	51'10"	56'11"	11,098	32"	252	227	202	15.78	17.34	315
	14	9,489	54'6"	59'7"	11,809	32"	268	242	215	16.60	18.15	335
	15	10,062	57'2"	62'3"	12,521	32"	285	257	228	17.41	18.96	355
	16	10,633	59'10"	64'11"	13,233	32"	301	271	241	18.22	19.77	375
	17	11,206	62'6"	67'7"	13,945	32"	317	286	254	19.03	20.59	395
	18	11,777	65'2"	70'3"	14,656	32"	333	300	266	19.85	21.40	416
	19	12,349	67'10"	72'11"	15,367	32"	349	315	279	20.66	22.21	436
	6	7,022	35'9"	41'9"	8,738	32"	199	179	159	10.88	12.70	248
	7	7,800	38'5"	44'5"	9,707	32"	221	199	177	11.70	13.52	275
	8	8,578	41'1"	47'1"	10,675	32"	243	219	195	12.51	14.33	303
	9	9,357	43'9"	49'9"	11,644	32"	265	239	212	13.32	15.14	330
	10	10,135	46'5"	52'5"	12,613	32"	286	258	229	14.14	15.96	358
	11	10,914	49'1"	55'1"	13,581	32"	308	278	247	14.95	16.77	385
	12	11,693	51'9"	57'9"	14,551	32"	330	298	264	15.76	17.58	413
21	13	12,471	54'5"	60'5"	15,519	32"	352	318	282	16.57	18.39	440
	14	13,249	57'1"	63'1"	16,487	32"	374	338	300	17.39	19.21	467
	15	14,027	59'9"	65'9"	17,456	32"	397	357	317	18.20	20.02	495
	16	14,806	62'5"	68'5"	18,425	32"	419	377	335	19.01	20.83	522
	17	15,584	65'1"	71'1"	19,394	32"	441	397	353	19.82	21.65	550
	18	16,363	67'9"	73'9"	20,363	32"	462	416	370	20.64	22.46	577
	19	17,141	70'5"	76'5"	21,331	32"	484	436	387	21.45	23.27	605
	20	17,920	73'1"	79'1"	22,300	32"	506	456	405	22.26	24.08	632

Cubic Meters based on 28 degree angle of repose. All commercial bins are designed for the storage of grain and other free-flowing materials weighing up to 52 lbs. per cubic foot. Maximum bushel capacity based on 6% compaction. Maximum storage capacities reflect grain peaked on center, using an angle of repose of 28 degrees. Other ring heights available in some diameters. Peak heights shown for 30 degree slope roofs.

Typical Grain Densities:

Corn approximately 721 kg/m^3 (45 lb/ft^3); Wheat approximately 800 kg/m^3 (50 lb/ft^3); Rice approximately 640 kg/m^3 (40 lb/ft^3)



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.



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Material Handling, we offer the broadest
product portfolio of proven and
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that withstand the conditions of any
commercial grain facility, while handling
the grain with care and efficiency.



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GSI and GSI Dealers alike share the same passion and commitment to our customers. GSI Dealers and contractors understand down time is not an option, construction schedules must be met. From site planning to installation and service, GSI Dealers and contractors are the proven partners for your operation. When you buy GSI, you get the quality product of a worldwide leader and the dependable service of your local Dealership.

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