EQUIPMENT

SAREN'S GIANT CRANES

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ABOUT US

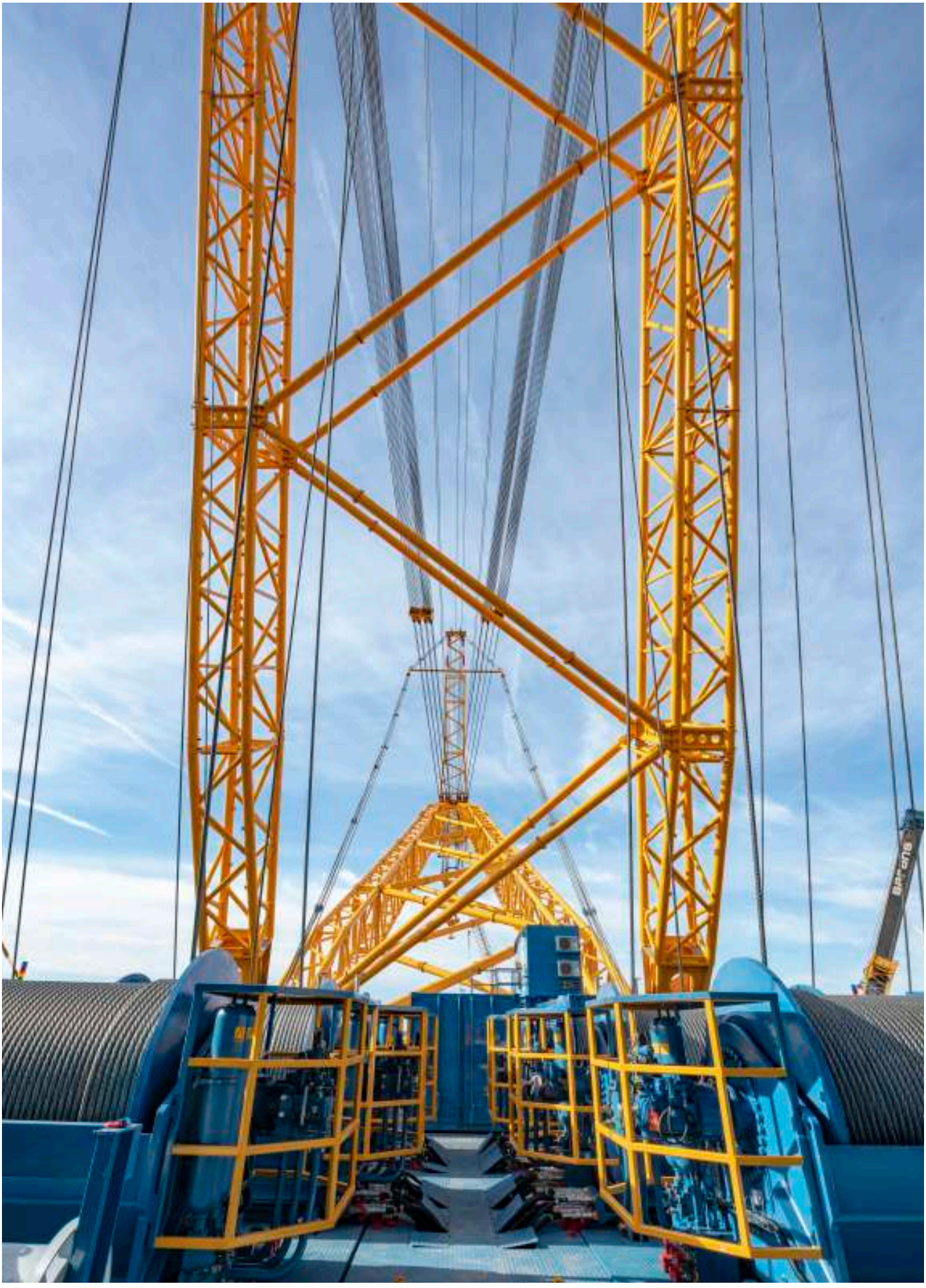
WITH STATE OF THE ART EQUIPMENT AND VALUE ENGINEERING, WE OFFER OUR CLIENTS CREATIVE SOLUTIONS

Sarens has been providing exceptional heavy lift and specialized transport services for over 60 years, building a thriving enterprise that now touches every continent with offices in more than 65 countries and dedicated employees who embody the spirit of the company's motto – nothing too heavy, nothing too high.

The success of Sarens as a specialist of the extraordinary is built around an unwavering commitment to safety, engineering creativity and operational excellence. Add state of the art design tools to one of the world's largest inventories of cranes, transporters and specialty rigging equipment, along with a team of highly skilled professionals and it becomes clear why Sarens has evolved into a worldwide leader in heavy lifting and engineered transport.

Sarens is the perfect example of how a family business has succeeded in carving out a position for itself on the world market in just several decades. From the 1940's when Sarens performed forestry work, to our first crawler and telescopic cranes in the 1950's, to today, with the largest crane in the world, our SGC-250, our work history shows that we consistently and successfully respond to the diverse and specialized challenges of our clients.

As a technically innovative, solution-driven company, customers have always relied on us for their heavy lifting and special transport needs. With over 125 highly qualified engineers working at locations across the globe, we provide innovation for the greatest possible value and immediate solutions. With a team of engineers and operational staff who are well acquainted with the unique challenges of today's projects and one of the world's largest and most diversified fleet of equipment, Sarens is prepared to provide the right solutions for your next heavy lifting and transport project.



OUR NOBLE MISSION IS TO BE THE GLOBAL LEADER AND MARKET REFERENCE IN CRANE RENTAL SERVICES, HEAVY LIFTING, AND ENGINEERED TRANSPORT FOR OUR CLIENTS.

Sarens has been the market leader for over 60 years. Our success lies in our entrepreneurial spirit and our continued dedication to our job. However, taking heavy lifting and engineered transport seriously is for us not just a matter of DNA and a family tradition but, most importantly, a choice.

At Sarens, we will continue to build our future on the foundations of our rich past but we ensure our clients that we will always stay ahead of the game when it comes to heavy lifting and engineered transport. We will keep braking ground and securing that your project is delivered in the fastest, safest, and smartest way.

Brilliant Solutions

Love for Tradition

Dedication to Safety

Global Spirit

Zeal for Excellence

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THE SARENS GIANT CRANES ARE RING-BASED HEAVY LIFTING MACHINES, IN-HOUSE DESIGNED ACCORDING TO EUROPEAN STANDARDS.

SGC-90

- Load moment:	99.000Tm
- Capacity	1.650T
- Year of construction:	2020
- Center ring:	35m
- Wheel bogies:	32
- Counterweight:	2.700T
- Main boom configuration*:	100m / 120m / 130m
- Runner:	27,5m
- Runner capacity:	200T
- Light-duty jib configuration*:	35,5m / 47,5m / 59,5m

SGC-120

- Load moment:	120.000Tm
- Capacity	3.200T
- Year of construction:	2011
- Outer ring:	38,4m
- Wheel bogies:	96
- Counterweight:	3.600T
- Main boom configuration*:	88,7m / 118m / 130m
- Light-duty jib configuration*:	89,5m
- Heavy-duty jib configuration*:	40,5m / 64,1m / 87,7m / 99,5m

SGC-140

- Load moment:	140.000Tm
- Capacity	3.200T
- Year of construction:	2017
- Outer ring:	38,4m
- Wheel bogies:	96
- Counterweight:	4.200T
- Main boom configuration*:	88,7m / 118m / 130m
- Light-duty jib configuration*:	89,5m
- Heavy-duty jib configuration*:	40,5m / 64,1m / 87,7m / 99,5m

SGC-250

- Load moment:	250.000Tm
- Capacity	5.000T
- Year of construction:	2018
- Outer ring:	48,5m
- Wheel bogies:	128
- Counterweight:	5.200T
- Main boom configuration*:	118m / 160,5m
- Heavy-duty jib configuration*:	40,5m / 52,3m / 64,1m / 87,7m / 99,5

*Other configurations available upon request

SGC-90

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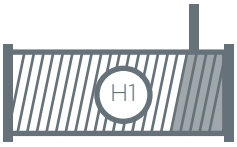
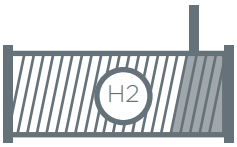
SGC-90

- Load moment:	**99.000Tm**
- Capacity:	**1.650T**
- Year of construction:	2020
- Center ring:	35m
- Wheel bogies:	32
- Counterweight:	2.700T
- Main boom configuration:	100m / 120m / 130m
- Runner:	27,5m
- Runner capacity:	200T
- Light-duty jib configuration*:	35,5m / 47,5m / 59,5m

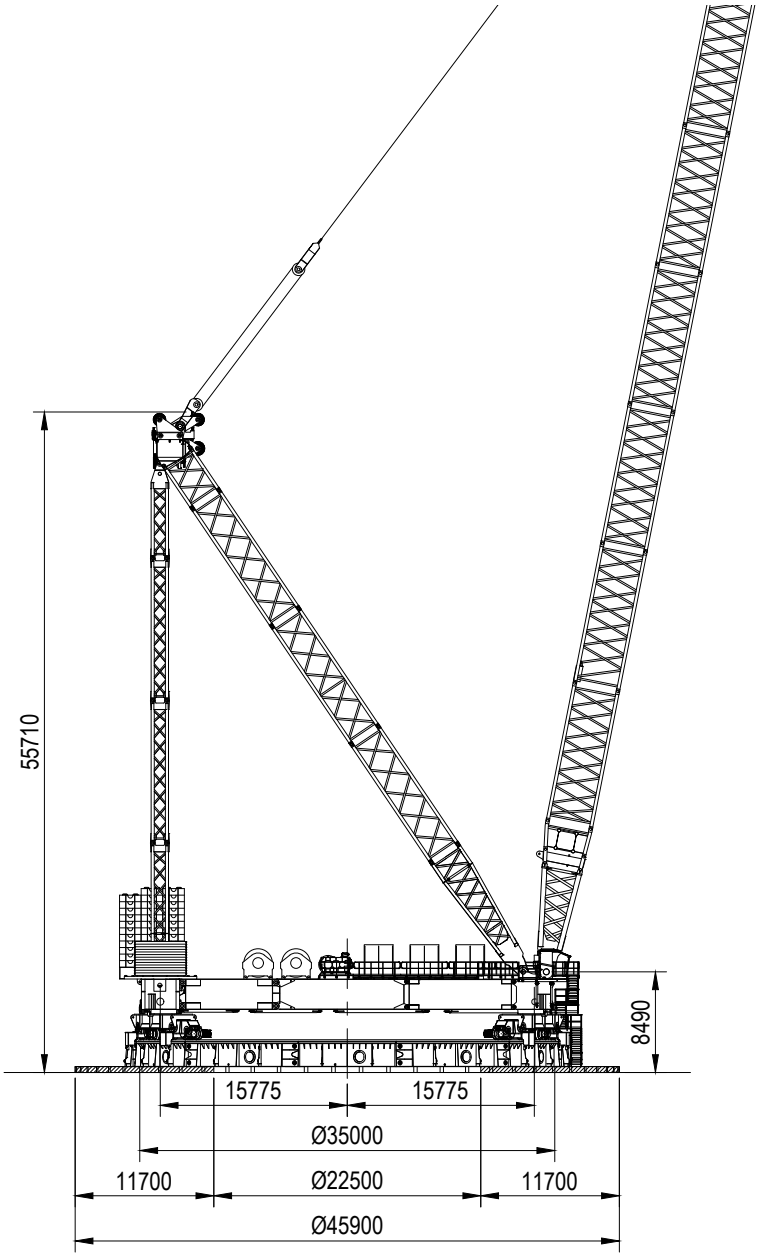
Working speed	Type	Speed	Cable diameter	Max single line pull	Cable length
	Main hoist 1-2	20-40m/min * On layer 1	52 mm	570 kN On layer 9	2100m
	Boom hoist 1-2	20m/min On layer 1	52 mm	570 kN On layer 9	1600m
	Slewing gear	8°/min			

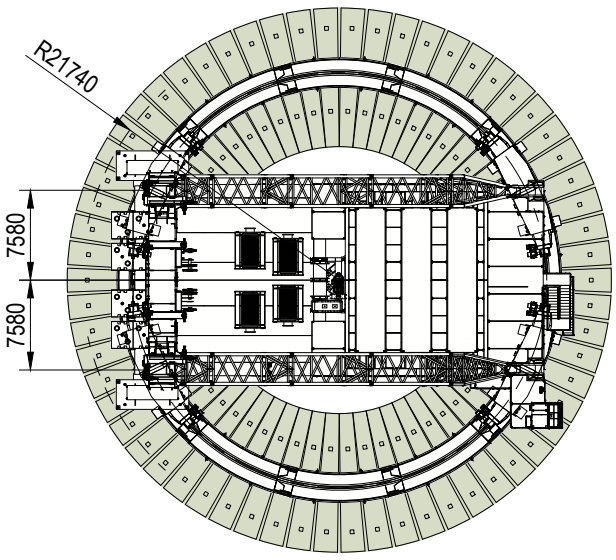
* The hoisting speed is maximized dependent on the hook load. At full load the minimum line speed is 20 m/min, the speed increases stepless to 40 m/min at no load.

The crane is driven electrically, this offers several advantages:

- the operation is very silent
- the crane is maintenance-friendly and reliable: no hydraulic pumps, filters, engines, ...
- environmentally friendly: no exhaust and no oil contamination hazards
- very energy efficient

*Other configurations available upon request





Dimensions for reference use only
indicated in millimeters

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SGC-90
MAIN BOOM CONFIGURATION

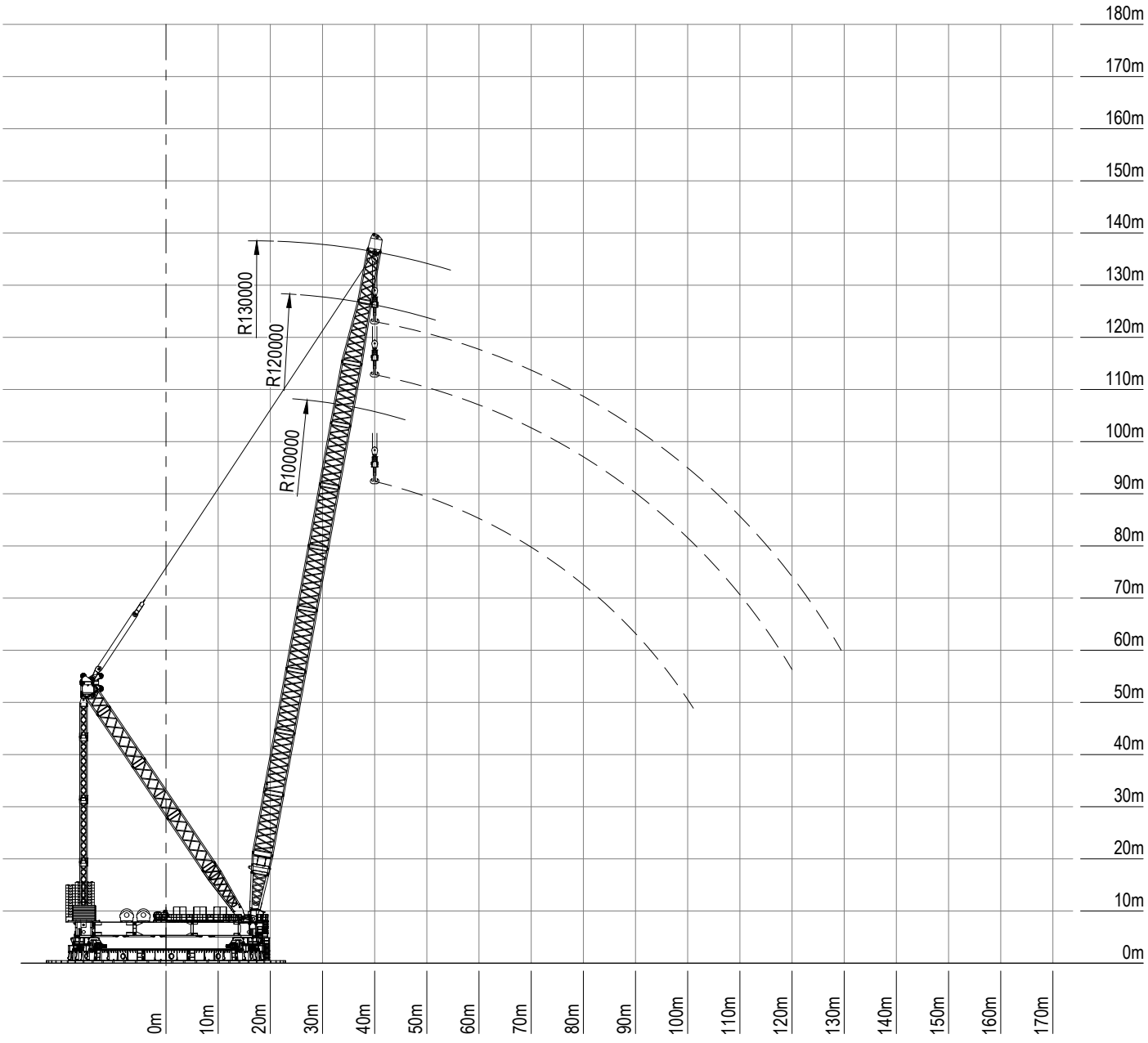
SGC-90
main boom - 120m

SGC-90
MAIN BOOM CONFIGURATION

35m | 2400T | 14m/s | 360° | ISO

Radius [m]

	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130
Capacity* MB 100m [T]	1650	1650	1650	1650	1650	1320	1175	1045	930	830	740	655	575	-	-	-	-	-	-
Capacity MB 120m [T]	1550	1500	1450	1400	1275	1150	1005	935	865	795	750	695	630	560	510	460	405	-	-
Capacity MB 130m [T]	1317	1275	1232	1190	1147	1035	980	910	840	770	725	670	605	535	485	435	380	350	325



Capacities in metric tonnes
Preliminary
*Counterweight 2700T

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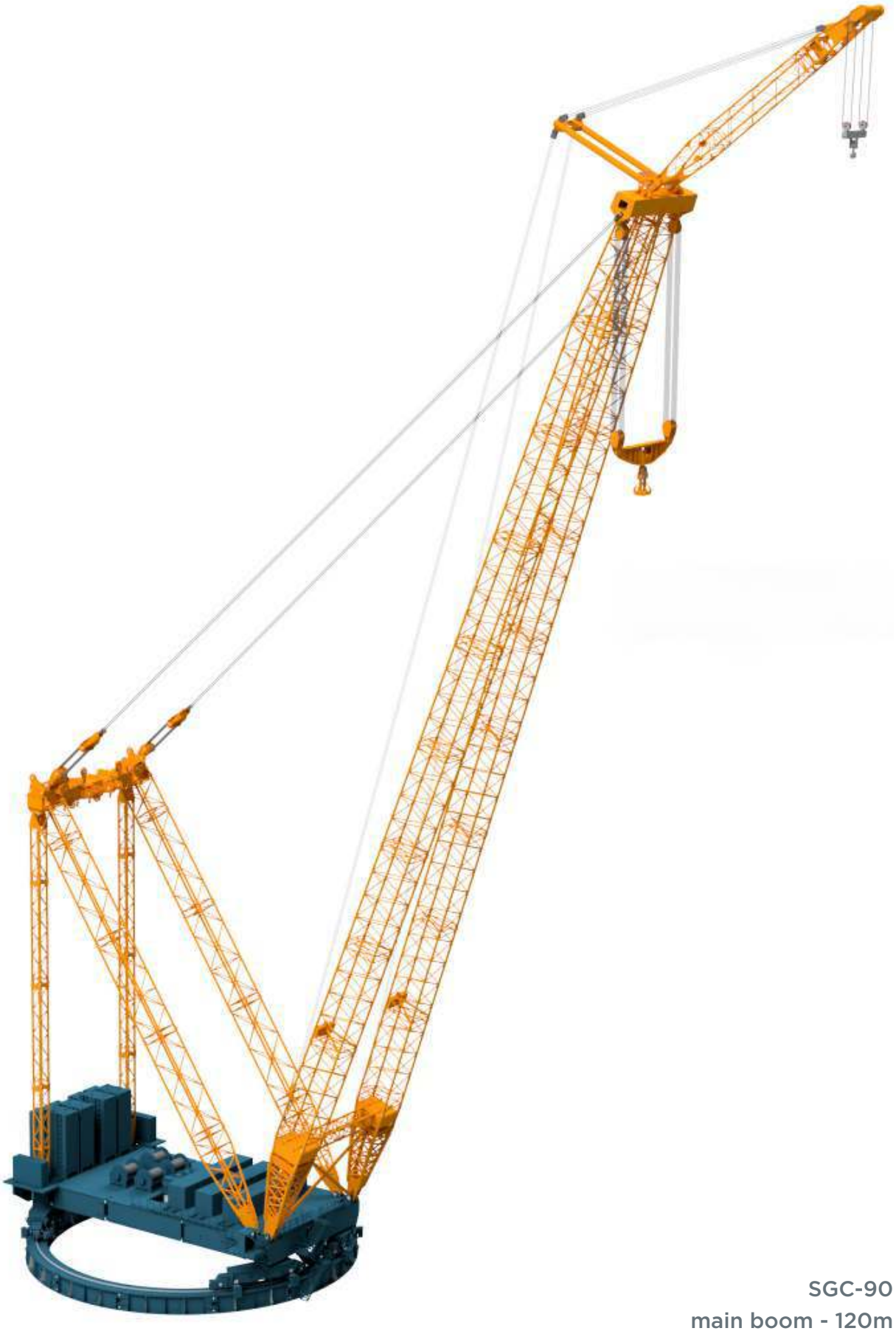
SGC-90
MAIN BOOM CONFIGURATION WITH RUNNER



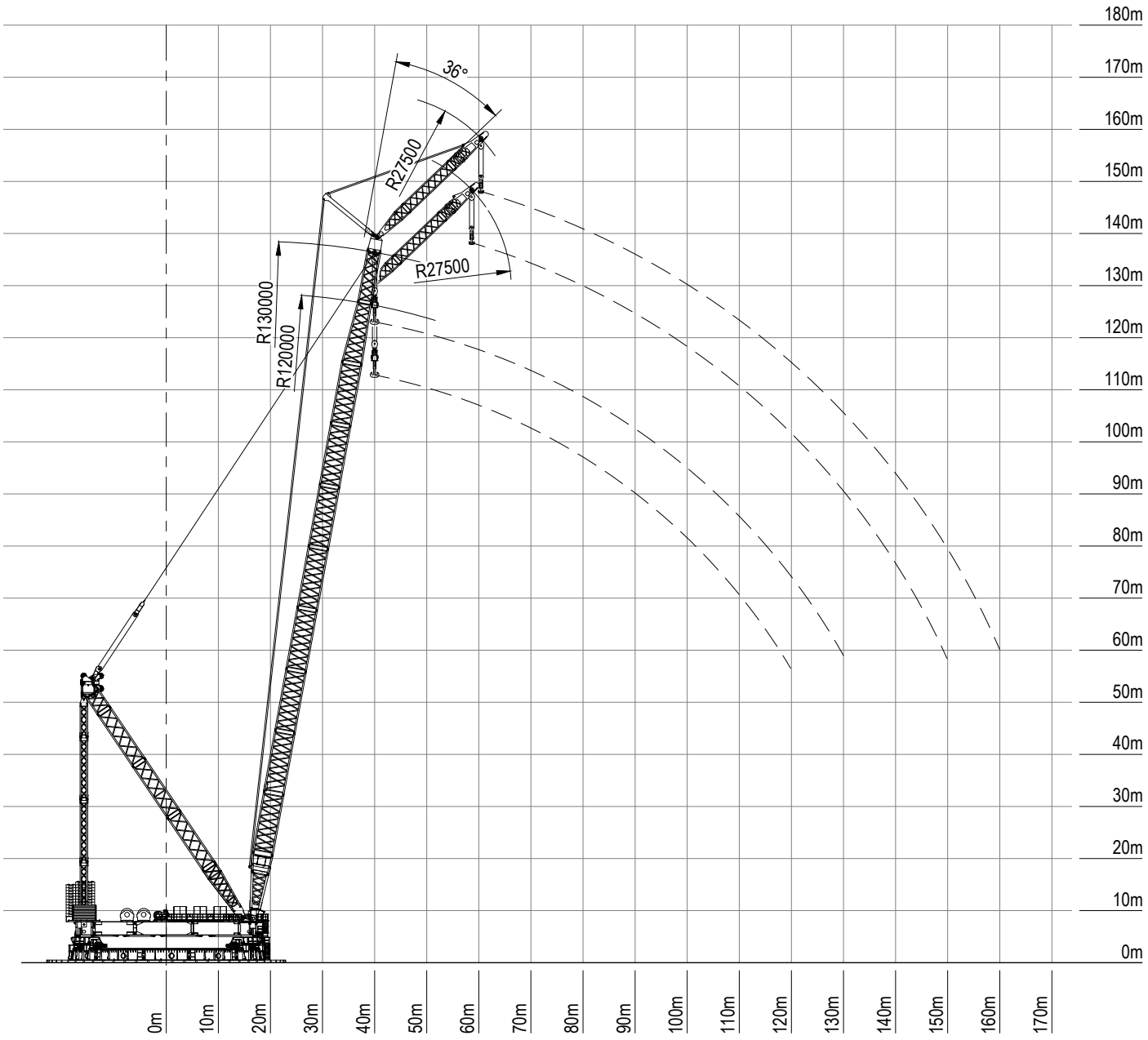
SGC-90
main boom - 120m
runner - 27,5m

SGC-90
MAIN BOOM CONFIGURATION WITH RUNNER

35m | 2400T | 14m/s | 360° | ISO

Radius [m]

	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130
Capacity MB 120m [T]	1470	1420	1370	1320	1195	1070	925	855	785	715	670	615	550	480	430	380	325	-	-
Capacity MB 130m [T]	1237	1195	1152	1110	1067	955	900	830	760	690	645	590	525	455	405	355	300	270	245



Runner capacity 200t
Capacities in metric tonnes
Preliminary

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SGC-90
GREEN CRANE

The green crane:

- energy is produced when lowering hook/boom. This energy is re-used when possible between hoist/boom/slewing
- when connected to the national grid, the crane recovers all produced energy and feeds back to the grid, thus reducing energy consumption up to 40%

The AFE (Active Front End) inverters on the SGC-90 crane can be switched between regenerative (standard) and non-regenerative operation (optional).

- If regenerative operation is selected, the crane has to be connected to the national grid through a transformer. The excess energy produced when lowering a load or booming down will be fed back to the grid, which saves energy up to 40%.
- If non-regenerative operation is selected, a resistor bank has to be mounted on the crane. Braking resistors will dissipate the excess energy. The crane can then be connected to a generator or through a transformer to a grid that does not allow energy feedback.

SGC-120

Flamanville, France

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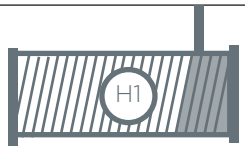
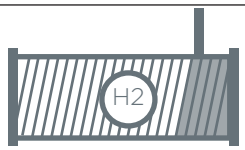
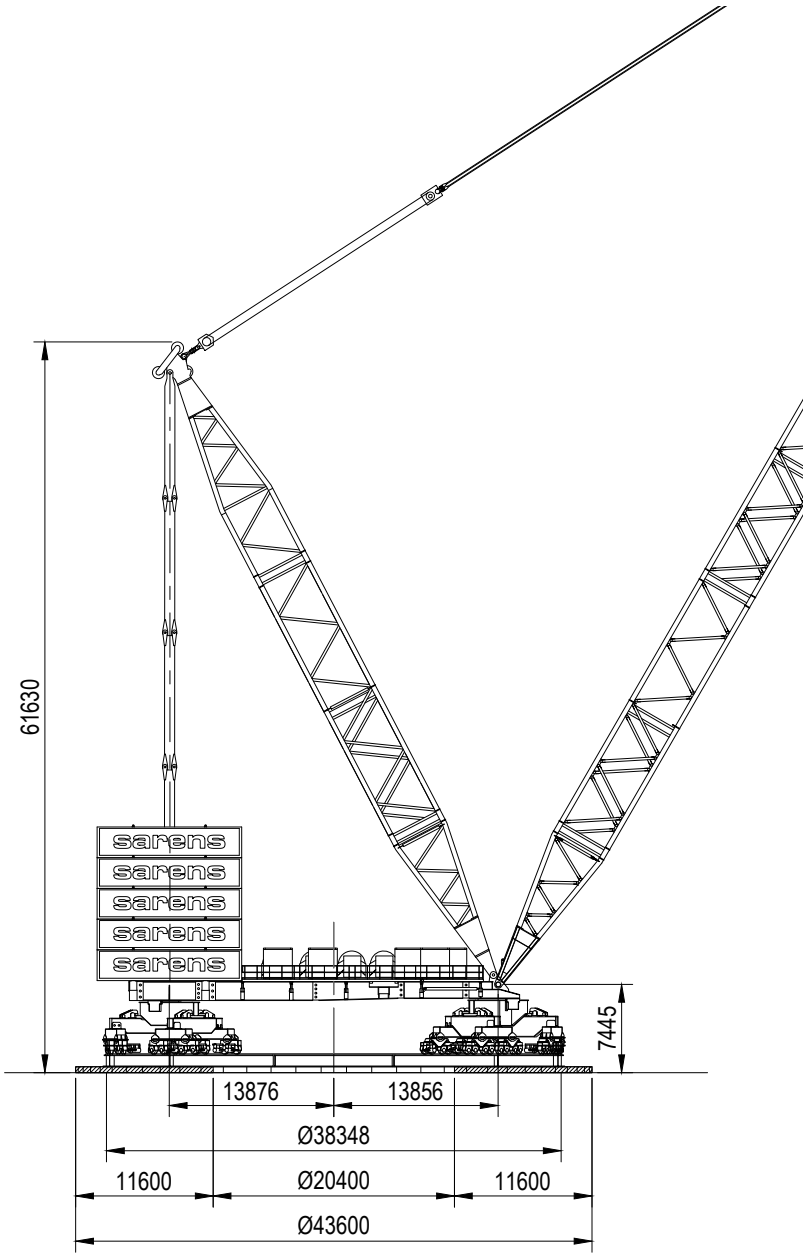
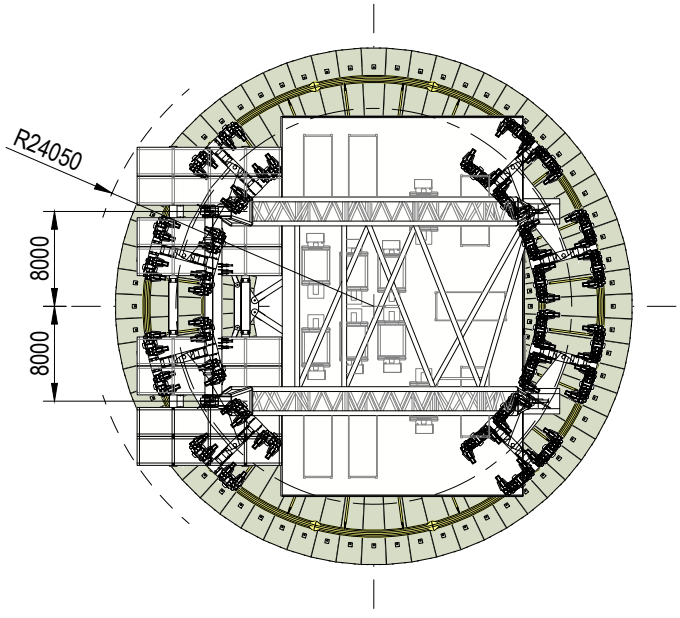
SGC-120

- Load moment:	**120.000Tm**
- Capacity:	**3.200T**
- Year of construction:	2011
- Outer ring:	38,4m
- Wheel bogies:	96
- Counterweight:	3.600T
- Main boom configuration*:	88,7m / 118m / 130m
- Light-duty jib configuration*:	89,5m
- Heavy-duty jib configuration*:	40,5m / 64,1m / 87,7m / 99,5m

Working speed	Type	Speed	Cable diameter	Max single line pull	Cable length
	Main hoist 1-6	20m/min On layer 1	50 mm	536 kN On layer 7	1300m
	Boom hoist 1-2	20m/min On layer 1	50 mm	536 kN On layer 7	1600m
	Slewing gear	6°/min			

*Other configurations available upon request





Dimensions for reference use only
indicated in millimeters

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SGC-120
MAIN BOOM CONFIGURATION

SGC-120
main boom - 130m

SGC-120
MAIN BOOM CONFIGURATION

38,4m

3600T

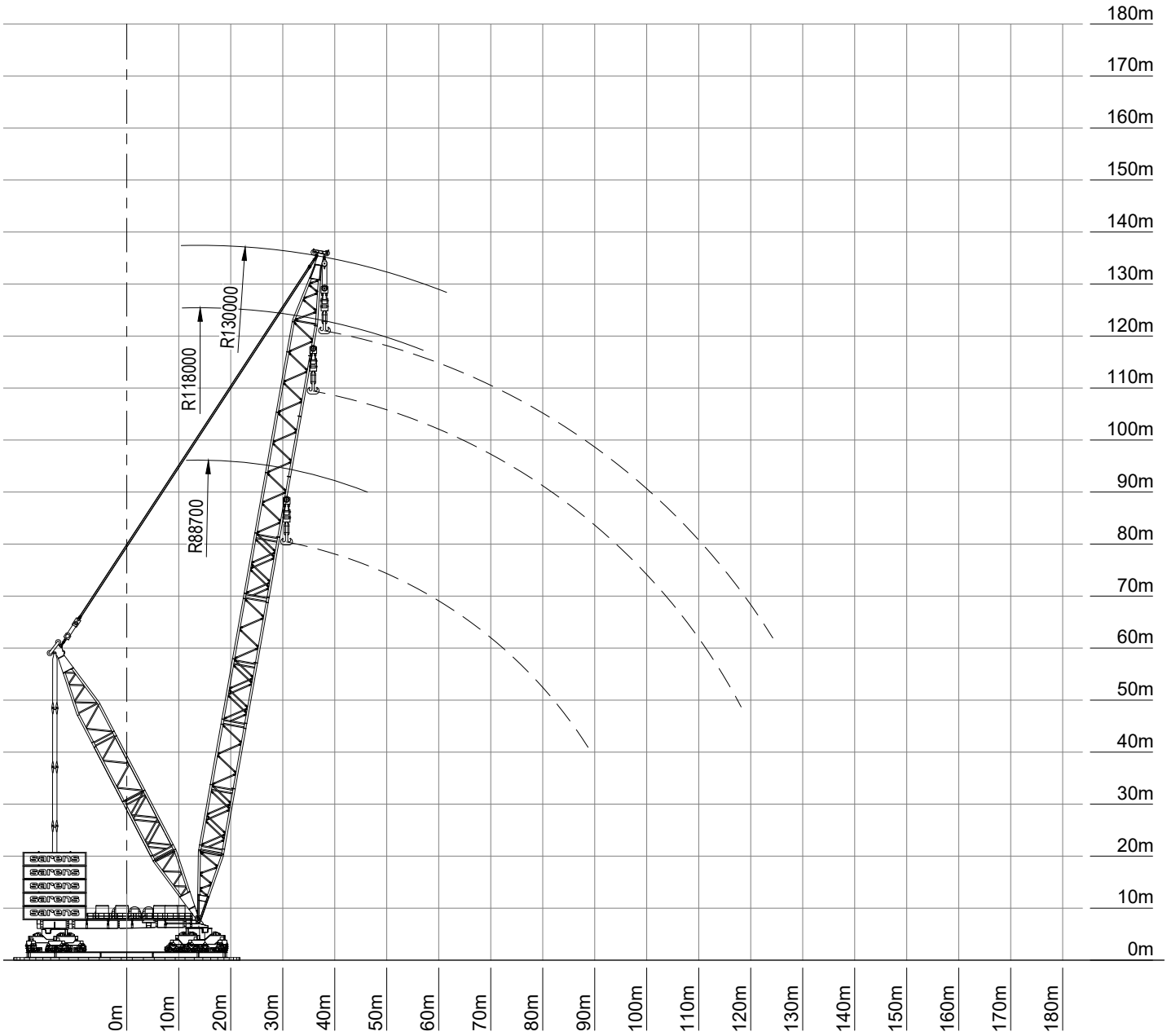
22,4m/s

360°

ISO

Radius [m]

	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	110	120
Capacity MB 88,7m [T]	3150	3150	3150	2777	2354	2004	1730	1511	1333	1186	1064	934	804	672	540	-	-
Capacity MB 118m [T]	(36m)	2400	2400	2400	2354	2004	1730	1511	1333	1186	1064	960	872	796	730	621	480
Capacity MB 130m [T]	(38m)	2200	2200	2200	2139	1934	1730	1511	1333	1186	1064	960	872	796	730	621	480



Capacities in metric tonnes
Other configurations available upon request

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SGC-120
LIGHT-DUTY JIB CONFIGURATION

SGC-120
main boom - 130m
light-duty jib - 89,5m

SGC-120
LIGHT-DUTY JIB CONFIGURATION

38,4m

3600T

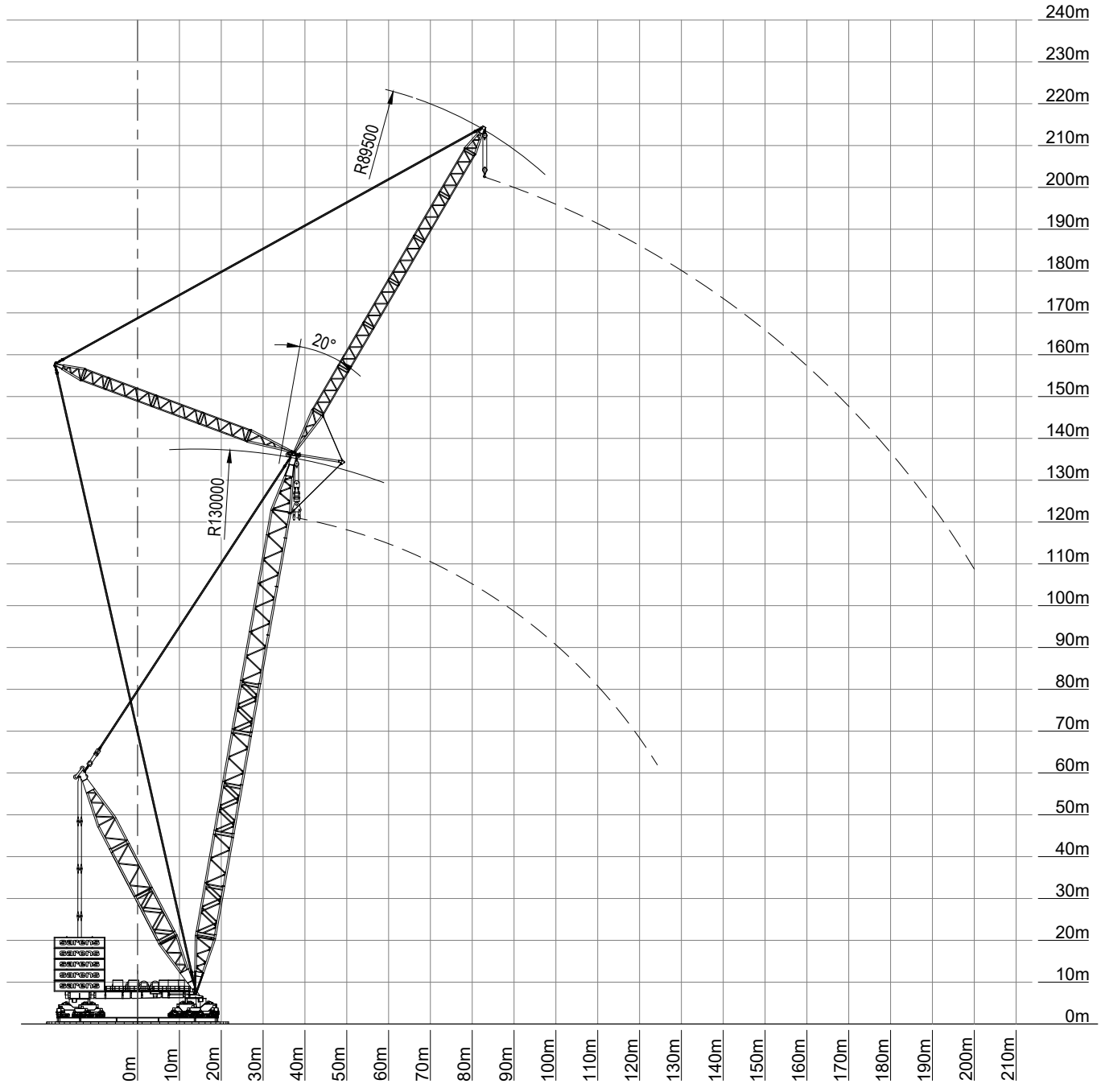
14m/s

360°

ISO

Radius [m]

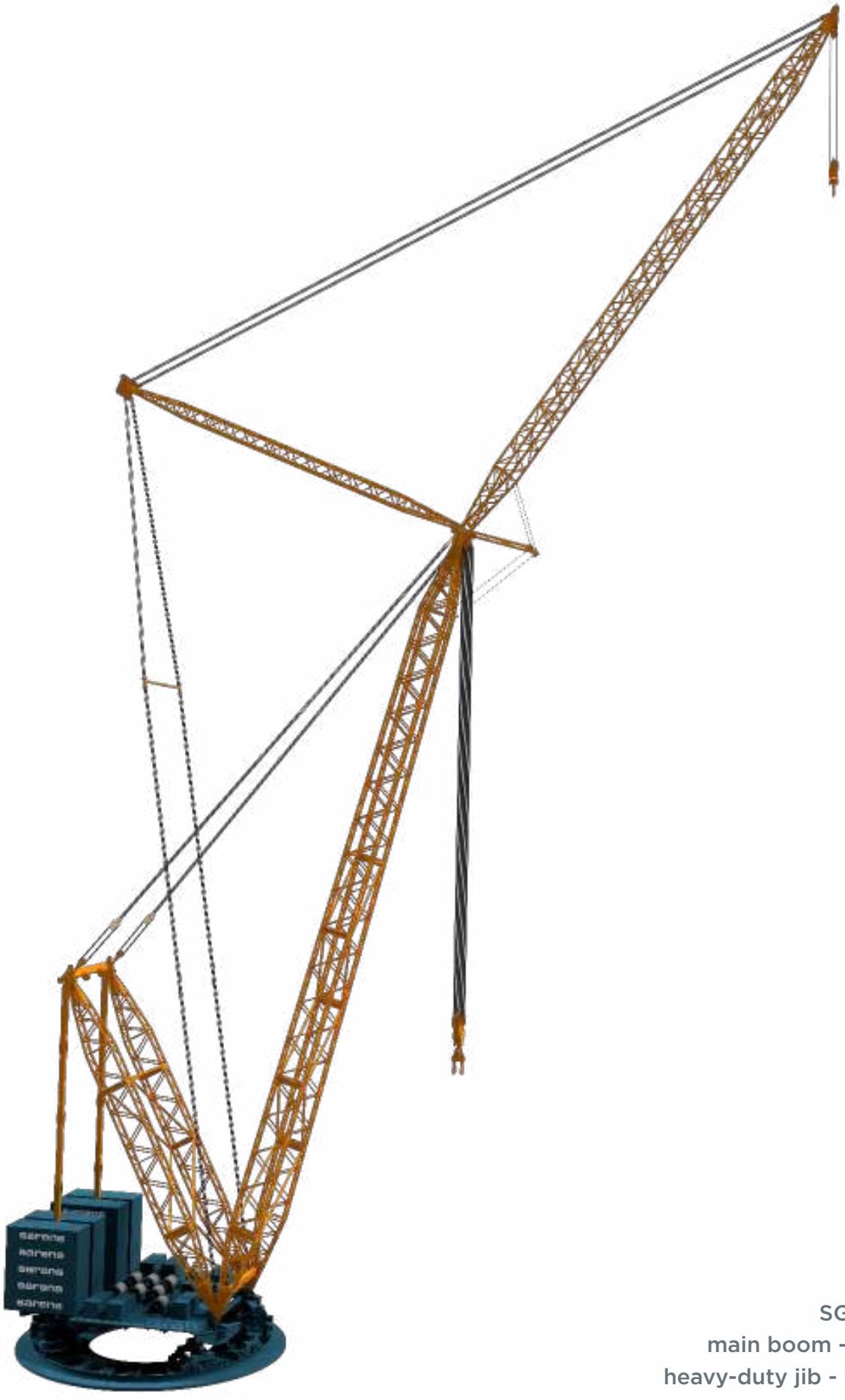
	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200
Capacity main hoist [T]	854	854	854	854	800	625	470	330	190	-	-	-	-	-	-	-	-
Capacity jib hoist [T]	-	-	-	(83m)	320	317,5	315	312,5	310	307,5	305	302,5	300	255	210	165	120



Capacities in metric tonnes
Other configurations available upon request

sarens

SGC-120
HEAVY-DUTY JIB CONFIGURATION



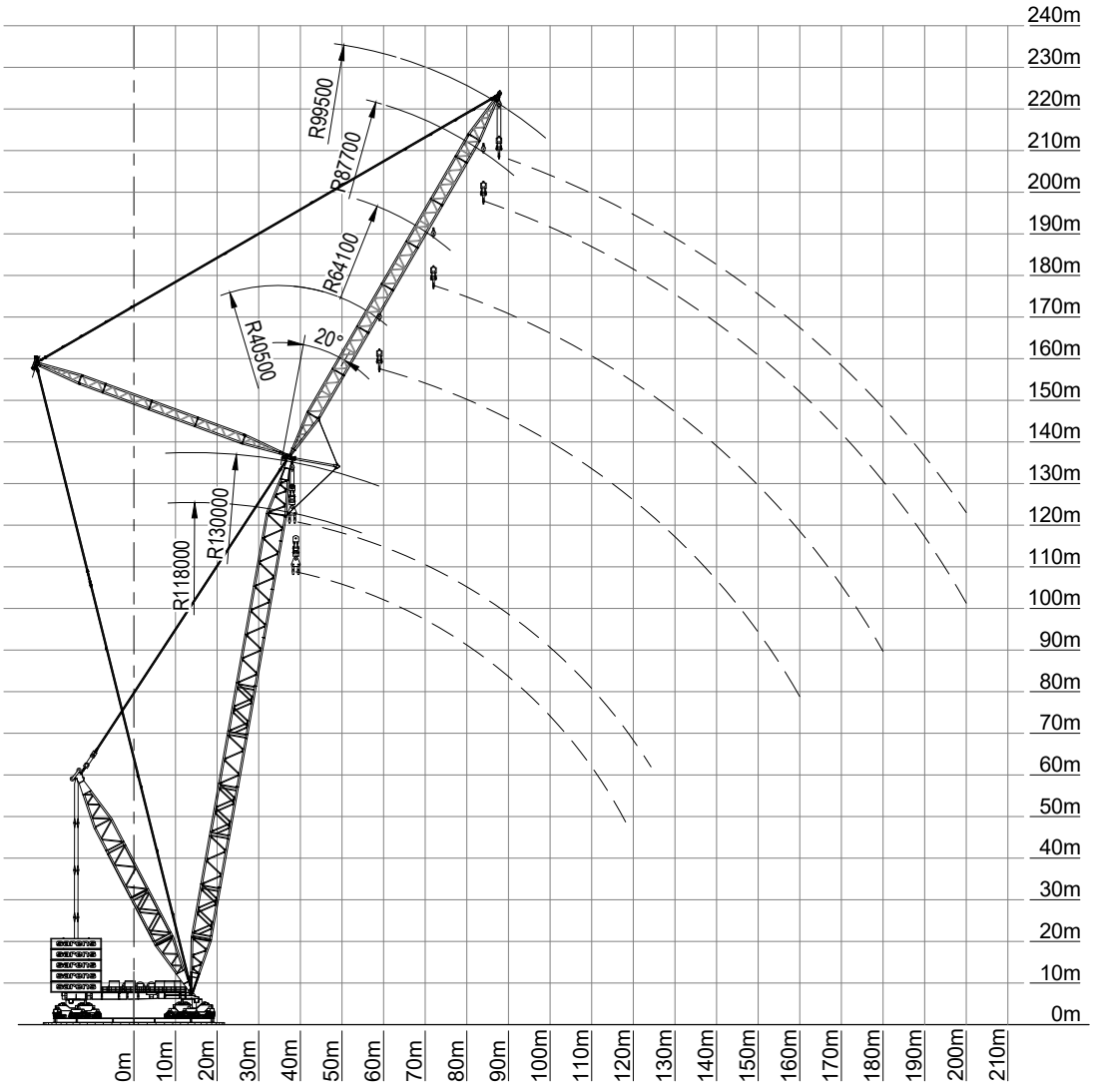
SGC-120
main boom - 130m
heavy-duty jib - 99,5m

SGC-120
HEAVY-DUTY JIB CONFIGURATION

38,4m | 3600T | 14m/s | 360° | ISO

Radius [m]

		40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200
MB 118m	Capacity* HDJ 34,6m [T]	(53m)	1875	1570	1250	1025	860	725	625	550	475	420	-	-	-	-	-	-
	Capacity HDJ 40,5m [T]	(57m)	1450	1420	1290	1110	925	780	670	575	480	390	-	-	-	-	-	-
	Capacity HDJ 64,1m [T]	-	-	-	1150	1060	935	805	695	595	515	440	365	295	-	-	-	-
MB 130m	Capacity HDJ 40,5m [T]	-	(59M)	1300	1290	1200	1055	895	765	655	555	465	380	305	235	-	-	-
	Capacity HDJ 64,1m [T]	-	-	(72m)	1000	950	870	755	660	580	495	420	350	285	225	170	-	-
	Capacity HDJ 87,7m [T]	-	-	-	(84m)	780	755	700	630	560	495	440	380	325	270	220	175	130
	Capacity HDJ 99,5m [T]	-	-	-	-	-	600	580	555	525	485	445	390	335	285	235	190	150



Capacities in metric tonnes
Other configurations available upon request
*Preliminary

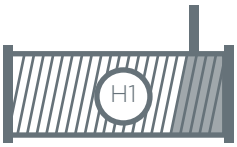
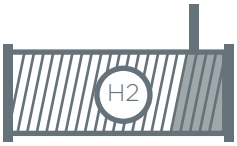
sarens

SGC-140

Ghent, Belgium

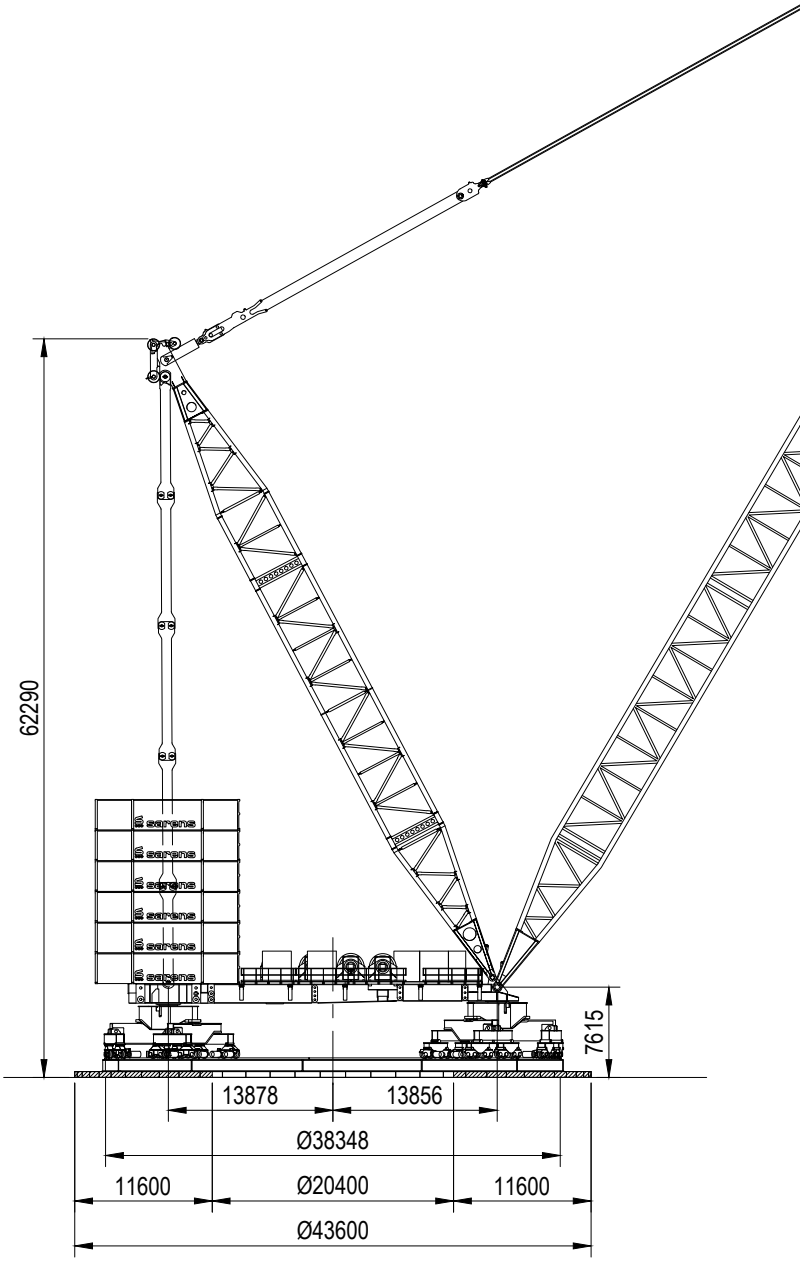
SGC-140

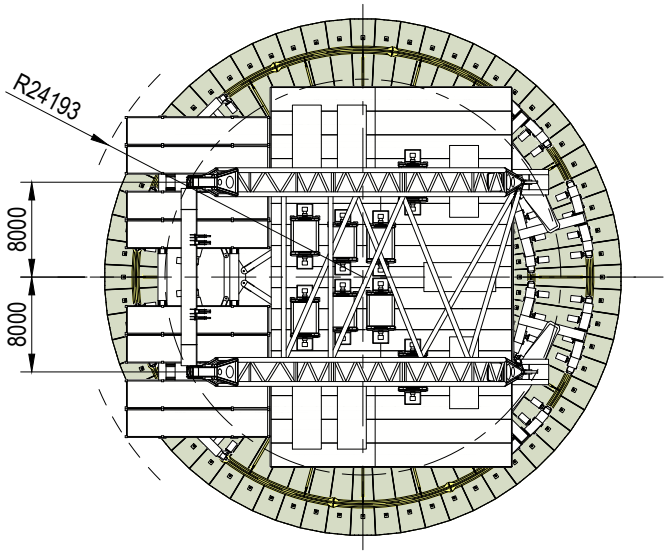
- Load moment:	**140.000Tm**
- Capacity:	**3.200T**
- Year of construction:	2017
- Outer ring:	38,4m
- Wheel bogies:	96
- Counterweight:	4.200T
- Main boom configuration*:	88,7m / 118m / 130m
- Light-duty jib configuration*:	89,5m
- Heavy-duty jib configuration*:	40,5m / 64,1m / 87,7m / 99,5m

Working speed	Type	Speed	Cable diameter	Max single line pull	Cable length
	Main hoist 1-6	20m/min On layer 1	50 mm	536 kN On layer 8	1300m
	Boom hoist 1-2	20m/min On layer 1	50 mm	536 kN On layer 8	2100m
	Slewing gear	6°/min			

TCO Project, Kazakhstan

*Other configurations available upon request





Dimensions for reference use only
indicated in millimeters

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SGC-140
MAIN BOOM CONFIGURATION

SGC-140
main boom - 118m

SGC-140
MAIN BOOM CONFIGURATION

38,4m

4200T

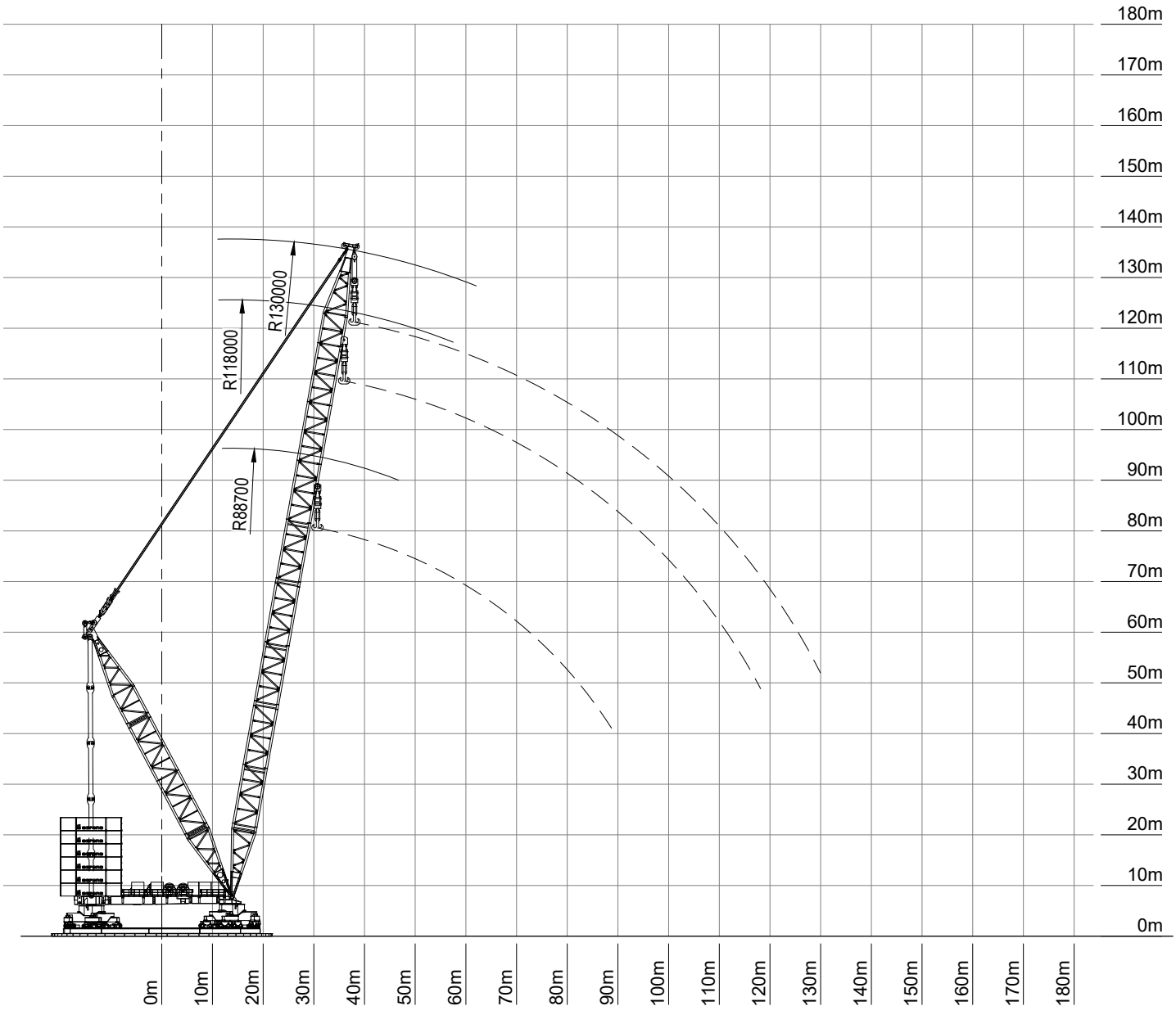
22,4m/s

360°

ISO

Radius [m]

	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	110	120
Capacity* MB 88,7m [T]	3200	3200	3200	3111	2719	2386	2112	1887	1697	1533	1402	1248	1091	921	751	-	-
Capacity MB 118m [T]	(36m)	2820	2770	2720	2640	2315	2060	1845	1665	1510	1375	1265	1165	1080	1000	875	700
Capacity* MB 130m [T]	(38m)	2585	2539	2493	2399	2234	2060	1845	1665	1510	1375	1265	1165	1080	1000	875	700



Capacities in metric tonnes
Other configurations available upon request
*Preliminary

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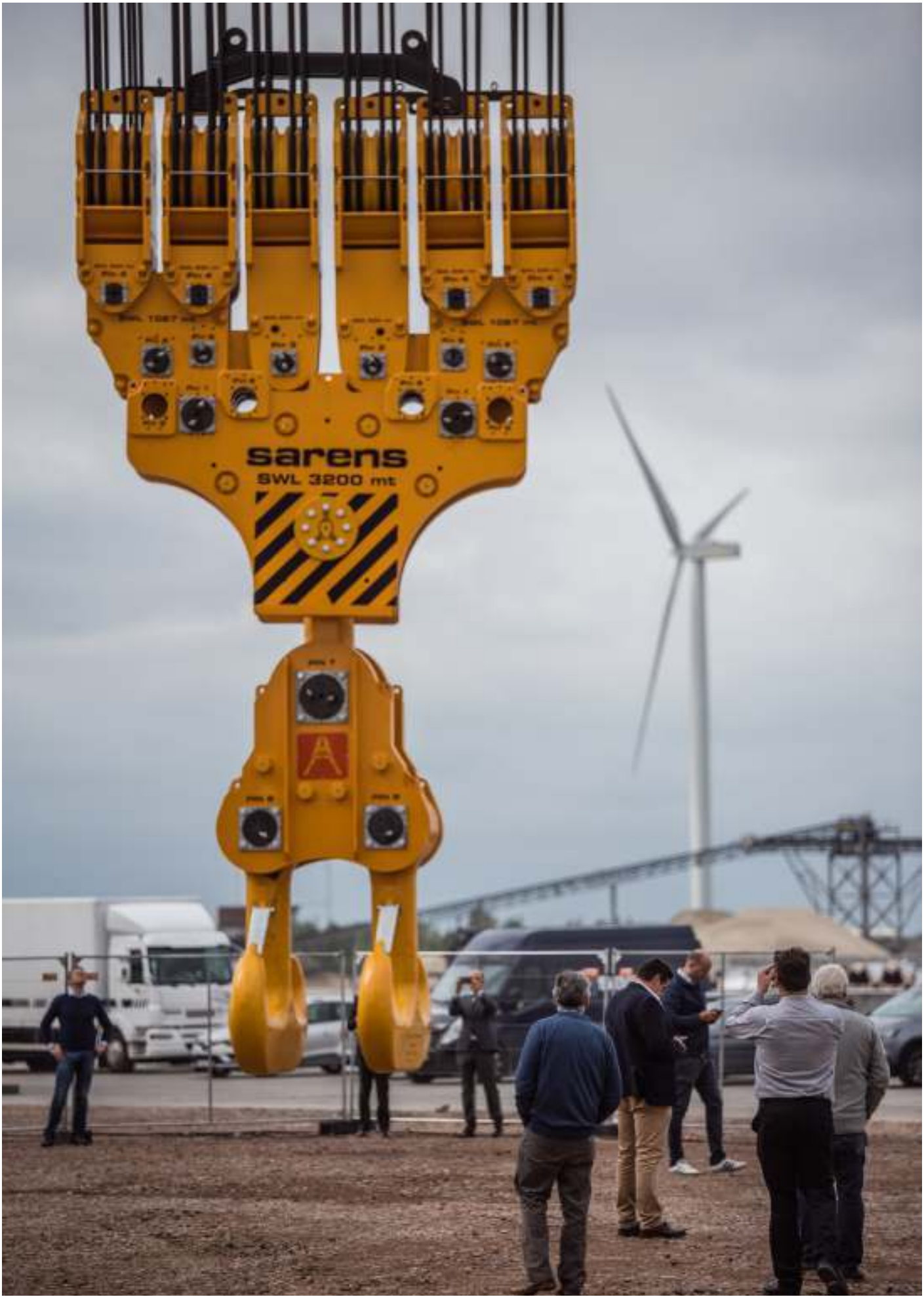
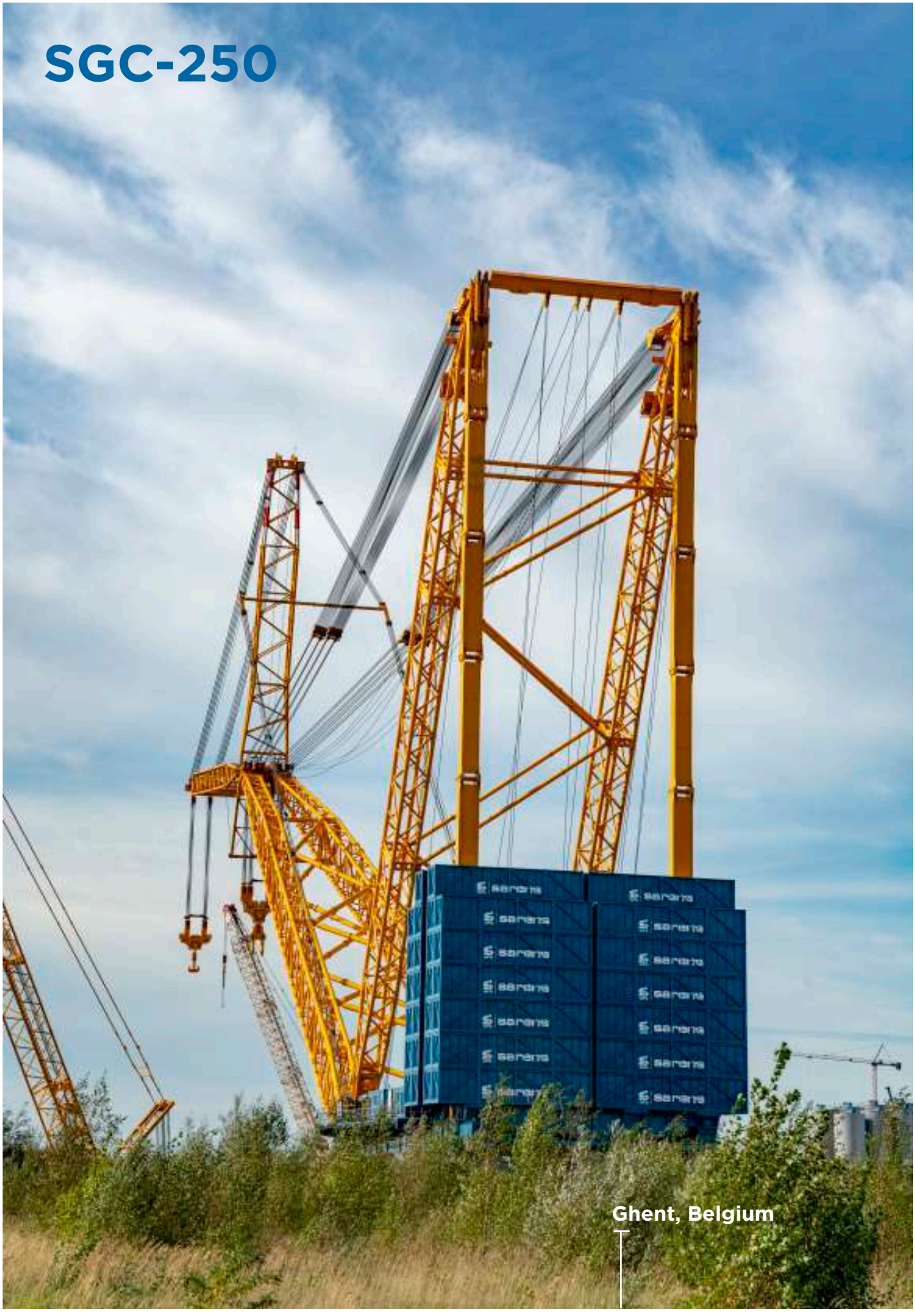
SGC-140



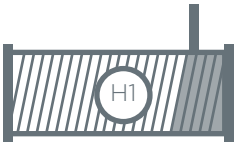
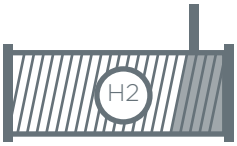
SGC-250



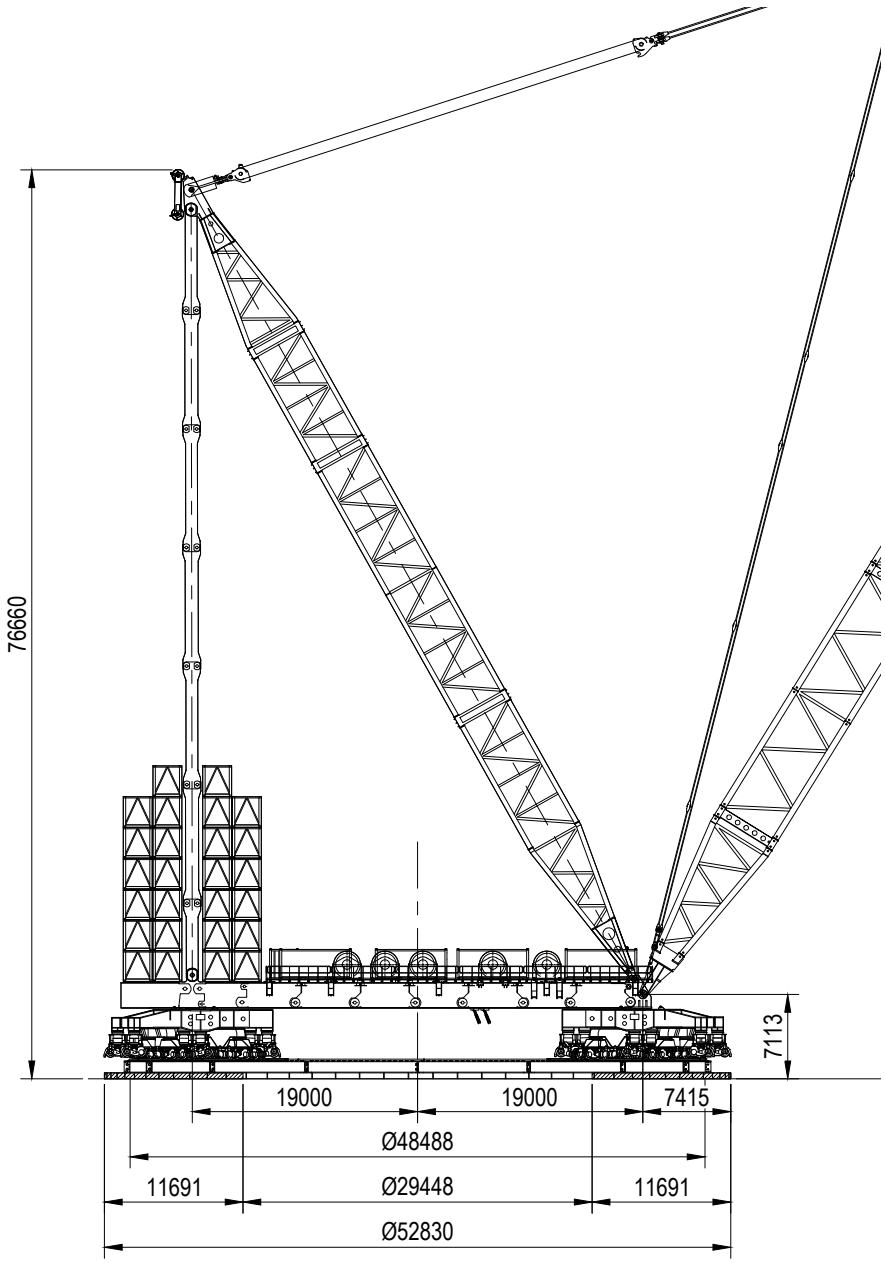
Ghent, Belgium

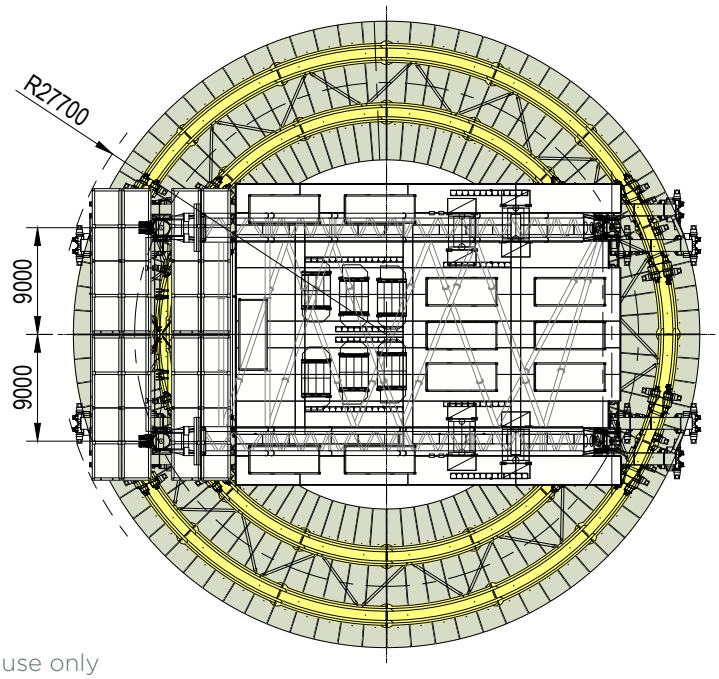
SGC-250

- Load moment:	**250.000Tm**
- Capacity:	**5.000T**
- Year of construction:	2018
- Outer ring:	48,5m
- Wheel bogies:	128
- Counterweight:	5.200T
- Main boom configuration*:	118m / 160,5m
- Heavy-duty jib configuration*:	40,5m / 52,3m / 64,1m / 87,7m / 99,5m

Working speed	Type	Speed	Cable diameter	Max single line pull	Cable length
	Main hoist 1-6	20m/min On layer 1	50 mm	536 kN On layer 9	4x1600m 2x2000m
	Boom hoist 1-4	20m/min On layer 1	50 mm	536 kN On layer 9	2600m
	Slewing gear	6°/min			

*Other configurations available upon request





Dimensions for reference use only
indicated in millimeters

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SGC-250
MAIN BOOM CONFIGURATION

SGC-250
main boom - 160,5m

SGC-250
MAIN BOOM CONFIGURATION

48,5m

5200T

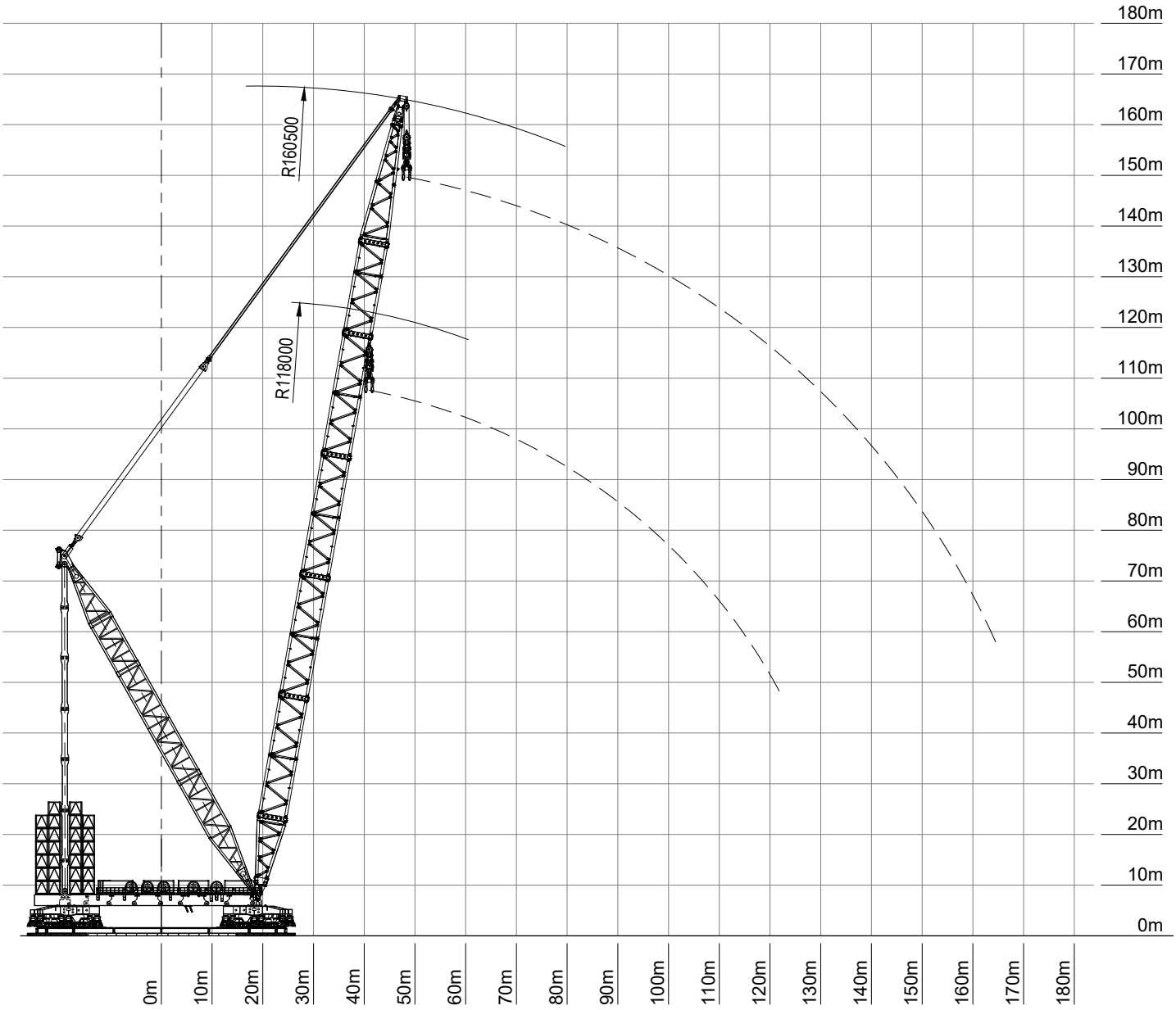
14m/s

360°

ISO

Radius [m]

	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170
Capacity MB 118m [T]	-	5000	4362	3831	3327	2746	2321	2001	1756	1554	-	-	-	-	-
Capacity MB 160,5m [T]	(45m)	3114	3017	2850	2694	2349	2089	1866	1621	1424	1260	1126	1009	913	838



Capacities in metric tonnes
Other configurations available upon request

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SGC-250
HEAVY-DUTY JIB CONFIGURATION

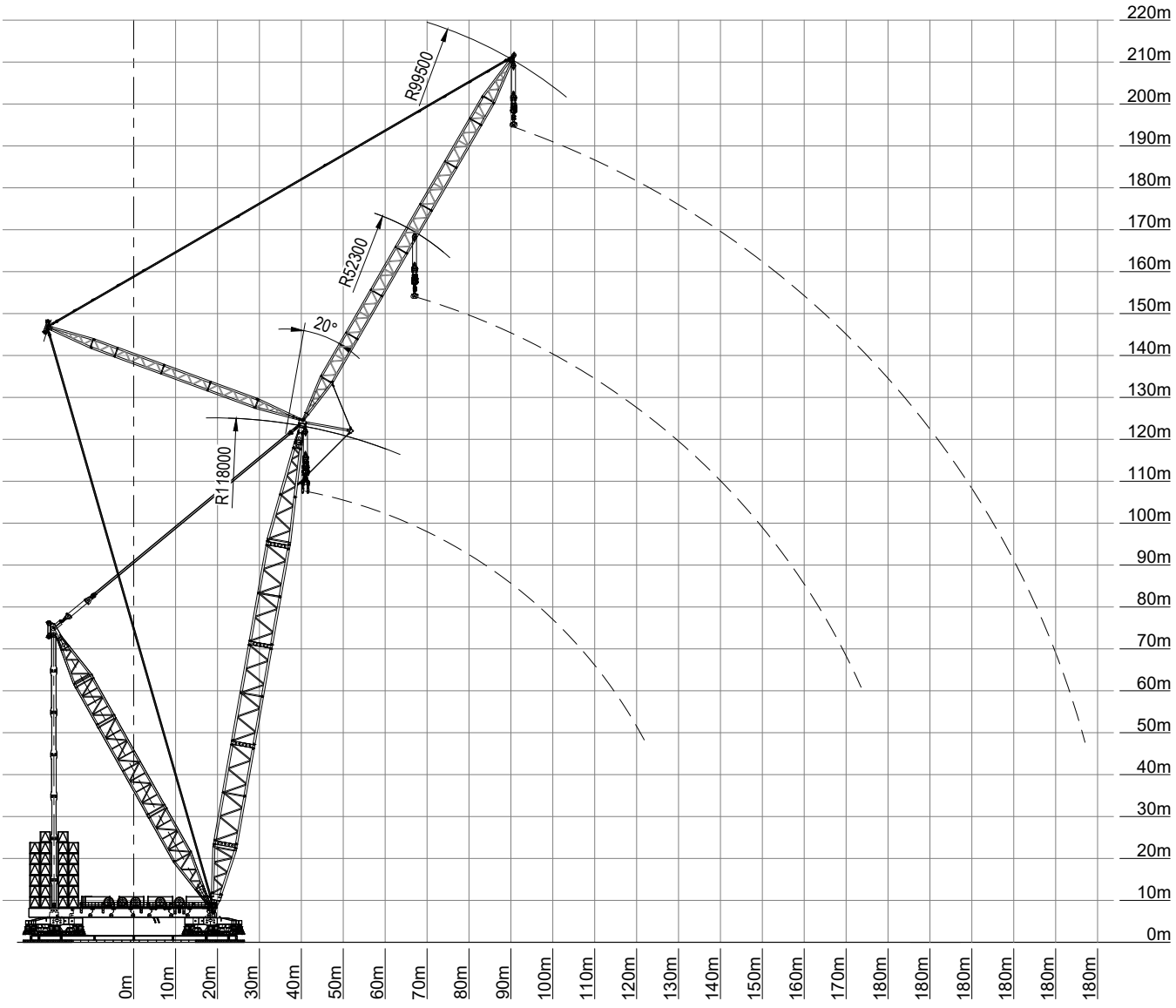
SGC-250
main boom - 118m
heavy-duty jib - 52,3m

SGC-250
HEAVY-DUTY JIB CONFIGURATION

48,5m | 5200T | 14m/s | 360° | ISO

Radius [m]

			40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210
MB 118m	HDJ 52,3m	Capacity main hoist [T]	4250	3828	3275	2876	2501	2091	1771	1526	-	-	-	-	-	-	-	-	-	-
		Capacity jib hoist [T]	-	(65m)	1781	1781	1776	1641	1525	1425	1338	1262	1195	1084	978	883	-	-	-	-
	HDJ 99,5m	Capacity main hoist [T]	1312	1312	1312	1312	1312	1312	1312	1312	-	-	-	-	-	-	-	-	-	-
		Capacity jib hoist [T]	-	-	-	-	-	850	850	850	839	792	747	702	662	621	588	554	522	491



Capacities in metric tonnes
Other configurations available upon request

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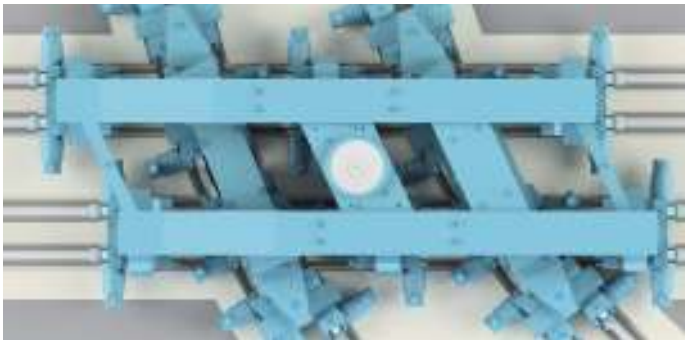
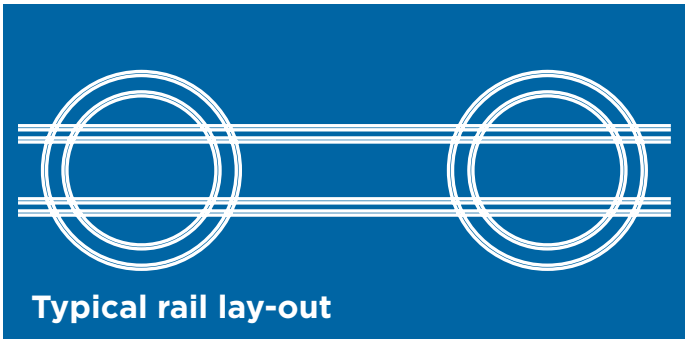
RELOCATION ON SITE

The SGC-250 can be relocated on site between different lifting positions.

For 360° slewing and lifting operation, the SGC-250 is positioned on the ring.
With hydraulic cylinders the SGC-250 can switch from ring to straight rails.





SLEWING AND LIFTING OPERATION

SGC-250 supported on 128 wheels
cylinder retracted

TRAVELLING

SGC-250 supported on 96 wheels
cylinder fully extended

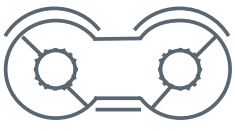
GROUND PRESSURES

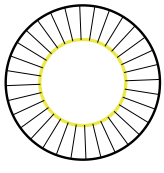
The Sarens Giant Cranes are ring-based. The crane is slewing on a high number of wheels divided on two ring beams. The wheel bogies are equally loaded and are allowing for easy spreading of the wheel load on the ring beams.

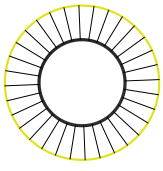
Bogies of SGC-140 on the ring beams

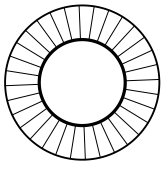
Ring spreader mats of SGC-250

THE RING SPREADER MATS BELOW THE BASE OF THE SGC ARE STANDARD SUPPLIED WITH THE CRANE.









SGC-90	32	22,5m	45,9m	20T/m^2
SGC-120	96	20,4m	43,6m	20T/m^2
SGC-140	96	20,4m	43,6m	25T/m^2
SGC-250	128	29,5m	52,8m	30T/m^2

Ground pressures depending on soil type and crane configuration

COUNTERWEIGHT

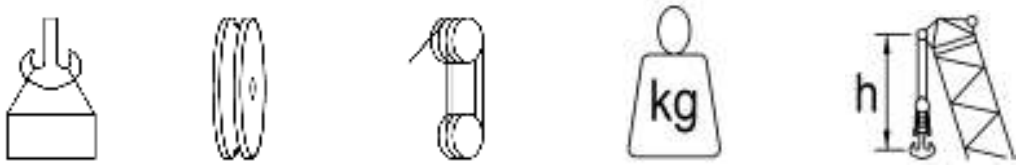
Filling the CTW box of SGC-250

THE COUNTERWEIGHT BOXES ARE FILLED WITH LOCALLY SOURCED MATERIAL TO ACHIEVE A TOTAL WEIGHT OF 100T PER CONTAINER. THE COUNTERWEIGHT BOXES ARE ALSO USED FOR TRANSPORT OF CRANE COMPONENTS TO REDUCE THE TRANSPORT COST.

HOOK

SGC-120
SGC-140
SGC-250

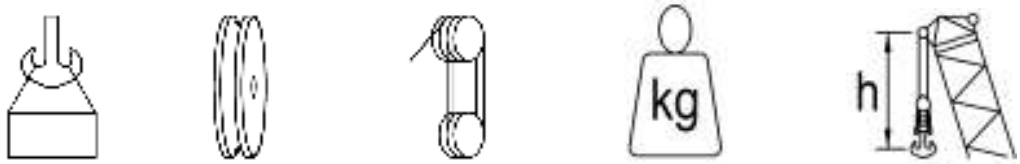
Main hook Jib hook



MAIN HOOK	3.200T	6 x 5	60	104,6T	14,5m
JIB HOOK	1.600T	4 x 5	32	58T	12,5m

SGC-90

Main hook Jib hook



MAIN HOOK	1.600T	2 x 8	32	57T	11,4m*
JIB HOOK	200T	2 x 2	8	10T	9,5m

Weight of the hook blocks and slings is part of
the load and is to be deducted from the capacity ratings
* up to 75° - more details upon request

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SARENS IS A RECOGNIZED WORDWIDE LEADER IN HEAVY LIFTING AND ENGINEERED TRANSPORT.

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9 REGIONS

65 COUNTRIES

4545 EMPLOYEES

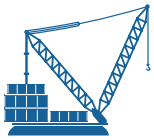
OVERVIEW

EQUIPMENT

CRANES

HYDRAULIC CRANES

LATTICE BOOM CRANES



GIANT CRANE

HEAVY-LIFTING TOWER CRANES

TRANSPORT

CONVENTIONAL TRAILERS

MECHANICAL STEERING

MODULAR TRAILERS ELECTRONIC STEERING

TECHNICAL SOLUTIONS EQUIPMENT

BARGES

TWIN BARGES

MODULAR BARGES

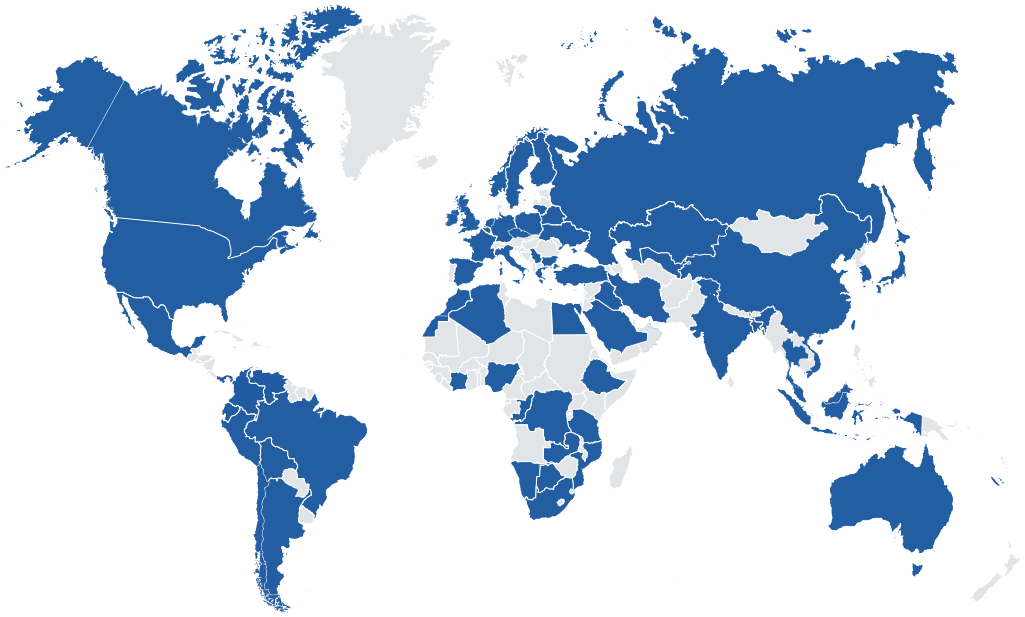
GANTRIES

JACKING SYSTEMS

STRAND JACKS

SKIDDING

GLOBAL PRESENCE



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Sarens Giant Cranes - version 2 - November 2020

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