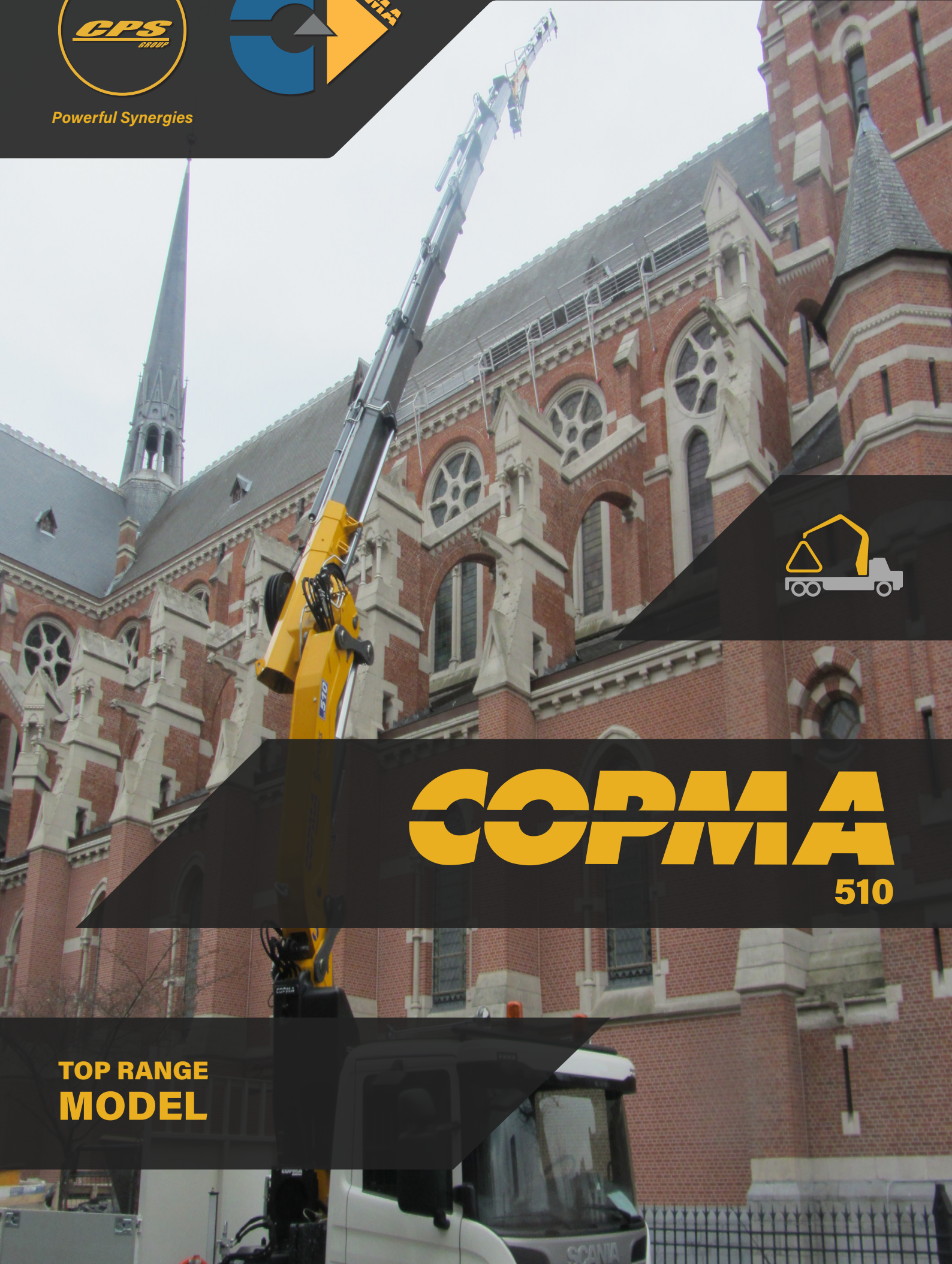




Powerful Synergies



# COPMA

510

TOP RANGE  
MODEL



# COPMA 510

Performance & Power

**510 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 - 50 Ton/Mt**
- **High tensile strength steel**
- **Efficient safety system**
- **Reliability, speed and precision**
- **Extra long working life cycle**
- **Easier maintenance operations**





**THE MOST  
POWERFUL  
CRANE FOR  
THE TOUGHEST  
MARKETS**

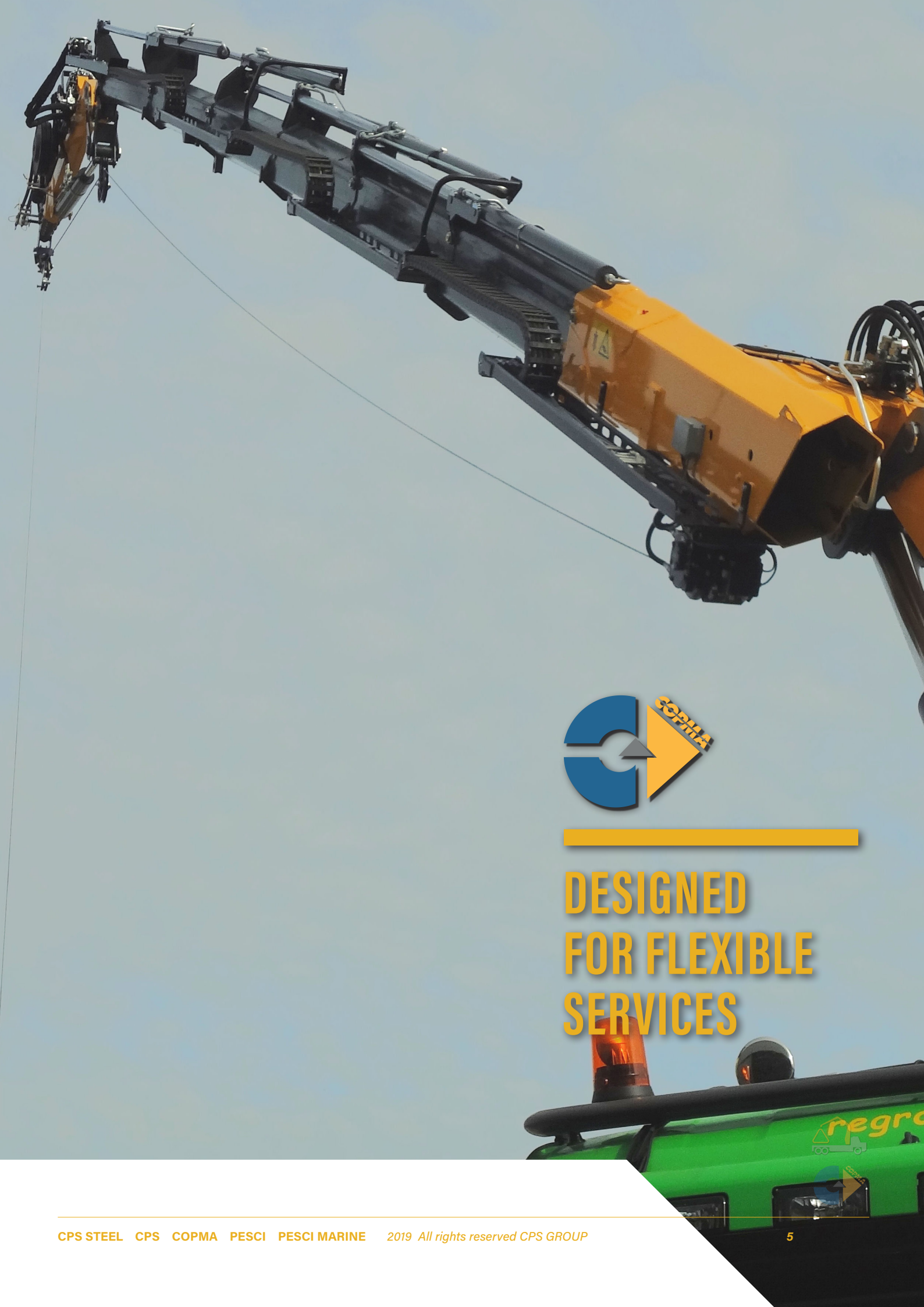
# COPMA 510

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**





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# DESIGNED FOR FLEXIBLE SERVICES

# COPMA 510

## 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



\*E.C. market specific equipment





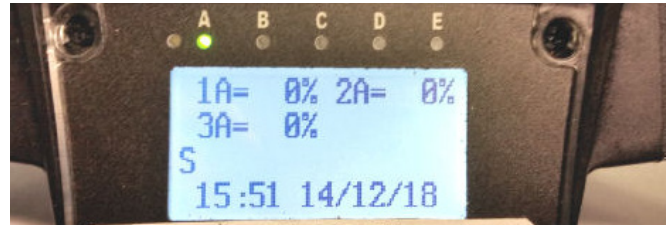
### High Speed Extension

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.



### 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.



### 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.



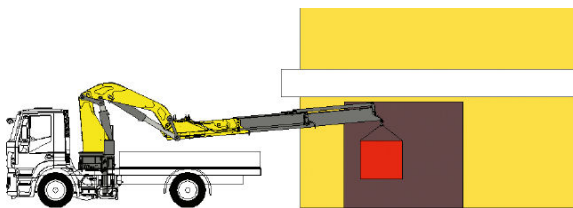
### Hydraulic Lifting Stabilizers 2.0

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.



### Negative Boom System

The linkage on the articulation of the secondary boom permits the introduction of loads within restricted spaces. It enables the recovery of the deflection of the extension boom group due to the weight and the load raised on the extensions.



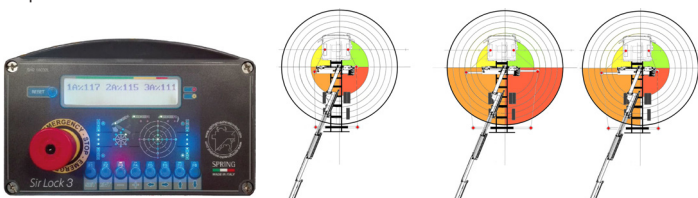
### Radio Remote Control 3.0

Radio control with directly flanged actuation electronics with proportional distribution. The remote control allows operating the crane while constantly monitoring the areas of operation.



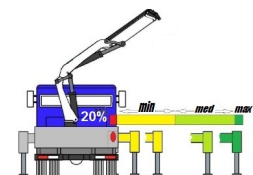
### Crane Monitoring System 2.0

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



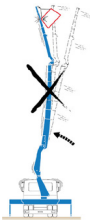
### Truck Electronic Stability 3.0

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



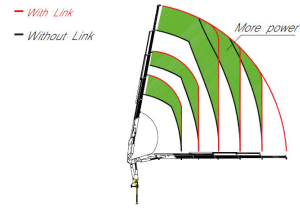
**NCS**  
control  
**Negative Control System**

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.



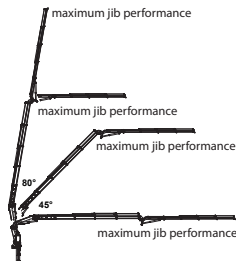
**CCLS**  
structure  
**Constant Control Link**

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.



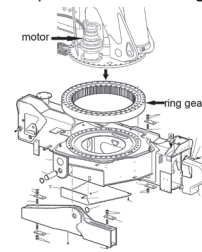
**PJM**  
control  
**Power Jib Monitoring**

The PJM system guarantees to operate with the maximum performance in every working condition thanks to a dynamic variation of the maximum pressure according to the crane arm angles.



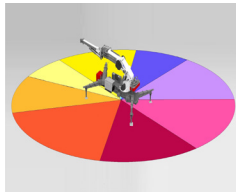
**RES 1.0**  
structure  
**Rotation Endless System 1.0**

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.



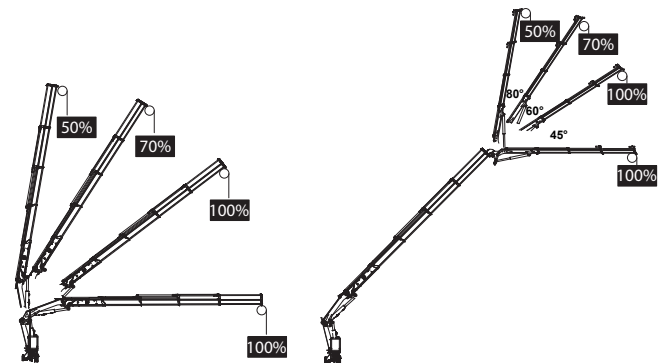
**CMS 3.0**  
control  
**Crane Monitoring System 3.0**

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.



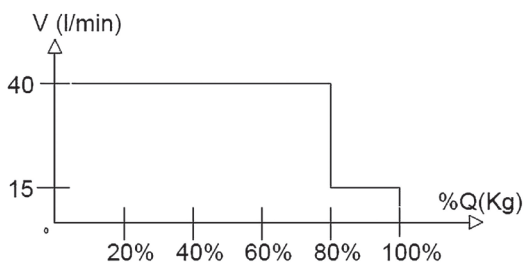
**WLC**  
control  
**Winch Linear Control**

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.



**HPV H**  
easy use  
**High Power Velocity Hydraulic**

Fully automatic hydraulic system for adjusting the crane lifting speed according to the maximum working pressure. With this system, the load capacity of the machine is optimized by reducing the dynamic structural effects.

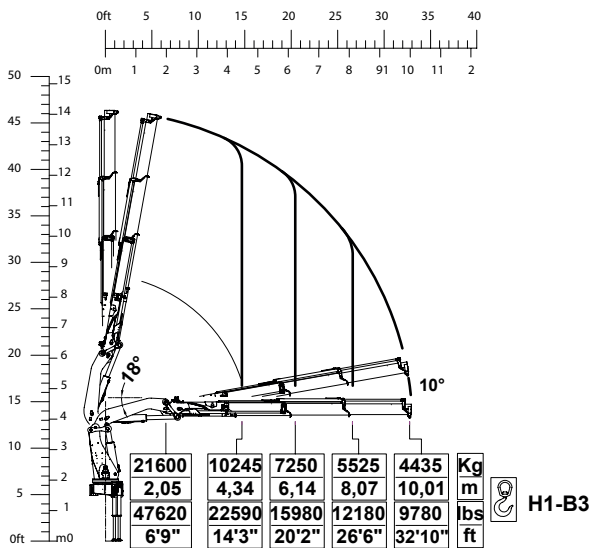




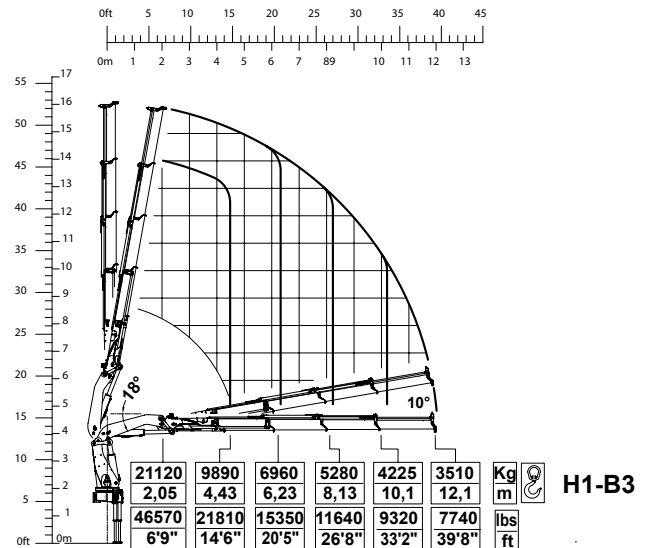
# 510 TOP RANGE

## Load Charts

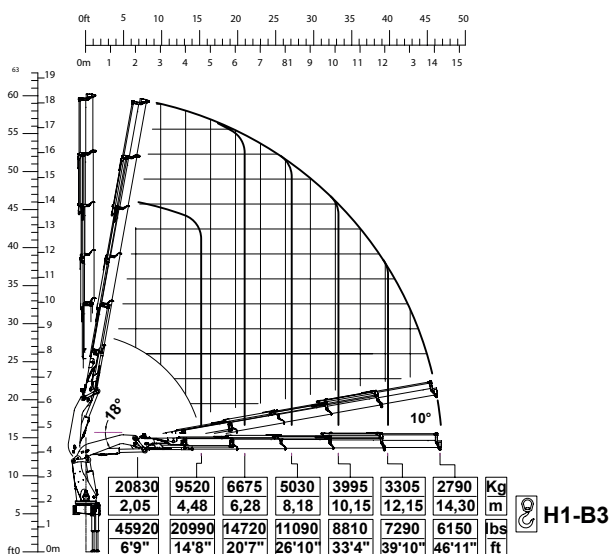
3 extensions



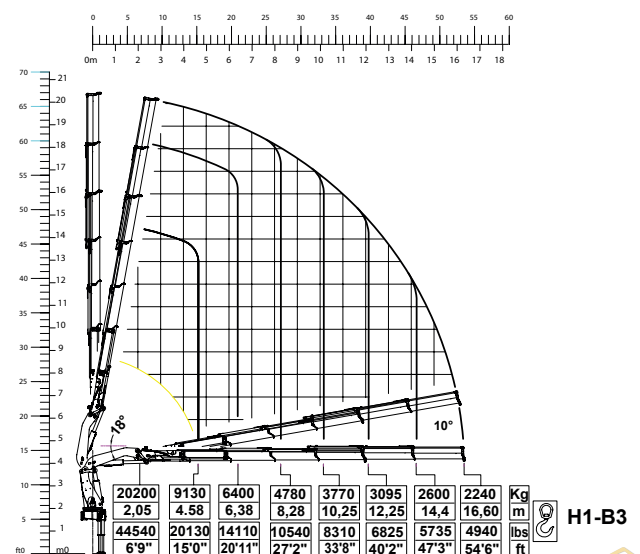
4 extensions



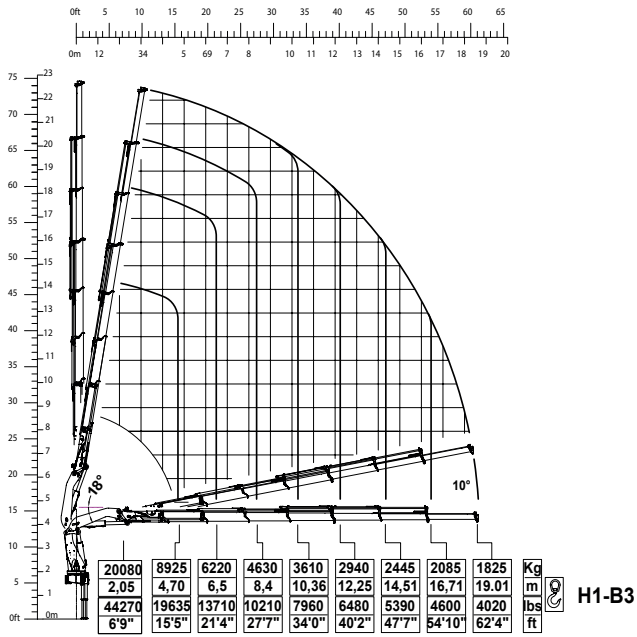
5 extensions



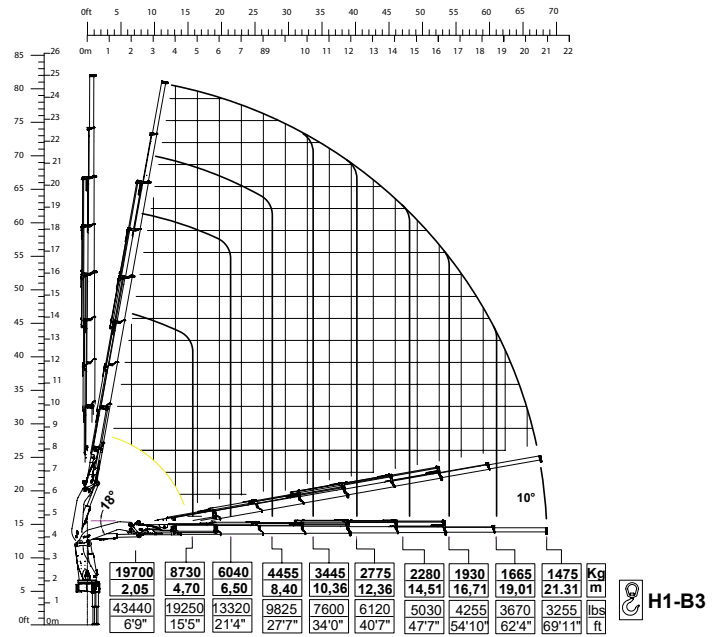
6 extensions



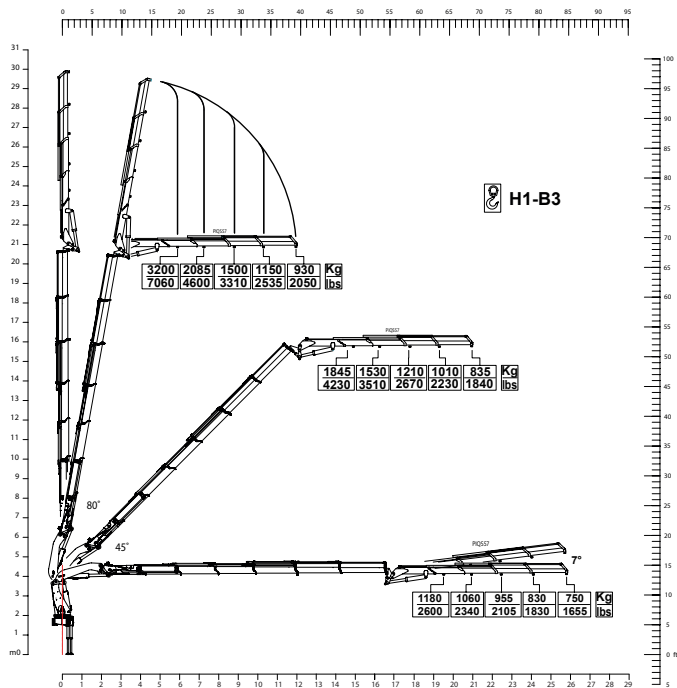
### 7 extensions



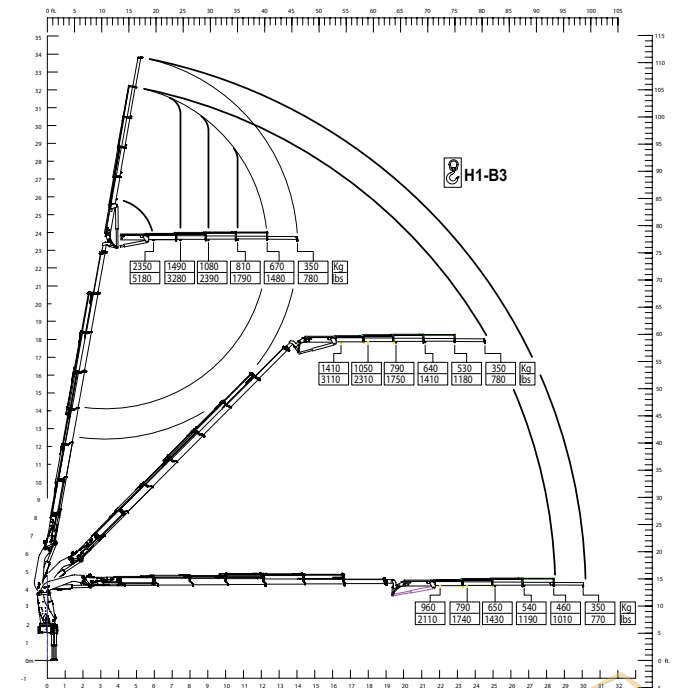
### 8 extensions



### 510.6 + J4



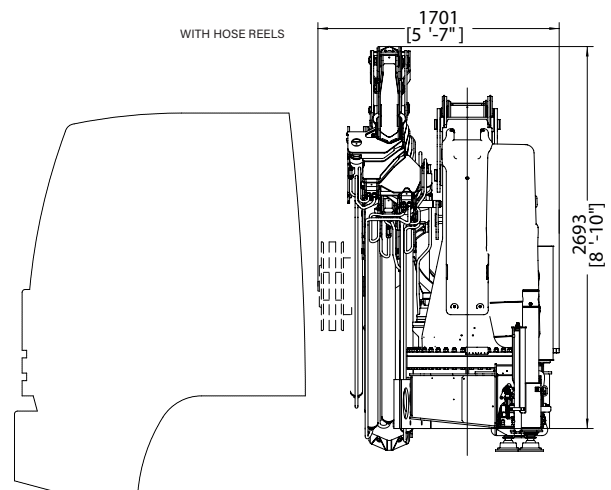
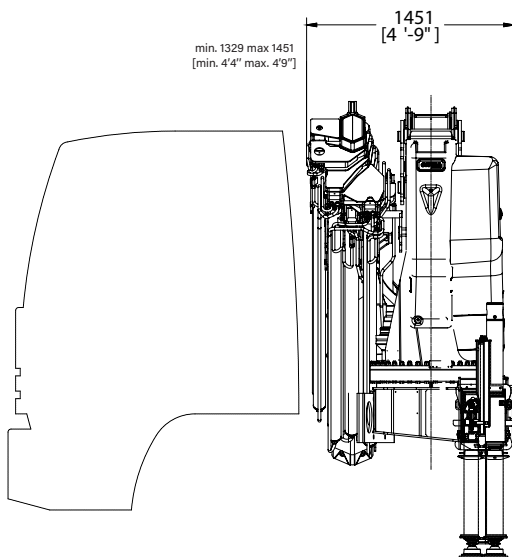
### 510.7 + J4



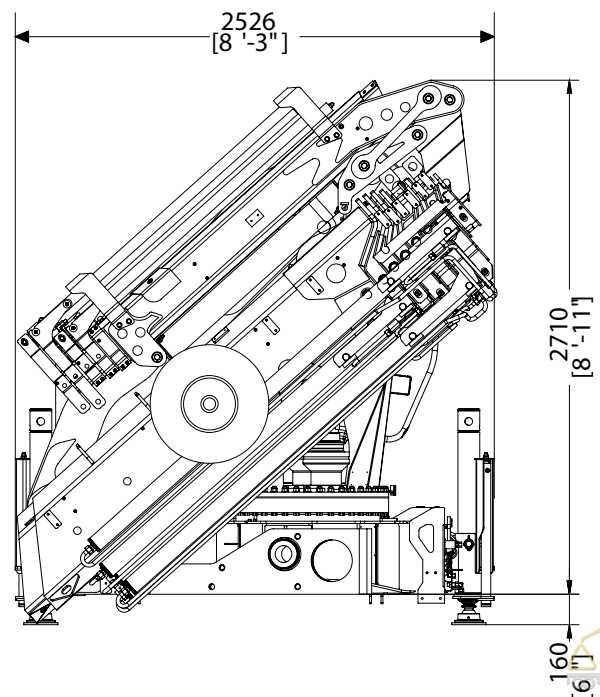
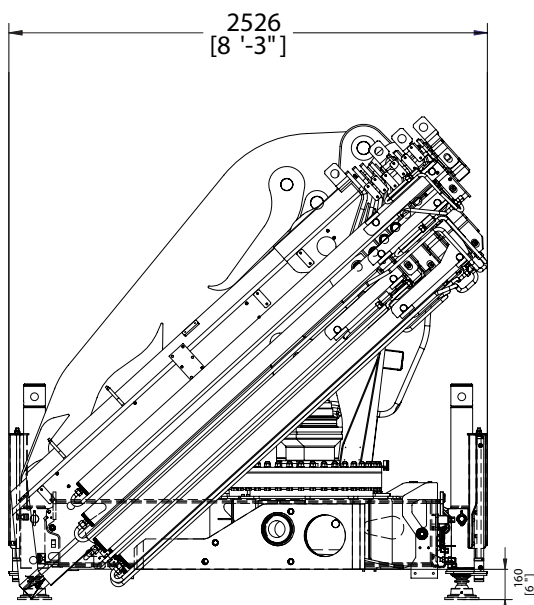
# 510 TOP RANGE

## Crane Dimensions

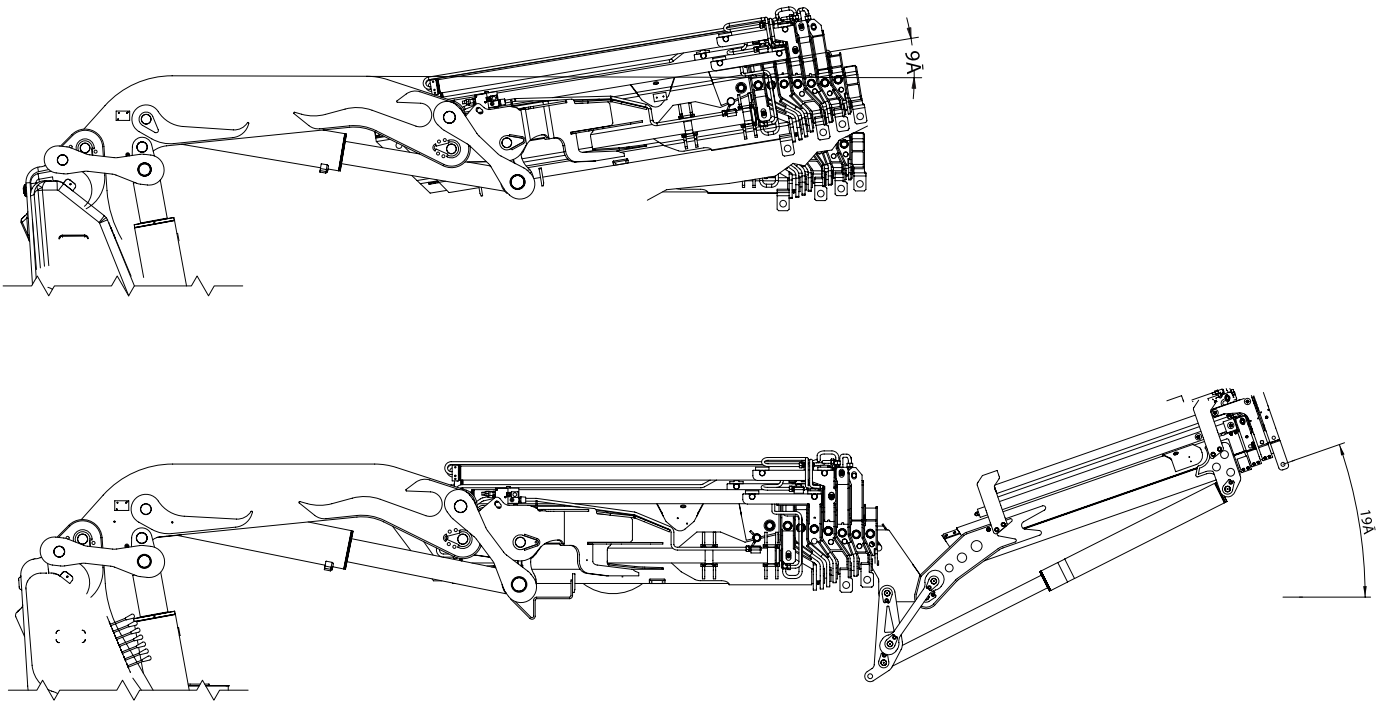
### back cabin left



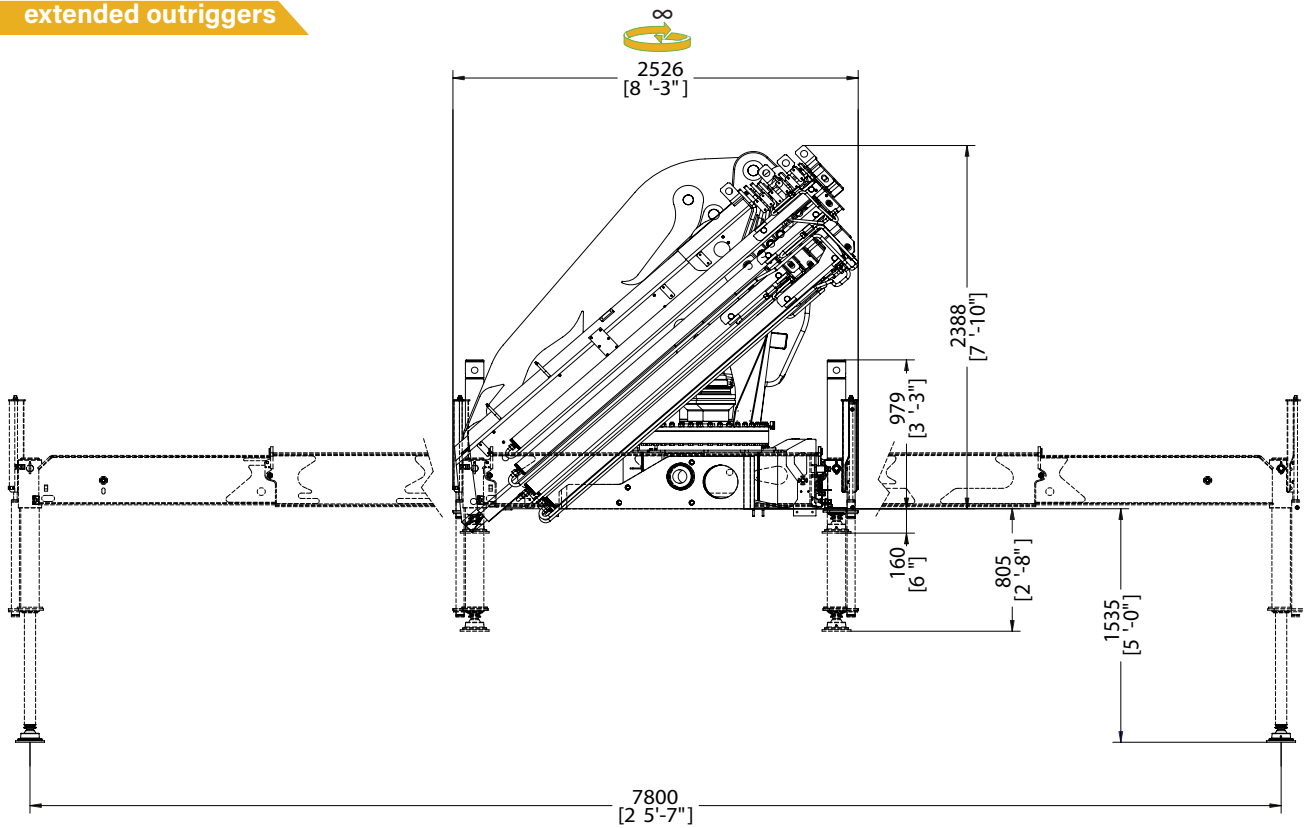
### rear truck



operational



extended outriggers












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












# 510 TOP RANGE

## Technical Data

### summarized data

|         |  |  |  |  |  |  |  |  |  |
|---------|---|---|---|---|---|---|---|---|---|
|         | kN.m  | bar   | l/min   | kg  | °   | mm  | mm  | mm  | mm  |
| 510.3   | 437   | 325   | 70  | 4960  | ∞   | 2525  | 1329  | 2349  | 7800  |
| 510.4   | 429   | 325   | 70  | 5140  | ∞   | 2525  | 1329  | 2349  | 7800  |
| 510.5   | 418   | 325   | 70  | 5300  | ∞   | 2525  | 1345  | 2349  | 7800  |
| 510.6   | 411   | 320   | 70  | 5480  | ∞   | 2525  | 1437  | 2349  | 7800  |
| 510.6J4 | 411   | 320   | 70  | 6360  | ∞   | 2525  | 1570  | 2800  | 7800  |
| 510.7   | 410   | 320   | 70  | 5540  | ∞   | 2525  | 1451  | 2388  | 7800  |
| 510.7j3 | 410   | 320   | 70  | 6070  | ∞   | 2525  | 1701  | 2710  | 7800  |
| 510.7j4 | 410   | 320   | 70  | 6135  | ∞   | 2525  | 1701  | 2710  | 7800  |
| 510.8   | 402   | 320   | 70  | 5670  | ∞   | 2525  | 1451  | 2388  | 7800  |

### summarized data

|         |  |  |  |  |  |  |  |  |  |
|---------|---|---|---|---|---|---|---|---|---|
|         | lbs.ft  | psi   | gal/min   | lbs   | °   | ft/inc  | ft/inc  | ft/inc  | ft/inc  |
| 510.3   | 316299  | 4712  | 18.4  | 10912   | ∞   | 8'3"  | 4'4"  | 7'8"  | 25'7"   |
| 510.4   | 310802  | 4712  | 18.4  | 11308   | ∞   | 8'3"  | 4'4"  | 7'8"  | 25'7"   |
| 510.5   | 302918  | 4712  | 18.4  | 11680   | ∞   | 8'3"  | 4'5"  | 7'8"  | 25'7"   |
| 510.6   | 297566  | 4640  | 18.4  | 12056   | ∞   | 8'3"  | 4'8"  | 7'8"  | 25'7"   |
| 510.6J4 | 297566  | 4640  | 18.4  | 13996   | ∞   | 8'3"  | 5'2"  | 7'8"  | 25'7"   |
| 510.7   | 296625  | 4640  | 18.4  | 12188   | ∞   | 8'3"  | 4'9"  | 7'10"   | 25'7"   |
| 510.7j3 | 296625  | 4640  | 18.4  | 13356   | ∞   | 8'3"  | 5'7"  | 8'11"   | 25'7"   |
| 510.7j4 | 296625  | 4640  | 18.4  | 13500   | ∞   | 8'3"  | 5'7"  | 8'11"   | 25'7"   |
| 510.8   | 291128  | 4640  | 18.4  | 12474   | ∞   | 8'3"  | 4'9"  | 7'10"   | 25'7"   |

### technical data

|                                   |               |                  |
|-----------------------------------|---------------|------------------|
| Max. lifting moment               | 437 kNm       | 316299 ft.lbs    |
| Max. hydraulic outreach           | 21,31 m       | 69'11"           |
| Slewing angle                     | ∞             | ∞                |
| Slewing torque                    | 5500 daNm     | 23652 ft.lbs     |
| Stabilizer spread                 | 7,8 mt        | 25'7"            |
| Fitting space required (min./max) | 1,33 m/1,70 m | 4'9"/5'7"        |
| Width folded                      | 2,53 m        | 8'3"             |
| Max. operating pressure           | 325 bar       | 4640 psi         |
| Recommended pump capacity         | 70 l/min      | 18,4 US gal./min |
| Dead weight (vers. 4)             | 4960 kg       | 10912 lbs        |

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







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# SUPERIOR RELIABILITY FOR EVERY OPERATOR



# COPMA 510



knuckle  
boom  
cranes



Powerful Synergies



**CPS**



**CPS  
STEEL**

## CPS GROUP S.P.A.

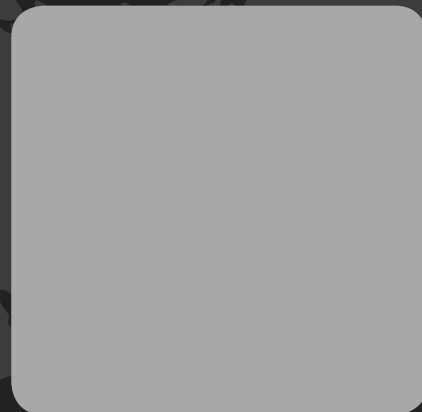
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