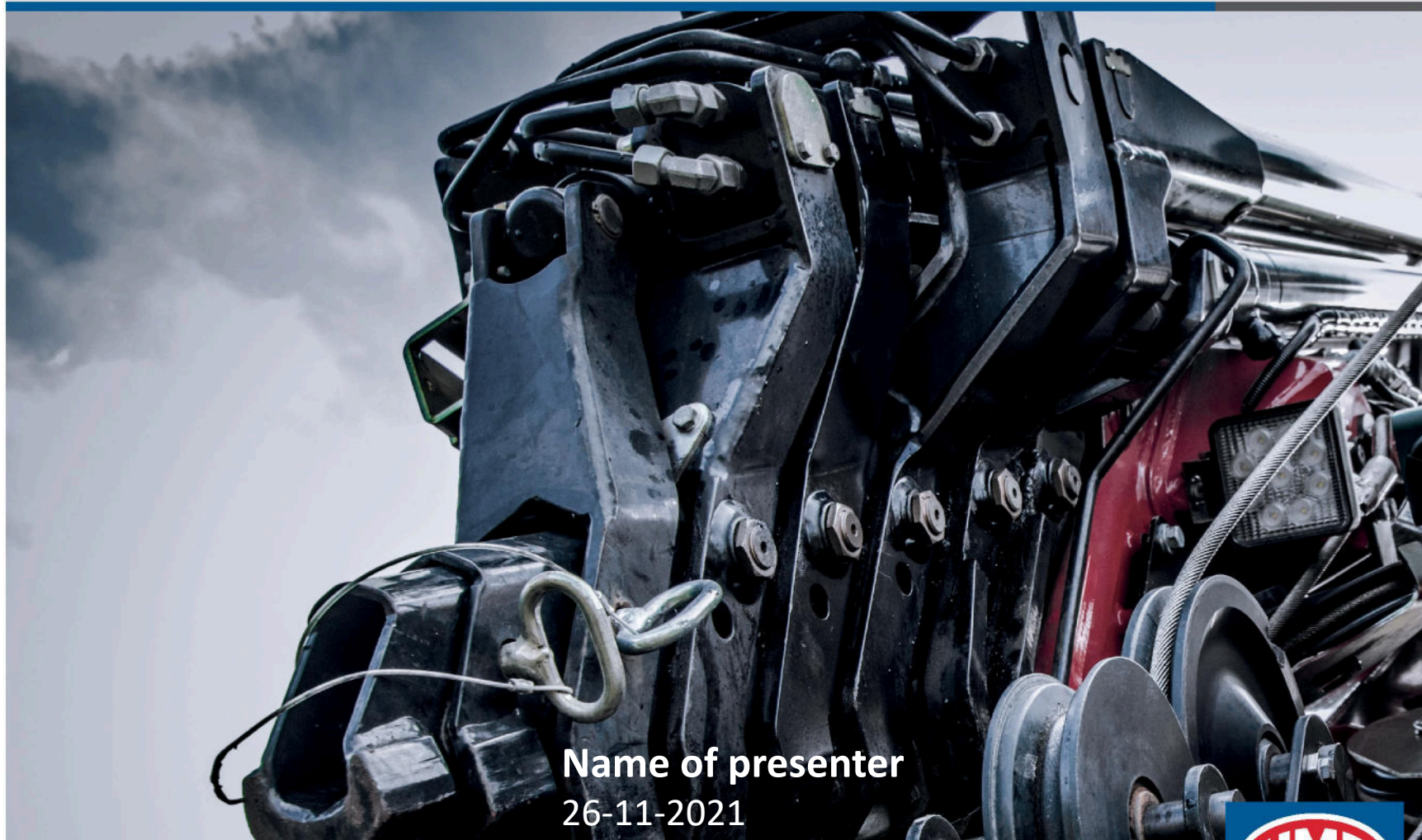


Introduction  
HMF cranes



**Name of presenter**  
26-11-2021



1. Crane Types: the different boom systems
2. Designation of cranes
3. Crane guide
4. Crane data on [hmfcranes.com](http://hmfcranes.com)
5. The crane's main components
6. Fly-jibs
7. Special cranes
8. CE-Approval of cranes
9. [hmfcranes.com](http://hmfcranes.com)
10. [hmfpartner.com](http://hmfpartner.com) - Partner portal





Knuckle boom cranes (K)



Short knuckle boom cranes (KS)



Long boom cranes (L)



Recycling cranes (S)



Telescopic cranes (T)



Z-fold grab cranes (Z)

[hmfcranes.com](http://hmfcranes.com)



## Product Features

- In its basic configuration, the K-boom system is like the human arm; in practice the crane operator gets an extended arm with a lot of power, high speed and great flexibility.
- Compact design and good lifting capacity compared to its tare weight.
- The crane can be folded or stowed on the truck body.



## Fields of Application

- A knuckle boom system is by far the most usable and common design for truck-mounted cranes.
- Up to 8 hydraulic extensions, an endless number of equipment like fly-jib, hydraulic hoist, personnel basket, manual extensions and a lot more.
- Can be used as a hook crane in the transport industry or with grab and rotator in the building business.

## Product Features

- The short knuckle boom system (KS) has a shorter jib than the standard knuckle boom system.
- High lifting height to the column.
- Up to 3 hydraulic extensions (KS3).



## Fields of Application

- Lifting of big loads close to the column.
- The crane can be stowed while extended in a platform body of 4 metres without dismounting the grab.
- Since the crane can be stowed even in a short platform body, the user does not need to stow the crane each time he drives off. It saves time and makes it the perfect tool in the building industry.





## Product Features

- A Z-boom system combines a very low height when folded with a long reach, a flat mounting surface in stowing position and even transport in this position with rotator and grab.
- Extension cylinders, hoses and pipes are shielded within the jib extension system to obtain maximum protection.
- Particularly high extension speed with a regeneration valve for high oil flow.

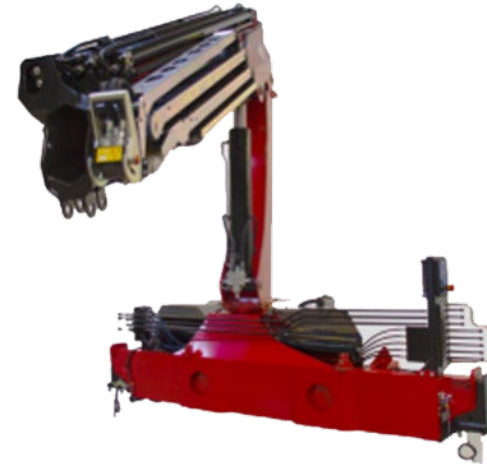


## Fields of Application

- Strong and sturdy cranes for heavy duty and continuous grab application work in the building industry.
- Thanks to the SafeFold auxiliary function the crane operator does not have to worry about sudden movements when unfolding the crane (on 2243Z).
- The cranes are equipped with high stand in order to get a good visibility of the load.

## Product Features

- Slim extension system with a reduced height: 3 extension cylinders are positioned flat on top of the extensions.
- Optimal protection: The T4 and T5 extension cylinders are placed inside the extensions.



## Fields of Application

- Specifically developed for recovery service vehicles.
- A hard-wearing loader crane suitable for hook application work with an optimized close-range lifting capacity.





## Product Features

- The crane is equipped with a longer main boom.
- The jib on an L-crane moves at the same oil flow almost 40% higher up than the jib on a K-crane.
- Equipped with a centre-mounted column, this loader cranes gives you optimum load distribution and even stability on both sides of the vehicle.
- Optimal protection: overall internal hose routing and internal cylinders in jib extension system.



## Fields of Application

- The L-crane is used in connection with long truck bodies since it is not foldable.
- The crane is perfect for the delivery of pallets of building materials.



## Product Features

- The particular boom design of the crane with its retracted jib is designed for a high lifting height close to the column.
- The installation height of the boom system is very compact.
- The Intelligent Park Assist safety system (IPA) helps the operator stowing the crane in situations where insufficient visibility or the risk of erroneous operation might cause damage to the crane or the equipment.



## Fields of Application

- The perfect crane for handling refuse containers in the recycling industry.
- Thanks to its design, the crane can easily be stowed over a compactor.
- The installation height of the boom system keeps the overall height on your entire vehicle low.



## Product Features

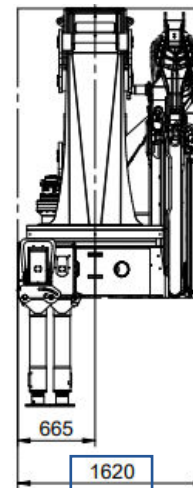
- Optimized reach and build-in length.
- These cranes offer a low cost of ownership as low tare weight and reduced dimensions provide for low fuel costings as well as maximum utilization of your truck.
- The OK-versions of 7020 and 9520 are available from OK2 to OK6.



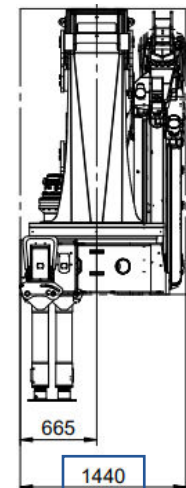
## Fields of Application

- Our 7020 and 9520 are both available with optimized boom system.
- Each extension is a little longer so that the OK2 and OK6 versions have a longer outreach.
- They can be chosen for applications where a longer reach is needed with 6 hydraulic extensions, i.e. in both the building and the transport industry.

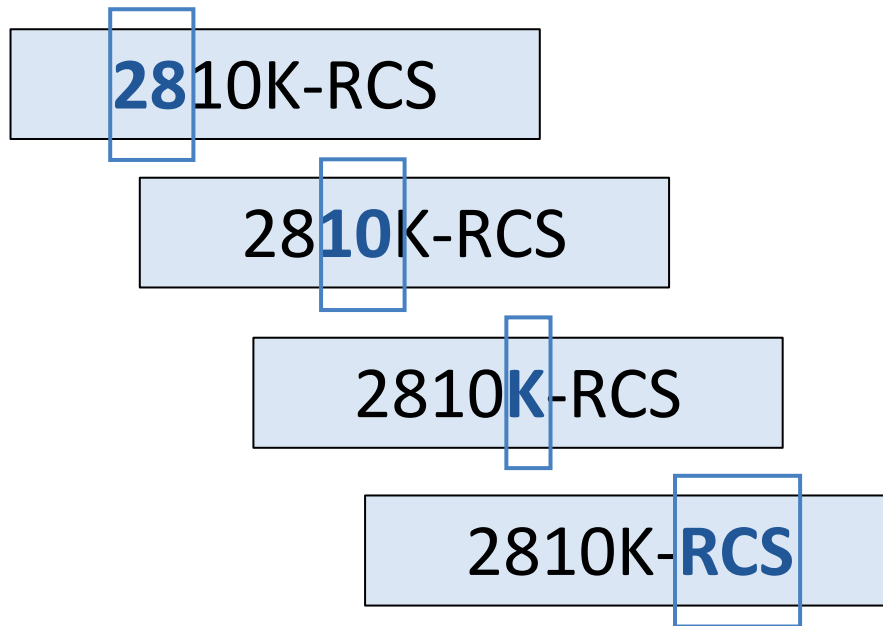
9520-K



9520-OK



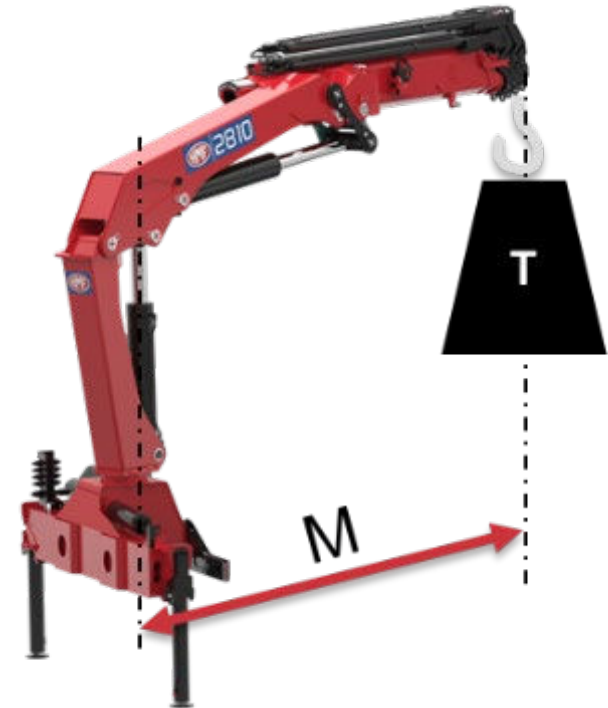
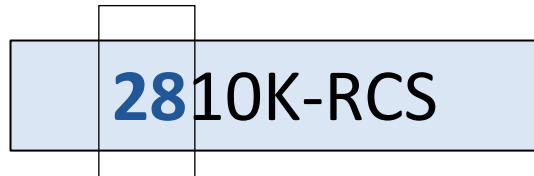
What do the different parts of the crane designation mean?



## 0 to 50 tm

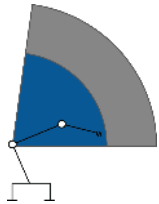
The first numbers in the crane designation (cranes from 0 to 50 tm):

- Load moment in tonne-metre (in K1 with the jib extension system retracted) rounded up to the nearest even number tm.
- The result provides the first two digits of the crane's designation.



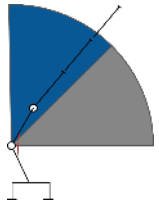
Tonne x Metre = Tonne-Metre

Abbreviated to "tm"



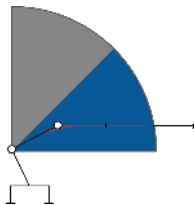
## No link arm (e.g.: 270K)

- Only for small cranes with short reach. Lifting well at short reaches and at low working height.



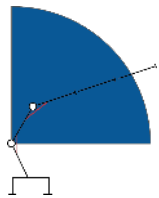
## Single power plus link arm system at the column (e.g.: 2243Z)

- Lifting extremely well in high position and at moderate reach



## Single power plus link arm system on the jib (e.g.: 2810K)

- Lifting particularly well with stretched boom system at moderate height and at long reach



## Dual power plus link arm system (e.g.: 2820K)

- Provides the best lifting capacity under all conditions
- Provides very precise and regular movements in the entire working area

2810K-RCS

--00

- Crane without link arm system.

--10 (or --30)

- Crane with single link arm system (at column or on jib).

--20 (or --00)

- Crane with dual link arm system (at column and on jib)



2810**K**-RCS

K-crane



KS-crane



T-crane



L-crane



Z-crane



S-crane



OK-crane





2810K**7**-RCS

A figure after "K" e.g. **"7"** indicates how many hydraulic extensions are contained in the jib extension system of the crane.

2810K-RCS

## MC (Manual Control)

- Manually operated crane with full speed in the entire working area

## MCS (Manual Control Superior)

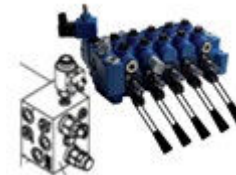
- Manually operated crane with electro-hydraulic speed adaptation system

## RC (Remote Control)

- Radio remote controlled crane with Danfoss PVG 16 control valve and electronic speed adaptation system

## RCS (Remote Control Superior)

- Radio remote controlled crane with Danfoss PVG 32 control valve, electronic speed adaptation system and acceleration control

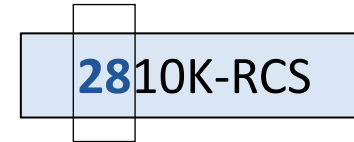




We wish to make it easier to understand our crane names:

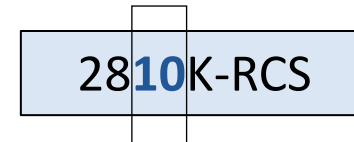
**1. Size in tm**

- a. 16, 19, 23, **28** etc.



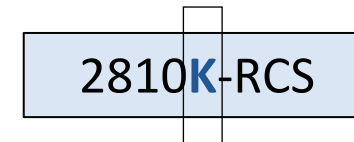
**2. According to their geometry:**

- a. 00: no link arm system
- b. **10**: 1 link arm
- c. 20: 2 link arms



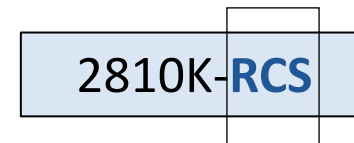
**3. According to type of boom system:**

- a. **K**, L, T etc.



**4. How they are operated:**

- a. Manually: MC and MCS
- b. By radio remote control: RC and **RCS**



*A figure after the letter describes the number of hydraulic extensions in the jib extension system of the crane, e.g. 2810K**5**-RCS*

Crane classification	RC/RCS	MC/MCS	Crane tm segment
K - Knuckle boom cranes	270K-RC	270K-MC	2-14 tm
	340K-RC	340K-MC	
	610K-RC	610K-MCS	
	710K-RCS	810K-MCS	
	810K-RC		
	910K-RCS		
	1120K-RCS		
	1130K-RCS		
	1320K-RCS		
1330K-RCS			
KS - Knuckle boom short crane	1320KS-RCS		
Z-fold cranes	1444Z-RC		
K - Knuckle boom cranes	1610K-RCS		15-31 tm
	1620K-RCS		
	1910K-RCS		
	1920K-RCS		
	2310K-RCS		
	2320K-RCS		
	2810K-RCS		
	2820K-RCS		
K-HS - Knuckle boom high stand		1800K-HS10-MC 2200K-HS10-MC	
T - Telescopic cranes	1630T-RCS	1530T-MCS	
	2130T-RCS	1910T-MC	
		2030T-MCS	
Z-fold cranes	1643Z-RC	1643Z-MC	
	2243Z-RCS	1943Z-MC	
L - Long boom cranes	1730L-RCS	2110L-MC	
	2030L-RCS		
	2530L-RCS		
S - Retracted knuckle boom	2310S-RCS		
K - Knuckle boom cranes	3220K-RCS		32-59 tm
	4020K-RCS		
	5020K-RCS		
	7020K-RCS		60-95 tm
	9520K-RCS		
OK - Optimised knuckle boom	7020OK-RCS		
	9520OK-RCS		

- An overview of HMF's crane range
- Important specifications for each model
- Lifting capacity shown for all cranes
- QR codes give quick access to our website
- Overview over the most important options
- Find it on [www.hmfcranes.com/](http://www.hmfcranes.com/)



Link to website

Model name

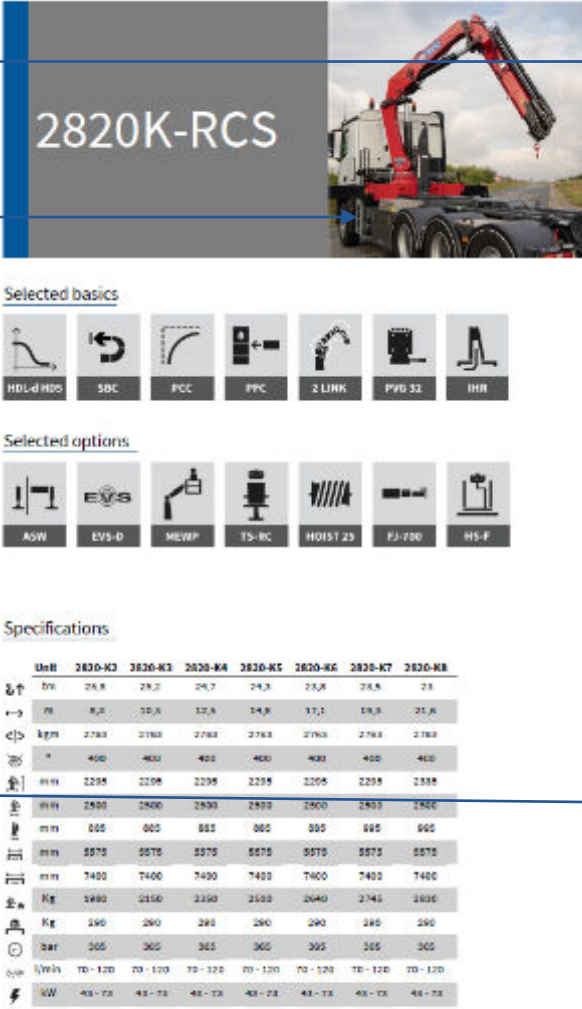
Picture of crane

Basic equipment

Selected options

Selected technical data

Lifting capacity



**2820K-RCS**

**Selected basics**

- HD-Lift®
- SBC
- PCC
- PPC
- 2 LINK
- PFD 32
- IHR

**Selected options**

- ASW
- EVS-D
- MCWP
- TS-RC
- HOIST 23
- FJ-750
- HS-F

**Specifications**

Unit	2820-K2	2820-K3	2820-K4	2820-K5	2820-K6	2820-K7	2820-K8
mm	25,8	28,2	24,7	24,3	23,8	23,8	23
m	8,2	10,3	12,3	14,8	17,1	19,3	21,6
kgm	2783	2783	2783	2783	2783	2783	2783
"	400	400	400	400	400	400	400
mm	2295	2295	2295	2295	2295	2295	2295
mm	2500	2400	2500	2500	2500	2500	2500
mm	605	605	605	605	605	605	605
mm	5575	5575	5575	5575	5575	5575	5575
mm	7400	7400	7400	7400	7400	7400	7400
kg	2480	2150	2150	2150	2040	2145	2030
kg	290	290	290	290	290	290	290
bar	305	305	305	305	305	305	305
l/min	70 - 120	70 - 120	70 - 120	70 - 120	70 - 120	70 - 120	70 - 120
kW	43 - 73	43 - 73	43 - 73	43 - 73	43 - 73	43 - 73	43 - 73

2820-K2-RCS

kg	505	4120	3130
m	4.1	5.2	6.2

2820-K3-RCS

kg	570	3940	2830	2270
m	4.4	5.3	6.2	10.2

2820-K4-RCS

kg	505	3180	2130	1730	1020	1480
m	4.5	6.4	8.8	10.8	12.4	14.1

F2700-K4

kg	2280	1280	605	600	560	350
(80%) m	4.9	6.6	8.5	10.3	12.2	14.2

2820-K5-RCS

kg	530	3650	2550	2170	1680	1430	1120
m	4.8	6.4	8.4	10.4	13.5	14.7	17.3

F2700-K3

kg	1970	1210	700	580	490	340
(80%) m	5.2	6.8	8.8	10.6	12.5	14.4

F2700-K4

kg	1800	1280	685	570	430	300
(80%) m	5.2	7	8.8	10.6	12.7	14.7

2820-K6-RCS

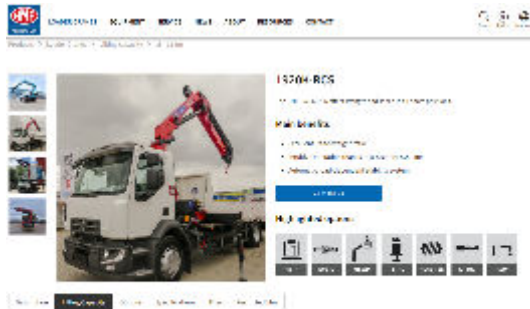
kg	5480	3480	2250	1820	1480	1380	830
m	4.6	6.5	8.5	10.5	13.6	14.8	17

2820-K7-RCS

kg	4900	3200	2400	1850	1440	1180	1000	580	520
m	4.7	6.6	8.5	10.5	13.6	14.8	17.1	19.2	21.8

2820-K8-RCS

kg	4520	3150	2270	1710	1350	1070	900	780	600	320
m	4.8	6.7	8.6	10.6	13.7	14.9	17.2	19.3	21.9	23.9



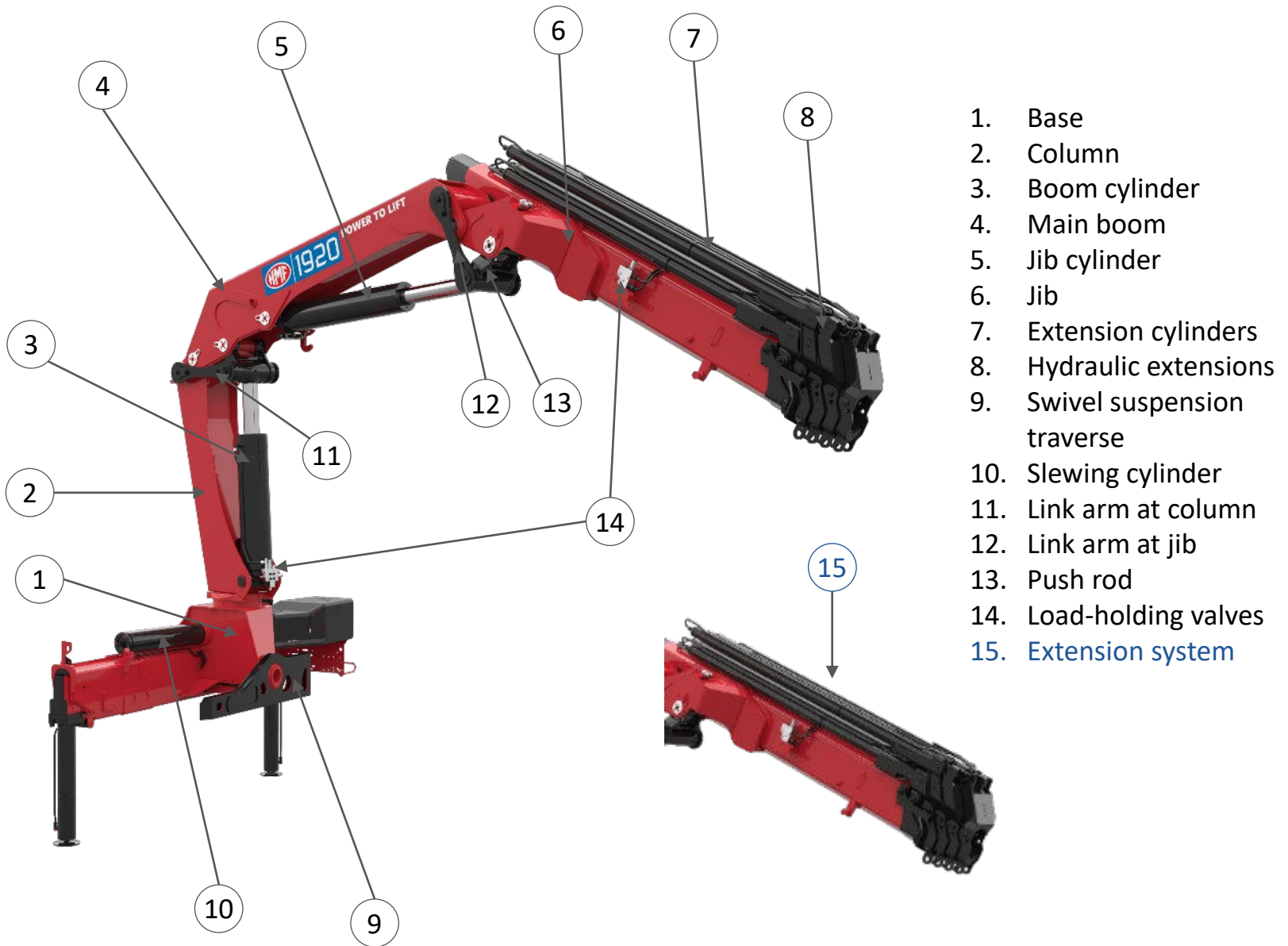
On our website you will find for each model:

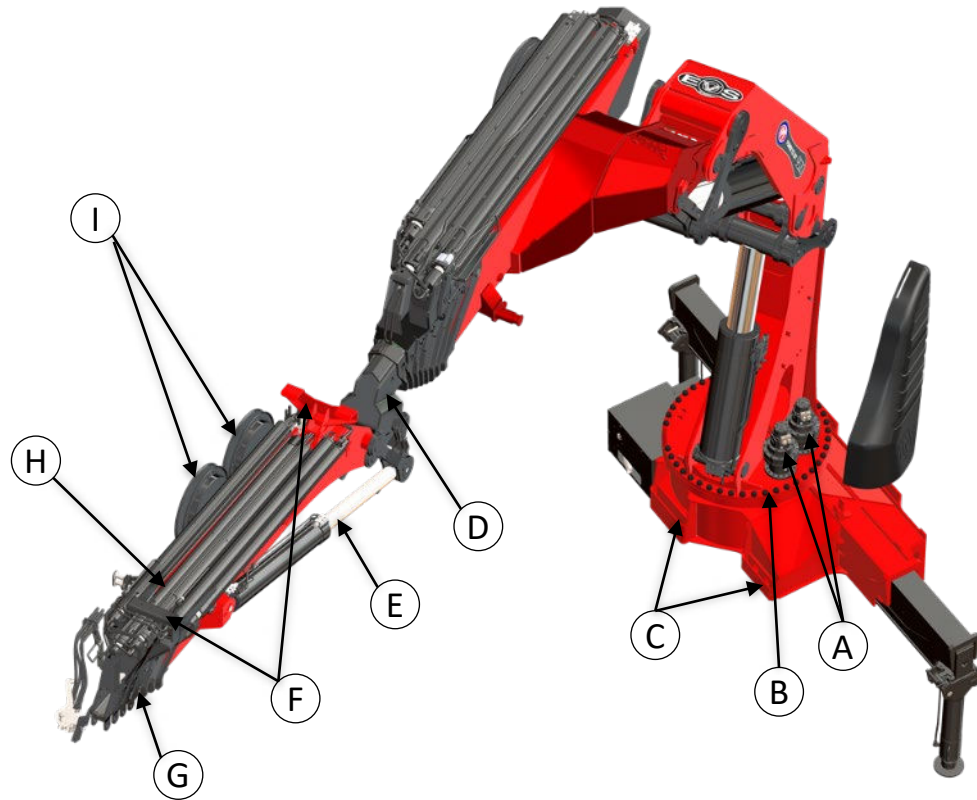
- Lifting capacity for each K-version with and without fly-Jib
- List of all available options for this crane model divided in groups
- The most important specifications like load moment, out-reach, measures, etc...

**Options**

- Control system
- Electrical system
- Hydraulic system
- Stabilizer system
- Wiring harness

Energy line	Lifting Capacity	Options	Specifications	Max	Specifications	
Max	1810 P1	1810 P2	1810 P3	1810 P4	1810 P5	1810 P6
1	13.1	17.0	21.2	25.3	29.4	33.5
2	14.2	18.1	22.3	26.4	30.5	34.6
3	15.3	19.2	23.4	27.5	31.6	35.7
4	16.4	20.3	24.5	28.6	32.7	36.8
5	17.5	21.4	25.6	29.7	33.8	37.9
6	18.6	22.5	26.7	30.8	34.9	39.0
7	19.7	23.6	27.8	31.9	36.0	40.1
8	20.8	24.7	28.9	33.0	37.1	41.2
9	21.9	25.8	30.0	34.1	38.2	42.3
10	23.0	26.9	31.1	35.2	39.3	43.4
11	24.1	28.0	32.2	36.3	40.4	44.5
12	25.2	29.1	33.3	37.4	41.5	45.6
13	26.3	30.2	34.4	38.5	42.6	46.7
14	27.4	31.3	35.5	39.6	43.7	47.8
15	28.5	32.4	36.6	40.7	44.8	48.9
16	29.6	33.5	37.7	41.8	45.9	50.0
17	30.7	34.6	38.8	42.9	47.0	51.1
18	31.8	35.7	39.9	44.0	48.1	52.2
19	32.9	36.8	41.0	45.1	49.2	53.3
20	34.0	37.9	42.1	46.2	50.3	54.4





- A. Slewing gear
- B. Turntable
- C. Fixed mounting pockets
- D. Insert for fly-jib
- E. Fly-jib, jib cylinder
- F. Stowing brackets, fly-jib
- G. Fly-jib, extension system
- H. Fly-jib, extension cylinders
- I. Fly-jib, extra valves in hose reels



- A fly-Jib is a jib extension to be mounted in the crane's extension system. It is equipped with hydraulic extensions.
- A fly-jib provides the possibility of carrying out e.g. horizontal lifting over roofs or through gates.
- Manual extensions can be fitted at the end of the extensions.
- The fly-jib can be used in connection with a hydraulic hoist.



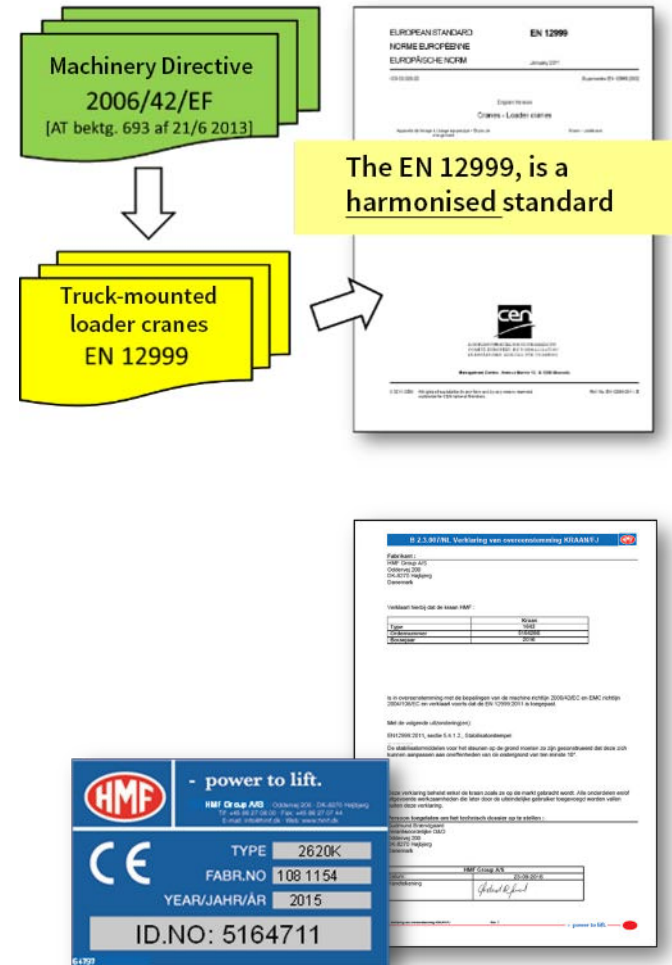
## Customised products

- Wallboard cranes, USA
- Cranes for the wind turbine industry (WTG)
- Cranes with personnel basket (Mobile Elevated Work Platforms, MEWP), according to EN280.
- Special cranes for the UK (BM1420K, 1430L-UK-RC)





- The Machinery Directive is a law in the countries of the EU and expressed in a national law in Denmark.
- The EN 12999 is a harmonised standard applicable for truck-mounted loader cranes.
  - EN 12999:2020 entered into force on 14/10-21 and is valid for all cranes with CE-marking (until 2023 the old norm is still valid in parallel to the new norm).
  - The new norm requires a higher level of safety in control circuits.
  - In practice, it means that the safety systems of the cranes are monitored by 2 sensors instead of one (it is called redundancy: that you put two measurements on the same thing you want to measure and thus achieve a higher level of safety).
- With a signed Declaration of Conformity, we document that we comply with relevant rules and regulations.
- This is how to ensure the free movement of our cranes across EU borders.

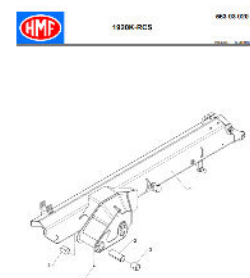


Lifting capacity diagrams, Product flyers and Feature flyers can be downloaded for each crane model under **Files** on hmfcranes.com.



Parameter	Value	Unit	Unit
Maximum height	12.1	m	m
Maximum height with jib	14.1	m	m
Maximum height with jib and counterweight	16.1	m	m
Maximum height with jib and counterweight (with jib)	18.1	m	m
Maximum height with jib and counterweight (with jib and counterweight)	20.1	m	m
Maximum height with jib and counterweight (with jib and counterweight and jib)	22.1	m	m
Maximum height with jib and counterweight (with jib and counterweight and jib and counterweight)	24.1	m	m
Maximum height with jib and counterweight (with jib and counterweight and jib and counterweight and jib and counterweight)	26.1	m	m
Maximum height with jib and counterweight (with jib and counterweight and jib and counterweight and jib and counterweight and jib and counterweight)	28.1	m	m
Maximum height with jib and counterweight (with jib and counterweight and jib and counterweight and jib and counterweight and jib and counterweight and jib and counterweight)	30.1	m	m

- Beskrivelse
  - Løftekapacitet
  - Optioner
  - Specifikationer
  - Files
  - Beskyttede filer
- Instruction Manual Crane
  - Instruktionsbog HCL
  - InstructionManualScanrecoG2
  - Teknisk information
  - Mounting Instructions Block
  - Mounting Instructions Knee
  - Mounting Instructions Plate
  - Sikkerhedsmanual
  - Reserveudskatskatalog
  - Reserveudskatskatalog FJ 1
  - Service information
  - Installation Manual Crane
  - QRG Scanreco G2 Joystiks
  - QRG Scanreco G2
  - 3D CAD Crane
  - 3D CAD Knee
  - 3D CAD Block
  - 3D CAD Plate
  - 2D CAD Crane



After login, you have access to restricted files related to the crane: instruction manuals, technical information, mounting instructions, spare parts catalogues and a lot more.







**POWER TO LIFT**