

KATO KR-20H-L ROUGH TERRAIN HYDRAULIC CRANE

CHART 1: 8.65m – 28.0m boom (outriggers are used)
TOTAL RATED LOAD IN TONNES

WORKING RADIUS (m)	OUTRIGGERS AT MAXIMUM EXTENSION (5.4m) (360°)				OUTRIGGERS AT MEDIUM EXTENSION (4.7m) (OVER THE SIDE)				OUTRIGGERS AT MEDIUM EXTENSION (3.7m) (OVER THE SIDE)				OUTRIGGERS AT MEDIUM EXTENSION (2.9m) (OVER THE SIDE)				OUTRIGGERS AT MINIMUM EXTENSION (2.04m) (OVER THE SIDE)				WORKIN G RAD IUS (m)						
	8.65m BOOM	13.6m BOOM	18.4m BOOM	23.2m BOOM	28.0m BOOM	8.65m BOOM	13.6m BOOM	18.4m BOOM	23.2m BOOM	28.0m BOOM	8.65m BOOM	13.6m BOOM	18.4m BOOM	23.2m BOOM	28.0m BOOM	8.65m BOOM	13.6m BOOM	18.4m BOOM	23.2m BOOM	28.0m BOOM							
2.0	20.00*	10.00	8.00		20.00*	10.00	8.00		20.00*	10.00	8.00		18.00	10.00	7.40	9.00	9.00	7.40	9.00	9.00	7.40	2.0					
2.5	20.00*	10.00	8.00	6.50	20.00*	10.00	8.00	6.50	20.00*	10.00	8.00	6.50	18.00	10.00	7.40	5.10	9.00	9.00	7.40	5.10	5.10	2.5					
3.0	20.00*	10.00	8.00	6.50	20.00*	10.00	8.00	6.50	17.00	10.00	8.00	6.50	12.00	10.00	7.40	5.10	6.70	7.10	6.75	6.75	5.10	3.0					
3.5	17.00	10.00	8.00	6.50	5.00	17.00	10.00	8.00	6.50	5.00	14.50	10.00	8.00	6.50	5.00	9.00	9.50	7.40	5.10	5.50	5.55	5.10	3.5				
4.0	14.80	10.00	8.00	6.50	5.00	14.80	10.00	8.00	6.50	5.00	11.00	10.00	8.00	6.50	5.00	7.00	7.40	7.40	5.10	3.80	4.00	4.35	4.35	4.0			
4.5	12.80	10.00	8.00	6.50	5.00	12.80	10.00	8.00	6.50	5.00	8.75	9.10	8.00	6.50	5.00	6.00	6.15	5.10	3.80	3.20	3.55	3.70	3.10	4.5			
5.0	11.20	9.80	7.90	6.50	5.00	11.00	9.80	7.90	6.50	5.00	7.10	7.50	7.65	6.50	5.00	4.65	5.00	5.10	3.80	2.65	2.95	3.10	3.15	2.70	5.0		
5.5	10.00	9.10	7.45	6.20	5.00	9.20	9.10	7.45	6.20	5.00	6.00	6.30	6.45	6.20	5.00	3.90	4.20	4.35	4.45	3.80	2.20	2.50	2.60	2.70	2.35	5.5	
6.0	9.00	8.40	7.00	5.90	5.00	7.80	8.10	7.00	5.90	5.00	5.10	5.40	5.50	5.60	5.00	3.30	3.60	3.75	3.80	3.80	2.15	2.25	2.30	2.410	2.410	6.0	
6.5		7.80	6.55	5.50	4.80		7.00	6.55	5.50	4.80		4.65	4.80	4.90	4.80		3.15	3.35	3.40		1.80	1.95	2.00	1.85	1.85	6.5	
7.0		7.30	6.20	5.20	4.60		6.10	6.20	5.20	4.60		4.10	4.20	4.30	4.30		2.75	2.85	2.90		3.00	1.55	1.65	1.75	1.60	1.60	7.0
8.0		6.10	5.60	4.70	4.10		4.80	4.90	4.70	4.10		3.20	3.30	3.40	3.40		2.10	2.20	2.30		2.35	1.15	1.25	1.30	1.25	1.25	8.0
9.0		4.90	5.05	4.20	3.70		3.90	4.00	4.05	3.70		2.60	2.70	2.75	2.80		1.65	1.75	1.85		1.90	0.85	0.95	0.95	0.95	0.95	9.0
10.0		4.05	4.20	3.80	3.40		3.20	3.30	3.35	3.40		2.10	2.20	2.25	2.30		1.30	1.40	1.50		1.55	0.55	0.70		10.0		10.0
11.0		3.40	3.55	3.45	3.05		2.70	2.75	2.80	2.85		1.70	1.80	1.90	1.95		1.05	1.15	1.20		1.25						11.0
12.0			3.00	3.05	2.80			2.35	2.40	2.45			1.50	1.60	1.60			0.90	0.95	1.00							12.0
13.0			2.60	2.65	2.55			2.00	2.05	2.10			1.25	1.35	1.35			0.70	0.75	0.80							13.0
14.0		2.25	2.30	2.35			1.75	1.75	1.80			1.05	1.10	1.15			0.50	0.55	0.60								14.0
15.0		2.00	2.05				1.50	1.55	1.55			0.85	0.90	0.95													15.0
16.0			1.75	1.80			1.35	1.35	1.35			0.70	0.75														16.0
17.0		1.55	1.60				1.15	1.15	1.15			0.55	0.60														17.0
18.0		1.35	1.40				0.95	1.00				0.45	0.50														18.0
19.0			1.15	1.20			0.80	0.85																			19.0
20.0			1.00	1.05			0.65	0.70				0.55															20.0
21.0				0.90																							21.0
22.0				0.80								0.45															22.0
23.0				0.65																							23.0
24.0				0.55																							24.0
25.0				0.45																							25.0
Critical Boom Angle												25°															Critical Boom Angle
Standard Hook												20t hook															Standard Hook
Hook Mass												200kg															Hook Mass
Parts of Line	7*,6	4	4	4	4	7*,6	4	4	4	4	4	7*,6	4	4	4	4	4	4	4	4	4	4	4	4	Parts of Line		

Note: * marked rated lifting capacities is for 7 part lines
 Capacities above bold outline of area of chart are limited by crane structural strength. All other loads are limited by 75% of tipping.

KATO KR-20H-L ROUGH TERRAIN HYDRAULIC CRANE

CHART 2: 8.65m – 28.0m boom (outriggers + jib are used)

TOTAL RATED LOAD IN TONNES

OUTRIGGERS AT MAXIMUM EXTENSION (5.4m) (360°)												OUTRIGGERS AT MEDIUM EXTENSION (4.7m) (OVER THE SIDE)												OUTRIGGERS AT MEDIUM EXTENSION (3.7m) (OVER THE SIDE)											
2.80m Boom + 7.0 Jib						2.80m Boom + 7.0 Jib						2.80m Boom + 11.4 Jib						2.80m Boom + 11.4 Jib						OUTRIGGERS AT MEDIUM EXTENSION (4.7m) (OVER THE SIDE)											
Boom Angle (°)	Offset 5°	Offset 25°	Offset 45°	Offset 60°	Boom Angle (°)	Offset 5°	Offset 25°	Offset 45°	Offset 60°	Boom Angle (°)	Offset 5°	Offset 25°	Offset 45°	Offset 60°	Boom Angle (°)	Offset 5°	Offset 25°	Offset 45°	Offset 60°	Boom Angle (°)	Offset 5°	Offset 25°	Offset 45°	Offset 60°	Boom Angle (°)	Offset 5°	Offset 25°	Offset 45°	Offset 60°	Boom Angle (°)	Offset 5°	Offset 25°	Offset 45°	Offset 60°	
CRITICAL BOOM ANGLE																																			
Standard Hook	43°	43°	46°	61°	61°	48°	48°	49°	51°	51°	22.2	0.61	60	17.5	0.88	19.3	0.74	20.2	0.67	64	15.3	0.72	17.2	0.57	18.3	0.51	18.5	0.52	18.1	0.59					
Standard Hook	45°	45°	47°	62°	62°	49°	49°	50°	52°	52°	22.2	0.61	65	15.1	1.38	16.9	1.16	18.0	1.06	67	13.8	1.06	15.7	0.85	16.9	0.75	17.2	0.75	17.8	0.66					
Standard Hook	47°	47°	49°	64°	64°	51°	51°	53°	55°	55°	22.2	0.61	66	14.6	1.54	16.4	1.29	17.5	1.16	68	12.2	1.45	14.2	1.19	15.5	1.03	15.8	0.75	16.2	0.75					
Standard Hook	49°	49°	51°	66°	66°	53°	53°	55°	57°	57°	22.2	0.61	67	14.1	1.68	15.9	1.39	17.1	1.19	69	10.2	1.30	12.4	1.30	12.9	0.75	13.4	0.75	13.9	0.75					
Standard Hook	51°	51°	53°	68°	68°	55°	55°	57°	59°	59°	22.2	0.61	68	13.6	1.75	15.4	1.43	16.6	1.20	70	8.0	1.20	10.1	1.10	12.2	1.68	13.5	1.29	13.9	1.29					
Standard Hook	53°	53°	55°	69°	69°	57°	57°	59°	61°	61°	22.2	0.61	69	13.0	1.75	15.6	1.52	16.8	1.23	71	6.3	1.20	10.1	1.00	12.2	1.70	13.0	1.30	13.4	1.30					
Standard Hook	55°	55°	57°	70°	70°	59°	59°	61°	63°	63°	22.2	0.61	70	12.5	1.75	15.8	1.52	17.0	1.23	72	5.0	1.20	10.1	1.00	12.2	1.70	13.0	1.30	13.4	1.30					
Standard Hook	57°	57°	59°	71°	71°	61°	61°	63°	65°	65°	22.2	0.61	71	12.0	1.75	16.0	1.52	17.2	1.23	73	3.0	1.20	10.1	1.00	12.2	1.70	13.0	1.30	13.4	1.30					
Standard Hook	59°	59°	61°	72°	72°	63°	63°	65°	67°	67°	22.2	0.61	72	11.5	1.75	16.2	1.52	17.4	1.23	74	1.0	1.20	10.1	1.00	12.2	1.70	13.0	1.30	13.4	1.30					
Standard Hook	61°	61°	63°	73°	73°	65°	65°	67°	69°	69°	22.2	0.61	73	11.0	1.75	16.4	1.52	17.6	1.23	75	0.0	1.20	10.1	1.00	12.2	1.70	13.0	1.30	13.4	1.30					
Standard Hook	63°	63°	65°	74°	74°	67°	67°	69°	71°	71°	22.2	0.61	74	10.5	1.75	16.6	1.52	17.8	1.23	76	-0.5	1.20	10.1	1.00	12.2	1.70	13.0	1.30	13.4	1.30					
Standard Hook	65°	65°	67°	75°	75°	69°	69°	71°	73°	73°	22.2	0.61	75	10.0	1.75	16.8	1.52	18.0	1.23	77	-1.0	1.20	10.1	1.00	12.2	1.70	13.0	1.30	13.4	1.30					
Standard Hook	67°	67°	69°	76°	76°	71°	71°	73°	75°	75°	22.2	0.61	76	9.5	1.75	17.0	1.52	18.2	1.23	78	-1.5	1.20	10.1	1.00	12.2	1.70	13.0	1.30	13.4	1.30					
Standard Hook	69°	69°	71°	77°	77°	73°	73°	75°	77°	77°	22.2	0.61	77	9.0	1.75	17.2	1.52	18.4	1.23	79	-2.0	1.20	10.1	1.00	12.2	1.70	13.0	1.30	13.4	1.30					
Standard Hook	71°	71°	73°	78°	78°	75°	75°	77°	79°	79°	22.2	0.61	78	8.5	1.75	17.4	1.52	18.6	1.23	80	-2.5	1.20	10.1	1.00	12.2	1.70	13.0	1.30	13.4	1.30					
Standard Hook	73°	73°	75°	79°	79°	77°	77°	79°	81°	81°	22.2	0.61	79	8.0	1.75	17.6	1.52	18.8	1.23	81	-3.0	1.20	10.1	1.00	12.2	1.70	13.0	1.30	13.4	1.30					
Standard Hook	75°	75°	77°	80°	80°	78°	78°	80°	82°	82°	22.2	0.61	80	7.5	1.75	17.8	1.52	19.0	1.23	82	-3.5	1.20	10.1	1.00	12.2	1.70	13.0	1.30	13.4	1.30					
Standard Hook	77°	77°	79°	81°	81°	80°	80°	82°	84°	84°	22.2	0.61	81	7.0	1.75	18.0	1.52	19.2	1.23	83	-4.0	1.20	10.1	1.00	12.2	1.70	13.0	1.30	13.4	1.30					
Standard Hook	79°	79°	81°	83°	83°	82°	82°	84°	86°	86°	22.2	0.61	82	6.5	1.75	18.2	1.52	19.4	1.23	84	-4.5	1.20	10.1	1.00	12.2	1.70	13.0	1.30	13.4	1.30					
Standard Hook	81°	81°	83°	85°	85°	84°	84°	86°	88°	88°	22.2	0.61	83	6.0	1.75	18.4	1.52	19.6	1.23	85	-5.0	1.20	10.1	1.00	12.2	1.70	13.0	1.30	13.4	1.30					
Standard Hook	83°	83°	85°	87°	87°	86°	86°	88°	90°	90°	22.2	0.61	84	5.5	1.75	18.6	1.52	19.8	1.23	86	-5.5	1.20	10.1	1.00	12.2	1.70	13.0	1.30	13.4	1.30					
Standard Hook	85°	85°	87°	89°	89°	88°	88°	90°	92°	92°	22.2	0.61	85	5.0	1.75	18.8	1.52	20.0	1.23	87	-6.0	1.20	10.1	1.00	12.2	1.70	13.0	1.30	13.4	1.30					
Standard Hook	87°	87°	89°	91°	91°	90°	90°	92°	94°	94°	22.2	0.61	86	4.5	1.75	19.0	1.52	20.2	1.23	88	-6.5	1.20	10.1	1.00	12.2	1.70	13.0	1.30	13.4	1.30					
Standard Hook	89°	89°	91°	93°	93°	92°	92°	94°	96°	96°	22.2	0.61	87	4.0	1.75	19.2	1.52	20.4	1.23	89	-7.0	1.20	10.1	1.00	12.2	1.70	13.0	1.30	13.4	1.30					
Standard Hook	91°	91°	93°	95°	95°	94°	94°	96°	98°	98°	22.2	0.61	88	3.5	1.75	19.4	1.52	20.6	1.23	90	-7.5	1.20	10.1	1.00	12.2	1.70	13.0	1.30	13.4	1.30					
Standard Hook	93°	93°	95°	97°	97°	96°	96°	98°	100°	100°	22.2	0.61	89	3.0	1.75	19.6	1.52	20.8	1.23	91	-8.0	1.20	10.1	1.00	12.2	1.70	13.0	1.30	13.4	1.30					
Standard Hook	95°	95°	97°	99°	99°	98°	98°	100°	102°	102°	22.2	0.61	90	2.5	1.75	19.8	1.52	21.0	1.23	92	-8.5	1.20	10.1	1.00	12.2	1.70	13.0	1.30	13.4	1.30					
Standard Hook	97°	97°	99°	101°	101°	100°	100°	102°	104°	104°	22.2	0.61	91	2.0	1.75	20.0	1.52	21.2	1.23	93	-9.0	1.20	10.1	1.00	12.2	1.70	13.0	1.30	13.4	1.30					
Standard Hook	99°	99°	101°	103°	103°	102°	102°	104°	106°	106°	22.2	0.61	92	1.5	1.75	20.2	1.52	21.4	1.23	94	-9.5	1.20	10.1	1.00	12.2	1.70	13.0	1.30	13.4	1.30					
Standard Hook	101°	101°	103°	105°	105°	104°	104°	106°	108°	108°	22.2	0.61	93	1.0	1.75	20.4	1.52	21.6	1.23	95	-10.0	1.20	10.1	1.00	12.2	1.70	13.0	1.30	13.4	1.30					
Standard Hook	103°	103°	105°	107°	107°	106°	106°	108°	110°	110°	22.2	0.61	94	0.5	1.75	20.6	1.52	21.8	1.23	96	-10.5	1.20	10.1	1.00	12.2	1.70	13.0	1.30	13.4	1.30					
Standard Hook	105°	105°	107°	109°	109°	108°	108°	110°	112°	112°	22.2	0.61	95	0.0	1.75	20.8	1.52	22.0	1.23	97	-11.0	1.20	10.1	1.00	12.2	1.70	13.0	1.30	13.4	1.30					
Standard Hook	107°	107°	109°	111°	111°	110°	110°	112°	114°	114°	22.2	0.61	96	-0.5	1.75	21.0	1.52	22.2	1.23	98	-11.5	1.20	10.1	1.00	12.2	1.70	13.0	1.30	13.4	1.30					
Standard Hook	109°	109°	111°	113°	113°	112°	112°	114°	116°	116°	22.2	0.61	97	-1.0	1.75	21.2	1.52	22.4	1.23	99	-12.0	1.20	10.1	1.00	12.2	1.70	13.0	1.30	13.4	1.30</td					