


LOAD CHARTS

KATO KR-45H-v

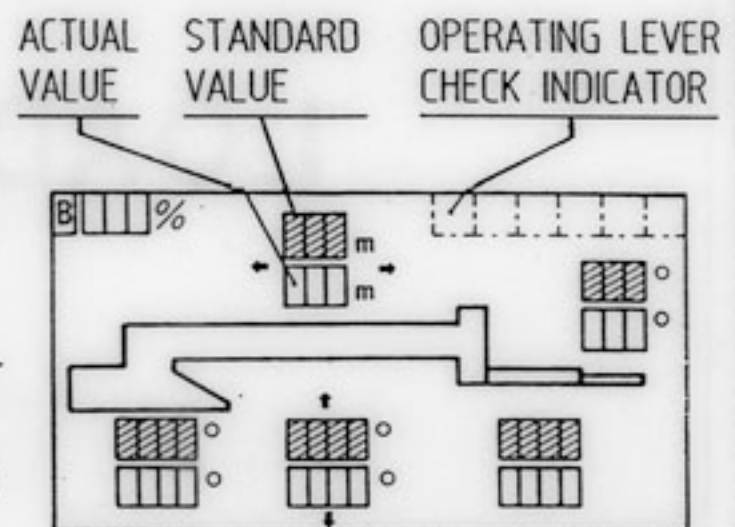
S/N 051466

TUTTS P/N 634-0011.1

ACS - SETUP INSTRUCTIONS

1. SET THE CRANE UP LEVEL ON FIRM LEVEL GROUND ON OUTRIGGERS, THEN SWITCH THE BOOM WORKING & OUTRIGGER SETTING STATUS SWITCH TO 'A' MODE.
2. SLEW BOOM TO FRONT AREA & APPLY SLEW LOCK. SET BOOM WORKING STATUS SWITCH TO 'B' (CHECK) MODE (). ALL STANDARD VALUES WILL BE DISPLAYED.

3. OPERATE THE CRANE MOTIONS SO THAT ACTUAL BOOM LENGTH & ANGLE, SLEW ANGLE & JIB LENGTH & OFFSET COINCIDE WITH STANDARD VALUES ON THE DISPLAY. WIND THE HOOK UP TO THE OVERWIND LIMIT. WHEN ALL THE VALUES ARE MATCHED TO THE STANDARD VALUES, ALL STANDARD VALUE DISPLAYS SHOULD CHANGE TO '888' OR '8888'. CRANE SHOULD NOW STOP AUTOMATICALLY.



4. IN THIS CONDITION OPERATE LEVERS TO RAISE, LOWER, EXTEND & RETRACT THE BOOM, WINCH UP & DOWN, & RAISE & LOWER THE JIB. CONFIRM THAT THE AUTOMATIC STOP WORKS, & THAT THE OPERATING LEVER CHECK INDICATOR DISPLAYS THE APPROPRIATE SYMBOL. (SYMBOLS ARE NOT DISPLAYED WHEN WINCHING DOWN OR RAISING JIB)
5. WHILE SLEW LOCK IS ENGAGED, OPERATE THE SLEWING LEVER, & CONFIRM THAT THE SLEW LEVER SYMBOL APPEARS IN THE LEVER CHECK DISPLAY.
6. BEFORE OPERATING THE CRANE, SET BOOM WORKING POSITION SWITCH TO 'C' (ACS) MODE AND CONFIRM THE BOOM WORKING STATUS & OUTRIGGER SETTING STATUS.
7. FOR ADDITIONAL INFORMATION, & IF PROBLEMS OCCUR DURING SETUP CHECKS, REFER TO THE ACS MANUAL.

NOTE : STANDARD HOOK & LIFTING EQUIPMENT SHOULD BE USED DURING THIS PROCEDURE.

TUTTS P/N 634-0011.2

KATO KR-45H-v OPERATING INSTRUCTIONS


STARTING ENGINE

1. SET SHIFT LEVER IN NEUTRAL POSITION BEFORE STARTING ENGINE.
2. TURN STARTER SWITCH TO 'ON' POSITION. ALL WARNING LAMPS & BUZZER SHOULD COME ON FOR A FEW SECONDS. RELEASE SWITCH WHEN ENGINE STARTS. IF ERROR OR ABNORMAL CONDITION IS INDICATED, STOP ENGINE IMMEDIATELY.
3. AFTER STARTING, WARM UP ENGINE AT LOW RPM.
4. CHECK HYDRAULIC OIL LEVEL.

CRANE INSPECTION & MAINTENANCE

1. CHECK DRUM BRAKE ADJUSTMENT ACCORDING TO THE INSTRUCTION PLATE.
2. CHECK ACCUMULATOR PRESSURE BY PRESSURE TEST.
3. CHECK OIL LEVEL, OIL LEAKS & CONDITION OF WIRE HOIST ROPE. REPLACE OIL & FILTER IN ACCORDANCE WITH OPERATOR'S MANUAL.

OUTRIGGER OPERATION

1. TURN PTO SWITCH ON & SET SUSPENSION SWITCH TO  BEFORE OPERATING OUTRIGGERS.
2. ADJUST OUTRIGGERS UNTIL ALL WHEELS ARE CLEAR OF THE GROUND & CRANE IS LEVEL.
3. IF THE HORIZONTAL EXTENSION OF ALL THE OUTRIGGERS IS NOT THE SAME, SET ACS TO THE SHORTEST OUTRIGGER EXTENSION.

SLEW OPERATION

1. PAY ATTENTION TO WORK AREA AROUND CRANE WHEN SLEWING, TO AVOID PERSONNEL OR OBSTACLES.
2. OPERATE THE CONTROL LEVER SMOOTHLY & PROGRESSIVELY.
3. WHEN SLEWING A LOAD FROM FRONT OR REAR AREAS TO SIDE, FIRST CHECK CAPACITY OVER SIDE TO AVOID OVERLOADING.
4. SLEW MOTION DOES NOT STOP IMMEDIATELY UPON RETURN OF LEVER TO NEUTRAL POSITION, SO ALLOW A REASONABLE BRAKING DISTANCE. ALWAYS APPLY SLEW LOCK AFTER SLEWING.

WINCH OPERATION

1. CONTROL LEVER MUST ALWAYS BE OPERATED SMOOTHLY & PROGRESSIVELY. NEVER DRAG LOADS, PARTICULARLY SIDE ON TO THE BOOM, & NEVER OVERLOAD THE WINCH ROPE.
2. WHEN HOLDING A LOAD SUSPENDED FOR A LONG PERIOD, APPLY THE DRUM BRAKE.
3. DO NOT ALLOW THE HOOK TO STRIKE THE GROUND WHEN USING FREE FALL.

BOOM OPERATION

1. KEEP HOOK AS LOW AS POSSIBLE DURING BOOM-UP & TELESCOPING OPERATIONS.
2. TO EXTEND OR RETRACT THE 3rd & 4th BOOMS, HOLD THE SWITCH FOR 3rd & 4th BOOM EXTENSION/RETRACTION DURING OPERATION.
3. OPERATE THE CONTROL LEVER SMOOTHLY & PROGRESSIVELY.

PREPARATION FOR DRIVING THE CRANE

1. SET BOOM, JIB, OUTRIGGERS & ROOSTER SHEAVE TO THEIR PRESCRIBED POSITIONS.
2. INSERT LOCK PINS INTO THE OUTRIGGERS AFTER RETRACTING.
3. APPLY SLEW BRAKE & LOCK.
4. SET STEERING MODE SELECTOR SWITCH TO 2-WHEEL DRIVE POSITION.
5. LOCK REAR WHEEL STEERING BY LOCKING DEVICE. (DO NOT APPLY STEERING LOCK WHILE ON OUTRIGGERS).
6. SET PTO & SUSPENSION LOCK SWITCHES TO 'OFF' POSITIONS. SET HIGH-LOW SPEED SWITCH TO 'HIGH' MODE.
NOTE: STOP CRANE BEFORE PUSHING HIGH-LOW SWITCH. CONFIRM 'HIGH' POSITION BY MONITOR INDICATOR LAMP.

TUTTS P/N 634-0011.3

KATO KR-45H-v

SAFE OPERATION NOTES

1. SAFE WORKING LOADS SHOWN IN THE CHARTS ARE MAXIMUM LOADS ON FIRM LEVEL GROUND AT INDICATED WORKING RADII (WHICH ARE ACTUAL VALUES INCLUDING LADEN BOOM DEFLECTION), & MUST BE REDUCED BY WEIGHT OF HOOK & LIFTING EQUIPMENT.

HOOK CAPACITY	45 tonnes	20 tonnes	4 tonnes
HOOK WEIGHT	450 kg	270 kg	120 kg

2. WHEN OPERATING CRANE WITH MAIN BOOM ONLY, LOADS MUST NOT EXCEED VALUES SHOWN IN SWL CHART No1 (on OUTRIGGERS) or No3 (on WHEELS). WITH JIB ERECTED, RATED LOADS LIFTED FROM MAIN BOOM MUST BE FURTHER REDUCED BY 2600 kg, & ROOSTER SHEAVE MUST NOT BE USED.
3. WORKING RADII SHOWN ON SWL CHART No2 FOR OPERATIONS WITH JIB ARE THOSE OBTAINED WITH FULLY EXTENDED (39.0m) BOOM. JIB OPERATIONS WITH OTHER BOOM LENGTHS MUST BE PERFORMED ON THE BASIS OF BOOM ANGLES ONLY.
4. SWL's FOR ROOSTER SHEAVE EQUAL SWL's FOR MAIN BOOM, BUT MUST NOT EXCEED 4000 kg, & MUST BE REDUCED BY WEIGHT OF 4t HOOK (120 kg) & LIFTING EQUIPMENT.
5. WHEN OPERATING WITH BOOM LENGTH NOT LISTED ON THE SWL CHART, OBSERVE RATED LOADS APPLICABLE TO THE NEXT LONGER BOOM LENGTH.
6. BOOM MUST NOT BE LOWERED BELOW THE MINIMUM ANGLE SHOWN ON THE LOAD CHART, OTHERWISE THE CRANE MAY OVERTURN EVEN WITHOUT A LOAD.
7. WHEN OPERATING THE CRANE OVER THE FRONT OR REAR (WITHIN THE OUTRIGGER SPREAD), RATED LOADS APPLICABLE TO FULLY EXTENDED OUTRIGGERS MAY BE LIFTED, REGARDLESS OF OUTRIGGER EXTENSION. HOWEVER, LOADS MUST NOT BE MOVED FROM FRONT OR REAR TO SIDE WITHOUT FIRST REDUCING RADIUS TO COMPLY WITH RELEVANT OVER-SIDE RATING.
8. HOIST ROPE REEVING FOR MAXIMUM RATED LOADS MUST COMPLY WITH TABLE BELOW. LOAD PER ROPE FALL MUST NOT EXCEED 4100 kg.

BOOM LENGTH	10.4m	17.55m	24.7m	31.85-39.0m	JIB/ROOSTER SHEAVE
ROPE FALLS	11	7	5	4	1

9. FREE FALL SHOULD ONLY BE USED TO LOWER THE UNLADEN HOOK, OR IN UNAVOIDABLE CIRCUMSTANCES, A LOAD NOT EXCEEDING 20% OF RATED CAPACITY, IN WHICH CASE SUDDEN BRAKING OF THE LOAD MUST BE AVOIDED.
10. INCORRECT OPERATION OR LIFTING LOADS IN EXCESS OF RATED LIFTING CAPACITY MAY DAMAGE THE CRANE OR CAUSE IT TO OVERTURN, IN WHICH CASE WARRANTY PROVISIONS WILL NOT APPLY.

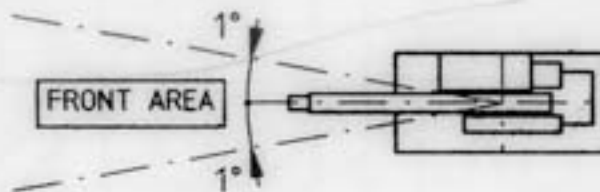
TUTTS P/N 634-0011.4

KATO KR-45H-v SAFE OPERATION NOTES
FOR OPERATION ON WHEELS

1. SAFE WORKING LOADS SHOWN IN CHART No3 ARE MAXIMUM LOADS ON FIRM LEVEL GROUND AT INDICATED WORKING RADII WITH SPECIFIED TYRE PRESSURE & WITH SUSPENSION LOCK CYLINDER FULLY RETRACTED. THEY MUST BE REDUCED BY WEIGHT OF HOOK & LIFTING EQUIPMENT.

TYRE SIZE (STANDARD)	18.00R25☆☆
TYRE PRESSURE	785 kPa

2. LOAD RATINGS IN FRONT AREA OF CRANE ARE GREATER THAN 360 DEGREE RATINGS. SO LOADS MUST NOT BE MOVED FROM FRONT TO SIDE WITHOUT FIRST ENSURING THAT THE 360 DEGREE RATING WILL NOT BE EXCEEDED.

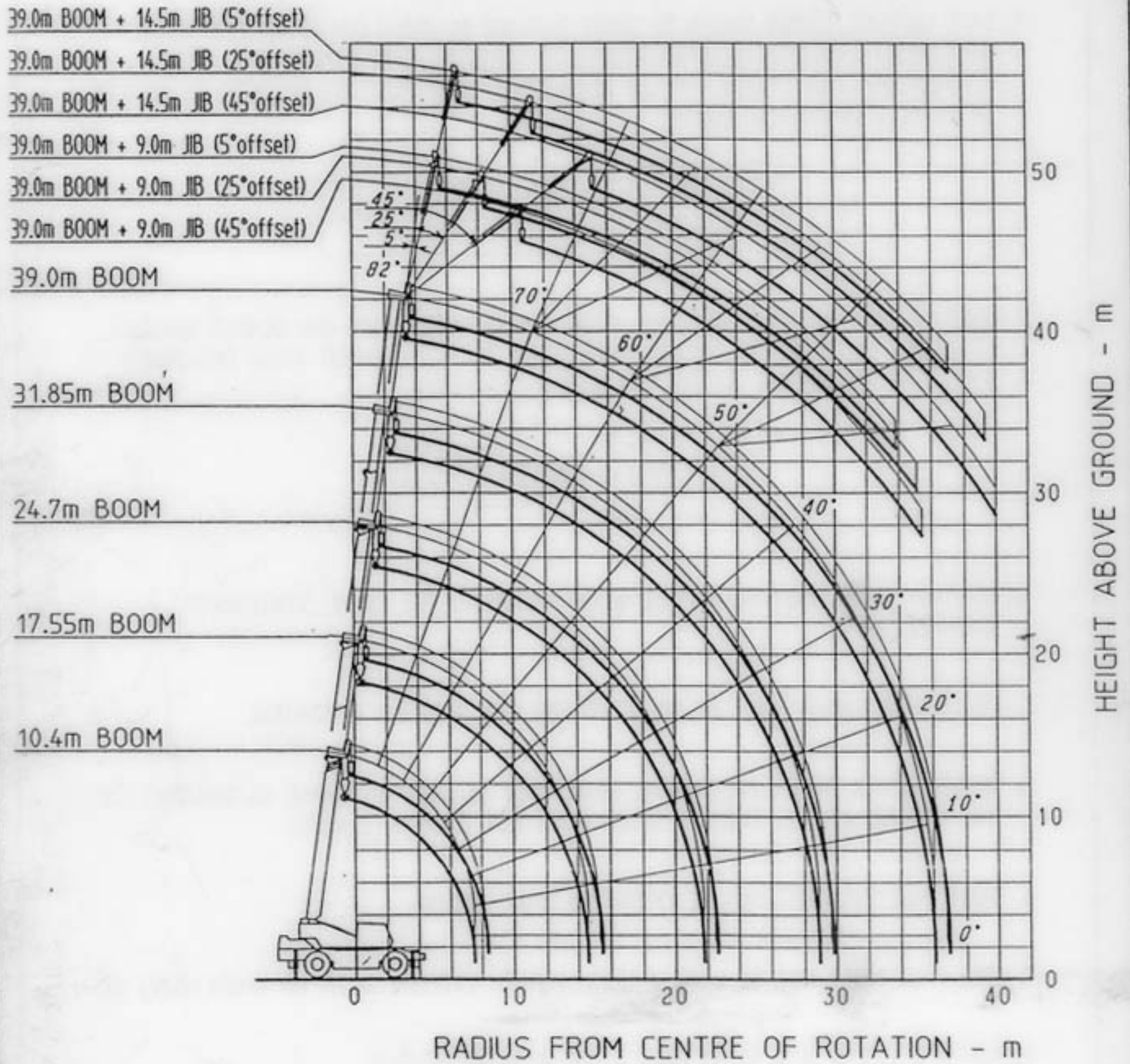


3. PARKING BRAKE MUST BE APPLIED WHEN OPERATING THE CRANE STATIONARY ON WHEELS.
4. LOW SPEED SWITCH MUST BE SELECTED FOR PICK & CARRY OPERATION.
5. DURING PICK & CARRY OPERATIONS, LOAD MUST BE KEPT AS CLOSE AS POSSIBLE TO THE GROUND AT ALL TIMES, & SPEED MUST NOT EXCEED 2 km/h.
6. CRANE MOTIONS MUST NOT BE OPERATED WHILE DRIVING.
7. FREE FALL MUST NOT BE USED IF BOOM LENGTH EXCEEDS 24.7m OR WHEN USING JIB.
8. NOTES 1, 4, 5, 6, 8 & 10 ON PAGE 4 ARE ALSO APPLICABLE.

TUTTS P/N 634-0011.5

HOIST ROPE SPECIFICATION	MAIN	AUXILIARY
DIAMETER - mm	18	18
CONSTRUCTION	IWRC 6xFi (29) NON-ROTATING	IWRC 6xFi (29) NON-ROTATING
MINIMUM GBF - kN	164	164
LENGTH - m	220	120

KATO KR-45H-v RANGE DIAGRAM



NOTE :

1. RADIUS DOES NOT INCLUDE EFFECT OF BOOM & JIB DEFLECTION.
2. DIAGRAM IS VALID ONLY WITH OUTRIGGERS FULLY EXTENDED.

TUTTS P/N 634-0011.6

KATO KR-45H-V SAFE WORKING LOAD CHART - No1

UNITS - tonnes

LOADS ON MAIN BOOM - CRANE SUPPORTED ON OUTRIGGERS

Working Radius (m)	Outriggers fully extended 360 degrees												Outriggers extended to 5.8m Over side												Outriggers extended to 4.3m Over side												O/riggers fully retracted Over side						Working Radius (m)
	10.4m Boom				17.55m Boom				24.7m Boom				31.85m Boom				39.0m Boom				10.4m Boom				17.55m Boom				24.7m Boom				10.4m Boom		17.55m Boom		24.7m Boom						
	10.4m	17.55m	24.7m	31.85m	10.4m	17.55m	24.7m	31.85m	10.4m	17.55m	24.7m	31.85m	10.4m	17.55m	24.7m	31.85m	10.4m	17.55m	24.7m	31.85m	10.4m	17.55m	24.7m	31.85m	10.4m	17.55m	24.7m	31.85m	10.4m	17.55m	24.7m	31.85m	10.4m	17.55m	24.7m	31.85m	10.4m	17.55m	24.7m	31.85m			
3.0	45.00	28.00	20.00	14.00	45.00	28.00	20.00	14.00	45.00	28.00	20.00	14.00	45.00	28.00	20.00	14.00	45.00	28.00	20.00	14.00	45.00	28.00	20.00	14.00	45.00	28.00	20.00	14.00	45.00	28.00	20.00	14.00	45.00	28.00	20.00	14.00	15.35	11.50	9.60	3.0			
3.5	41.00	28.00	20.00	14.00	41.00	28.00	20.00	14.00	41.00	28.00	20.00	14.00	41.00	28.00	20.00	14.00	41.00	28.00	20.00	14.00	41.00	28.00	20.00	14.00	41.00	28.00	20.00	14.00	41.00	28.00	20.00	14.00	41.00	28.00	20.00	14.00	15.35	11.50	9.60	3.5			
4.0	37.00	28.00	20.00	14.00	37.00	28.00	20.00	14.00	37.00	28.00	20.00	14.00	37.00	28.00	20.00	14.00	37.00	28.00	20.00	14.00	37.00	28.00	20.00	14.00	37.00	28.00	20.00	14.00	37.00	28.00	20.00	14.00	37.00	28.00	20.00	14.00	12.10	11.50	9.60	4.0			
4.5	33.50	28.00	20.00	14.00	33.50	28.00	20.00	14.00	33.50	28.00	20.00	14.00	33.50	28.00	20.00	14.00	33.50	28.00	20.00	14.00	33.50	28.00	20.00	14.00	33.50	28.00	20.00	14.00	33.50	28.00	20.00	14.00	33.50	28.00	20.00	14.00	10.00	9.50	9.60	4.5			
5.0	30.20	28.00	20.00	14.00	30.20	28.00	20.00	14.00	30.20	28.00	20.00	14.00	30.20	28.00	20.00	14.00	30.20	28.00	20.00	14.00	30.20	28.00	20.00	14.00	30.20	28.00	20.00	14.00	30.20	28.00	20.00	14.00	30.20	28.00	20.00	14.00	8.35	7.95	8.00	5.0			
5.5	27.50	26.10	20.00	14.00	27.50	26.10	20.00	14.00	27.50	26.10	20.00	14.00	27.50	26.10	20.00	14.00	27.50	26.10	20.00	14.00	27.50	26.10	20.00	14.00	27.50	26.10	20.00	14.00	27.50	26.10	20.00	14.00	27.50	26.10	20.00	14.00	7.00	6.60	6.60	5.5			
6.0	25.00	24.40	20.00	14.00	25.00	24.40	20.00	14.00	25.00	24.40	20.00	14.00	25.00	24.40	20.00	14.00	25.00	24.40	20.00	14.00	25.00	24.40	20.00	14.00	25.00	24.40	20.00	14.00	25.00	24.40	20.00	14.00	25.00	24.40	20.00	14.00	6.05	5.65	5.50	6.0			
6.5	22.70	22.40	18.70	14.00	22.70	22.40	18.70	14.00	22.70	22.40	18.70	14.00	22.70	22.40	18.70	14.00	22.70	22.40	18.70	14.00	22.70	22.40	18.70	14.00	22.70	22.40	18.70	14.00	22.70	22.40	18.70	14.00	22.70	22.40	18.70	14.00	5.15	4.80	4.65	6.5			
7.0	20.70	20.60	17.60	13.50	20.70	20.60	17.60	13.50	20.70	20.60	17.60	13.50	20.70	20.60	17.60	13.50	20.70	20.60	17.60	13.50	20.70	20.60	17.60	13.50	20.70	20.60	17.60	13.50	20.70	20.60	17.60	13.50	20.70	20.60	17.60	13.50	4.40	4.10	4.00	7.0			
7.5		18.90	16.60	13.00		18.90	16.60	13.00		18.90	16.60	13.00		18.90	16.60	13.00		18.90	16.60	13.00		18.90	16.60	13.00		18.90	16.60	13.00		18.90	16.60	13.00		18.90	16.60	13.00		3.50	3.35	3.35	7.5		
8.0		17.50	15.60	12.50		17.50	15.60	12.50		17.50	15.60	12.50		17.50	15.60	12.50		17.50	15.60	12.50		17.50	15.60	12.50		17.50	15.60	12.50		17.50	15.60	12.50		17.50	15.60	12.50		2.95	2.85	2.85	8.0		
8.5		16.20	14.70	11.90		16.20	14.70	11.90		16.20	14.70	11.90		16.20	14.70	11.90		16.20	14.70	11.90		16.20	14.70	11.90		16.20	14.70	11.90		16.20	14.70	11.90		16.20	14.70	11.90		2.55	2.40	2.40	8.5		
9.0		15.00	13.90	11.30		15.00	13.90	11.30		15.00	13.90	11.30		15.00	13.90	11.30		15.00	13.90	11.30		15.00	13.90	11.30		15.00	13.90	11.30		15.00	13.90	11.30		15.00	13.90	11.30		2.10	2.00	2.00	9.0		
10.0		13.00	12.30	10.30		13.00	12.30	10.30		13.00	12.30	10.30		13.00	12.30	10.30		13.00	12.30	10.30		13.00	12.30	10.30		13.00	12.30	10.30		13.00	12.30	10.30		13.00	12.30	10.30		1.40	1.25	1.25	10.0		
11.0		10.35	10.00	9.40		10.35	10.00	9.40		10.35	10.00	9.40		10.35	10.00	9.40		10.35	10.00	9.40		10.35	10.00	9.40		10.35	10.00	9.40		10.35	10.00	9.40		10.35	10.00	9.40		0.80	0.70	0.70	11.0		
12.0		8.65	8.55	8.65		8.65	8.55	8.65		8.65	8.55	8.65		8.65	8.55	8.65		8.65	8.55	8.65		8.65	8.55	8.65		8.65	8.55	8.65		8.65	8.55	8.65		8.65	8.55	8.65					12.0		
13.0		7.30	7.20	8.00		7.30	7.20	8.00		7.30	7.20	8.00		7.30	7.20	8.00		7.30	7.20	8.00		7.30	7.20	8.00		7.30	7.20	8.00		7.30	7.20	8.00		7.30	7.20	8.00					13.0		
14.0		6.25	6.15	6.80		6.25	6.15	6.80		6.25	6.15	6.80		6.25	6.15	6.80		6.25	6.15	6.80		6.25	6.15	6.80		6.25	6.15	6.80		6.25	6.15	6.80		6.25	6.15	6.80					14.0		
15.0			5.25	6.05			5.25	6.05			5.25	6.05			5.25	6.05			5.25	6.05			5.25	6.05			5.25	6.05			5.25	6.05			5.25	6.05					15.0		
16.0			4.50	5.30			4.50	5.30			4.50	5.30			4.50	5.30			4.50	5.30			4.50	5.30			4.50	5.30			4.50	5.30			4.50	5.30					16.0		
18.0			3.25	4.10			3.25	4.10			3.25	4.10			3.25	4.10			3.25	4.10			3.25	4.10			3.25	4.10			3.25	4.10			3.25	4.10					18.0		
20.0			2.40	3.15			2.40	3.15			2.40	3.15			2.40	3.15			2.40	3.15			2.40	3.15			2.40	3.15			2.40	3.15			2.40	3.15					20.0		
21.0			2.00	2.75			2.00	2.75			2.00	2.75			2.00	2.75			2.00	2.75			2.00	2.75			2.00	2.75			2.00	2.75			2.00	2.75					21.0		
22.0				2.45				2.45				2.45				2.45				2.45				2.45					2.45				2.45								22.0		
24.0				1.80				1.80				1.80				1.80				1.80				1.80					1.80				1.80								24.0		
26.0				1.30				1.30				1.30				1.30				1.30				1.30					1.30				1.30								26.0		
28.0				0.90				0.90				0.90				0.90				0.90				0.90					0.90				0.90								28.0		
30.0																																									30.0		
32.0																																										32.0	
34.0																																										34.0	
Minimum Boom Angle																																										Minimum Boom Angle	
Std hook	45t	45t	20t	20t	45t	45t	20t	20t	45t	45t	20t	20t	45t	45t	20t	20t	45t	45t	20t	20t	45t	45t	20t	20t	45t	45t	20t	20t	45t	45t	20t	20t	45t	45t	20t	20t	45t	45t	20t	20t	Std hook		
Hook weight	450kg	450kg	270kg	270kg	450kg	450kg	270kg	270kg	450kg	450kg	270kg	270kg	450kg	450kg	270kg	270kg	450kg	450kg	270kg	270kg	450kg	450kg	270kg	270kg	450kg	450kg	270kg	270kg	450kg	450kg	270kg	270kg	450kg	450kg	270kg	270kg	450kg	450kg	270kg	270kg	Hook weight		
Rope falls	11	7	5	4	11	7	5	4	11	7	5	4	11	7	5	4	11	7	5	4	11	7	5	4	11	7	5	4	11	7	5	4	11	7	5	4	11	7	5	4	Rope falls		

Loads within shaded areas are limited by crane structural strength. All other loads are limited by 75% of tipping.

KATO KR-45H-V SAFE WORKING LOAD CHART - No2

39.0m BOOM + 9.0m JIB

(STD HOOK - 4t CAPACITY - WEIGHT 120kg)

BOOM ANGLE (deg)	OUTRIGGERS FULLY EXTENDED - 360 SLEW						BOOM ANGLE (deg)	OUTRIGGER SPREAD 5.8m - OVER SIDE						BOOM ANGLE (deg)	OUTRIGGER SPREAD 4.3m - OVER SIDE					
	5 deg. offset		25 deg. offset		45 deg. offset			5 deg. offset		25 deg. offset		45 deg. offset			5 deg. offset		25 deg. offset		45 deg. offset	
	Radius (m)	Load (t)	Radius (m)	Load (t)	Radius (m)	Load (t)		Radius (m)	Load (t)	Radius (m)	Load (t)	Radius (m)	Load (t)		Radius (m)	Load (t)	Radius (m)	Load (t)	Radius (m)	Load (t)
82.0	6.0	3.50	10.0	2.40	11.0	1.60	6.0	3.50	10.0	2.40	11.0	1.60	6.0	3.50	10.0	2.40	11.0	1.60		
77.0	11.5	3.50	14.0	2.40	15.8	1.60	11.5	3.50	14.0	2.40	15.8	1.60	11.5	3.50	14.0	2.40	15.8	1.60		
75.0	13.0	3.50	15.6	2.30	17.5	1.60	13.0	3.50	15.6	2.30	17.5	1.60	13.0	3.50	15.6	2.30	17.5	1.60		
73.0	14.7	3.15	17.2	2.15	18.8	1.55	14.7	3.15	17.2	2.15	18.8	1.55	14.7	3.15	17.2	2.15	18.8	1.55		
70.0	17.0	2.75	19.5	1.95	21.0	1.50	17.0	2.75	19.5	1.95	21.0	1.50	17.0	2.75	19.5	1.95	21.0	1.50		
66.0	20.1	2.30	22.4	1.70	23.7	1.45	20.1	2.30	22.4	1.70	23.7	1.45	20.1	2.30	22.4	1.70	23.7	1.45		
64.0	21.6	2.15	23.8	1.60	25.0	1.40	21.6	2.15	23.8	1.60	25.0	1.40	21.6	2.15	23.8	1.60	25.0	1.40		
60.0	24.7	1.85	26.6	1.45	27.5	1.30	24.1	1.15	26.3	0.96	27.4	0.86	24.1	1.15	26.3	0.96	27.4	0.86		
57.0	26.7	1.70	28.5	1.35	29.3	1.25	26.7	0.67	28.7	0.48	29.7	0.48	26.7	0.67	28.7	0.48	29.7	0.48		
55.0	28.0	1.34	29.7	1.30	30.5	1.20	27.8	0.48					27.8	0.48						
52.0	30.0	0.96	31.5	0.91	32.1	0.86														
50.0	31.1	0.77	32.6	0.72	33.1	0.72														
45.0	33.8	0.38	35.1	0.38	35.4	0.38														
Min. Boom Angle	42 degrees		42 degrees		42 degrees		Min. Boom Angle		52 degrees		54 degrees		54 degrees		54 degrees		61 degrees		62 degrees	

39.0m BOOM + 14.5m JIB

(STD HOOK - 4t CAPACITY - WEIGHT 120kg)

BOOM ANGLE (deg)	OUTRIGGERS FULLY EXTENDED - 360 SLEW						BOOM ANGLE (deg)	OUTRIGGER SPREAD 5.8m - OVER SIDE						BOOM ANGLE (deg)	OUTRIGGER SPREAD 4.3m - OVER SIDE					
	5 deg. offset		25 deg. offset		45 deg. offset			5 deg. offset		25 deg. offset		45 deg. offset			5 deg. offset		25 deg. offset		45 deg. offset	
	Radius (m)	Load (t)	Radius (m)	Load (t)	Radius (m)	Load (t)		Radius (m)	Load (t)	Radius (m)	Load (t)	Radius (m)	Load (t)		Radius (m)	Load (t)	Radius (m)	Load (t)	Radius (m)	Load (t)
82.0	9.0	2.40	14.0	1.25	17.0	0.80	9.0	2.40	14.0	1.25	17.0	0.80	9.0	2.40	14.0	1.25	17.0	0.80		
78.0	12.5	2.40	16.6	1.25	19.6	0.80	12.5	2.40	16.6	1.25	19.6	0.80	12.5	2.40	16.6	1.25	19.6	0.80		
77.0	13.5	2.30	17.5	1.25	20.4	0.80	13.5	2.30	17.5	1.25	20.4	0.80	13.5	2.30	17.5	1.25	20.4	0.80		
75.0	15.4	2.10	19.3	1.20	22.0	0.80	15.4	2.10	19.3	1.20	22.0	0.80	15.4	2.10	19.3	1.20	22.0	0.80		
73.0	17.1	1.95	21.0	1.15	23.5	0.79	17.1	1.95	21.0	1.15	23.5	0.79	17.1	1.95	21.0	1.15	23.5	0.79		
70.0	19.7	1.75	23.6	1.08	25.8	0.78	19.7	1.75	23.6	1.08	25.8	0.78	19.7	1.75	23.6	1.08	25.8	0.78		
65.0	24.1	1.45	27.6	1.00	29.4	0.75	24.1	1.45	27.6	1.00	29.4	0.75	24.1	1.45	27.6	1.00	29.4	0.75		
60.0	28.1	1.25	31.2	0.90	32.7	0.73	26.4	0.96	29.8	0.94	31.4	0.74	26.4	0.96	29.8	0.94	31.4	0.74		
55.0	31.8	1.15	34.6	0.83	35.8	0.71	27.7	0.77	31.0	0.72	32.7	0.73	27.7	0.77	31.0	0.72	32.7	0.73		
52.0	33.8	0.77	36.5	0.80	37.5	0.70	30.5	0.38	33.5	0.38	35.0	0.38	30.5	0.38	33.5	0.38	35.0	0.38		
50.0	35.1	0.62	37.7	0.57	38.5	0.53														
47.0	37.0	0.38	39.3	0.38	40.0	0.38														
Min. Boom Angle	44 degrees		44 degrees		44 degrees		Min. Boom Angle		54 degrees		54 degrees		54 degrees		54 degrees		62 degrees		63 degrees	

Loads within shaded areas of chart are limited by crane structural strength. All other loads are limited by 75% of tipping.

KATO KR-45H-V SAFE WORKING LOAD CHART - No3

(UNITS - tonnes)

LOADS ON MAIN BOOM - CRANE ON WHEELS

Working Radius (m)	PICK & CARRY - MAX. SPEED 2 km/hr												Working Radius
	STATIONARY						24.7m Boom						
	10.4m Boom		17.55m Boom		24.7m Boom		10.4m Boom		17.55m Boom		24.7m Boom		
	Front Area	360 Degrees	Front Area	360 Degrees	Front Area	360 Degrees	Front Area	360 Degrees	Front Area	360 Degrees	Front Area	360 Degrees	
3.5	20.00	12.00	15.00	8.50	9.00	4.50	14.50	8.00	10.50	6.50	7.50	3.30	3.5
4.0	20.00	9.40	15.00	8.50	9.00	4.50	14.50	7.00	10.50	6.50	7.50	3.30	4.0
4.5	17.40	7.70	15.00	6.90	9.00	4.50	12.50	6.00	10.50	5.40	7.50	3.30	4.5
5.0	15.50	6.30	15.00	5.85	9.00	4.50	11.00	5.10	10.50	4.50	7.50	3.30	5.0
5.5	14.00	5.25	13.70	4.90	9.00	4.50	10.00	4.30	10.50	3.75	7.50	3.30	5.5
6.0	12.80	4.45	12.40	4.05	9.00	3.65	9.10	3.60	9.50	3.15	7.50	2.90	6.0
6.5	11.70	3.75	11.30	3.45	8.60	3.05	8.40	3.00	8.60	2.70	7.00	2.50	6.5
7.0	10.70	3.05	10.30	2.85	8.20	2.60	7.80	2.50	7.80	2.25	6.55	2.10	7.0
7.5			9.40	2.40	7.80	2.20			7.10	1.85	6.10	1.75	7.5
8.0			8.60	2.00	7.40	1.80			6.50	1.50	5.70	1.40	8.0
8.5			7.40	1.60	7.00	1.50			5.85	1.20	5.35	1.05	8.5
9.0			6.70	1.30	6.60	1.25			5.30	0.90	5.00	0.75	9.0
10.0			5.45	0.80	5.25	0.72			4.30		4.10		10.0
11.0			4.55		4.40				3.50		3.35		11.0
12.0			3.80		3.60				2.90		2.65		12.0
13.0			3.20		2.90				2.45		2.00		13.0
14.0			2.70		2.40				2.10		1.50		14.0
15.0					1.90						1.00		15.0
16.0					1.50								16.0
17.0					1.15								17.0
18.0					0.85								18.0
Minimum Boom Angle				45 degrees	30 degrees	60 degrees				48 degrees	42 degrees	62 degrees	Minimum Boom Angle
Std hook	45t		45t		20t		45t		45t		20t		Std hook
Hook weight	450kg		450kg		270kg		450kg		450kg		270kg		Hook weight
Rope falls	11		7		5		11		7		5		Rope falls

LOADS WITHIN SHADED AREA OF CHART ARE LIMITED BY CRANE STRUCTURAL STRENGTH
 ALL OTHER LOADS ARE LIMITED BY STABILITY (STATIONARY - 75% OF TIPPING, PICK & CARRY - 66.7% OF TIPPING)