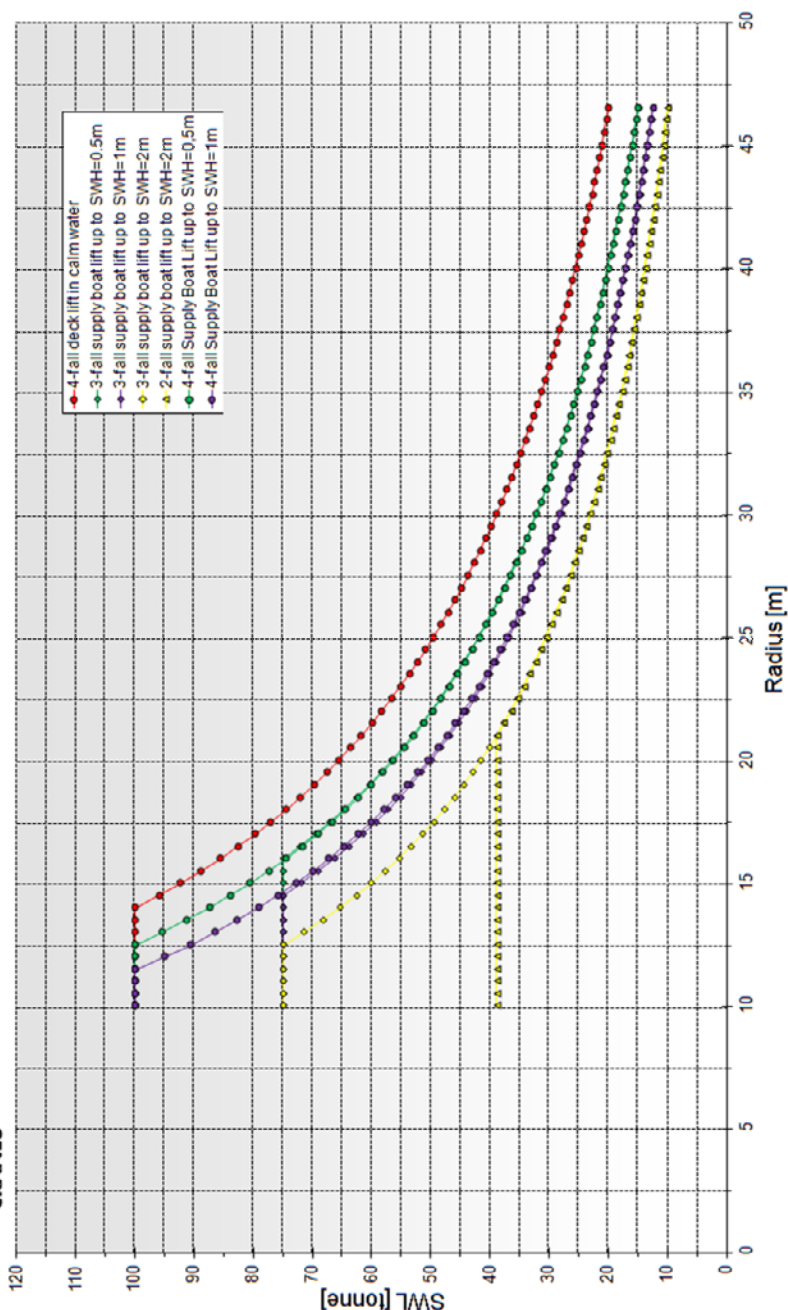


DATA SHEET



LOAD/RADIUS CURVES: Main Hoist
DHC 100/4000 O.S.
Project: P324N001,
Crane for POSH Semco



Rev: B	Description:	Updated hoisting factors, offleads and sideleads		By: JNO	Date: 221013		
Purchaser: POSH SEMCO Vessel: Posh Bawean		Item no: --		Orig: JNO	Date: 120913		
		P.O. no: POSH/13005		Check: FHO	Date: 120913		
Job: DHC 100/4000 O.S.		Description: Load-radius curves MH		Appr: MBL	Date: 111013		
				Source: P318N001			
 PO BOX 235, 1500 LE ZAANDAM, ZUIDDIJK 400, 1505 HE ZAANDAM THE NETHERLANDS T +31 (0)75 6810410, WWW.KENZ-FIGEE.COM  2C-0036   001							
						Order no: P324N001	
						Doc. no: 0050_001	
						Page 1 of 4	Rev: B

DATA SHEET

Radius [m]	46,50	46,00	45,50	45,00	44,50	44,00	43,50	43,00	42,50	42,00	41,50	41,00	40,50	40,00
4-fall deck lift in calm water [t]	20,0	20,4	20,8	21,1	21,5	22,0	22,4	22,8	23,2	23,7	24,2	24,6	25,1	25,6
3-fall supply boat lift up to SWH=0,5m [t]	15,0	15,3	15,7	16,0	16,4	16,8	17,2	17,6	18,0	18,4	18,8	19,2	19,7	20,1
3-fall supply boat lift up to SWH=1m [t]	12,5	12,8	13,1	13,4	13,8	14,1	14,5	14,8	15,2	15,5	15,9	16,3	16,7	17,1
3-fall supply boat lift up to SWH=2m [t]	10,0	10,3	10,5	10,8	11,1	11,4	11,6	11,9	12,2	12,6	12,9	13,2	13,5	13,9
2-fall supply boat lift up to SWH=2m [t]	10,0	10,3	10,5	10,8	11,1	11,4	11,6	11,9	12,2	12,6	12,9	13,2	13,5	13,9
4-fall Supply Boat Lift up to SWH=0,5m [t]	15,0	15,3	15,7	16,0	16,4	16,8	17,2	17,5	17,9	18,3	18,8	19,2	19,6	20,1
4-fall Supply Boat Lift up to SWH=1m [t]	12,5	12,8	13,1	13,5	13,8	14,1	14,5	14,8	15,2	15,6	16,0	16,4	16,8	17,2

Radius [m]	39,50	39,00	38,50	38,00	37,50	37,00	36,50	36,00	35,50	35,00	34,50	34,00	33,50	33,00
4-fall deck lift in calm water [t]	26,1	26,6	27,2	27,7	28,3	28,8	29,4	30,1	30,7	31,3	32,0	32,7	33,4	34,1
3-fall supply boat lift up to SWH=0,5m [t]	20,6	21,1	21,5	22,0	22,6	23,1	23,6	24,2	24,8	25,3	25,9	26,6	27,2	27,9
3-fall supply boat lift up to SWH=1m [t]	17,5	17,9	18,4	18,8	19,3	19,8	20,3	20,8	21,3	21,8	22,4	22,9	23,5	24,1
3-fall supply boat lift up to SWH=2m [t]	14,2	14,6	15,0	15,3	15,7	16,1	16,5	17,0	17,4	17,9	18,3	18,8	19,3	19,8
2-fall supply boat lift up to SWH=2m [t]	14,2	14,6	15,0	15,3	15,7	16,1	16,5	17,0	17,4	17,8	18,3	18,8	19,3	19,8
4-fall Supply Boat Lift up to SWH=0,5m [t]	20,5	21,0	21,5	22,0	22,5	23,0	23,6	24,1	24,7	25,3	25,9	26,5	27,1	27,8
4-fall Supply Boat Lift up to SWH=1m [t]	17,6	18,0	18,5	18,9	19,4	19,9	20,4	20,9	21,4	21,9	22,5	23,1	23,7	24,3

Radius [m]	32,50	32,00	31,50	31,00	30,50	30,00	29,50	29,00	28,50	28,00	27,50	27,00	26,50	26,00
4-fall deck lift in calm water [t]	34,8	35,6	36,4	37,2	38,1	39,0	39,9	40,8	41,8	42,8	43,8	44,9	46,0	47,2
3-fall supply boat lift up to SWH=0,5m [t]	28,6	29,3	30,0	30,7	31,5	32,3	33,1	34,0	34,9	35,8	36,7	37,7	38,8	39,8
3-fall supply boat lift up to SWH=1m [t]	24,7	25,3	26,0	26,7	27,4	28,1	28,8	29,6	30,4	31,2	32,1	33,0	33,9	34,8
3-fall supply boat lift up to SWH=2m [t]	20,3	20,8	21,4	21,9	22,5	23,1	23,8	24,4	25,1	25,8	26,5	27,3	28,0	28,8
2-fall supply boat lift up to SWH=2m [t]	20,3	20,8	21,4	21,9	22,5	23,1	23,8	24,4	25,1	25,8	26,5	27,2	28,0	28,8
4-fall Supply Boat Lift up to SWH=0,5m [t]	28,5	29,2	29,9	30,6	31,4	32,2	33,0	33,9	34,7	35,6	36,6	37,6	38,6	39,6
4-fall Supply Boat Lift up to SWH=1m [t]	24,9	25,5	26,2	26,9	27,6	28,3	29,1	29,8	30,7	31,5	32,4	33,3	34,2	35,2

Rev: B	Description:	Updated hoisting factors, offleads and sideleads		By: JNO	Date: 221013
Purchaser: POSH SEMCO Vessel: Posh Bawean		Item no: --		Orig: JNO	Date: 120913
		P.O. no: POSH/13005		Check: FHO	Date: 120913
Job: DHC 100/4000 O.S.		Description: Load-radius curves MH		Appr: MBL	Date: 111013
				Source: P318N001	
    PO BOX 235, 1500 LE ZAANDAM, ZUIDDIJK 400, 1505 HE ZAANDAM THE NETHERLANDS T +31 (0)75 6810410, WWW.KENZ-FIGEE.COM 2C-0036				Order no: P324N001	
				Doc. no: 0050_001	
				Page 2 of 4	Rev: B

DATA SHEET

Radius [m]	25,50	25,00	24,50	24,00	23,50	23,00	22,50	22,00	21,50	21,00	20,50	20,00	19,50	19,00
4-fall deck lift in calm water [t]	48,4	49,6	50,9	52,3	53,7	55,2	56,8	58,4	60,1	61,8	63,7	65,7	67,7	69,9
3-fall supply boat lift up to SWH=0.5m [t]	40,9	42,1	43,3	44,5	45,8	47,2	48,6	50,1	51,6	53,2	54,9	56,7	58,6	60,6
3-fall supply boat lift up to SWH=1m [t]	35,8	36,9	37,9	39,1	40,2	41,4	42,7	44,0	45,4	46,9	48,4	50,0	51,7	53,5
3-fall supply boat lift up to SWH=2m [t]	29,7	30,6	31,5	32,4	33,4	34,4	35,5	36,6	37,8	39,0	40,3	41,7	43,1	44,6
2-fall supply boat lift up to SWH=2m [t]	29,7	30,5	31,4	32,4	33,4	34,4	35,5	36,6	37,8	39,0	39,0	39,0	39,0	39,0
4-fall Supply Boat Lift up to SWH=0.5m [t]	40,7	41,9	43,1	44,3	45,6	46,9	48,3	49,8	51,3	52,9	54,6	56,4	58,3	60,2
4-fall Supply Boat Lift up to SWH=1m [t]	36,2	37,2	38,3	39,5	40,6	41,9	43,2	44,5	45,9	47,4	49,0	50,6	52,3	54,1

Radius [m]	18,50	18,00	17,50	17,00	16,50	16,00	15,50	15,00	14,50	14,00	13,50	13,00	12,50	12,00
4-fall deck lift in calm water [t]	72,2	74,6	77,1	79,8	82,7	85,7	88,9	92,4	96,1	100,0	100,0	100,0	100,0	100,0
3-fall supply boat lift up to SWH=0.5m [t]	62,6	64,8	67,2	69,6	72,2	75,0	75,0	75,0	75,0	75,0	75,0	75,0	75,0	75,0
3-fall supply boat lift up to SWH=1m [t]	55,4	57,3	59,4	61,6	64,0	66,5	69,1	72,0	75,0	75,0	75,0	75,0	75,0	75,0
3-fall supply boat lift up to SWH=2m [t]	46,2	47,8	49,6	51,5	53,4	55,6	57,8	60,2	62,7	65,5	68,4	71,6	75,0	75,0
2-fall supply boat lift up to SWH=2m [t]	39,0	39,0	39,0	39,0	39,0	39,0	39,0	39,0	39,0	39,0	39,0	39,0	39,0	39,0
4-fall Supply Boat Lift up to SWH=0.5m [t]	62,3	64,5	66,8	69,2	71,8	74,6	77,5	80,6	84,0	87,5	91,4	95,5	100,0	100,0
4-fall Supply Boat Lift up to SWH=1m [t]	56,0	58,0	60,1	62,4	64,8	67,3	70,0	72,9	75,9	79,2	82,8	86,6	90,7	95,2

Radius [m]	11,50	11,00	10,50	10,00
4-fall deck lift in calm water [t]	100,0	100,0	100,0	100,0
3-fall supply boat lift up to SWH=0.5m [t]	75,0	75,0	75,0	75,0
3-fall supply boat lift up to SWH=1m [t]	75,0	75,0	75,0	75,0
3-fall supply boat lift up to SWH=2m [t]	75,0	75,0	75,0	75,0
2-fall supply boat lift up to SWH=2m [t]	39,0	39,0	39,0	39,0
4-fall Supply Boat Lift up to SWH=0.5m [t]	100,0	100,0	100,0	100,0
4-fall Supply Boat Lift up to SWH=1m [t]	100,0	100,0	100,0	100,0

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Purchaser: POSH SEMCO Vessel: Posh Bawean		Item no: --		Orig: JNO	Date: 120913
		P.O. no: POSH/13005		Check: FHO	Date: 120913
Job: DHC 100/4000 O.S.		Description: Load-radius curves MH		Appr: MBL	Date: 111013
				Source: P318N001	
 PO BOX 235, 1500 LE ZAANDAM, ZUIDDIJK 400, 1505 HE ZAANDAM THE NETHERLANDS T +31 (0)75 6810410, WWW.KENZ-FIGEE.COM   				Order no: P324N001	
				Doc. no: 0050_001	
				Page 3 of 4	

DATA SHEET

NOTES

The following design factors have been used for each load case.

With a crane base angle of 0deg:

Load case	Hoisting factor [-]	Offlead [°]	Sidelead [°]	Static heel [°] (*)	Static trim [°] (*)
4-fall deck lift in calm water	1.18 – 1.33	0.00	1.15	5.00	3.00
3-fall supply boat lift up to SWH=0.5m	1.30 – 1.40	1.86 – 6.77	1.15 – 3.29	2.50	1.00
3-fall supply boat lift up to SWH=1m	1.37 – 1.63	2.24 – 8.31	1.15 – 4.04	2.50	1.00
3-fall supply boat lift up to SWH=2m	1.72 – 2.18	4.61 – 11.85	1.15 – 5.55	2.50	1.00
2-fall supply boat lift up to SWH=2m	1.83 – 2.20	4.81 – 11.85	1.15 – 5.55	2.50	1.00
4-fall supply boat lift up to SWH=0,5m	1.25 – 1.40	1.80 – 6.77	1.15 – 3.29	2.50	1.00
4-fall supply boat lift up to SWH=1m	1.36 – 1.60	2.19 – 8.31	1.15 – 4.04	2.50	1.00

With a crane base angle of 90deg:

Load case	Hoisting factor [-]	Offlead [°]	Sidelead [°]	Static heel [°] (*)	Static trim [°] (*)
4-fall deck lift in calm water	1.18 – 1.33	0.00	0.00	5.00	3.00
3-fall supply boat lift up to SWH=0.5m	1.30 – 1.40	0.72 – 6.55	1.75 – 3.68	2.50	1.00
3-fall supply boat lift up to SWH=1m	1.37 – 1.63	0.74 – 8.04	2.14 – 4.53	2.50	1.00
3-fall supply boat lift up to SWH=2m	1.72 – 2.18	0.88 – 11.00	4.52 – 7.09	2.50	1.00
2-fall supply boat lift up to SWH=2m	1.83 – 2.20	1.64 – 11.00	4.57 – 7.09	2.50	1.00
4-fall supply boat lift up to SWH=0,5m	1.25 – 1.40	0.54 – 6.55	1.73 – 3.68	2.50	1.00
4-fall supply boat lift up to SWH=1m	1.36 – 1.60	0.56 – 8.04	2.12 – 4.53	2.50	1.00

The dynamic forces acting on the crane are determined according the General Method (API 2C 7th edition - paragraph 5.4.3):

- deck lifts are calculated as a “Ship and barge in calm water”;
- supply boat lifts as a “Drill ship”.

The maximum operational wind speed is 25m/s.

(*) With a crane base angle of 90deg the total crane inclination due to heel and trim is added to the sidelead angle. With a crane base angle of 0deg it is added to the offlead angle. To account for this static offlead, the crane boom angle shall be adjusted to bring the hook back to the correct radius and rating determined for this configuration, according API 2C 7th edition - paragraph 5.4.6.3.

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		P.O. no: POSH/13005	Check: FHO	Date: 120913
Job: DHC 100/4000 O.S.		Description: Load-radius curves MH	Appr: MBL	Date: 111013
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 PO BOX 235, 1500 LE ZAANDAM, ZUIDDIJK 400, 1505 HE ZAANDAM THE NETHERLANDS T +31 (0)75 6810410, WWW.KENZ-FIGEE.COM  2C-0036  ISO 9001  001			Order no: P324N001	
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