

















Power | Passion | Partnership



HEILA CRANES GROUP:

Heila Cranes SpA in Italy Heila Cranes Nederland BV in The Netherlands Heila Cranes Southeast Asia Pte Ltd in Singapore

HIGHLIGHTS:

- Over 40 years of experience
- > 5,250 marine cranes engineered and manufactured
- ▶ 197 cranes certified by class in the last 3 years
- Outstanding in-house engineering capability



Focus on our customer

The Heila Group focuses on establishing long-term relationships with its customers, speed, proactiveness, and technical reliability. With energy and passion. In practice this means engineering and manufacturing the most reliable custom-built marine and offshore cranes, with capacities ranging from 3 up to 4,000 tm. Always in cooperation with our customers. Always striving to find the perfect solution.

MISSION

We supply the most reliable custom-built cranes to our customers in the marine and offshore industry. We aim to satisfy their every need with respect to deck cranes.

"Quality, reliability and service are Heila's unique selling points. The company has gathered together a group of true professionals who are reliable and skilled"

Neptune Shipyard BV

"We prefer quality cranes for our vessels and value at the same time a good understanding and relationship with our suppliers. No problem for Heila: our long-term cooperation with Heila proves this"

Damen Shipyards, Hardinxveld

FOUNDED IN ITALY, WITH WORLDWIDE PRESENCE

Heila Cranes has service, sales and dealer hubs throughout the world. This makes it possible to provide our customers with an optimal service. Check our website for a Heila representative in your area.



Heila Foldable Telescopic Cranes: the HLM and HLRM series

Heila foldable telescopic cranes are of superior quality. This is the result of more than 40 years of experience and technical expertise in designing, producing components and developing the manufacturing process to meet the highest quality standards.

Facts:

- more than 3,000 foldable telescopic cranes manufactured and delivered
- market leader in foldable telescopic cranes
- first to produce a HLRM 1000 crane;
 a 70-ton crane featuring a telescopic
 arm with a maximum reach of 30 m that is very compact in storage position.



Features:

- Originally designed for a marine environment
- Compact
- Safe & reliable
- Easy operation
- Easy maintenance

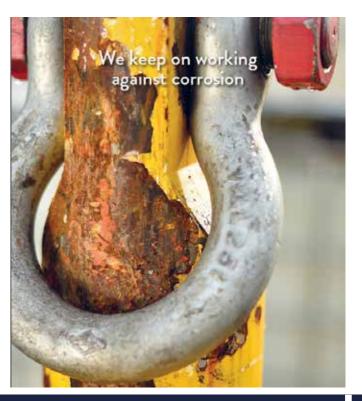




Heila Anti-Corrosion Pogram

Our Anti-Corrosion Program ensures that the crane's structure and seals have a long life, even if the crane operates in a harsh environment.

- Complete Surface Treatment: structural design, surface preparation and painting process compliant with ISO 12944-C5M.
- High-durability, chrome-plated hydraulic cylinder rods.
- · Geomet-coated structural bolts.
- Stainless steel AISI 316 pin locking system designed according to DIN 15058.
- Hydraulic fittings protected by special silicone spray and special vulcanised rubber tape.
- All non-structural screws and bolts made from stainless steel protected with silicone.
- Rigid pipes and relevant fittings in AlSI316 stainless steel
- Stainless Steel junction boxes and encoders.



 $4 - \frac{1}{2}$

HLM CRANES: Fully foldable telescopic cranes with rack and pinion slewing system



The **HLM cranes** with their rack and pinion slewing system are very compact and light. This makes the HLM type ideal for use on small vessels, especially where space is limited. Cranes of this type, our 'workhorses of the sea', are indispensable for auxiliary vessels including multifunctional work boats, tugs and pontoons.

CHARACTERISTICS

- The crane is able to work in any configuration; with boom extended upwards or folded downwards offering great manoeuvrability
- Rotation exceeds 360°. This is possible because the crane is fitted with a double rack and pinion system with bronze bushes that guarantees safe operation, even at excessive heel and trim angles.

CONTROL AND SAFETY

- · Stationary fixed control console
- Counterbalance valves directly mounted on each cylinder provide a fast response
- Proportional Electrohydraulic Control Valve

Block with internal compensation for simultaneous movements and self-centring manual levers; supplied by primary world-wide producers

 Electrohydraulic load moment limiting device; prevents the crane being overloaded and damaged.

STRONG AND RELIABLE

Doubling the number of racks and cylinders doubles the power of the slewing system. Moreover, the life of these components is extended because the load is shared.

CUSTOMISATION

The HLM crane series is standardised, however, there are a surprising number of options allowing a degree of customisation.

HORIZONTAL LOAD HLM CRANES

	r of	Length of bo	oom (m) and c	rane lifting cap	pacity (kg)	HEIL	A Cranes ST	ANDARD P	roducts Table	9	Revision 1 - 1 June 2018						
	exter	nsions	3 m	4 m	5 m	6 m	7 m	8 m	9 m	10 m	11 m	12 m	13 m	14 m			
	10	m	3.5		5.17												
Model extensions	15	Kg	1,000		680												
	3.58		5.25	6.91													
	extension 1S	Kg	980		660	500											
HLM 6	m	3.54		5.25													
	1,800		1,250														
TILIVI O	25	m	3.63		5.3	6.97											
	20	Kg	1,700		1,150	850											
	10	m		4.20	5.90												
	13	Kg		2,100	1,500												
	25	m		4.30	5.90		7.47										
TILIVI O	20	Kg		2,100	1,500		1,200										
	20	m		4.37	5.99		7.64		9.30								
	33	Kg		1,950	1,400		1,100		850								
15	10	m		4.64		6.54											
	13	Kg		2,300		1,650											
⊔IM 10	20	m		4.65		6.55		8.41									
TILIVI 10	23	Kg		2,250		1,600		1,200									
	20	m		4.81		6.65		8.52		10.30							
	28 -	Kg		2,150		1,500		1,150		930							
	10	m		4.92		6.92											
	13	Kg		3,400		2,400											
UI M 16	20	m		4.93		6.99			9.01								
TILIVI TO	23	Kg		3,200		2,200			1,680								
	35	m		4.99		6.99			9.00	10.99							
	33	Kg		3,150		2,150			1,600	1,200							
	20	m		4.68		6.64		8.62									
	23	Kg		5,200		3,600		2,800									
	20	m		4.81		6.75		8.72		10.58							
LIM 25	33	Kg		5,000		3,450		2,600		2,100							
TILIVI 23	10 25 Kg m Kg Sg		4.94		6.88		8.85		10.71		12.63						
HLM 10 28	45	Kg		4,850		3,350		2,450		1,800		1,450					
	m			5.02	6.97		8.93		10.79		12.79		14.69				
	55	Kg			4,700	3,200		2,400		1,800		1,400		1,150			



Condition: Sea state O or harbour conditions

Horizontal loads, lifting by hook in harbour conditions. For the minimum outreach, please check the technical data sheet.

Features:

- Originally designed for a marine environment
- One (1) cylinder for multiple telescopic movements
- Designed for easy maintenance
- High degree of customisation







HLRM CRANES: Fully foldable telescopic cranes &

Foldable knuckle telescopic cranes





Fully foldable telescopic



Foldable knuckle telescopic crane, HLRM 580/3S

HLRM cranes featuring slew bearings and continuous rotation, are available as fully foldable telescopic cranes and as telescopic knuckle boom cranes.

THE BEST LIFTING PERFORMANCE

The fully foldable telescopic cranes are designed to provide the best lifting performance combining exceptional boom strength with a powerful slewing ring rotation system. The cranes are suitable for a wide range of on-board and off board activities including buoy handling and the hoisting of structures and equipment.

NO COMPROMISE ON QUALITY

Heila provides all of the features and uses quality components to construct cranes that offer excellent performance. The cranes are designed for the tough environmental conditions at sea. We protect all of our cranes — large and small - by thoroughly sand blasting them, applying marine paint systems and using stainless steel pipe fittings.

HEAVY DUTY OPERATION

Each crane component is selected and designed for heavy duty operation in a marine environment, they feature:

- · Heila Anti-Corrosion Program
- Standard design temperature -20°C +45°C
- Minimum IP 56 protection standard on all electric cabinets and junction boxes on the crane
- Electronic Safety System protects the crane from being overloaded

ALWAYS PUSHING THE ENVELOPE

Starting from the first development of the Heila telescopic knuckle boom crane, Heila has always strived to build bigger and better cranes. Heila was the first to build many of the larger cranes of this type, culminating in the HLRM 1000-6S in 2018.

This crane is able to lift 14,300kg at a reach of almost 30m and 52,500kg at 13.4m.

Despite its small footprint, it is a high-capacity crane. In combination with various options, including Active Heave Compensation (AHC), this crane is a cost-effective, highly versatile but compact tool, suitable for many offshore activities, thus greatly reducing mobilisation time of vessels. It is the offshore equivalent of a Swiss army knife.

Fully foldable telescopic cranes with slew bearing system

HORIZONTAL LOAD HLRM CRANES

Crane	nr o	f	Length o	f boom (m	n) and cran	e lifting c	apacity (k	(g)	HEI	LA Crar	es STA	Revision 1 – 1 June 2018								
nodel	extensi	ions	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m	21m
	00	m	4.66		6.63		8.6													
	28	Kg	4,000		2,800		2,100	1												
HLRM	-00	m	4.79		6.74		8.71		10.56	1										
19	3S	Kg	4,000		2,800		2,100		1,500	1										
		m	4.93		6.88		8.85		10.70		12.62	1								
	48	Kg	3,750		2,500		1,900		1,500		1,200	1								
		m	4.68		6.65		8.62					1								
	28	Kg	4,800		3,400		2,600	1												
		m	4.81		6.76		8.72		10.58	1										
HLRM	35	Kg	4,550		3,150		2,400		1,950											
25		m	4.94		6.89		8.85		10.71		12.63	1								
	4S	Kg	4,350		3,000		2,230		1,800		1,500	1								
		m	4.97		6.92		8.89		10.74		12.76		14.66	1						
	5S	Kg	4,300		3,000		2,200		1,750		1,450		1,200	1						
		m	4.55		6.3		8.15		.,		1,100		, , ,	1						
	28	Kg	6,150		4,420		3,200	1												
		m	4.68		6.43		8.28		10.23	1										
HLRM-I 25	3S	Kg	5,800		4,100		3,100		2,400	1										
		m	4.8		6.55		8.4		10.35		12.4	1								
	4S	Kg	5,560		3,850		2,900		2,200		1,730	1								
		m	4.92		6.67		8.52		10.47		12.52		14.63	1						
	5S	Kg	5,250		3,650		2,680		1,910		1,460		1,190	1						
		m	0,200	5.03	6.78		8.63	_	10.58		12.63		14.74		16.9	1				
	6S	Kg		5,000	3,400		2,400		1,750		1,320		1,050		880	-				
		m	4.98	3,000	6.95		8.92		1,730		1,320		1,030		000	1				
	28	Kg	6,650		4,650		3,600	-												
		1	0,000	5.08	4,030	7.03	3,000	9	10.85	1										
	3S	m Kg		6,500		4,550		3,500	2,800	1										
		m		5.4		7.6		9.8	2,000		12	1								
	3-SL	Kg		5,400		3,600		2,700			2,200	1								
HLRM				5,400		7.16		9.13	10.98		12.9	+								
35	48	m Kg		6,200		4,300		3,250	2,450		1,950	1								
33				5.2		7.15		9.12	10.97		12.99		14.79	-						
	5S	m		6,100		4,250		3,150	2,350		1,850		1,550	-						
		Kg		5.25		7.45		9.66	2,300	11.86	1,000	13.88	1,000	15.85	-					
	5-SLC	m Kg		5,000		3,300		2,400				_		_	-					
										1,850		1,550	14.06	1,350	16.22	-				
	5-SLL	m Kg		5.25		7.45		9.66		11.86					1,250	-				
		_	4.88	5,100	COF	3,350	8.82	2,400		1,850			1,500		1,230	-				
	28	m			6.85			-												
		Kg	8,400		6,000		4,650		40.75	-										
	38	m	4.98		6.93		8.9		10.75	-										
HLRM		Kg	8,200	F 4 1	5,900	7.00	4,500	0.00	3,600		10.0	-								
	48	m		5.11		7.06		9.03	10.88		12.8	-								
45		Kg		8,300		5,700		4,400	3,300		2,600			-						
	58	m		5.16		7.11		9.07	10.93		12.95		14.74	-						
		Kg		8,050		5,750		4,000	3,000		2,350		1,950		40.04	-				
	5SL	m		5.44		7.64		9.85			12.05		14.07		16.04	-				
		Kg		6,700		4,500		3,400			2,500		2,000		1,700					



Condition: Sea state O or harbour conditions

Horizontal loads, lifting by hook in harbour conditions For the minimum outreach, please check the technical data sheet.

Features

- Originally designed for a marine environment
- Continuous slewing
- Designed for easy maintenance
- High grade of customisation







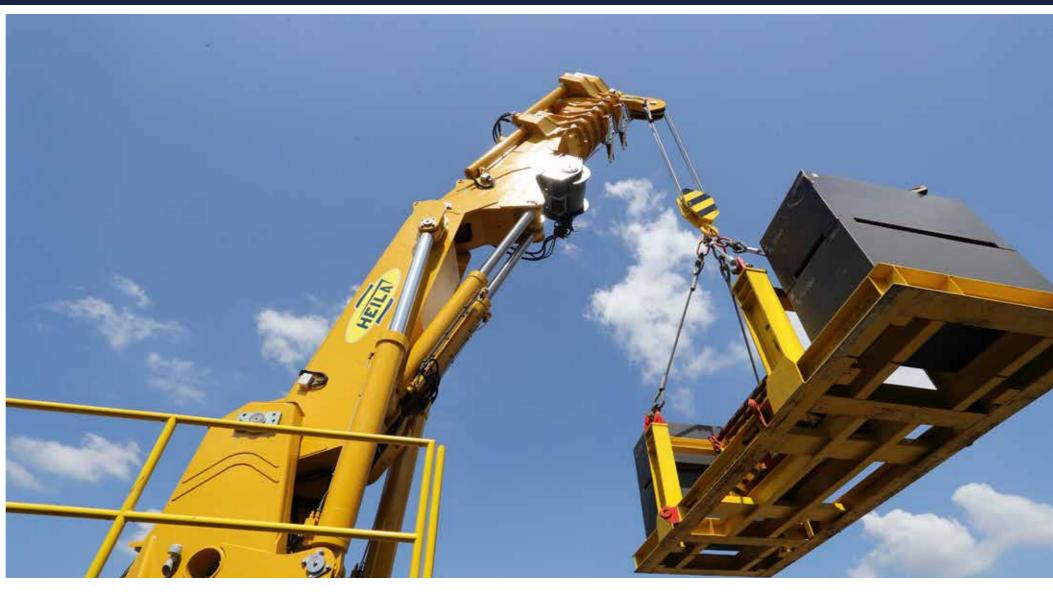
Crane	nr o	of	Length of	f boom (m)	and crane	lifting cap	acity (kg]	HEIL	A Crane	s STAN	DARD F	Product	s Table		Revisi	on 1 – 1	June 20	18	
model	extensi	ions	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m	211
	28	m	4.63		6.13	7.93														
	20	Kg	9,800		7,500	5,800														
	3S	m K-	4.71		6.21		8.06	9.96	-											
		Kg m	9,500 4.73		7,200 6.23		5,550 8.08	4,200	10.02		12.04	1								
	48	Kg	9,300		7,000		5,350		4,000		3,100	1								
HLRM-I		m	4.82		6.32		8.17		10.11		12.13		14.31	1						
45	58	Kg	9,000		6,800		5,100		3,800		2,900		2,350							
	6S	m	4.91		6.41		8.26		10.2		12.22		14.39		16.66					
		Kg	8,700		6,550		4,900		3,650		2,780		2,190		1,800					
	78	m		5.01	6.51		8.36		10.3		12.32		14.49		16.76			19.03	-	
		Kg		8,400 5.12	6,300 6.62		4,700 8.47		3,450		2,600 12.43		2,000		1,630 16.87			1,380		21
	88	m Kg		8,150	6,150		4,600		3,250		2,415		1,865		1,500			1,235		1,
		m	4.88	0,130	6.85		8.82		3,230		2,413		1,000		1,300			1,200		1,
	28	Kg	9,200		6,650		5,050	1												
	00	m	4.98		6.93		8.9		10.75	1										
HLRM	3S	Kg	8,600		6,100		4,750		3,900											
50	48	m		5.13		7.08		9.05	10.9		12.8	-								
		Kg		8,400		5,900		4,500	3,550		2,850			-						
	5S	m		5.16		7.11		9.08	10.94		12.96		14.75 2,300	-						
		Kg m	4.69	8,200	6.59	5,800	8.45	4,400	3,450		2,700		2,300	1						
	28	Kg	15,800		11,500		9,000	1												
		m	4.77		6.67		8.67		10.67	1										
	3S	Kg	15,000		10,800		8,300		6,300											
	48	m	4.82		6.72		8.72		10.72		12.72									
HLRM		Kg	14,500		10,400		7,900		5,900		4,650									
65	58	m	4.92		6.82		8.82		10.82		12.82		14.82	-						
		Kg	14,000	5.02	10,100 6.92		7,700 8.92		5,650 10.92		4,450 12.92		3,700 14.92		16.92	-				
	68	m Kg		13,500	9,600		7,300		5,450		4,300		3,500		3,000	1				
		m		5.46	0,000	7.76	7,000		10.16		12.56		14.96		0,000	17.36		19.76		
	6SL	Kg		12,000		8,300			6,000		4,300		3,300			2,700		2,300		
	28	m	4.51		6.01	7.76													7	
	23	Kg	15,500		12,000	9,200														
	35	m	4.55		6.05	7.91		9.81	_											
		Kg	15,000 4.65		11,500	8,800	0	6,400 9.9		110	-									
	48	m Kg	14,500		6.14 11,000		8,400	6,200		11.9 4,900	-									
HLRM-I		m	4.75		6.26		8.1	0,200	10	4,500	12		14	1						
65	5S	Kg	14,000		10,500		8,000		6,000		4,600		3,750	1						
	60	m	4.87		6.37		8.21		10.12		12.12		14.12		16.27]				
	6S	Kg	13,300		10,100		7,700		5,600		4,300		3,500		2,900					
	7S	m	4.97		6.48		8.32		10.23		12.23		14.23		16.37		18.64			
	-	Kg	13,000	F 40	9,800		7,500		5,500		4,200		3,400		2,750		2,350		20.04	-
	88	m Ka		5.13 12,000	9,200		7,000		10.33 5,000		12.32 3,800		14.33 3,000		16.48 2,500		18,75 2.200		20,64 1.900	-
		Kg m	4.73	12,000	6.63		8.63		10.63		3,000		3,000		2,300		2.200		1.500	4
	3S	Kg	17,500		12,600		9,500		7,200	1										
	40	m	4.8		6.7		8.7		10.7		12.7	1								
	45	Kg	17,000		12,100		9,100		6,800		5,400]						
HLRM	5S	m	4.91		6.81		8.81		10.81		12.81		14.81							
90		Kg	16,800		12,000		8,700		6,400		5,100		4,200		45 -	1				
	6S	m K-	4.99		6.89		8.89		10.89		12.89		14.89		16.89	-				
		Kg m	16,000	5.19	11,400	7.29	8,500	9.49	6,350	11.69	5,000	13.69	4,200	15.69	3,600	17.69	-			
	6SL	Kg		13,700		9,500		7,200		5,700		4,800		4,000		3,500	1			
		m	4.4	,, 50	6.15	7.80		9.49		2,7 50		.,555		.,000		,	1			
	3S	Kg	25,400		18,400	14,600		12,000												
	49	m	4.45 m		6.20	7.85		9.59		11.40										
35 45 55	43	Kg	24,300		18,000	14,200		11,500		9,700			-							
	58	m	4.54		6.29	7.94		9.68		11.49		13.46	-							
	_	Kg	23,500		17,400	13,500		10,800		9,000		8,000		45.00	-					
	6S	m Ka	4.62 23,000		6.37 17,000	8.02 13,200		9.76		11.57 8,600		13.55 7,600		15.62 6,400	-					
1LRM-I 150		Kg m	4.72		6.47	8.12		9.86		11.67		13.65		15.72		17.79	1			
	7S	Kg	22,200		16,700	12,800		10,200		8,200		7,200		6,000		5,400	+			
	-	m	4.82		6.57	8.22		9.96		11.77		13.75		15.82		17.89		19.59	1	
-	88					12,500		9,900		8,000		6,900		5,700		5,100		4,600	1	
	03	Kg	21,600		16,400	12,500		0,000		0,000		0,000		3,700		0,.00		7,000		
	98	M M Kg	21,600 4.92 21,000		6.67	8.32 12,300		10.06		11.87 7,800		13.85		15.92 5,500		17.99 4,900		19.69		2

HLRM CRANES: Foldable knuckle telescopic cranes

with slewing bearing system







Leadership in foldable telescopic cranes

Heila, with its HLRM series, is the market leader in foldable knuckle boom cranes. We design, develop and deliver our HLRM cranes as standard cranes or completely custom made. The entire range from small to large cranes is available and can be delivered quickly.

The HLRM crane is the perfect solution when high capacity is required at a short outreach and when deck space is limited. We develop solutions for customers in areas ranging from the fishing industry to the offshore sector and other areas of the maritime sector.

Heila was the first company to supply a 340 tm knuckle boom telescopic crane. It was also the first to supply a HLRM 460 tm dredging crane and the first to supply a HLRM 580 tm crane. The natural next step was to break the 1000 tm barrier.

HLRM 1000-6SL

The company has supplied numerous sub-sea and active and passive heave compensation installations. Our HLRM 1000-6SL, a 70-ton foldable knuckle telescopic crane, will dramatically change the heavy-duty crane market. Even though it is equipped with a telescopic arm that can extend to a maximum radius of 30 metres, the crane only requires a limited

The HLRM 1000 features:

- Outreach up to 30 metres
- · Lifting capacity up to 70 tons
- · Compact crane in storage position
- · Suitable for sub-sea application
- · Originally designed for a marine
- environment

Foldable knuckle telescopic cranes

with slewing bearing rotation system

HORIZONTAL LOAD HLRM CRANES

Crane	nr of		Length	of boom ((m) and c	rane liftii	ng capac	ity (kg)		HEILA	Cranes	STANE	ARD P	roducts	Table		Revis	ion 1 –	1 June	2018		
model	exter sions		5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m	21m	22m	23m	24m
	28	m		6.2		8.2		10.2														
		Kg m		12,300 6.33		9,200		7,400 10.33		12.33	-											
HLRM	35	Kg		12,000		9,000		7,200		5,900												
80	3SL	m			7.75			10.2		12.65			15.04									
	JJL	Kg			8,900			6,500		5,100			4,200	1								
	48	m Kg		6.5 11,500		8.5 8,900		10.5 7,000		12.5 5,500		14.5 4,500	-									
		m	6.01	11,500		8.02		10.03		12.04		4,300	1									
	35	Kg	20,100			15,000		11,600		9,000	-											
	48	m		6.22		8.23		10.24		12.25		14.25										
HLRM 120		Kg		19,200	7.50	14,400		11,000		8,500		7,000	45.40									
120	3SL	m Kg			7.53 14,200			10.08		12.64 7,300			15.19 5,600	-								
	L	m			7.71			10.26		12.82			15.36		18.02	1						
	4SL	Kg			14,500			10,100		7,070			5,400		4,300							
	35	m	5.67		7.78		9.95			12.12												
		Kg	22,500 5.79		16,500 7.95		12,500	10.12		10,000		14	-									
	4S	m Kg	21,800		16,000			12,200		9,400		8,100	-									
	FC	m	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	6.17		8.24		10.31		12.35		14.5		16.7								
	5S	Kg		19,950		14,700		11,500		9,500		8,000		6,700								
	6S	m		6.28		8.35		10.42		12.48		14.6		16.82			19.03					
HLRM 140		Kg m		19,700	7.51	14,450		11,350 10.06		9,350		7,800	15.16	6,550			5,650	1				
	3SL	Kg			17,000			12,500		9,000			7,000	1								
	4SL	m			7.69			10.24		12.79			15.34			18.03						
		Kg			16,800			11,900		8,500			6,550			5,300						
	4SLK	m			7.64 14,600			10.19		12.75 8,150			15.3 6,200			18 5,100						
		Kg m			14,000			10,430		0,130	13.5		0,200		17	3,100		20.5				24
	24-4SL	Kg						8,700			5,600				4,000			3,000				2,400
	25	m	5.59		7.59		9.49															
		Kg	24,000 5.58		17,900 7.64		14,500 9.72		11.78	-												
	35	m Kg	28,000		21,000		16,700		13,800	-												
	40	m	5.77		7.83		9.9		11.97		14	1										
HLRM	48	Kg	27,400		20,400		16,000		13,400		11,000											
170	3SL	m			7.88		9.94			12.01		14.07										
		Kg m			18,600	8.03	14,600	10.09		12,100 12.16		9,800		15.93	-							
	4SL	Kg				18,200		14,300		11,800		9,400		8,000								
	4SLK	m			7.65			10.2		12.75			15.3			18						
	TOLK	Kg			17,000			12,500	1	9,100			7,000			5,600	-					
	2SL	m Kg			7.5 23,500		9.67 18,200		11.84	-												
		m			7.58		9.75		11.92		14.09	1										
	3SL	Kg			22,500		17,400		14,000		11,000	1										
HLRM 200	4SL	m			7.76		9.92			12.09		14.26		16.31	_							
200	-	Kg m			22,000	8.46	17,000	10.81		13,500	13.16	10,700	15.51	9,000		18	-					
	18-4SL	Kg				20,000		15,100			12,300		10,300			8,200						
	20-4SL	m					9.74			12.29		14.85			17.41			20				
		Kg			7.00		16,700			13,000		10,500			8,100			6,600	-			
	2SL	m Kg			7.63 25,300		9.8			11.97 16,200												
		m			7.7		9.87			12.05		14.22	1									
	3SL	Kg			24,500		19,000			15,500		13,000										
	3SLK	m			7.23		9.49		11.76			14.03										
HLRM 230		Kg			26,500		20,000	10.00	16,200	12.22		12,500		16.5	-							
230	4SL	m Kg			7.89 24,400			10.06		12.23 15,400		14.4		10,300	+							
	4011/	m			7.45		9.71		11.98			14.25		16.45								
	4SLK	Kg			25,000		19,000		15,300			11,900		9,800								
	15-3SL	m			7.98			10.31		12.66			15	-								
		Kg			23,500 7.2		0.45	18,000	110	14,600			12,300	-								
	28	m Kg			7.2 32,000		9.45		11.9													
	25-	m			7.2		9.45		11.9													
	DRG	Kg			30,000		21,500		16,000													
HLRM	38	m			7.55		9.8			12.25		14.7	-									
240		Kg m			30,000 7.89		22,000	10.14		15,500 12.59		12,000	15.04		17.49	-						
	48	m Kg			27,000			20,000		14,000			10,700		8,700	1						
	2SL	m					9.03		11.93				15.03			1						
		Kg					24,000		17,500				13,000		1		I .	I .	1	I	I .	1

Crane	nr of		Length	of boon	n (m) an	d crane	lifting o	capacity	(kg)		HEILA	Cranes	STAN	DARD	Produc	ts Tab	е	ı	Revisio	n 1 – 1	1 June	une 2018				
nodel	exten sions		8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m	21m	22m	23m	24m	25m	26m	27m	28m	29		
	001	m		9.08			12.08			15.08																
	281	Kg		30,500			22,200			16,000	1															
ILRM	001	m		9.48			12.48			15.48			18.48	1												
280	3SL	Kg		28,000			20,500			14,400			11,000	1												
	401	m		9.88			12.88			15.88			18.88		20.88	1										
	4SL	Kg		25,500			18,500			13,200			10,000		8,200	1								İ		
	-00	m	8.69			11.25			14.09							1										
	28	Kg	37,000			27,100			20,500	1																
		m	8.7			11.25			14.1	1																
	2-DRG	Kg	32,850			24,000			18,000	1																
		m		9.07		11.63			14.47			17.31														
ILRM	3S	Kg		35,000		26,000			18,500			14,400	1													
340		m		9.45			12		14.85			17.69			20.53	1										
	48	Kg		32,500			24,300		16,800			12,900			10,500											
		m		9.13			12.03			15.03						1										
	2SLK	Kg		35,000			26,000			20,000	1															
35		m		9.57			12.47			15.47			18.47	1												
	3SLK	Kg		32,500			24,000			18,000			13,900	1												
		m			10.62		, , , , ,	13.67		16.72			.,	1												
	28	Kg			39,700			29,800		24,000	1															
HLRM		m			,	11.03		20,000	14.08	1,000		17.13			20.18	1										
460	3S	Kg				36,500			27,000			21,300			16,700	1										
		m				11.44			14.49			17.54			20.59			23.64								
	48	Kg				33,500			24,500			19,000			14,400			11,700								
		m			10.58			13.63	,,,,,,		16.68	-,						-	1							
	4SL	Kg			46,500			35,300			28,000	1														
		m			10.98			,	14.03		,	17.08			20.13											
HLRM	4SLK	Kg			43,500				32,000			25,700			21,200	1										
580		m			,	11.38			14.43			17.48			20.53			23.58	1							
	15-3SL	Kg				39,700			29,500			23,000			18,700			15,700	1							
		m				11.78			14.83			17.88			20.93			23.98				27.03	1			
	4SLK	Kg				35,200			26,200			20,500			16,200			13,700				11,700	1			
		m				-,	12.03		14.63			17.23			-,5			-,: -0					1			
	28	Kg					68,000		54,500			45,500	1													
2S 3S HLRM 1000 4S		m					12.51		,,,,,,,	15.11		17.71		20.31	1											
	3S	Kg					62,500			49,500		41,500		35,500	1											
		m					12.96			15.56		1,000	18.16			21.76		23.46	1							
	48	Kg					57,000			44,500			37,500			31,500		26,500	1							
		m					57,000	13.44		.4,000	16.04		18.64			21.24		23.94			26.64					
	58	Kg						52,500			41,500		34,000			28,500		23,100			19,800	+				
		m						13.98			16.58		3-,000	19.18		21.78		20,100	24.48		. 0,000	27.18		29		
	6S	-						46,300			35,800			28,500		23,800			20,000			16,100		14		
		Kg						46,300			35,800			28,000		23,800			20,000			16,100		1		



Sea state O or harbour conditions

Horizontal loads, lifting by hook in harbour conditions For the minimum outreach, please check the technical data sheet

Features:

- Originally designed for a marine environment
- Especially suitable for high loads
- Continuous slewing
- High degree of customisation







Options and Accessories

Optional features for Heila cranes

DESIGN FEATURES

CERTIFICATION & CLASSIFICATION

Heila Crane S.p.A marine cranes comply with EN 13001 / DIN 15018 and, if required, the principal international standards for shipboard and offshore applications including EN13582-1 and API-2C. All cranes can be certified in accordance with the rules of international classification societies including:

- · American Bureau of Shipping (ABS)
- Bureau Veritas (BV)
- China Classification Society (CCS)
- Det Norske Veritas Germanischer Lloyd (DNV-GL)
- Lloyd's Register of Shipping (LRS)
- Registro Italiano Navale (RINA)
- Norwegian Maritime Authority (NMA)
- Russian Maritime Register of Shipping (RMRS)
- Others on special request
 We use 3D CAD systems, verified ANSYS software and FEA techniques (Finite
 Element Analysis) to check and assure the

AUTOMATIC AND MANUAL OVERLOAD PROTECTION SYSTEM (AOPS/MOPS)

structural integrity of our equipment.

The AOPS system features safety equipment that automatically safeguards and protects the crane against overload and 'overturning-moment' when operating by allowing the hook to be pulled away from the crane in a controlled manner so avoiding significant damage. When the MOPS system is activated, if there is the risk of overload, the crane operator is warned to manually operate the winch release. AOPS/MOPS is mandatory for certified offshore cranes that perform ship-to-ship or ship-to-platform lifting operations. Heila offers a turnkey system.

LOW TEMPERATURE AND ARCTIC SOLUTIONS

An extensive range of options and accessories are available to operate in low temperature conditions. Special steel for use in low temperatures and specific technical solutions for winterisation assure the safe operation of the cranes in the most severe low temperatures and Arctic environmental conditions.

ATEX / NEC505 HAZARDOUS AREA EXECUTION

Heila offers solutions for use of its cranes in hazardous areas (explosion proof execution) including Zone O, I and II and temperature class T3 or T4. All such cranes are supplied with a dedicated EX-ATEX Declaration of Conformity. Upon request, Heila can supply equipment for other zones and classes.

LIFTING DEVICES AND LOAD CONTROL

HOISTING WINCHES

Heila provides a wide range of winches. From a single line pulling capacity of 500 kG up to more than 50 metric tons, multiple speeds, multiple drum rope capacities and in accordance with customer requirements. They are equipped with an electric/hydraulic load limiting device that controls the pulling force on the rope and that will not allow the maximum safe working load of the crane to be exceeded. All Heila winches are fitted with non-rotating galvanised and greased steel cables to ensure the best performance in all working conditions.



PERSONNEL LIFTING COMPLIANT WITH EN 123852-1 OR API-2C

Heila offers its customers a complete range of solutions for personnel lifting that comply with EN 13582-1 or API-2C. Heila can equip its cranes with 'dedicated winches' for personnel lifting or 'dual use winches' that can be used for both cargo handling and personnel lifting up to 8 metric tons

CONSTANT TENSION (CT) WINCHES

A Heila constant tension winch system combines a special winch, a customised electronic control system and a dedicated PLC. Constant tension winches are used for difficult lifting operations in marine environments. The system creates a constant line-pull between the load and the winch. Prior to starting the operation the line-pull is set. It is measured by a load sensor and monitored by the PLC central control system. If the actual value differs from the pre-set value, the winch will pay in or pay out wire rope to maintain the pre-set value. Constant tension winch systems are suitable for pre-tensioning the

wire rope used in buoy-laying operations, but also when positioning and connecting floating pipelines during dredging projects. Moreover, they are perfect for raising and lowering tender boats or deck equipment from a vessel into sea.

ACTIVE HEAVE COMPENSATION (AHC)

Current offshore and subsea projects require advanced technology to position loads on the seabed for subsea installations or to position them in the air, for instance when servicing wind turbines. An AHC system on the crane compensates for the vessel's motion. Heila supplies tailor-made AHC systems on winches that rely on the input of motion sensors. Responding to the signal from these sensors, the winch pays in or pays out wire rope to keep the load at a constant elevation. An AHC system on a winch responds rapidly and, when combined with active hydraulic accumulators, reduces power consumption significantly.

Options and Accessories

INTEGRATED PULLEY HEAD AND/OR PULLEY BLOCK

When a winch is used rather than a fixed hook, different solutions are required to lift the loads. Heila offers the optimal solution to its customers by integrating either a pulley head or top sheave into the last boom extension. To be able to work with both a winch and a fixed hook, Heila provides a pulley block that can be connected, when required, to the last boom extension hook connection point. As an additional option, Heila can install single line pull or multiple line pull solutions according to the customer's needs.

MISCELLANEOUS OPTIONS

- Standing platform
- Local control operator panel
- Remote control
- Operator cabin

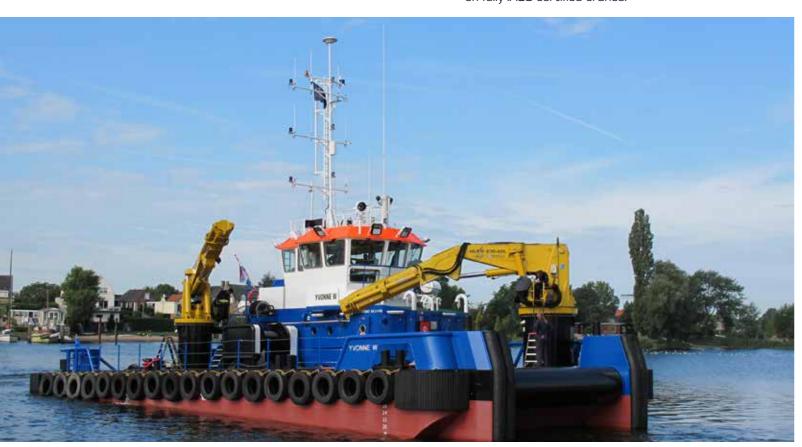
SAFETY AND OPERATION

SEA STATE SELECTOR

Heila marine cranes can optionally be designed to operate in different sea states. To be able to select the type of operation for the different states, a crane is fitted with a sea state selector switch on its control panel (either at a fixed location or as wireless control unit). The sea state selector switch allows the crane to be operated safely and precisely in difficult marine conditions.

ACOUSTIC AND VISUAL ALARMS

Acoustic and visual alarms can be installed on cranes to allow the crane to be operated reliably and safely. A green / yellow / red light is installed on the crane column. This shows, respectively, the 90% / 100% / 110% SWL load being experienced by the crane. In addition to the visual alarm, an acoustic alarm can be installed. Acoustic and visual alarms are mandatory for use on fully IACS certified cranes.



LOAD AND RADIUS INDICATORS

Depending on the type of application and/or in agreement with the customer, Heila can provide specific load and radius indicators that can be displayed on one or more portable remote units or on video screens installed in operator control stations and/or in operator cabins. We can also provide the crane with a visual indication of the loads and 3D controls.

LED FLOODLIGHT

LED floodlights can be fitted to the tip of the crane's boom to illuminate the working area around the crane. Heila offers swivelling or fixed solutions with different power outputs ranging from 100 to 1000 equivalent Watt (W).

LOAD SENSING (LS) SYSTEM

In situations where a more complex hydraulic circuit is used, Heila can fit a main hydraulic control valve block that can be used with load sensing (LS) pumps. This solution increases the efficiency of the hydraulic circuit and reduces both the power loss of the system and the heating of the oil. For the best solution, this feature must be discussed with the customer.

CENTRALISED GREASING SYSTEM

Heila marine cranes have greasing points on all pins and pivot points to keep them operating efficiently and to prevent excessive wear. A 'Manual Central Greasing System' can be installed as an optional feature on all Heila cranes to simplify maintenance and extend the crane's life. On request, an 'Automatic Central Greasing System' can be installed to programmably and automatically grease the crane without any risk or human intervention.

SURFACE TREATMENT AND ANTI-CORROSION SOLUTIONS

FLAME METALLISATION TREATMENT

Flame metallisation is a thermal spray coating process that is used to coat anti-corrosive metals onto surfaces, it is long lasting and highly effective. On request, Heila can thermally spray zinc and aluminium onto all of the crane's structural steel parts providing the highest grade of corrosion protection.

PAINTING AND CUSTOM CRANE COLOUR

The standard Heila paint system complies with ISO 12944-5 (C5M – marine/offshore applications); the standard colour is RAL 1005 'Honey Yellow'. However, Heila also offers alternative paint systems. These systems comply with NORSOK M-501. Special isocyanate-free paint systems and/or special customer-specific paint systems are also possible. All top coats are available in specific customer-specified RAL colours..

HYDRAULIC CYLINDER ROD COATING HD4+ AND HD4stars

Heila has improved the corrosion resistance and wear-resistance of its hydraulic cylinder rods with two unique treatments registered under the names HD4+ and HD4stars. These innovative hi-tech solutions efficiently protect the cylinder rods from corrosion and help to protect against leaks, coating peeling and seal wear. (For more information please consult the specific "Heila Cranes Anti-Corrosion Program" brochure).

Services

Worldwide service

Cranes must be able to operate efficiently under the most diverse sea conditions.

Wherever our customers may be, we ensure that their cranes remain operational.

Heila Cranes Netherlands is responsible for Heila's field services worldwide. We provide customers with technical support, on-site repairs, installation, commissioning and the complete refurbishment of their cranes. Furthermore, critical spare parts, such as cylinders, seal kits, air brakes and electrical components for standard cranes are held in stock in the Netherlands. When you buy a new Heila crane, we are available to provide you with information about our standard spare parts packages.

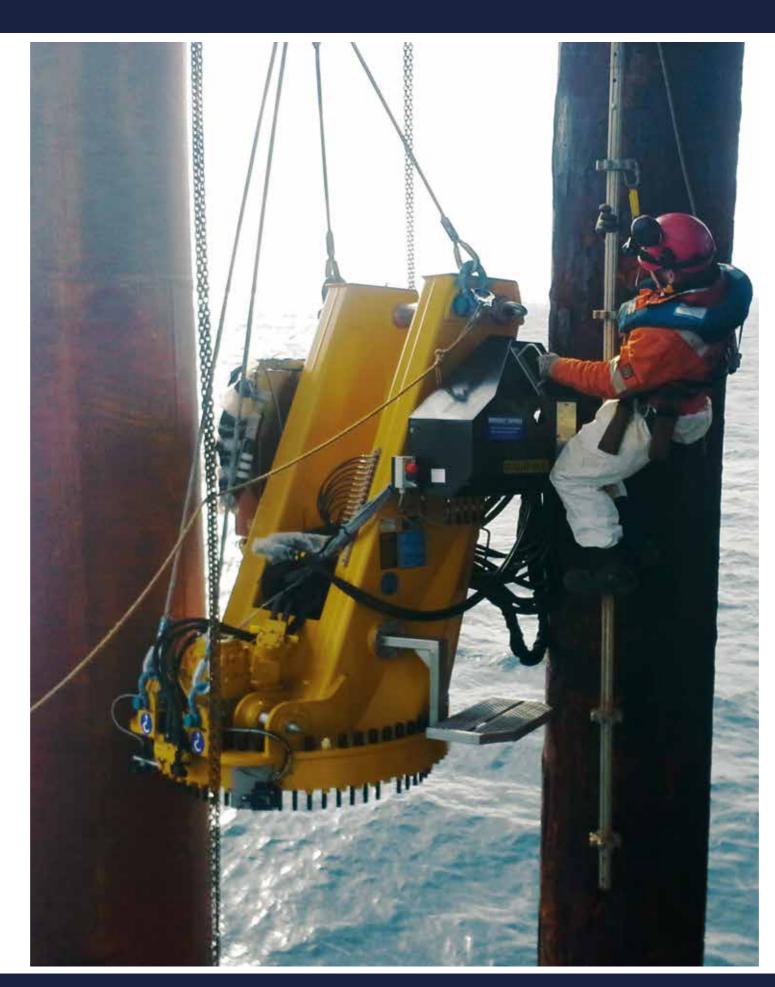
To support your business, we also have a wide range of cranes in stock, ranging in capacity from 2 tm to 280 tm.

Refurbishment

The HEILA refurbishment program offers several types of refurbishment, ranging from component repairs, and the refurbishment of slewing gearboxes, control valve blocks, cylinders and winches to full crane refurbishments.

Benefits of refurbishment:

- · Reduced downtime
- · New warranty period
- Extended product life
- New anti-corrosion treatment



Rental Crane Program

An easy and economical solution

Heila Group has developed a rental program for foldable knuckle boom cranes. You can rent a crane for the duration of your project. This could also be when your own crane is being refurbished by Heila. This means 100% availability of your vessel.

The rental cranes are built according to international standards. They are covered by an OEM warranty during the rental period. We have Heila cranes available for rent* in stock in the range of 80 tm - 230 tm. However, if there is no appropriate crane listed below, please feel free to enquire. We will search for a suitable solution.

- HLRM 80-3S
- HLRM 140-4SLK
- HLRM 170-4S
- HLRM 230-4SLK

Features:

- · Available where you want
- · Available when you want
- Continuous availability of your vessel while your crane is being refurbished

* depending on availability

Cranes applications in the Marine and Offshore Industry







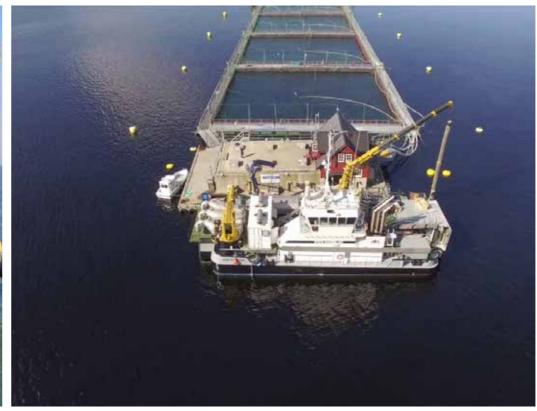




Tugs & Workboats



Fishing & Aquaculture





Yacht Support Vessels



Cranes applications in the Marine and Offshore Industry

Oceanographic Research Vessels





Offshore
Oil & Gas
and Wind







Navy & Coast Guard







Complete range of Heila cranes

The HLM and HLRM series cranes described in this catalogue are the core products of the Heila Group. However, Heila has a highly skilled team of engineers that are able to design complex, state-of-the-art cranes. These are referred to as Heila Special Projects, custom engineered, highly complex and often high-capacity cranes.

HEILA SPECIAL PROJECTS

Heila can provide numerous references for such projects, please contact our Sales Managers or contact your local Heila representative for more information.

When Heila is contracted to supply a special crane, a dedicated Project Manager is assigned to the project. The Project Manager is responsible for the detailed planning, reporting and progress monitoring. In addition to the Project Manager, a Project Engineering Team and a Lead Engineer are assigned who are responsible for the crane's engineering. A weekly Design Review Meeting is held to monitor the project's progress.

ENGINEERING CAPABILITY

Heila has significant experience in designing and building all of the cranes mentioned below. Heila also has highly specialised knowledge and experience in designing and building cranes suitable for Arctic conditions and ATEX environments, as well as specialised dredging cranes (DRG) that are able to operate at extreme heel and trim angels.

Heila has in-house the capability to build customised crane safety & control systems, and is able to develop PLC software. It is therefore able to support and maintain the crane's safety & control system throughout the crane's life.

















Stiff boom cranes -HMR-F

10 tm - > 4,500 tm

Characteristics:

- · Marine crane
- · Continuous slewing
- Crane boom not extendable
- Low maintenance
- Easy to adapt for ATEX environments

Telescopic cranes -HMR-S

3 tm - > 1,000 tm

Characteristics:

- · Marine crane
- Continuous slewing
- Crane boom is extendable, which enlarges the working

Telescopic knuckle boom cranes - HLRM

60 tm - > 1,000tm

Characteristics:

- Marine crane
- Continuous slewing
- Crane boom is both knuckled and extendable, enlarging the working area
- High manoeuvrability
- Compact storage configuration
- Possibility to use a fixed hook
- Maximum capacity at short outreach

oom Fully foldable telescopic cranes - HLM. HLRM

3 tm - 90 tm

Characteristics:

- Marine crane
- Crane boom is knuckled, foldable and extendable, which enlarges the maximum working area
- High manoeuvrability
- Compact storage configuration
- Possibility to use a fixed hook
- Maximum capacity at short outreach

Jib cranes - HR-2BJ

20 tm - > 4,500 tm

Characteristics:

- Marine crane
- Knuckle boom
- Maximum capacity at a wide range of outreaches, large working area
- Easy to adapt for ATEX environments
- Low maintenance

Customised cranes

Capacity per customer requirement

Characteristics:

- Marine crane
- Completely customised design
- Adapted to any dimensional constraints
- Adapted to any other special requirement

Lattice boom crane - HLBC

Capacity per customer requirement

Characteristics:

- Marine crane
- · Continuous slewing
- High lifting capacity to weight ratio
- Modularised for easy transport



REPRESENTATIVE





