

Shepherd Offshore

Energising Industry to support local, regional and global businesses



Neptune Energy Park, Fisher Street, Walker, Newcastle Upon Tyne NE6 4LY

www.shepherdoffshore.com

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Energising Industry to support local, regional and global businesses



Demag CC 4800-III Crane

Neptune Energy Park



www.shepherdoffshore.com



Shepherd Offshore is one of the UK's leading service providers, developing and operating facilities while supporting world class manufacturing within the North East of England based on the North Bank of the River Tyne.

The manufacturing and construction companies which have co-located within the Shepherd Offshore facilities, have had access to cost effective development and service solutions supported by an established infrastructure and sound logistical capabilities with suitable expansion areas, as well as other critical support services.

Offshore Technology Park and Neptune Energy Park are homes to established companies such as JDR, Bridon-Bekaert, Royal IHC, Baker Hughes Energy Technology, Technip FMC Umbilicals, Newcastle Renewables Academy and Newcastle University Subsea Academy. Shepherd Offshore has developed and funded these bespoke facilities and manufacturing clusters with the company value, focusing on providing first class services to compliment these manufacturing companies so they can compete globally.

We provide a fully integrated offshore supply base at Offshore Technology Park, Neptune Energy Park and Swans Energy Park facilities. We ensure safe and effective added value support and on-time delivery of products to projects.

Our head office is based in Walker, Newcastle upon Tyne, along the banks of the river. The distance from Offshore Technology Park (OTP) to Neptune Energy Park (NEP) is approximately 1.3 miles, and the distance from Swans Energy Park (SEP) to NEP is 550 metres. These key locations make it accessible to all three sites.

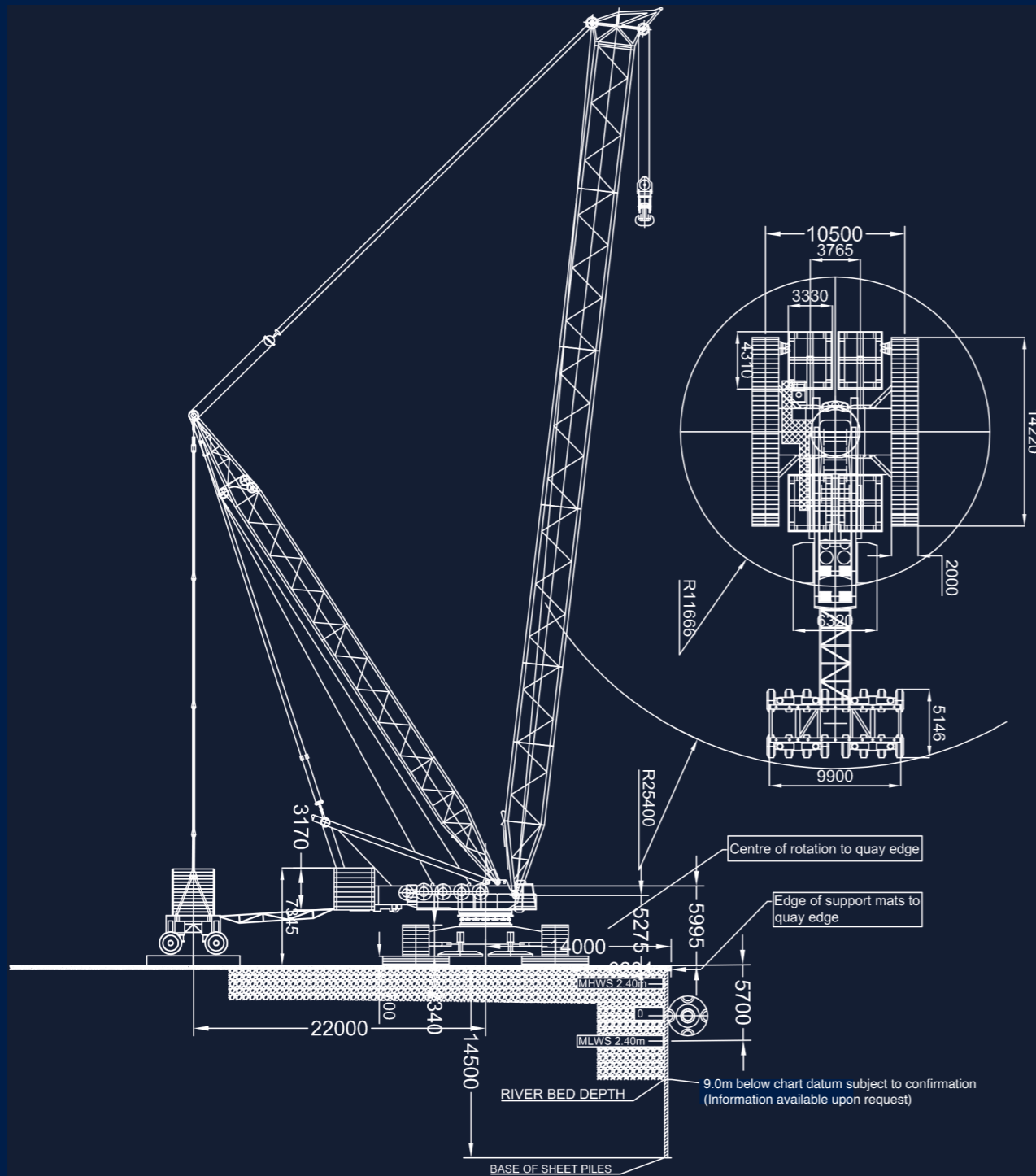


350

Reels are lifted over our quays each year



Demag CC4800 Crane Details -
Neptune Energy Park Quay



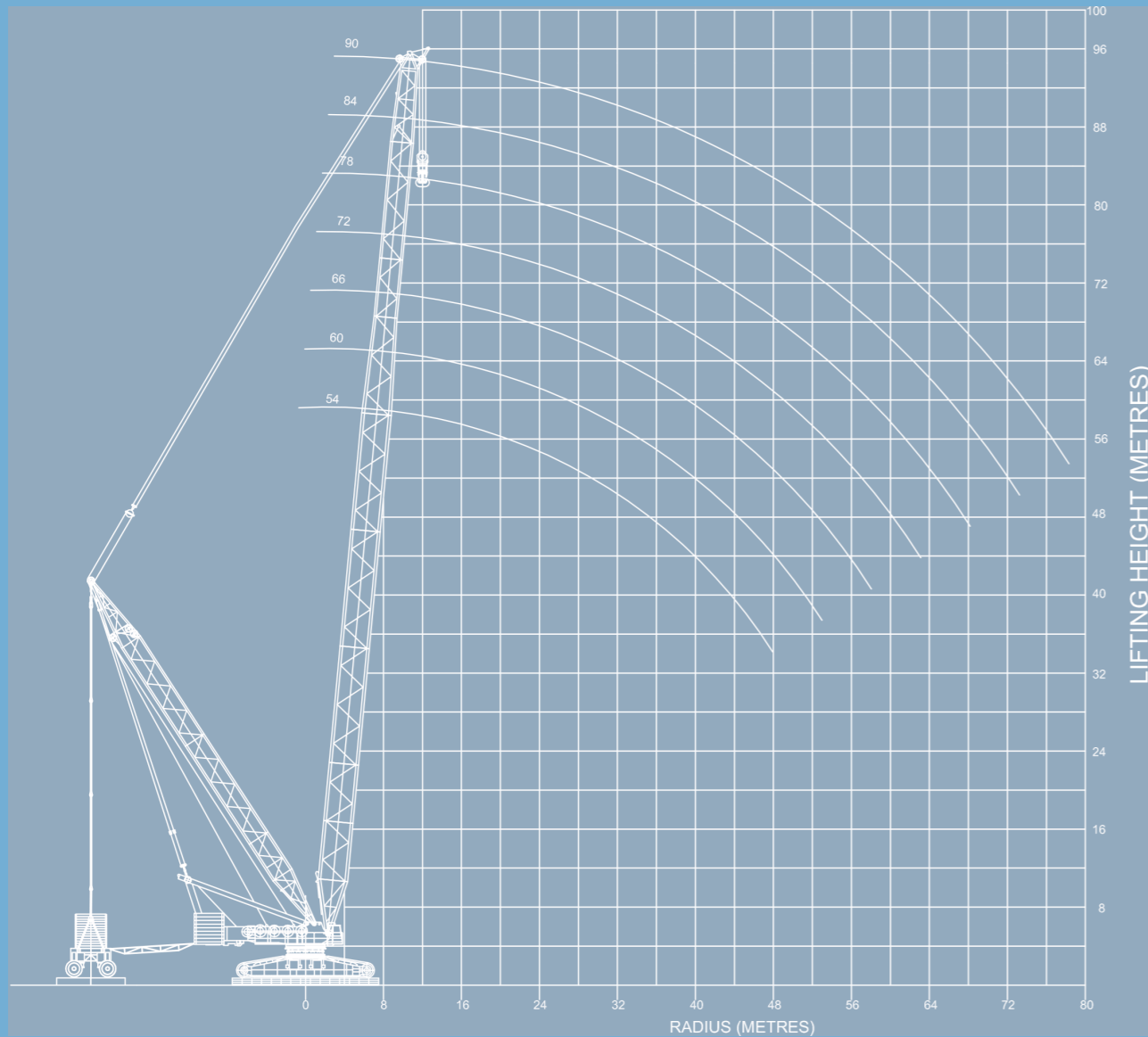
The Demag CC4800-III is a crawler crane with exceptional lifting capacity of 800T. The crane is complete with 480T superlift ballast on a wheeled carrier, 22m superlift ballast radius, variable offset of main boom length ranging between 48m to 90m configuration for SW and SWSL and 42m superlift back mast.

The crane was manufactured by Demag and is situated at Shepherd Offshore Limited, Neptune Energy Park, Walker, Newcastle upon Tyne. The crane is positioned on its dedicated heavy lift pad approximately 14m from quay edge when undertaking ship to shore lifts. It is also capable of utilising its crawler capabilities to travel to various locations on the quay and withing the site to undertake varying lift operations.

Between 2016 and 2017, the CC4800 hit a record in assisting in 133 reel transfers between Offshore Technology Park and Neptune Energy Park.



Demag CC4800 Crane Details - Lifting height chart



Demag CC 4800-III

Serial number: 41023 Mammoet machine identification: 000430

MAIN BOOM 66 m with SUPERLIFT

Lift ratings in t, for 360° slew range, according Euro-Standard
 Superlift mast 42 m, Superlift radius 22 m
 Track width 10.5 m (c.t.c.), Crane level within 1.75% gradient (1°)

Reeving	Superlift counterweight [t]											
	0	50	100	150	200	250	300	350	400	450	480	
Radius [m]												
10	464	597	626	626	626	626	626	626	626	626	626	626
11	416	537	623	623	623	623	623	623	623	623	623	623
12	377	488	599	620	620	620	620	620	620	620	620	620
13	344	446	548	617	617	617	617	617	617	617	617	617
14	315	410	496	576	615	615	615	615	615	615	615	615
15	291	379	453	526	599	612	612	612	612	612	612	612
16	269	348	416	483	551	609	609	609	609	609	609	609
18	227	297	356	415	474	533	593	603	603	603	603	603
20	195	258	310	362	415	467	520	572	600	600	600	600
22	169	226	274	320	367	414	462	509	556	595	595	595
24	148	201	244	286	329	372	414	457	500	543	568	568
26	131	179	219	258	297	336	375	414	454	493	516	516
28	116	161	198	234	270	306	342	378	414	450	472	472
30	103	145	181	214	247	281	314	347	381	414	434	434
34	83	120	152	181	210	239	269	298	327	356	374	374
38	68	100	130	156	182	208	233	259	285	311	327	327
42	56	85	113	136	159	182	206	229	252	275	289	289
46	46	72	99	120	141	162	183	204	225	246	259	259
50	38	62	86	106	126	145	164	184	203	222	234	234
54	32	54	76	95	113	131	149	167	185	203	209	209
58	27	47	68	86	103	119	136	152	169	180	180	180

Demag CC 4800-III

Serial number: 41023 Mammoet machine identification: 000430

MAIN BOOM 78 m with SUPERLIFT

Lift ratings in t, for 360° slew range, according Euro-Standard
 Superlift mast 42 m, Superlift radius 22 m
 Track width 10.5 m (c.t.c.), Crane level within 1.75% gradient (1°)

	Superlift counterweight [t]										
	0	50	100	150	200	250	300	350	400	450	480
Reeving	2x13 p	2x17 p	2x17 p	2x17 p	2x16 p	2x17 p	2x16 p	2x16 p	2x16 p	2x16 p	2x16 p
Radius [m]											
11	380	492	505	505	505	505	505	505	505	505	505
12	346	449	502	502	502	502	502	502	502	502	502
13	316	413	499	499	499	499	499	499	499	499	499
14	291	381	470	497	497	497	497	497	497	497	497
15	269	353	437	494	494	494	494	494	494	494	494
16	249	328	407	482	490	490	490	490	490	490	490
18	216	287	354	413	472	488	488	488	488	488	488
20	190	254	308	360	412	465	483	483	483	483	483
22	165	224	271	318	365	412	459	478	478	478	478
24	144	197	241	283	326	369	412	454	473	473	473
26	126	175	216	255	294	333	372	411	451	468	468
28	112	157	195	231	267	303	339	375	411	448	464
30	99	141	177	211	244	277	311	344	378	411	431
34	79	115	149	178	207	236	265	294	324	353	370
38	63	95	126	152	178	204	230	256	281	307	323
42	51	80	109	132	155	178	202	225	248	272	285
46	41	67	93	115	137	158	179	200	221	242	255
50	32	57	81	102	121	141	160	179	199	218	230
54	26	48	70	91	108	126	144	162	180	198	208
58	20	41	61	81	98	114	131	147	164	180	190
62	15	35	54	73	88	104	119	135	150	166	175
66	12	30	48	66	81	95	109	124	138	153	158
70	26	42	59	74	87	101	115	128	138		

Demag CC 4800-III

Serial number: 41023 Mammoet machine identification: 000430

MAIN BOOM 84 m with SUPERLIFT

Lift ratings in t, for 360° slew range, according Euro-Standard
 Superlift mast 42 m, Superlift radius 22 m
 Track width 10.5 m (c.t.c.), Crane level within 1.75% gradient (1°)

	Superlift counterweight [t]										
	0	50	100	150	200	250	300	350	400	450	480
Reeving	2x11 p	2x15 p	2x15 p	2x15 p	2x15 p	2x15 p	2x14 p	2x14 p	2x14 p	2x14 p	2x13 p
Radius [m]											
12	333	434	446	446	446	446	446	446	446	446	446
13	306	399	444	444	444	444	444	444	444	444	444
14	282	369	442	442	442	442	442	442	442	442	442
15	260	342	424	439	439	439	439	439	439	439	439
16	242	319	396	437	437	437	437	437	437	437	437
18	210	279	349	414	433	433	433	433	433	433	433
20	185	247	309	361	414	429	429	429	429	429	429
22	164	221	271	318	366	413	424	424	424	424	424
24	144	98	241	284	327	370	413	413	413	413	413
26	126	175	216	255	295	334	373	412	412	412	412
28	111	157	195	231	267	303	340	376	411	411	411
30	99	141	177	211	244	278	311	345	378	407	407
34	78	115	148	177	207	236	265	294	324	353	371
38	62	95	126	152	178	204	230	255	281	307	323
42	50	79	108	131	155	178	201	225	248	271	285
46	40	66	93	115	136	157	178	199	221	242	255
50	31	56	80	101	121	140	159	179	198	217	229
54	24	47	69	90	108	125	143	161	179	197	208
58	19	39	60	80	97	113	130	146	163	179	189
62	14	33	52	72	87	103	118	133	149	164	174
66	10	28	46	64	79	93	108	122	137	151	160
70		23	40	57	72	86	99	113	126	140	148
74		19	35	51	66	79	92	104	117	130	

Demag CC 4800-III

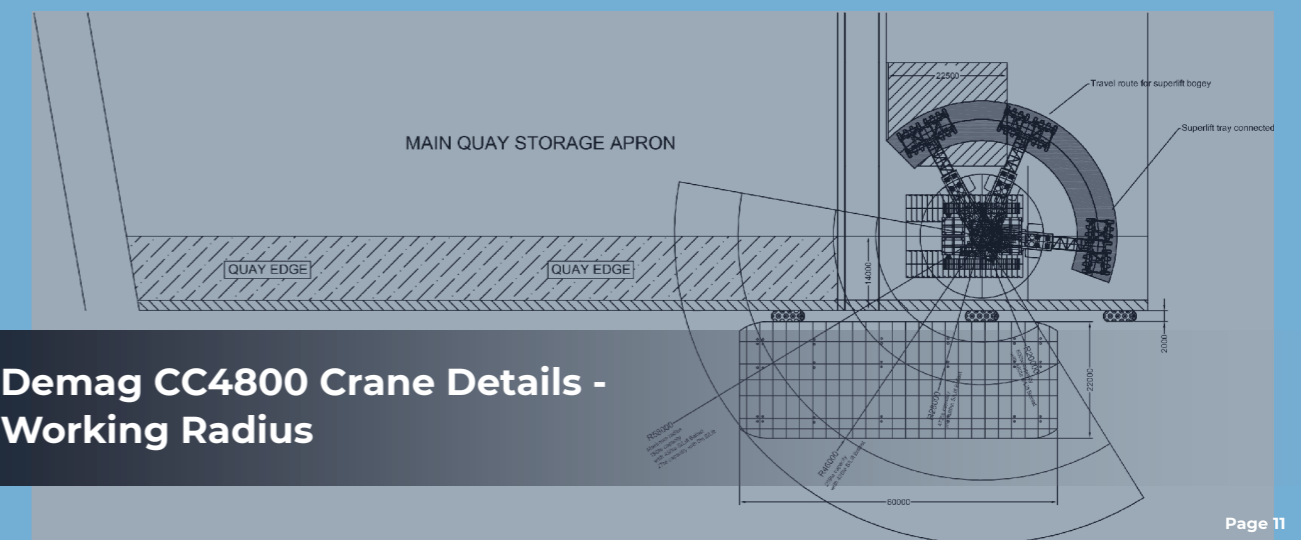
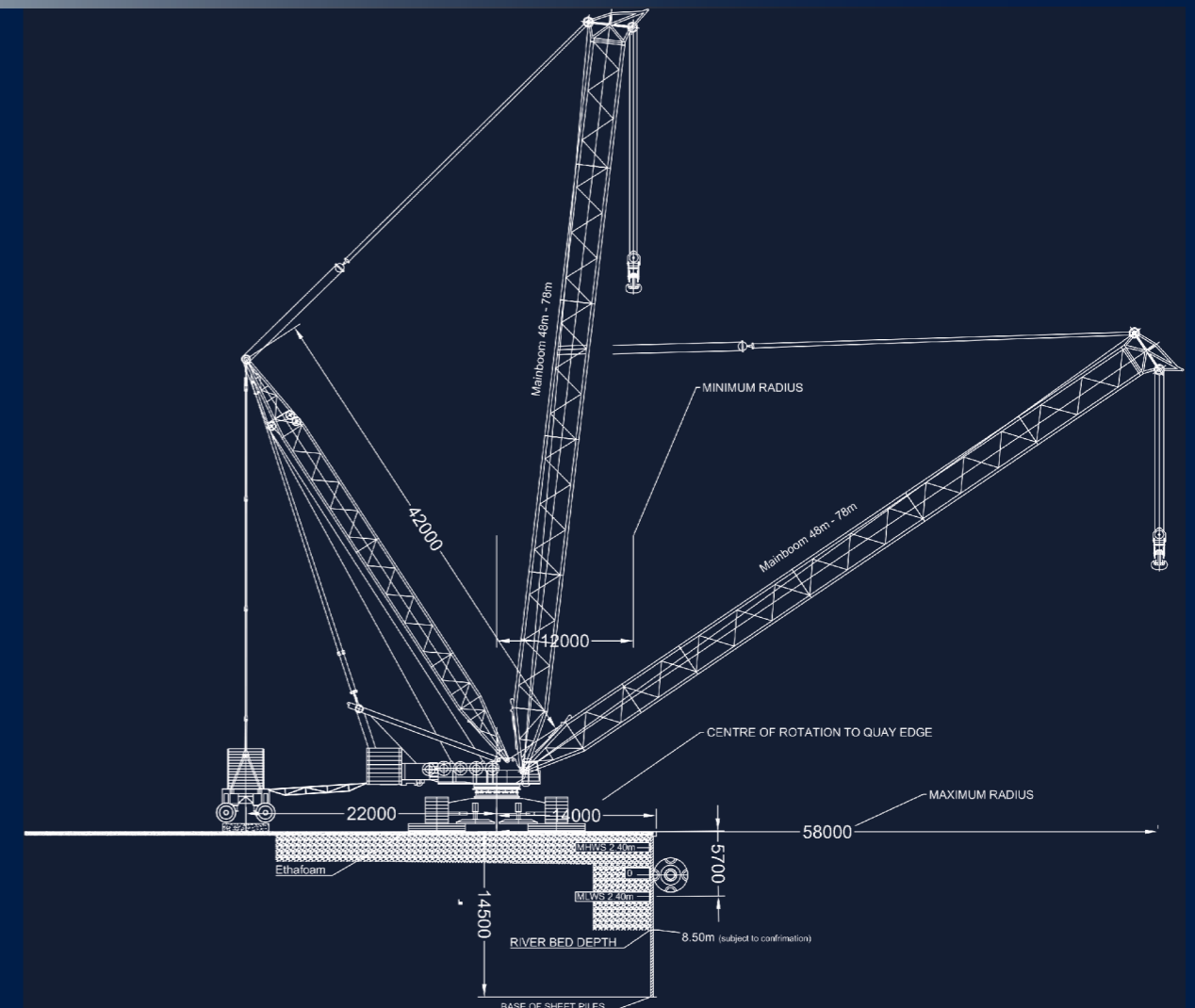
Serial number: 41023 Mammoet machine identification: 000430

MAIN BOOM 90 m with SUPERLIFT

Lift ratings in t, for 360° slew range, according Euro-Standard
 Superlift mast 42 m, Superlift radius 22 m
 Track width 10.5 m (c.t.c.), Crane level within 1.75% gradient (1°)

Radius [m]	Superlift counterweight [t]										
	0	50	100	150	200	250	300	350	400	450	480
Reeving	2x11 p	2x13 p	2x13 p	2x13 p	2x13 p	2x13 p	2x12 p	2x12 p	2x12 p	2x12 p	2x12 p
12	319	395	395	395	395	395	395	395	395	395	395
13	294	385	394	394	394	394	394	394	394	394	394
14	271	356	392	392	392	392	392	392	392	392	392
15	251	331	390	390	390	390	390	390	390	390	390
16	233	309	384	384	384	384	384	384	384	384	384
18	203	271	338	383	383	383	383	383	383	383	383
20	179	240	301	360	380	380	380	380	380	380	380
22	158	214	271	318	365	376	376	376	376	376	376
24	141	193	240	283	326	369	369	369	369	369	369
26	125	174	215	254	294	333	368	368	368	368	368
28	110	155	194	230	266	303	339	365	365	365	365
30	97	139	176	210	243	277	310	344	361	361	361
34	76	113	147	176	205	235	264	293	323	352	354
38	61	93	125	150	176	202	228	254	280	306	322
42	48	77	106	130	153	177	200	223	246	270	284
46	38	64	91	113	134	156	177	198	219	240	253
50	29	53	78	100	119	138	158	177	196	216	227
54	22	45	67	88	106	124	142	159	177	195	206
58	16	37	58	78	95	111	128	144	161	178	188
62	11	31	50	69	85	101	116	132	147	162	172
66	25	43	61	77	91	106	120	135	149	158	158
70	20	37	54	70	83	97	111	124	138	146	146
74	16	32	48	64	76	89	102	115	128	136	136
78	13	28	43	58	70	82	95	107	119	123	123

Demag CC4800 Crane Details - Minimum and maximum radius



Demag CC4800 Crane Details - Working Radius

Demag CC 4800-III

Serial number: 41023 Mammoet machine identification: 000430

CAPACITIES MAIN BOOM without SUPERLIFT, SUPERLIFT-MAST @ 12 m

Lift ratings in t, for 360° slew range, according Euro-Standard
 Superlift mast 42 m, Superlift radius 12 m
 Track width 10.5 m (c.t.c.), Crane level within 1.75% gradient (1°)

Radius [m]	48m			54m			60m			66m		
	Load [t]	Angle [deg]	Top [m]	Load [t]	Angle [deg]	Top [m]	Load [t]	Angle [deg]	Top [m]	Load [t]	Angle [deg]	Top [m]
9	603	84.2	52.3	567	84.9	58.3						
10	530	83.0	52.1	500	83.8	58.2	473	84.4	64.2			
11	471	81.8	51.9	447	82.7	58.0	423	83.5	64.1			
12	416	80.6	51.7	402	81.7	57.9	382	82.5	63.9			
13	372	79.4	51.5	366	80.6	57.7	348	81.5	63.8			
14	336	78.2	51.3	333	79.5	57.5	318	80.6	63.6			
15	305	76.9	51.0	302	78.4	57.2	293	79.6	63.4			
16	279	75.7	50.7	276	77.3	57.0	271	78.6	63.1	259	79.7	69.3
18	238	73.2	50.1	234	75.1	56.4	230	76.7	62.6	224	77.9	68.8
20	205	70.6	49.4	202	72.9	55.8	197	74.7	62.1	194	76.1	68.3
22	180	68.1	48.5	176	70.6	55.0	172	72.7	61.4	168	74.3	67.7
24	159	65.4	47.6	155	68.3	54.2	151	70.6	60.7	147	72.5	67.1
26	142	62.7	46.5	138	66.0	53.3	133	68.6	59.9	130	70.6	66.3
28	127	59.9	45.3	124	63.6	52.2	119	66.5	59.0	115	68.7	65.5
30	115	57.1	43.9	111	61.2	51.1	106	64.3	58.0	103	66.8	64.6
34	95	51.0	40.8	91	56.1	48.5	87	59.9	55.7	83	63.0	62.6
38	80	44.3	36.8	76	50.7	45.3	71	55.3	53.0	67	58.9	60.2
42	69	36.5	31.7	64	44.7	41.4	59	50.4	49.7	55	54.7	5
46	60	26.8	24.6	55	38.0	36.5	50	45.1	45.9	46	50.2	54.2
50				48	30.0	30.1	42	39.2	41.1	38	45.4	50.4
54							36	32.4	35.2	32	40.1	45.8
58										26	34.1	40.2

Code 2 blocks	3201	3202	3203	3204
Code 1 block	3211	3212	3213	3214
Einzieh [t] *	15.9	15.9	15.9	15.9

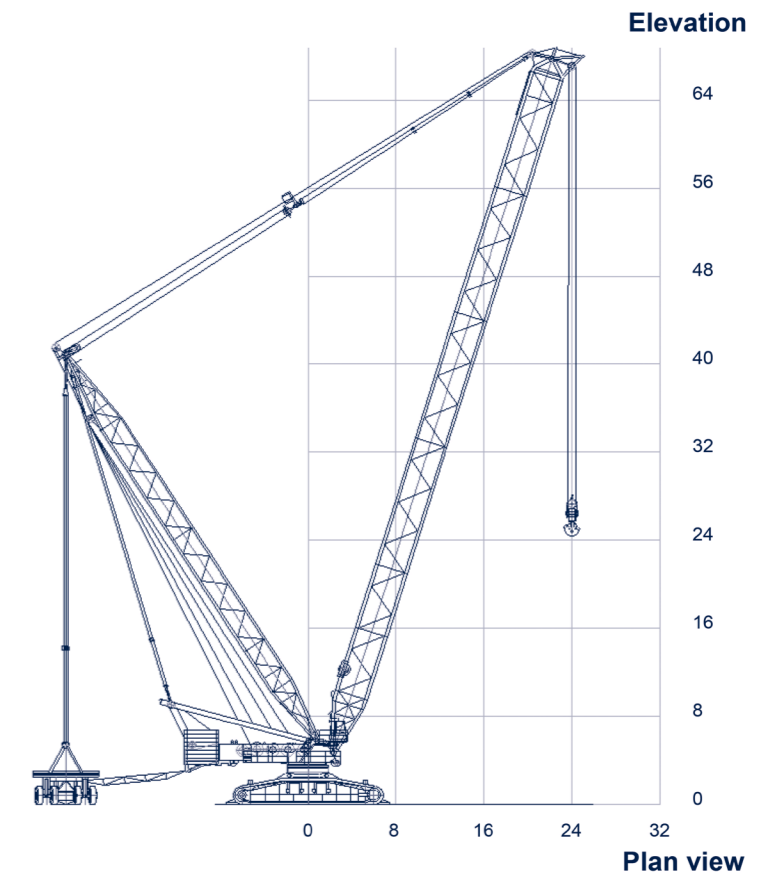
*) = maximum allowed single part line load in A-frame hoist (Einziehwerk) (t)

= with "heavy-lift" attachment

Crane Configuration:

Make: Demag/Terex
Type: CC4800-3
Selected Chart: SSL
Boomlength: 66
Carrier: 10.5
Counterweight: 180
SL-Cwt4: 80
Lift capacity: 568

Upper rotation: -24.7
Lift height: 25
Lift radius: 24
Lift capacity: 568



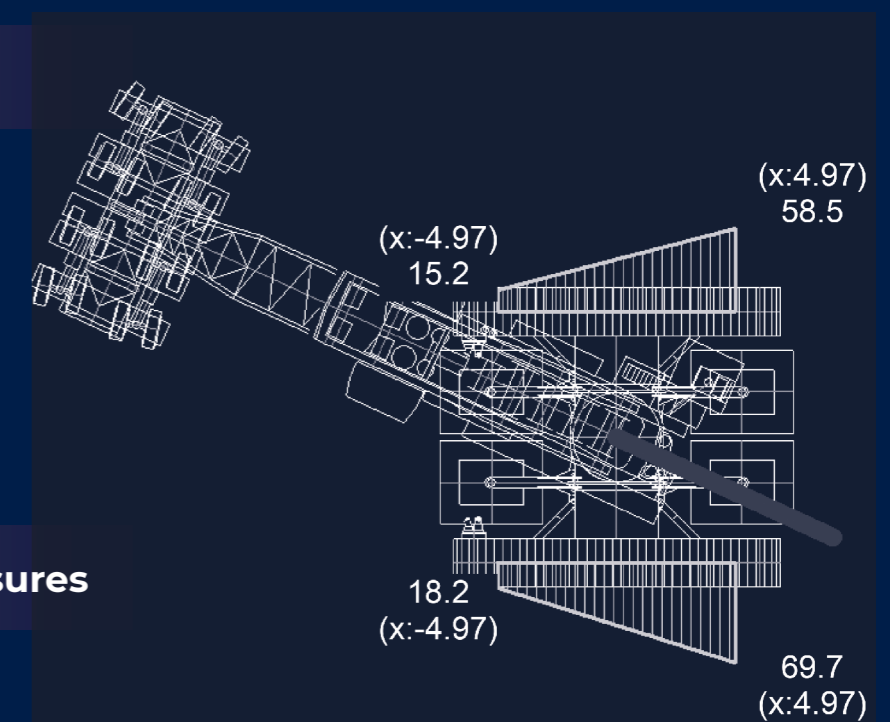
Load Configuration

Title: Lift
Load name: Item-1
Load: 558.8
Hook block: 12.2
Auxiliary: 0
Rigging: 0

Total: 568
Percentage[%]: 100

Ground bearing pressures

Crawler width: 2
Max. GBP under crawlers: 69.7





Case Study 1

Bridon/Hydralift Amclyde Inc

Vessel: MV Berit

410_T

Max hook weight of lift (Approximately)



Agent: Gillie & Blair

Freight Forwarder: SLS Ltd

Client: Bridon

Project: Hydralift Amclyde Inc

Cargo: Steel Wire Rope 50mm

Location: Neptune Energy Park Heavy Load Out Platform (NEP 2A)

Scope: Lift & load 5 x reels from quay to vessel, on to load spreading materials in vessel's hold. Max gross reel weight 389T.

Max Hook Weight of Lift(s): Approx 410T @ 28m radius (Dims 5500 x 6832 x 5700)

Type Of Lift: Complex / Contract Lift / Off set centre of gravity.

Duration Of Loading: 1 x Shift

Client Feedback

Overall Performance: 10

Timely delivery of service: 10

Communication: 10

Quality of service: 10

Health and safety awareness: 10

Happy to recommend Shepherd Offshore Ltd to others: Yes

Stamp of Vessel:



PROVIDED IN HOUSE PLANT, TRANSPORT & CRANEAGE CAPABILITY



PROVIDED 24hr SERVICE TO CUSTOMER



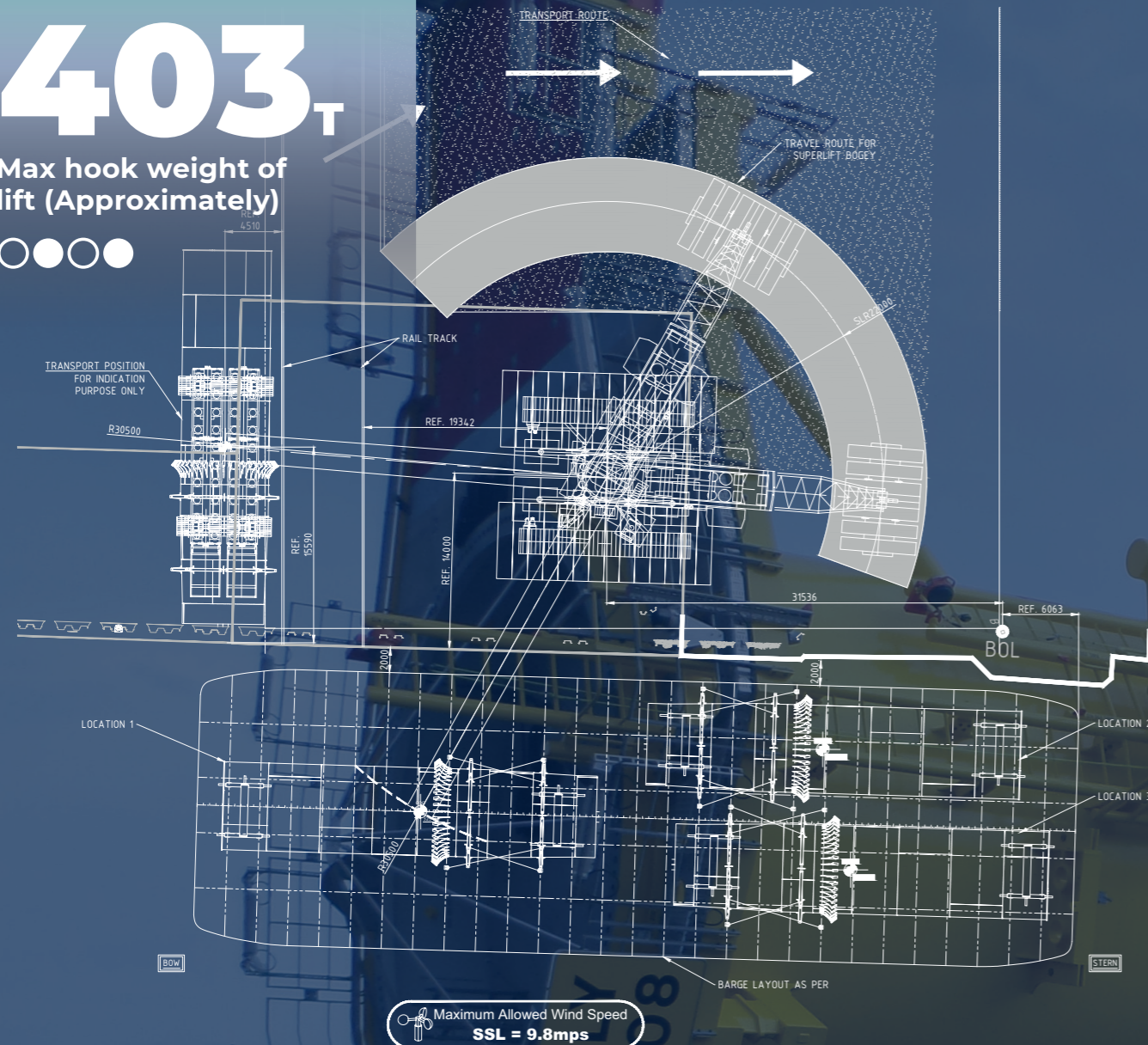
PROVIDED QUAYSIDE HEAVY LOAD OUT CAPACITY UP TO 700 TONNE

Info: Complex Heavy Lift Quay to Vessel with Centre Gravity Off Set this was analysed and appropriate rigging arrangement employed. The lift quay to vessel was onto load spreading materials in the hold good planning and precise control allowed for a successful lift. Overall efficient and safe performance carried out resulting in high score from client and third parties.



403_T

Max hook weight of lift (Approximately)



Case Study 2

BAM Nuttal Ltd /EDF

Vessel: Barge & Tugs

Shipment: x 4

Agent: Osprey

Shipper / Manufacturer: Smulder Group

Client: BAM Nuttal Ltd /EDF

Project: Blyth Wind Turbines

Cargo: 5 lower & 5 upper tower sections of GBF (Gravity Base Foundation)

Location: Neptune Energy Park Heavy Load Out Platform (NEP 2A) / NEP 2B / Drydock

Scope: Lift 10 x Tower Sections (2 x per Gravity Base Foundation). Max Gross Tower Section Weight 353T - Barge to Quay to SPMTs. Tandem Lift to Concrete Gravity Bases in Drydock

CC4800 Max Hook Weight Capacity of Lift(s): Approx 403T @ 30m radius (450T ballast added)

Dimensions: Example Lower Section

Detailed Description	Qty	Estimated Dimensions [m]	Estimated Weight [T]
Bottom Shaft Sections	2	L = 29.78m x Ø6.5m	334

Type Of Lift: Complex / Contract Lift / Product Protection / Specialist Lift Arrangement.

Duration Of Off Loading Barge: 2 x shifts per tower section

Client Feedback

"Thanks for your support and professionalism over the project, hopefully we'll see each other again with more GBFs."

Senior Agent BAM Nuttall Limited

Info: High level of planning & coordination throughout with additional time set up and a customised lifting arrangement due to working at height. This complex heavy lift particularly focused on protection of furniture. The lifts barge to Quay SPMT was then transferred by SPMT to over cranes at the drydock to be top and tailed, then lifted into the drydock concrete gravity base. Overall, efficient, and safe performance supporting a ground-breaking new design in offshore wind turbines.

PROVIDED IN HOUSE PLANT, TRANSPORT & CRANAGE CAPABILITY

PROVIDED 24hr SERVICE TO CUSTOMER

PROVIDED QUAYSIDE HEAVY LOAD OUT CAPACITY UP TO 700 TONNE





Contact Us

Shepherd Offshore operates within a highly effective and dedicated management structure in order that projects can be accelerated and executed efficiently at all times. Our management team is focused on building mutually beneficial long term relationships based on first class service, speedy decision making and delivering on our promise.

Please contact us regarding any enquiry you have relating to the many services we provide.



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