



Powerful Synergies



# COPMA<sup>®</sup>

450

TOP RANGE  
MODEL

# COPMA 450

Performance & Power

**450 HAS COMPACT DIMENSIONS  
AND OPTIMIZED WEIGHTS WITH A  
CUSTOMIZED DESIGN FOR MORE  
POWER AND RELIABILITY AT  
EVERY OPERATOR NEED.**

- **TOP RANGE - HEAVY RANGE model, load category - 45 Ton/Mt**
- **High tensile strength steel**
- **Efficient safety system**
- **Reliability, speed and precision**
- **Extra long working life cycle**
- **Easier maintenance operations**





Cranes  
& Equipment  
Corp.

Cranes  
& Equipment  
Corp.  
Sales • Service  
Parts  
800-682-1000 www.craneequip.com



# THE MOST POWERFUL CRANE FOR THE TOUGHEST MARKETS

CRANE  
& EQUIPM  
PEORIA, I  
1-800-682-10



# COPMA 450

More Safety & Security

**DESIGNED WITH THE HIGHEST  
HYDRAULIC SYSTEMS AND THE  
TOUGHEST STRUCTURAL STEEL  
TO PERFORM THE MAXIMUM  
LIFTING CAPACITY.**

- **Superior Hydraulic Technology**
- **Dynamic Electronic Controls**
- **High Degree of User Friendliness**
- **Efficiency and Reliability thanks to superior structural features**
- **More Efficiency with advanced electronic controls**





**DESIGNED  
FOR FLEXIBLE  
SERVICES**

# COPMA 450

## Technical Features

**CUTTING EDGE FEATURES FOR  
MAXIMUM LIFTING POWER,  
STABILITY AND OPERATIONAL  
SAFETY IN EVERY WORKING  
CONDITION.**

### Standard features

- easy use



- control



- structure



### optional features

- control



- easy use

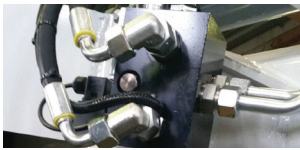


\*CEversion



**HSE**  
easy use  
**High Speed Extension**

Hydraulic system for reducing load losses and bottlenecks for the correct output sequence of the extensions by increasing the speed of 30%-60% thanks to the regenerative valve. Greater continuous performance thanks to lower fluid temperature.



**RRC**  
3.0  
control  
**Radio Remote Control 3.0**



**TAD**  
control  
**Transport Alert Device**

Sensors on the basement guarantee the correct closing of the beams and a column switch sensor indicates if the crane is in a folded position, no more than 4 Mt in height. The operator is warned with light and sound signals in the truck cabin.



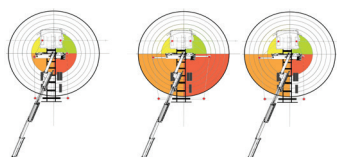
**CMS**  
3.0  
control  
**Crane Monitoring System 3.0**

Crane monitoring system with safety and overload control as well as lifting speed (HPVE) for small-medium range cranes, combined with TES4. This device controls 4 working areas in medium cranes and 8 working areas in big cranes: each area can be set according to the truck stability.



**CMS**  
2.0  
control  
**Crane Monitoring System 2.0**

Crane monitoring system with safety and overload control as well as lifting speed (HPVE/H) for small-medium range cranes, combined with TES1, TES2. This device controls 4 working areas in medium cranes and 8 working areas in big cranes: each area can be set according to the truck stability.



**ERD**  
easy use  
**Electronic Radio Display**

A display on the remote control allows the operator to maintain the total control of all the crane functions in real time by managing the work mode, the stability control, and oversee any maintenance and diagnostic messages.



**HLS**  
2.0  
easy use  
**Hydraulic Lifting Stabilizers 2.0**

The stabilizer cylinder is lifted thanks to an auxiliary jack, allowing the vertical movement inside a bush or a rotation around a pin. This easy use system saves time and allows an efficient stabilizer set up.



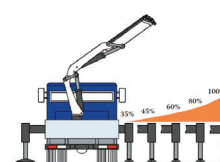
**NCS**  
control  
**Negative Control System**

Slope sensors mounted on the articulated booms of the crane, combined with the electronic control, control the maximum vertical angle of the arms and the JIB preventing incorrect or dangerous movements by the operator.



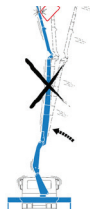
**TES**  
4.0  
control  
**Truck Electronic Stability 4.0**

Active stability control for performance optimization according to the type of stabilization (continuous control of stabilizing beam opening positions) to guarantee maximum safety in all working conditions. Mandatory in the CE market, it helps a better vehicle-crane configuration.



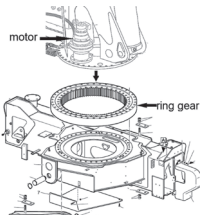
**NCS**  
control  
**Negative Control System**

Slope sensors mounted on the articulated booms of the crane, combined with the electronic control, manage the maximum vertical angle of the arms and the JIB preventing incorrect or dangerous movements by the operator.



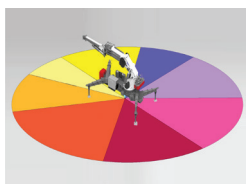
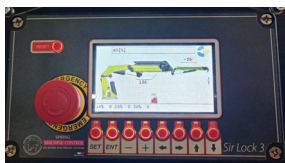
**RES 1.0**  
structure  
**Endless Rotation System 1.0**

A rotating bearing and one gearbox system, the electric wires are linked between base-column with a swivel electrical-hydraulic joint. Allows operator to gain maximum power also at the slowest operational speed and having the highest precision.



**CMS 3.0**  
control  
**Crane Monitoring System 3.0**

Crane stability control system TES2-TES3, with safety and overload controls medium high-range crane and HPVE lifting speed management. Active control on 4-8 working areas according to the model and vehicle stability requirements.



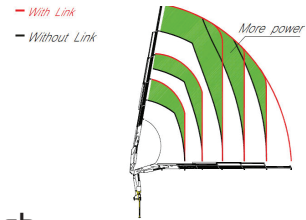
**CRC 4.0**  
control  
**COPMA® Remote Connectivity 4.0**

COPMA® Remote Connectivity 4.0 to the crane. Two-way communication by GPRS for real-time diagnosis and remote real-time parameter setting and/or adjustment.



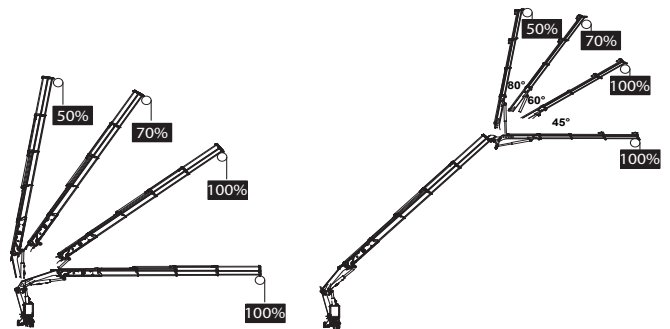
**CCLS**  
structure  
**Constant Control Link**

The cranes equipped with connecting rods on the articulations, with a constant lifting moment over the entire working arc, allow to 100% optimize the crane's capacity in positions close to the maximum vertical.



**WLC**  
control  
**Winch Linear Control**

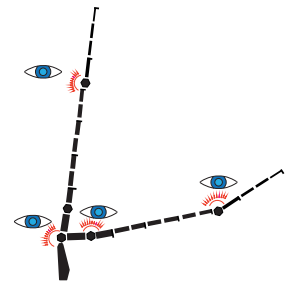
The winch linear electronic control allows pulling the rope according to the working angle of the crane and the JIB. It optimizes the load control and makes every movement easier and safer.



**ELS**  
control  
**ELECTRONIC LIMIT SWITCH**

Electronic limit switch on articulation rams.

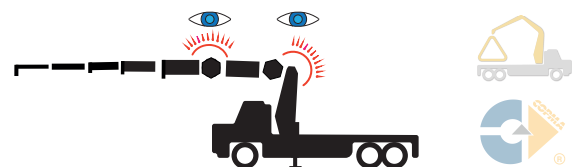
This device prevents the end run and therefore avoids the pressure peaks that stall the machine. The crane works in a smoother and safer way.



**CAD**  
easy use  
**CABIN ANTI-COLLISION DEVICE**

Cabin anti-collision device (available only if combined with ELS).

This system prevents the boom from performing any movement that might crash the truck cabin. It's a setting in the CMS 2.0/CMS 3.0 software that can be adjusted only after the crane is installed on the truck.

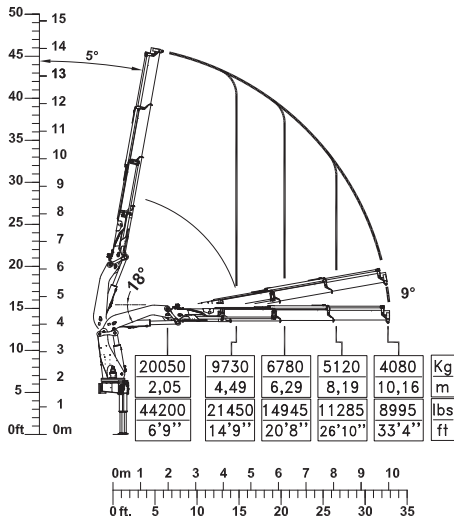




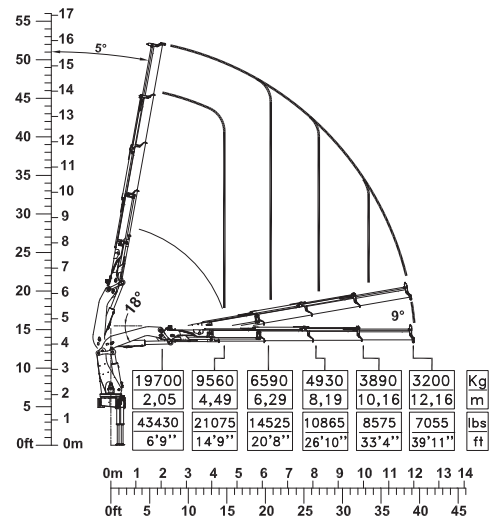
# 450 TOP RANGE

## Load Charts

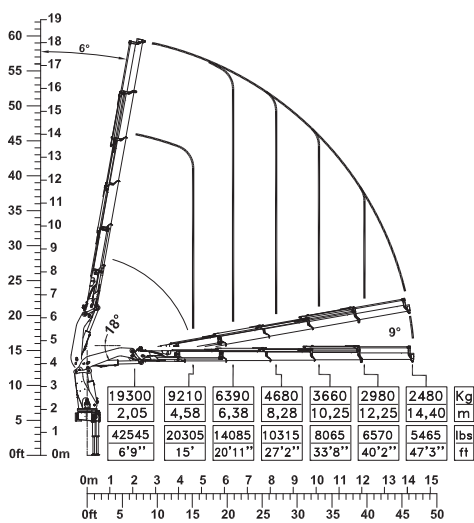
3 extensions



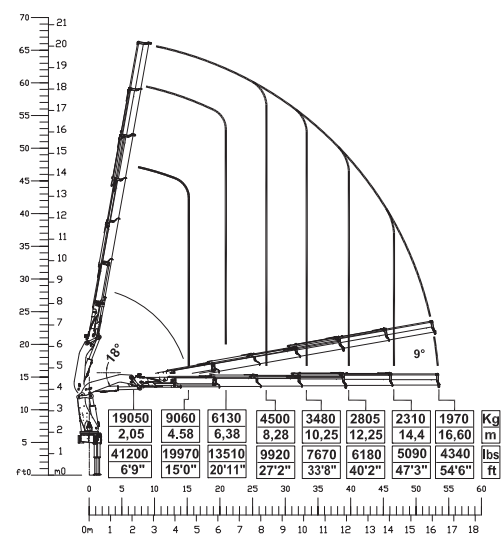
4 extensions



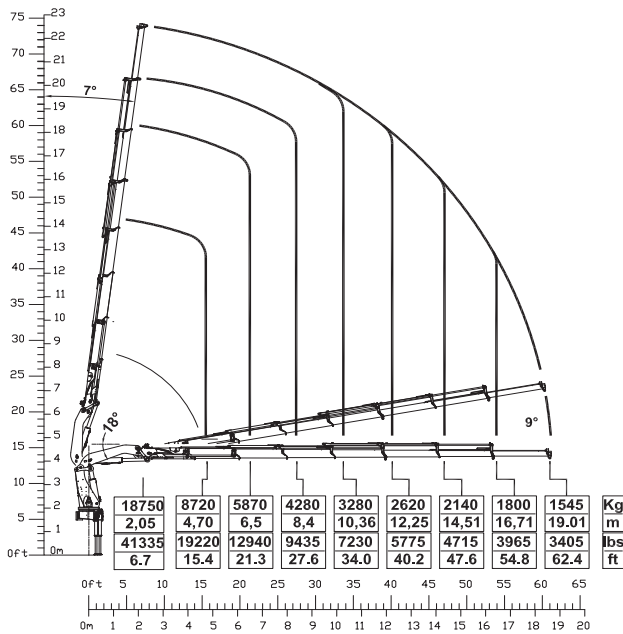
5 extensions



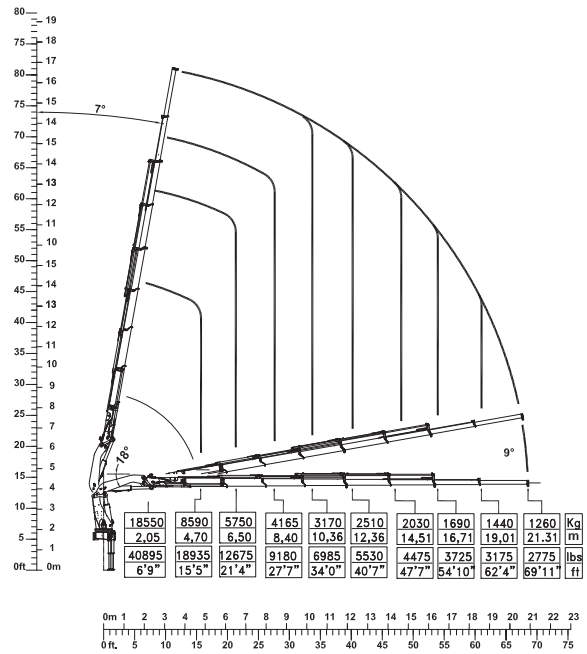
6 extensions



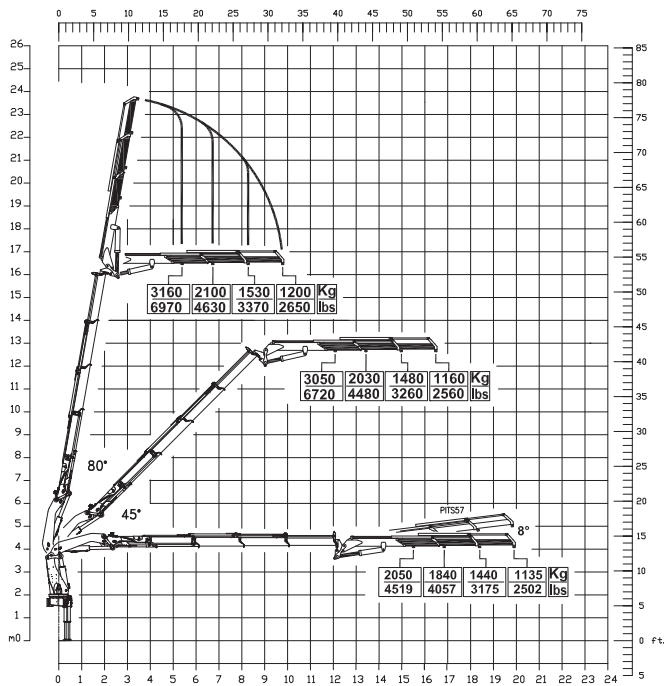
### 7 extensions



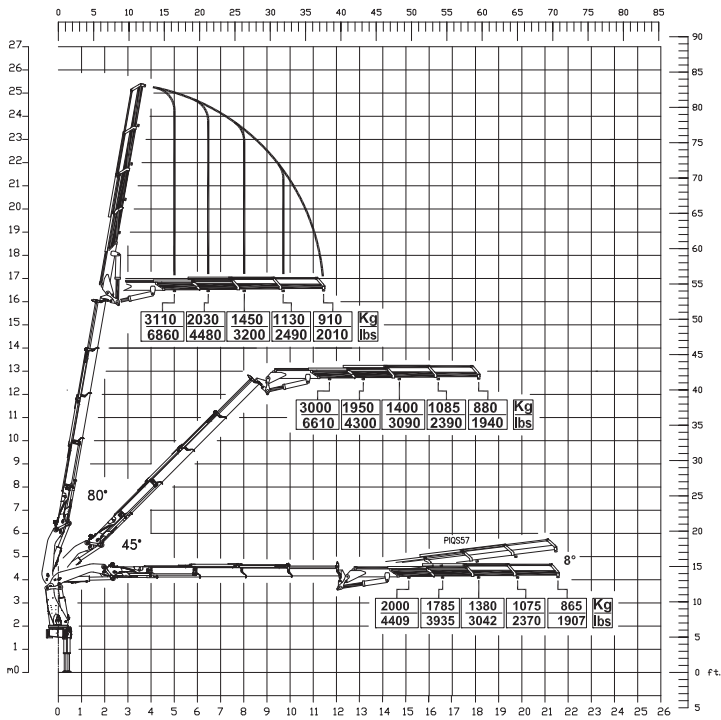
### 8 extensions



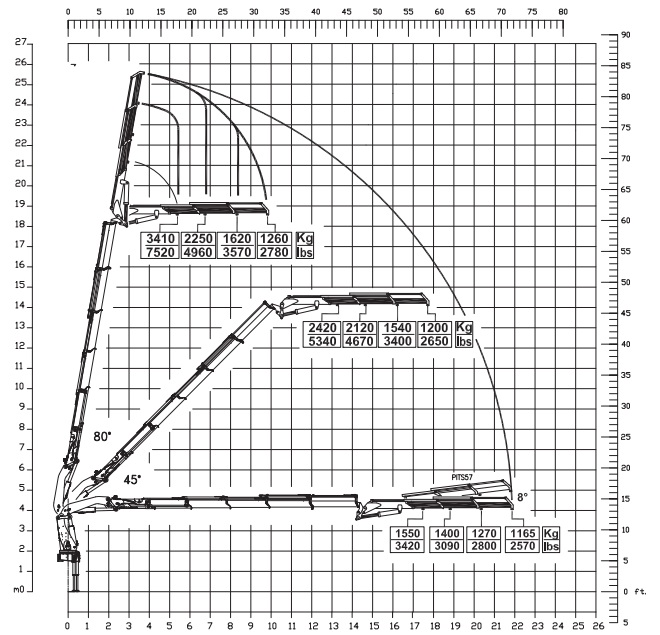
### 450.4 + J3



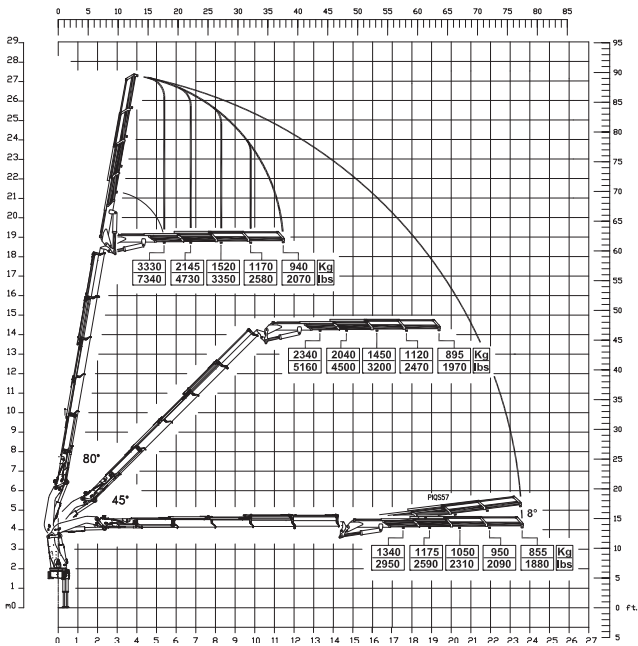
### 450.4 + J4



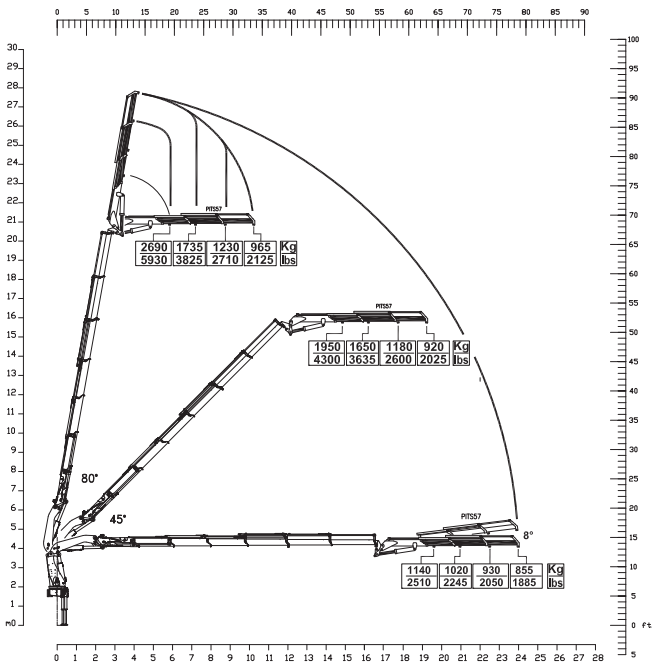
### 450.5 + J3



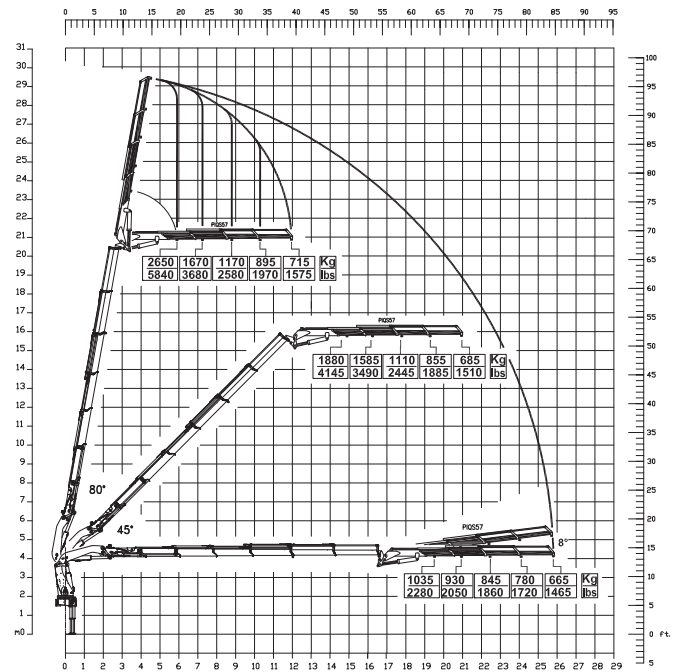
### 450.5 + J4



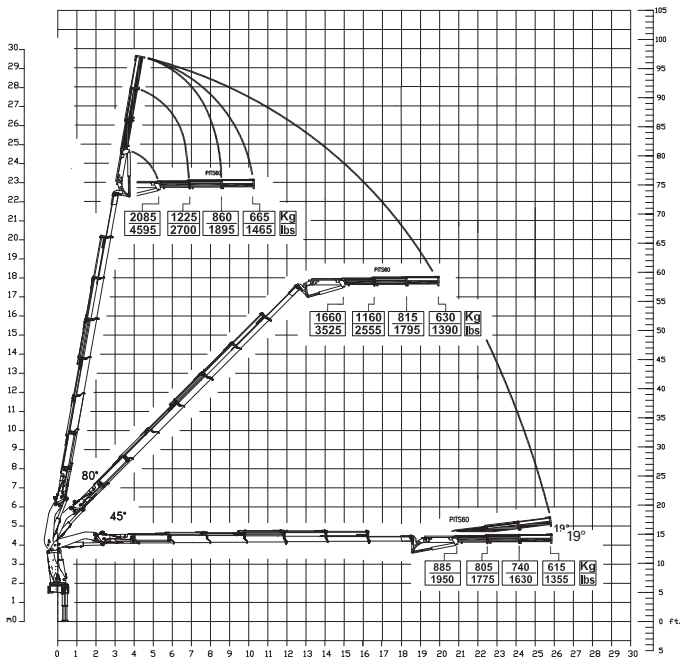
### 450.6 + J3



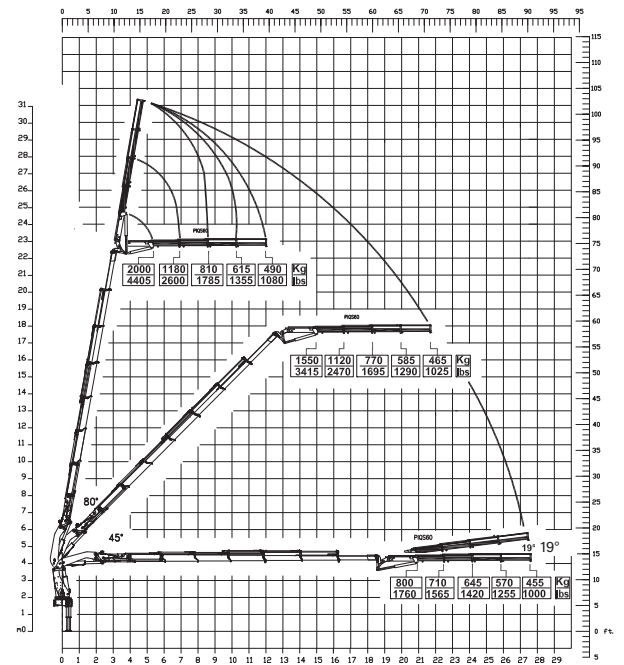
### 450.6 + J4



### 450.7 + J3



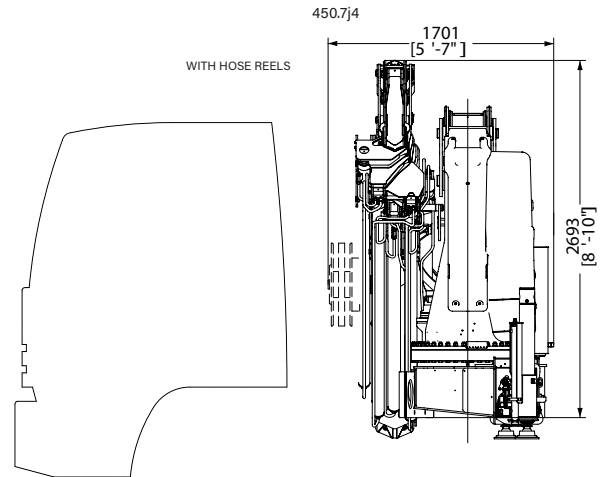
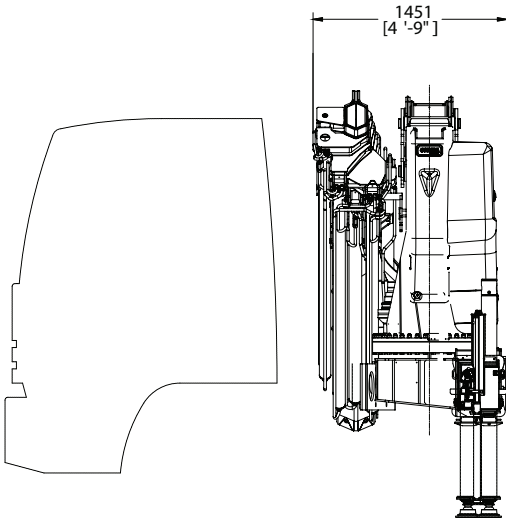
### 450.7 + J4



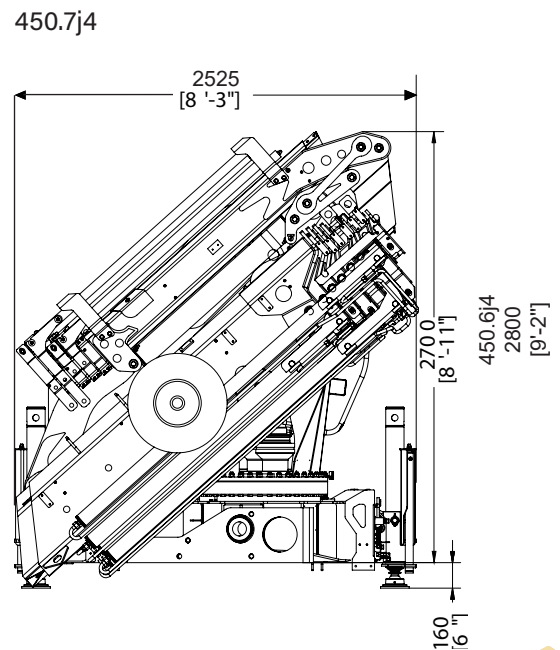
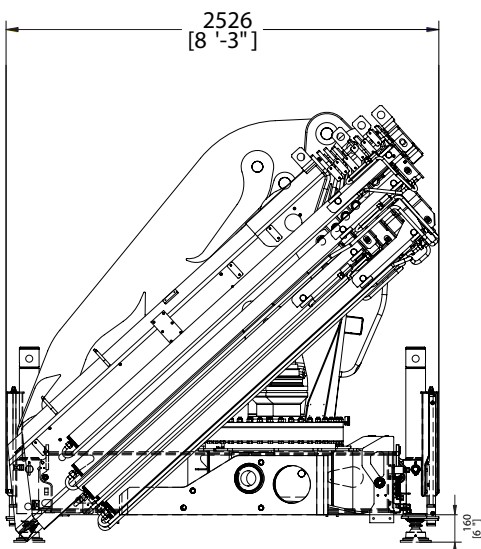
# 450 TOP RANGE

## Crane Dimensions

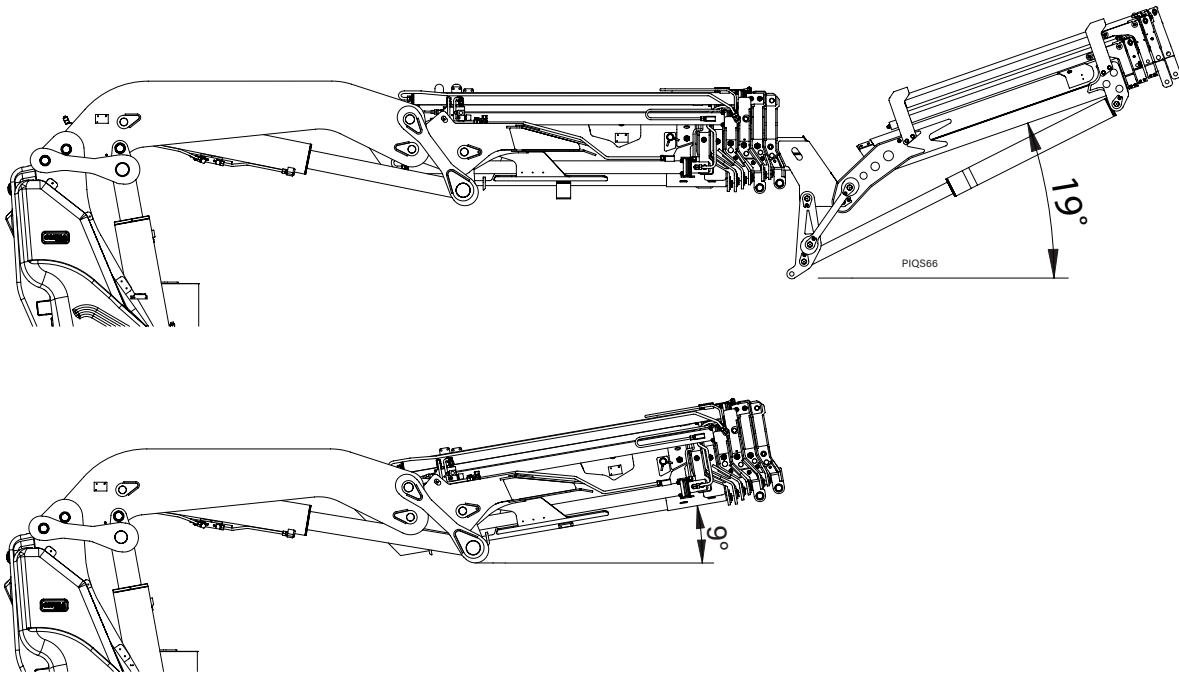
### back cabin left



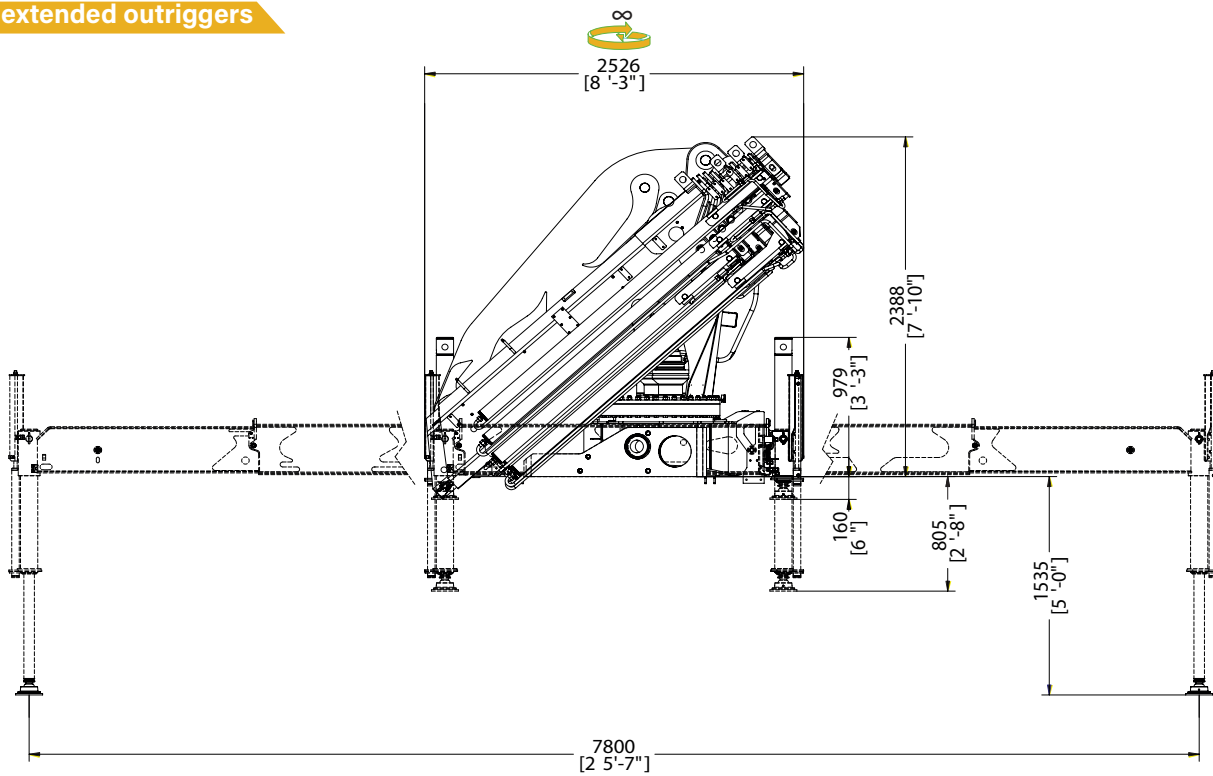
### rear truck



operational



extended outriggers











\* Note: technical features are not binding, the company reserves itself the right to any modification without notice












# 450 TOP RANGE

## Technical Data

### summarized data

									
	kN.m	bar	l/min	kg	°	mm	mm	mm	mm
450.3	428	330	70	4680	∞	2525	1329	2349	7800
450.4	421	330	70	5040	∞	2525	1329	2349	7800
450.4j3	421	330	70	5840	∞	2525	1545	2570	7800
450.4J4	421	330	70	5920	∞	2525	1545	2570	7800
450.5	413	330	70	5210	∞	2525	1345	2349	7800
450.5j3	413	330	70	6040	∞	2536	1570	2767	7800
450.5J4	413	330	70	6110	∞	2536	1570	2767	7800
450.6	407	330	70	5380	∞	2525	1422	2349	7800
450.6j3	407	330	70	6220	∞	2525	1620	2800	7800
450.6J4	407	330	70	6300	∞	2525	1620	2800	7800
450.7	402	330	70	5440	∞	2525	1451	2388	7800
450.7j3	402	330	70	6080	∞	2525	1700	2700	7800
450.7j4	402	330	70	6140	∞	2525	1700	2700	7800
450.8	396	330	70	5570	∞	2525	1451	2388	7800

									
	lbs.ft	psi	gal/min	lbs	°	ft/inc	ft/inc	ft/inc	ft/inc
450.3	315677	4785	18,49	10320	∞	8'3"	4'4"	7'8"	25'7"
450.4	310514	4785	18,49	11110	∞	8'3"	4'4"	7'8"	25'7"
450.4j3	310514	4785	18,49	12870	∞	8'3"	5'1"	7'8"	25'7"
450.4j4	310514	4785	18,49	13050	∞	8'3"	5'1"	8'5"	25'7"
450.5	304613	4785	18,49	11490	∞	8'3"	4'5"	7'8"	25'7"
450.5j3	304613	4785	18,49	13320	∞	8'3"	5'2"	9'1"	25'7"
450.5J4	304613	4785	18,49	13470	∞	8'3"	5'2"	9'1"	25'7"
450.6	300118	4785	18,49	11860	∞	8'3"	4'8"	7'8"	25'7"
450.6j3	300118	4785	18,49	13710	∞	8'3"	5'4"	9'2"	25'7"
450.6j4	300118	4785	18,49	13890	∞	8'3"	5'4"	9'2"	25'7"
450.7	296500	4785	18,49	11990	∞	8'3"	4'9"	7'10"	25'7"
450.7j3	296500	4785	18,49	13400	∞	8'3"	5'7"	8'11"	25'7"
450.7j4	296500	4785	18,49	13540	∞	8'3"	5'7"	8'11"	25'7"
450.8	292075	4785	18,49	12280	∞	8'3"	4'9"	7'10"	25'7"

### technical data

Max. lifting moment	428.7 kNm	315677 ft.lbs
Max. hydraulic outreach	21,31 m	69'11"
Slewing angle	∞	∞
Slewing torque	3600 daNm	23652 ft.lbs
Stabilizer spread	7,8 mt	25'7"
Fitting space required (min./max)	1,55 m/1,80 m	5'1"/5'11"
Width folded	2,53 m	8'3"
Max. operating pressure	320 bar	4640 psi
Recommended pump capacity	70 l/min	18,4 US gal./min
Dead weight (vers. 3)	4680 kg	10320 lbs

\* Note: technical features are not binding, the company reserves itself the right to any modification without notice



# COPMA 450



knuckle boom  
cranes



Powerful Synergies



**CPS**



**CPS  
STEEL**

## CPS GROUP S.P.A.

281 Via Emilia, Castel Bolognese (RA), 48014  
Italy

T +39 0546 653 711

[sales.cpsgroup@cps-group.com](mailto:sales.cpsgroup@cps-group.com)

[service.cpsgroup@cps-group.com](mailto:service.cpsgroup@cps-group.com)

[cps-group.com](http://cps-group.com)



COPMA MODEL 650 TOP RANGE 9-2022 all rights reserved CPS GROUP

UNICERT  
ISO 9001:2008



Technical features, design and specifications are not binding, CPS GROUP S.P.A. reserves itself the right to any modifications without prior notice.  
COPMA, PESCI, PESCI MARINE and CPS are registered trademarks of CPS GROUP S.P.A. in Italy and other countries.