



# TRUCK MOUNTED CRANE

## HB150



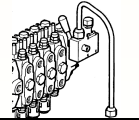
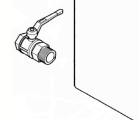
[www.hyvacrane.com](http://www.hyvacrane.com)  
[www.hyva.com](http://www.hyva.com)

<b>Max dynamic moment [daNm]</b>	18110
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<b>Max capacity [kg]</b>	<b>Version</b>	<b>Q<sub>max</sub></b>
	E1	5660
	E2	5405
	E3	5200
	E4	5100
	E5	5000
	E3J2	550

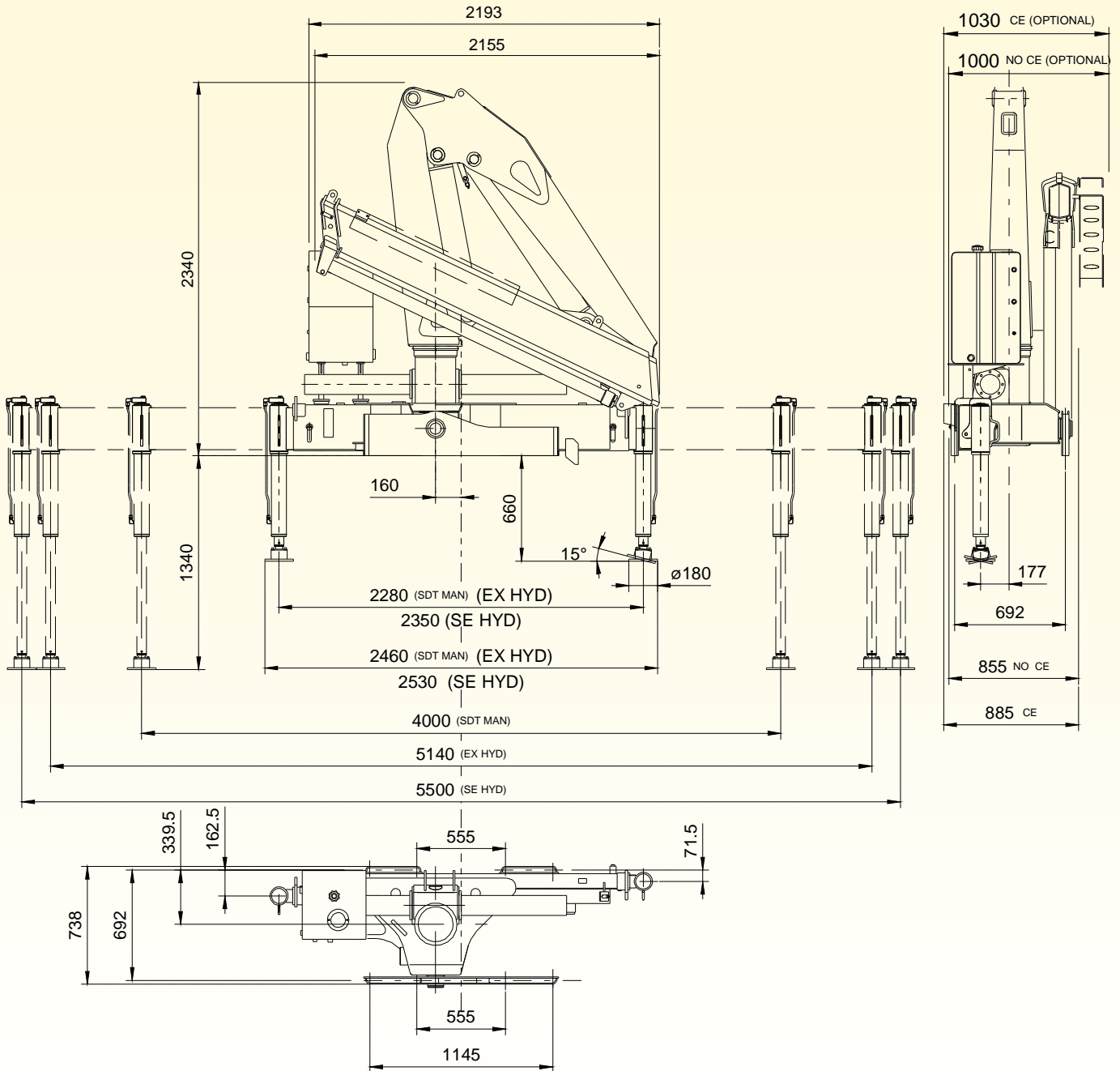
<b>Crane weight [kg]</b>	<b>Version</b>	<b>Stand.</b>	<b>EX hydr.</b>	<b>SE hydr.</b>
	E1	1670	1770	1780
	E2	1800	1900	1910
	E3	1920	2020	2030
	E4	2020	2120	2130
	E5	2100	2200	2210
	E3J2	2230	2330	2340

<b>Version</b>	<b>Stand.</b>	<b>EX hydr</b>	<b>SE hydr.</b>
<b>Max force on the stabilizer leg</b>	9845 daN	7515 daN	6750 daN
<b>Max stabilizer pressure on the ground</b>	39 daN/cm <sup>2</sup>	30 daN/cm <sup>2</sup>	27 daN/cm <sup>2</sup>
<b>Max working pressure</b>	290 bar		
<b>Max oil flow to main relief valve</b>	25 dm <sup>3</sup> /min		
<b>Oil tank capacity</b>	100 dm <sup>3</sup>		
<b>Slewing moment</b>	1825 daNm		
<b>Slewing angle</b>	380°		
<b>Absorbed power</b>	17 kW 23 HP		
<b>Design standard</b>	DIN 15018 EN 12999		

<b>Fittings for connection with pump</b>		<b>NO RDC</b>	<b>RDC</b>
<b>Control valve pressure line</b>		<b>F 7/8" - 14 Jic</b>	<b>M 7/8" - 14 Jic</b>
<b>Tank suction line</b>		<b>F 1" 1/2 BSP</b>	<b>F 1" 1/2 BSP</b>

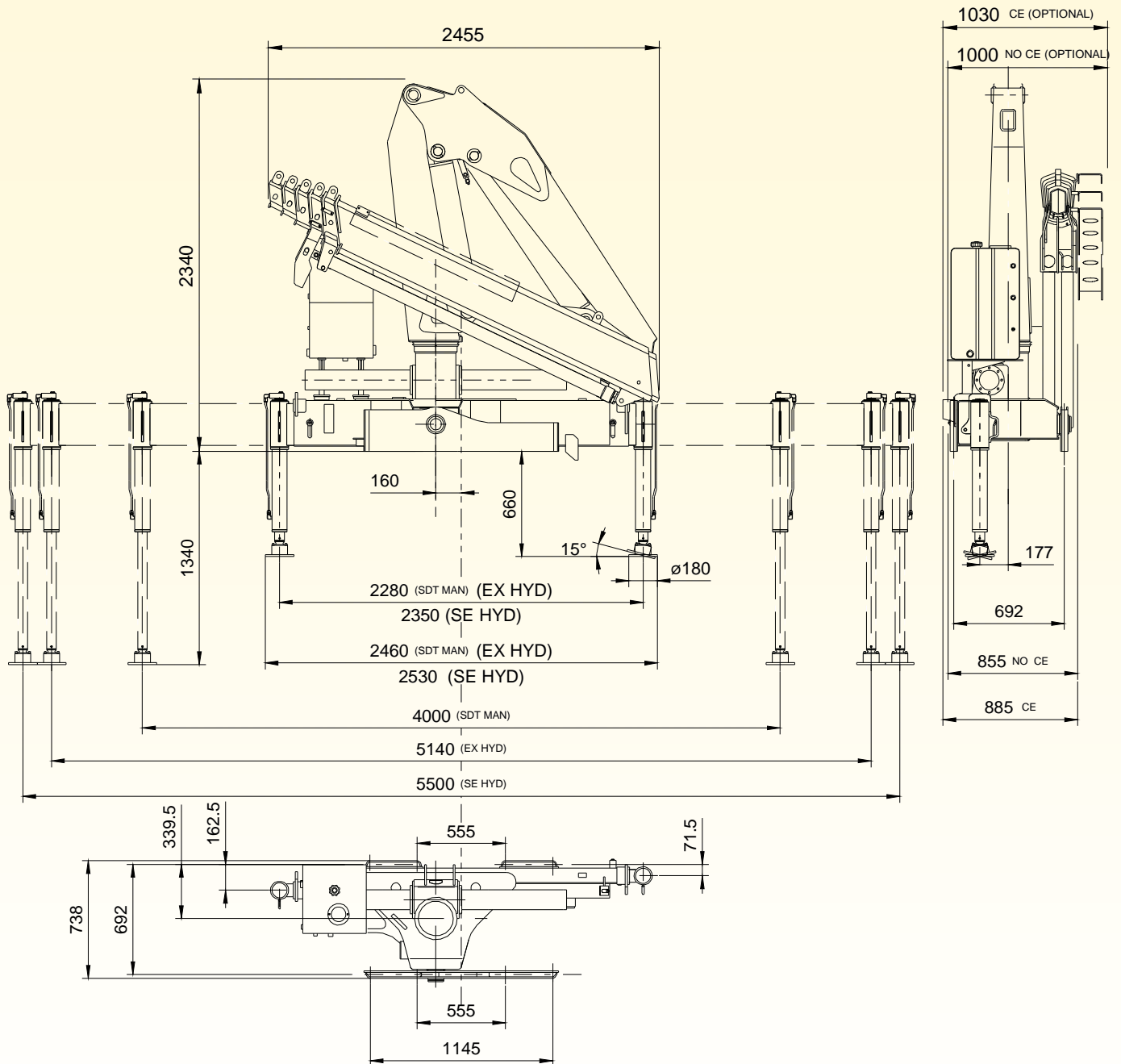
# HB150 TECHNICAL SHEET

## OVERALL DIMENSIONS E1



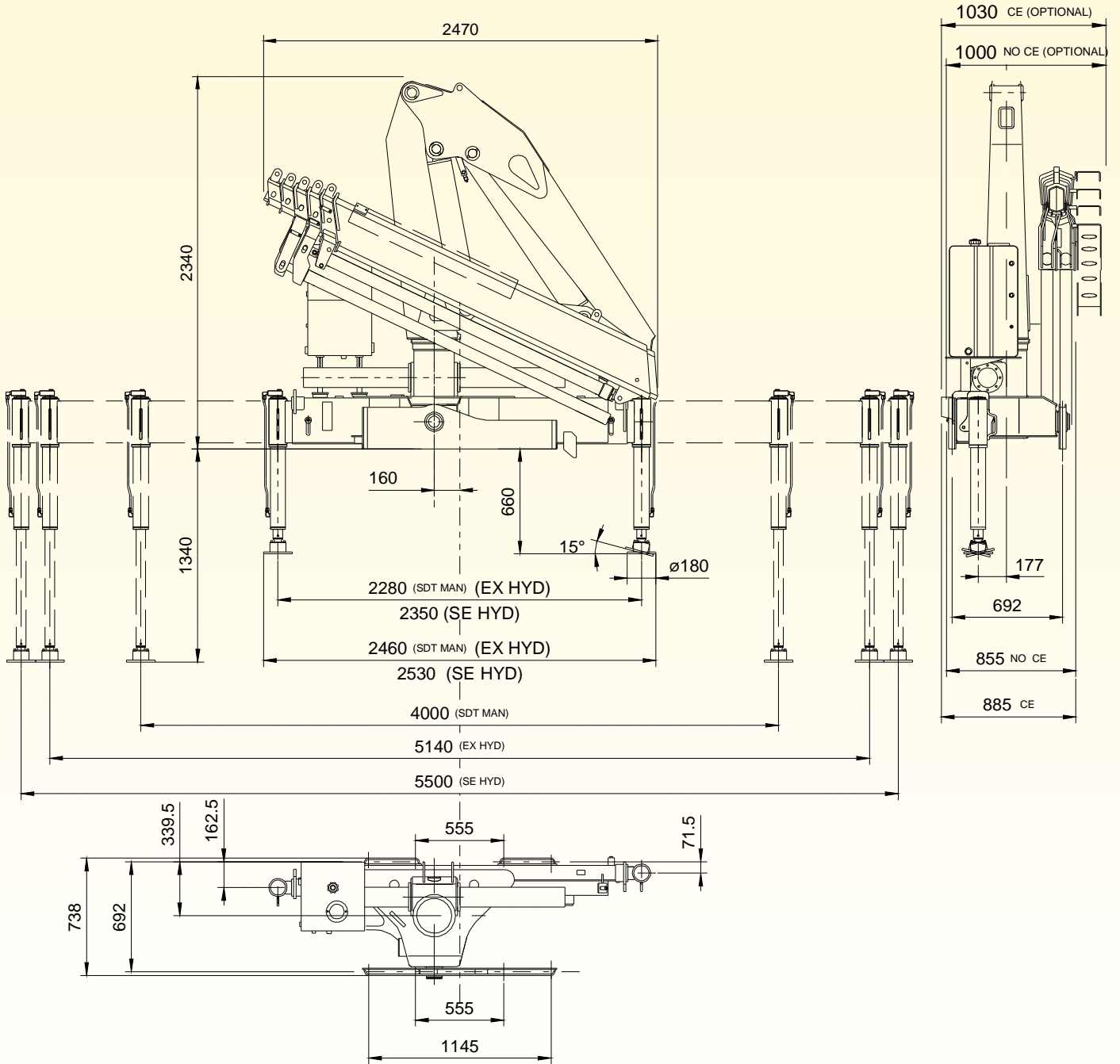
# HB150 TECHNICAL SHEET

## OVERALL DIMENSIONS E2



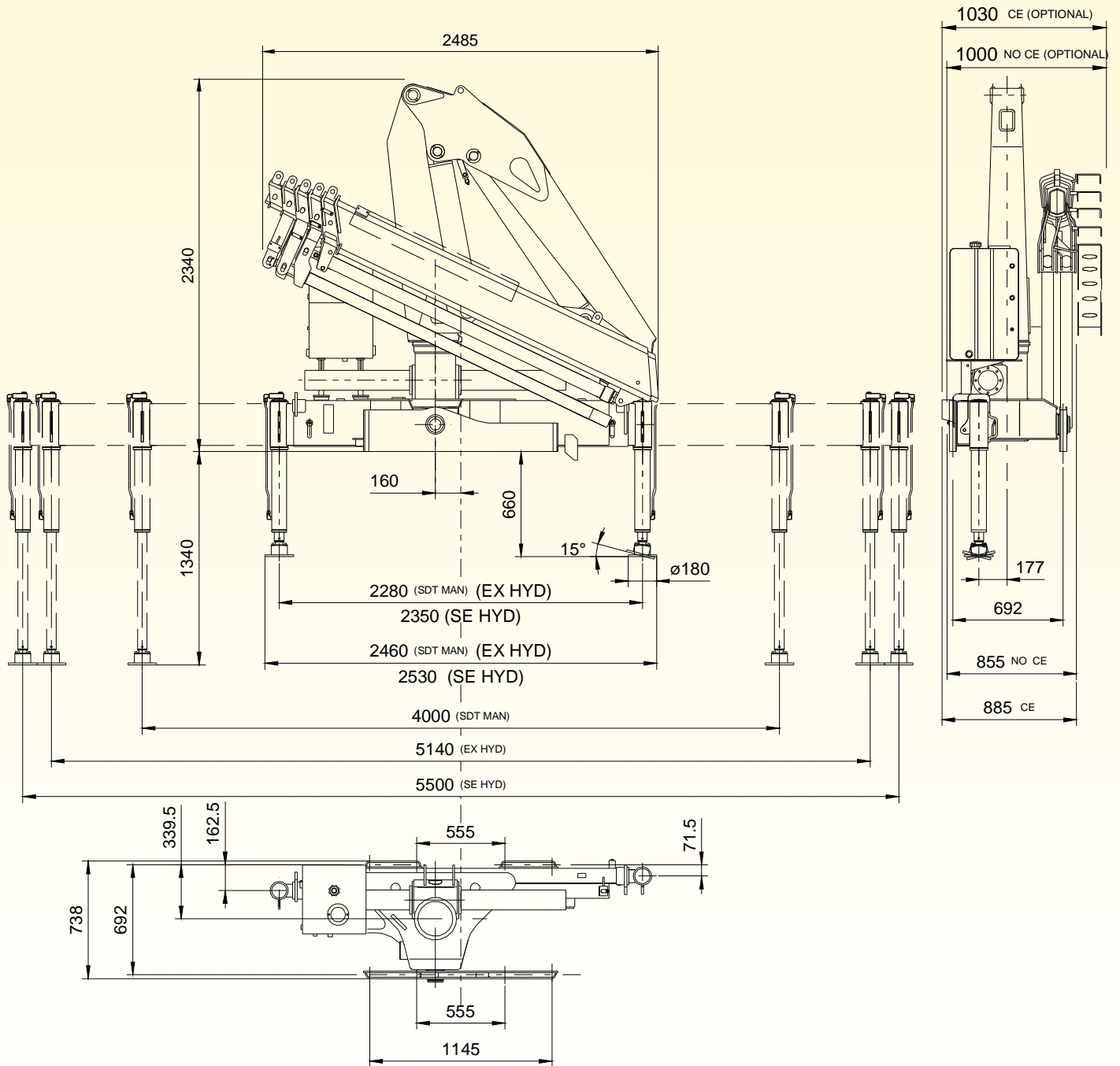
# HB150 TECHNICAL SHEET

## OVERALL DIMENSIONS E3



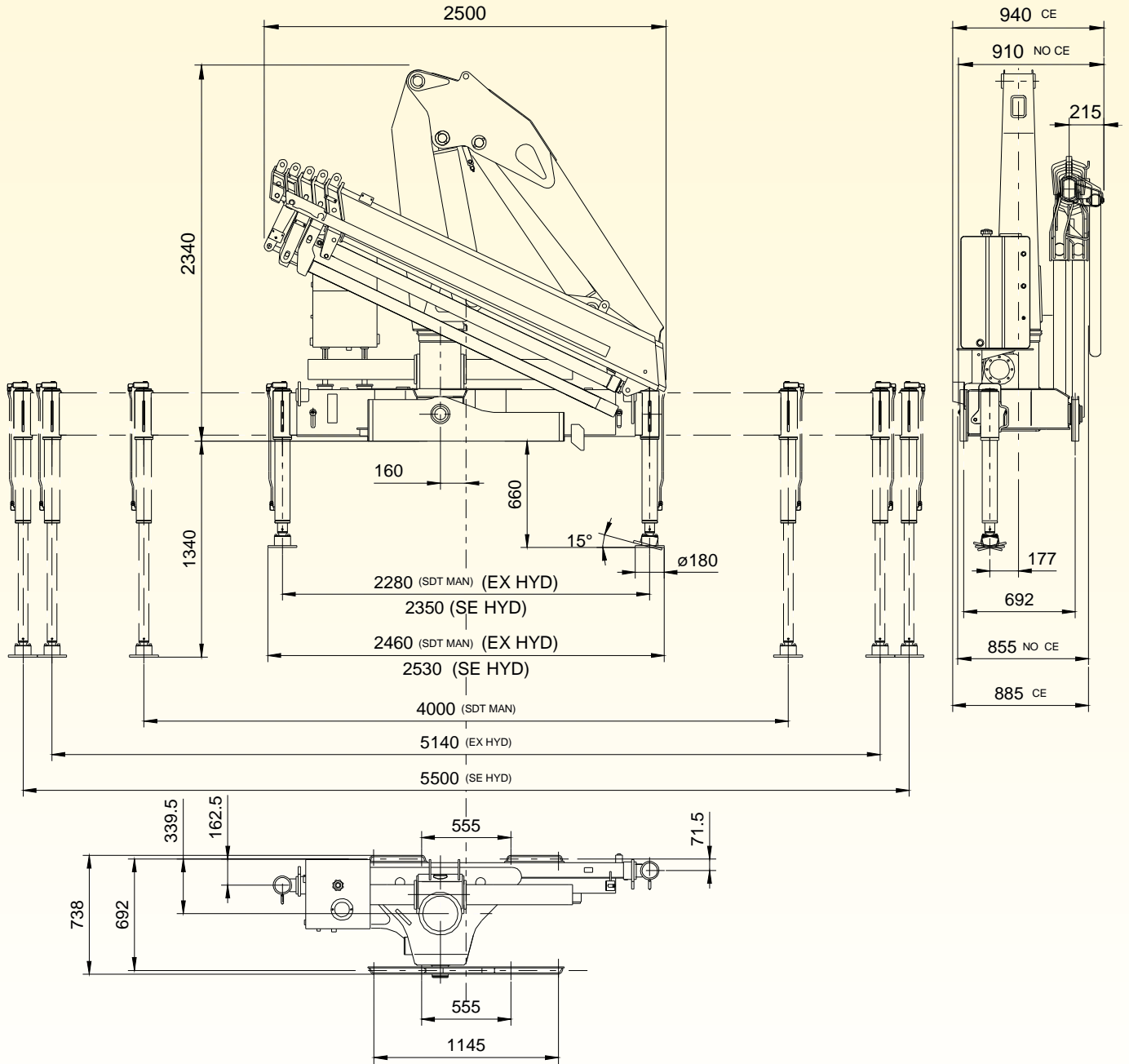
# HB150 TECHNICAL SHEET

## OVERALL DIMENSIONS E4



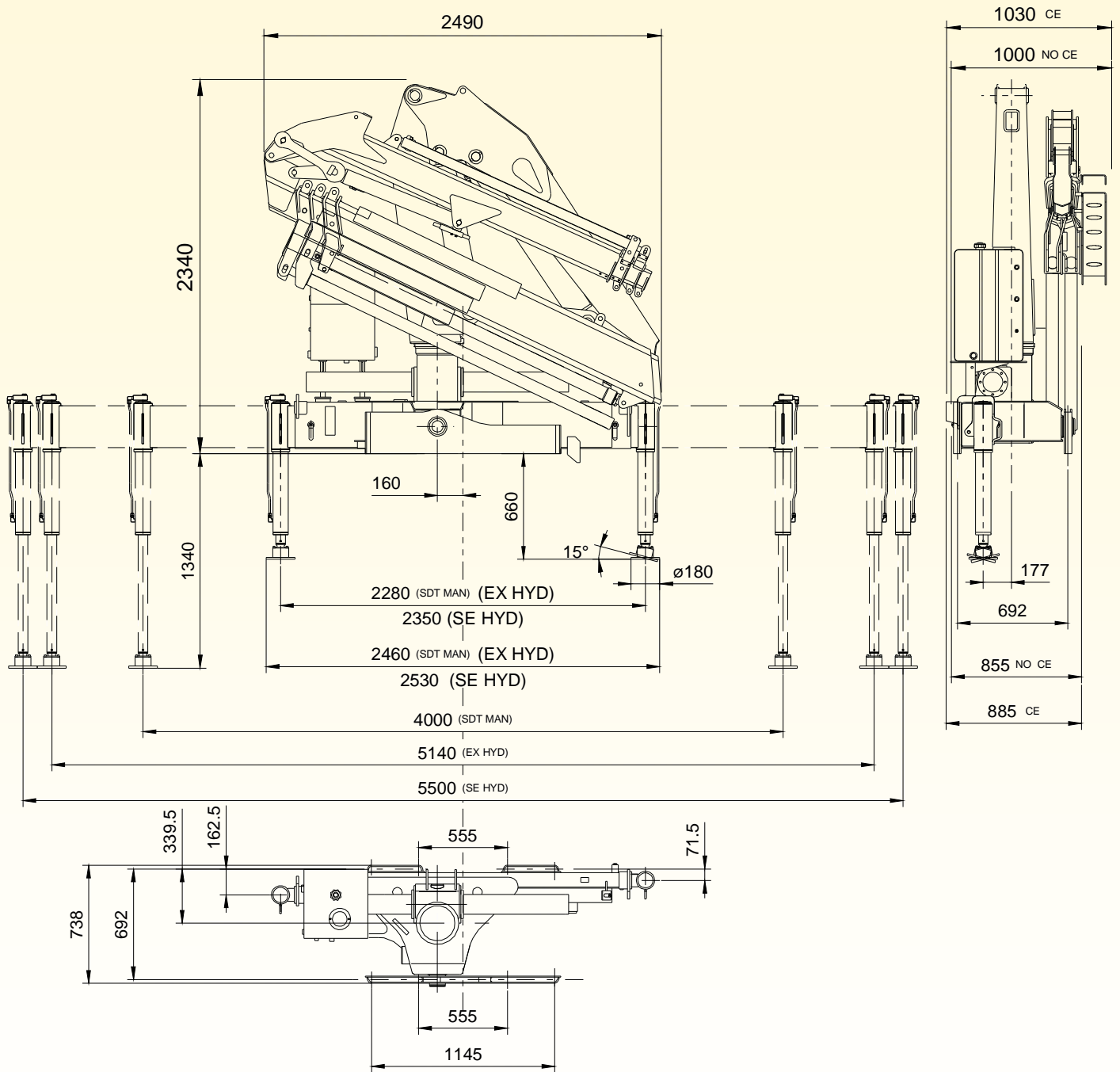
# HB150 TECHNICAL SHEET

## OVERALL DIMENSIONS E5

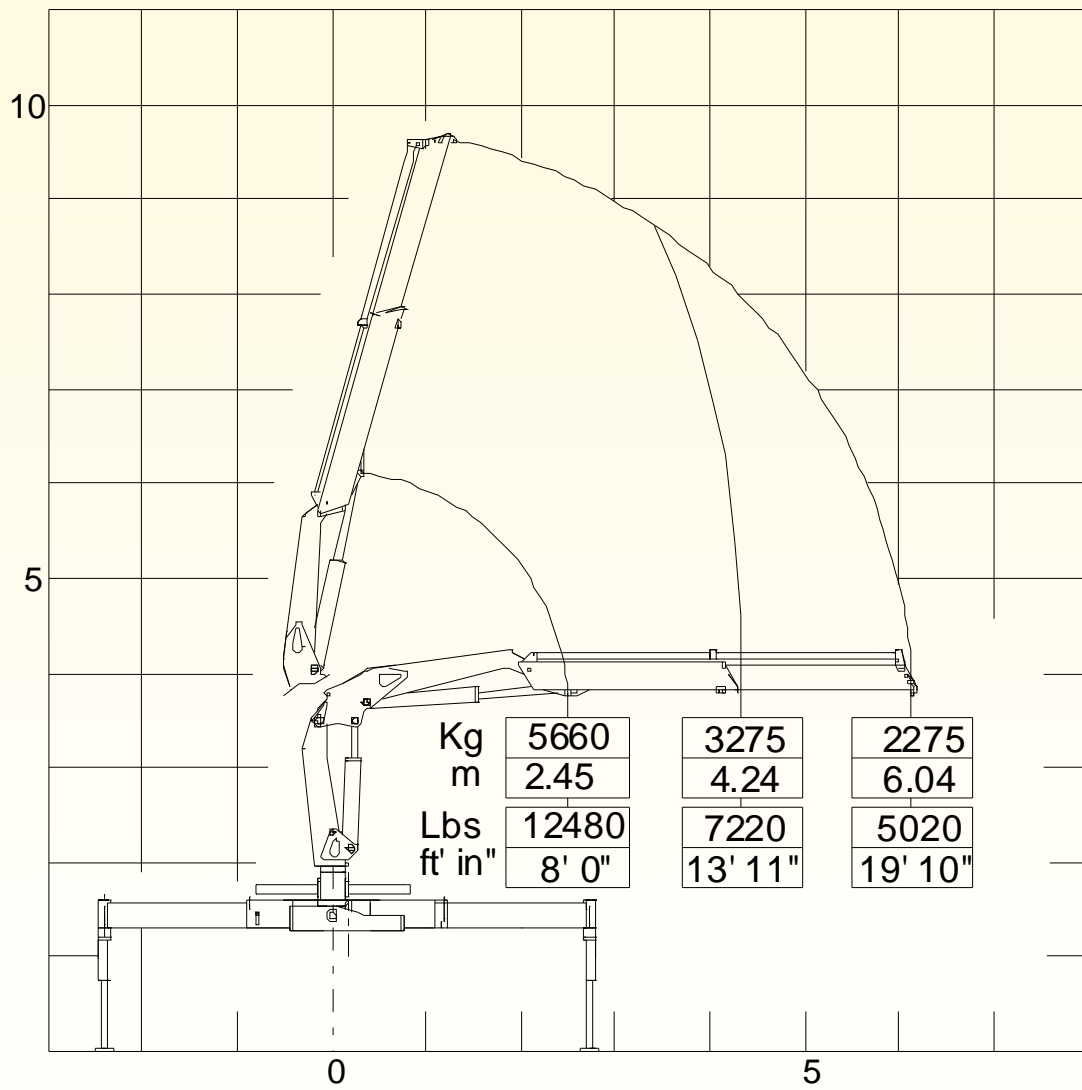


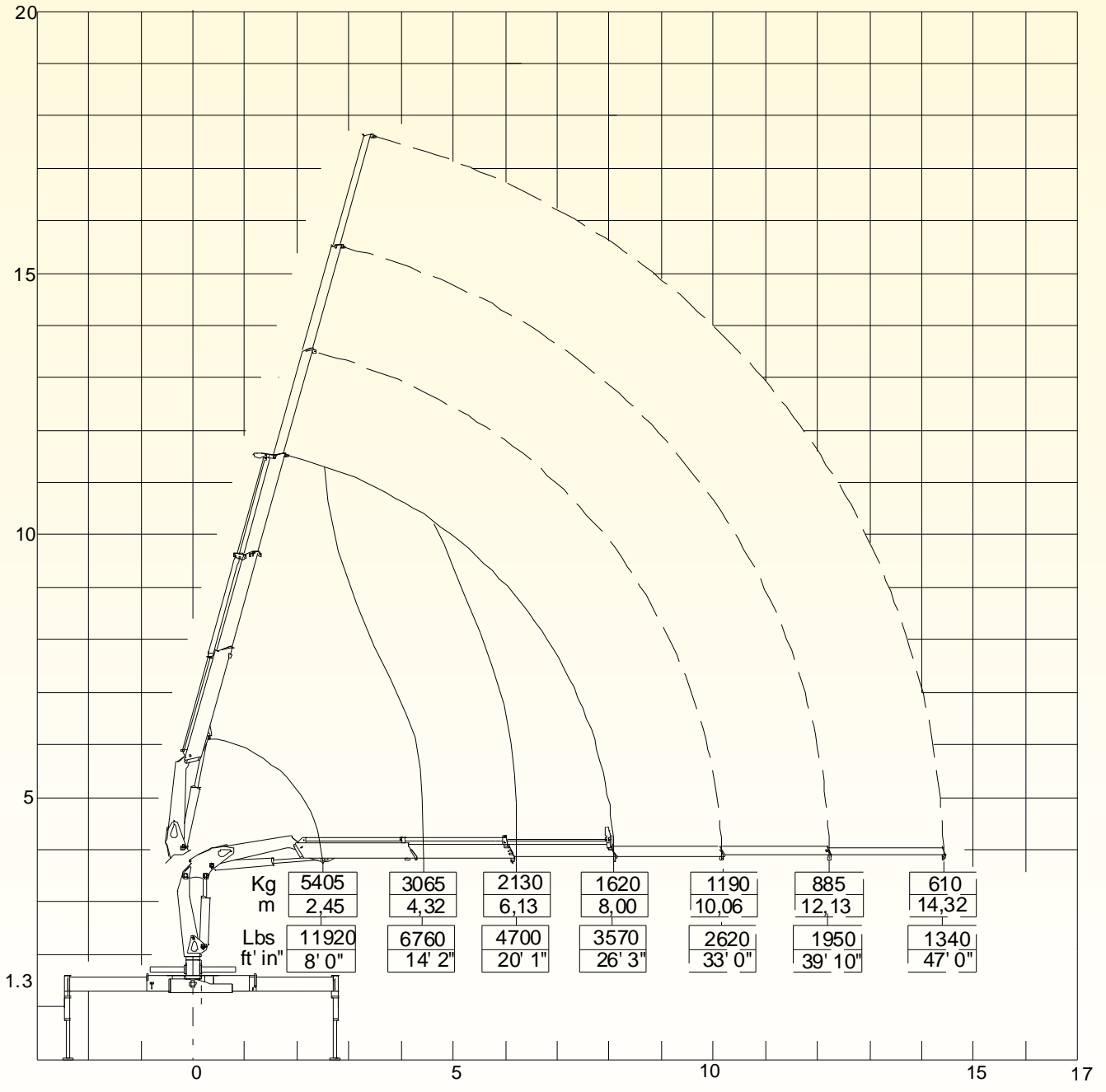
# HB150 TECHNICAL SHEET

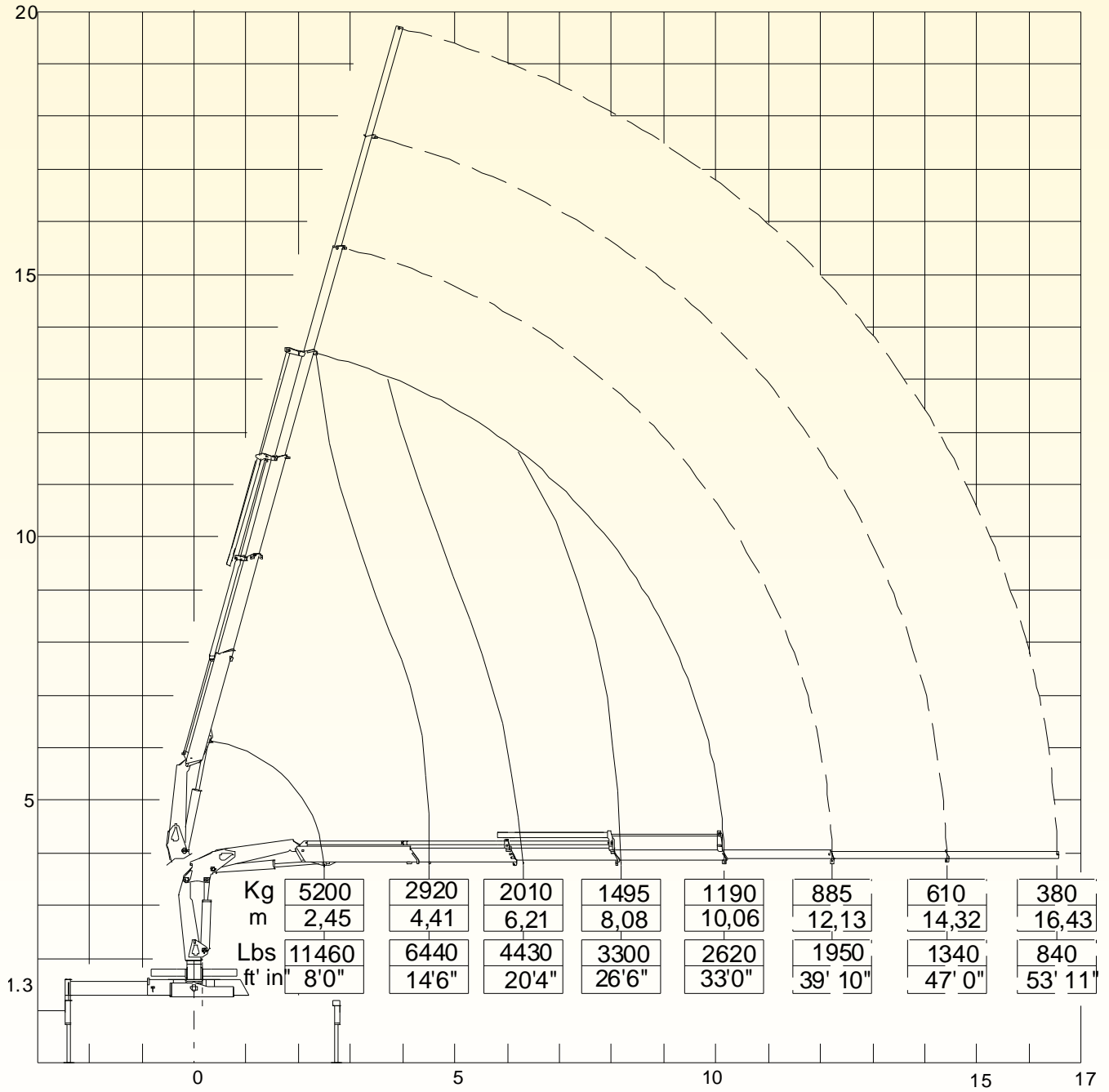
## OVERALL DIMENSIONS E3J2

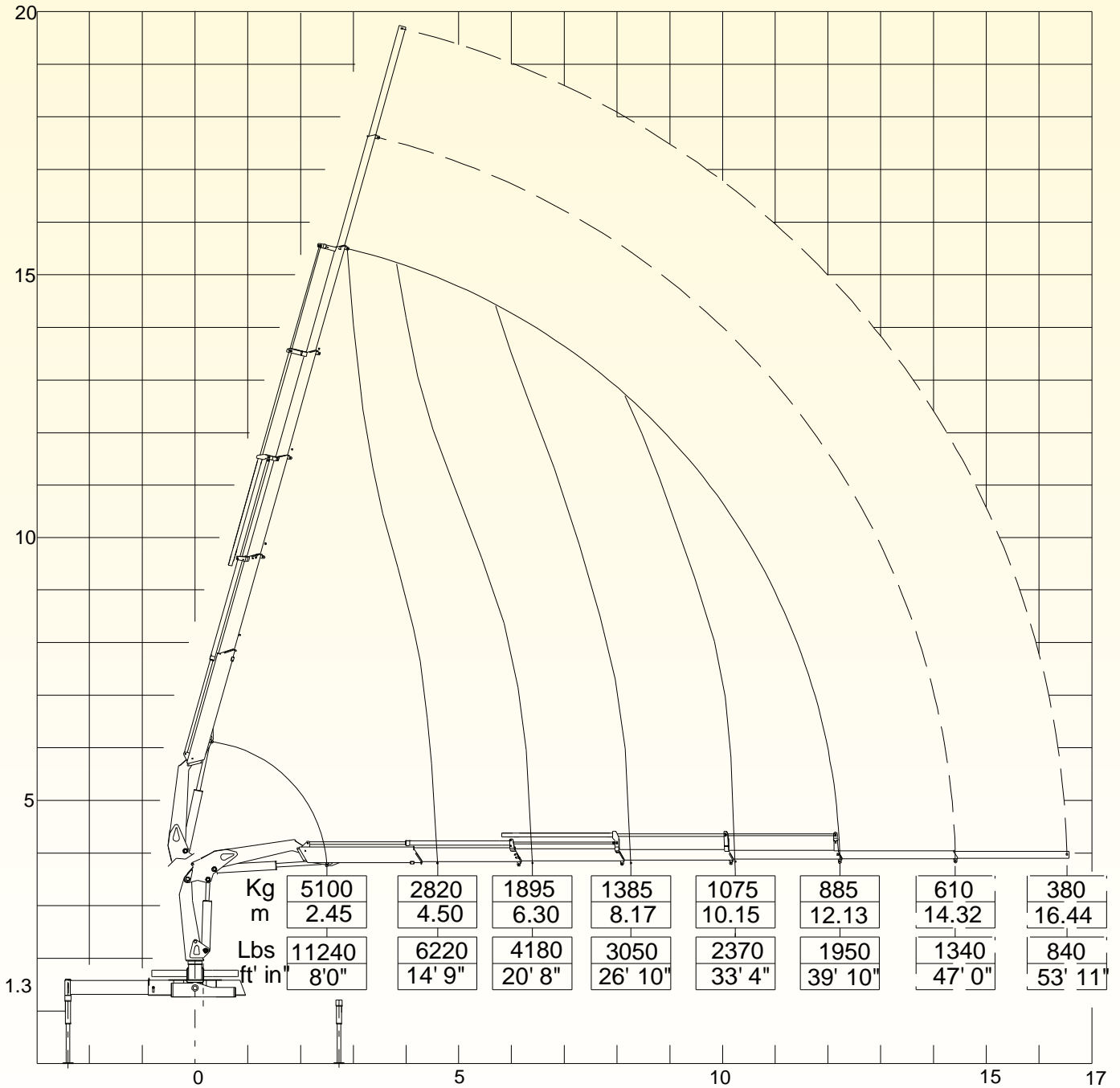


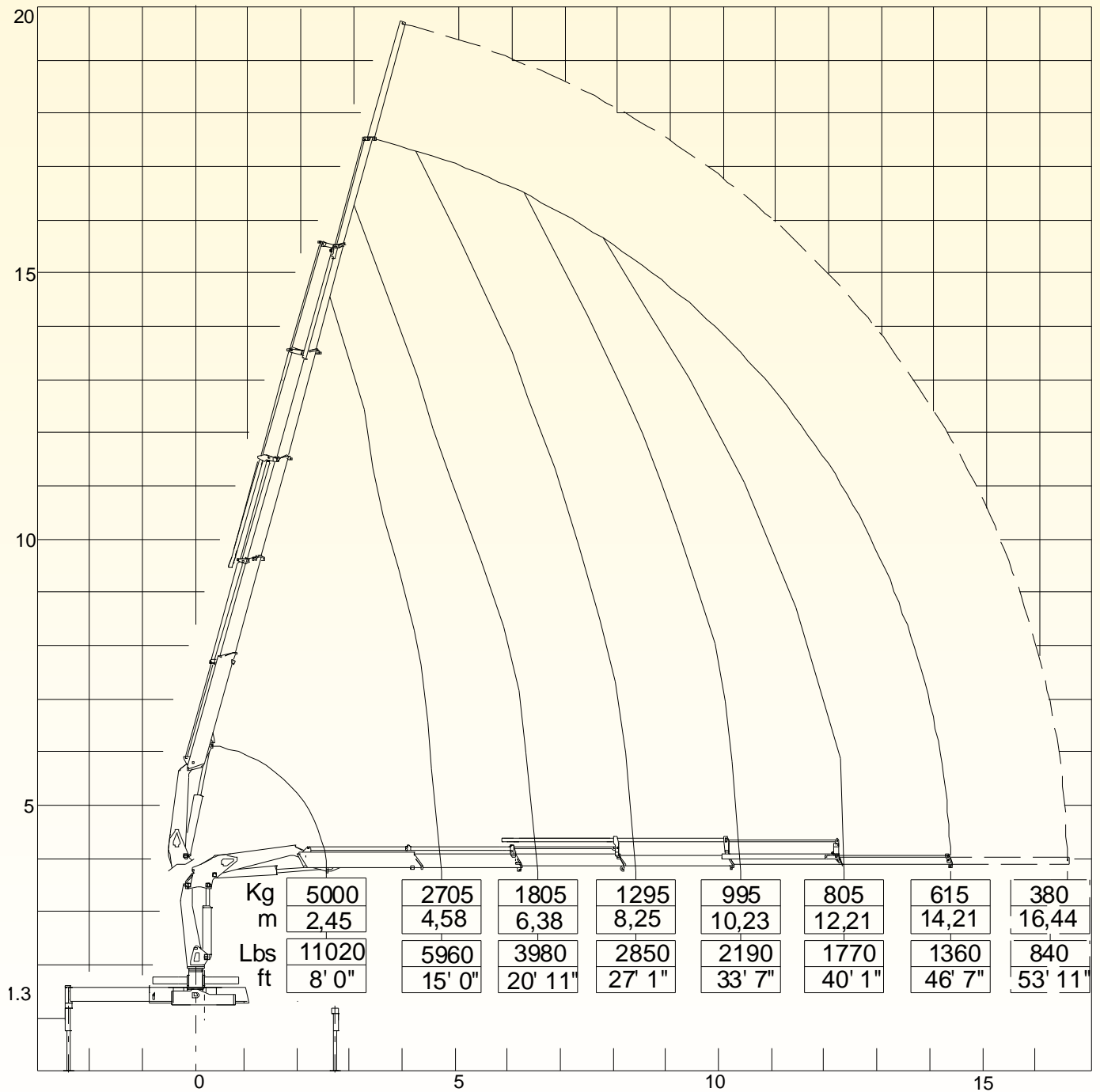






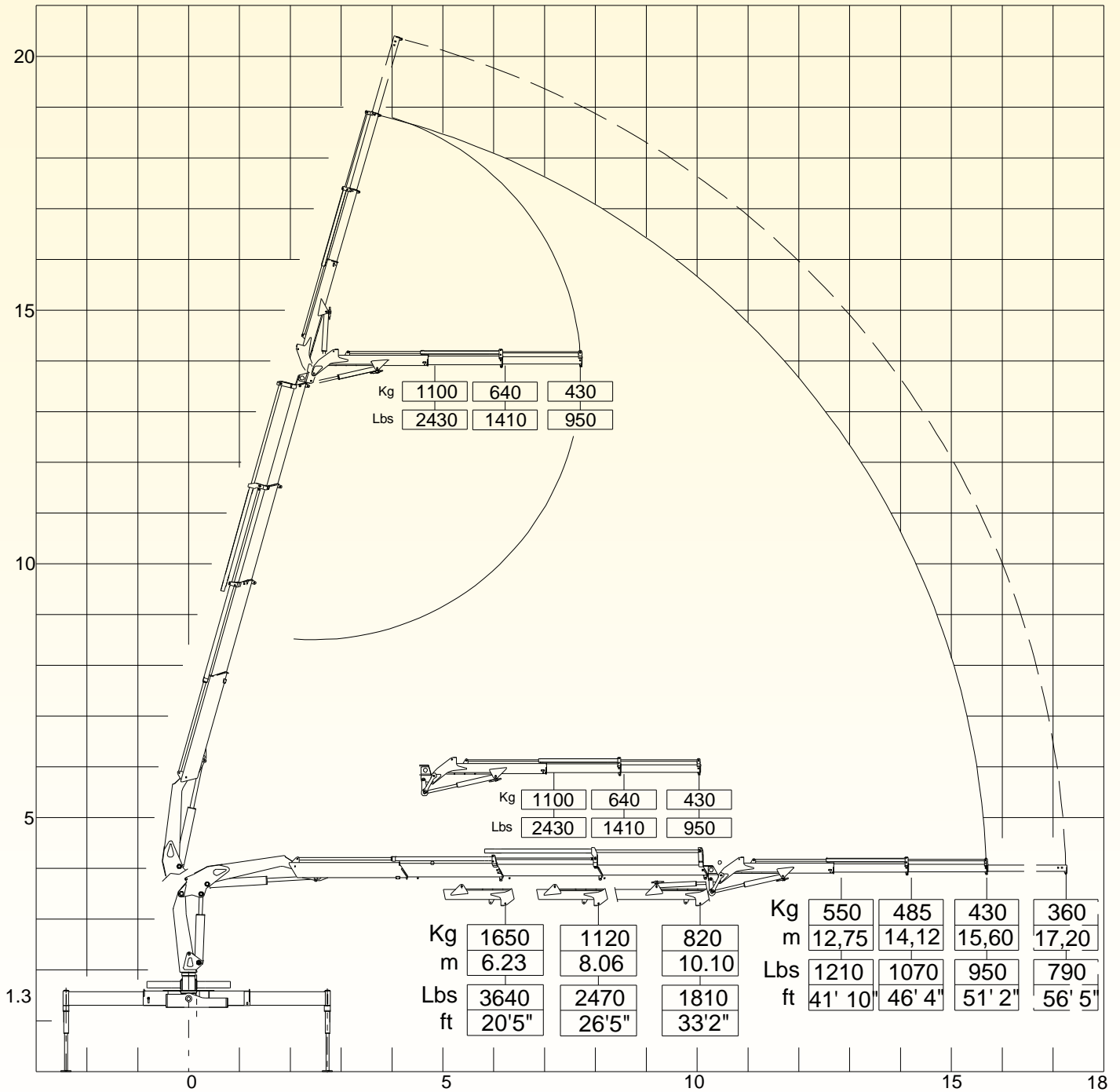


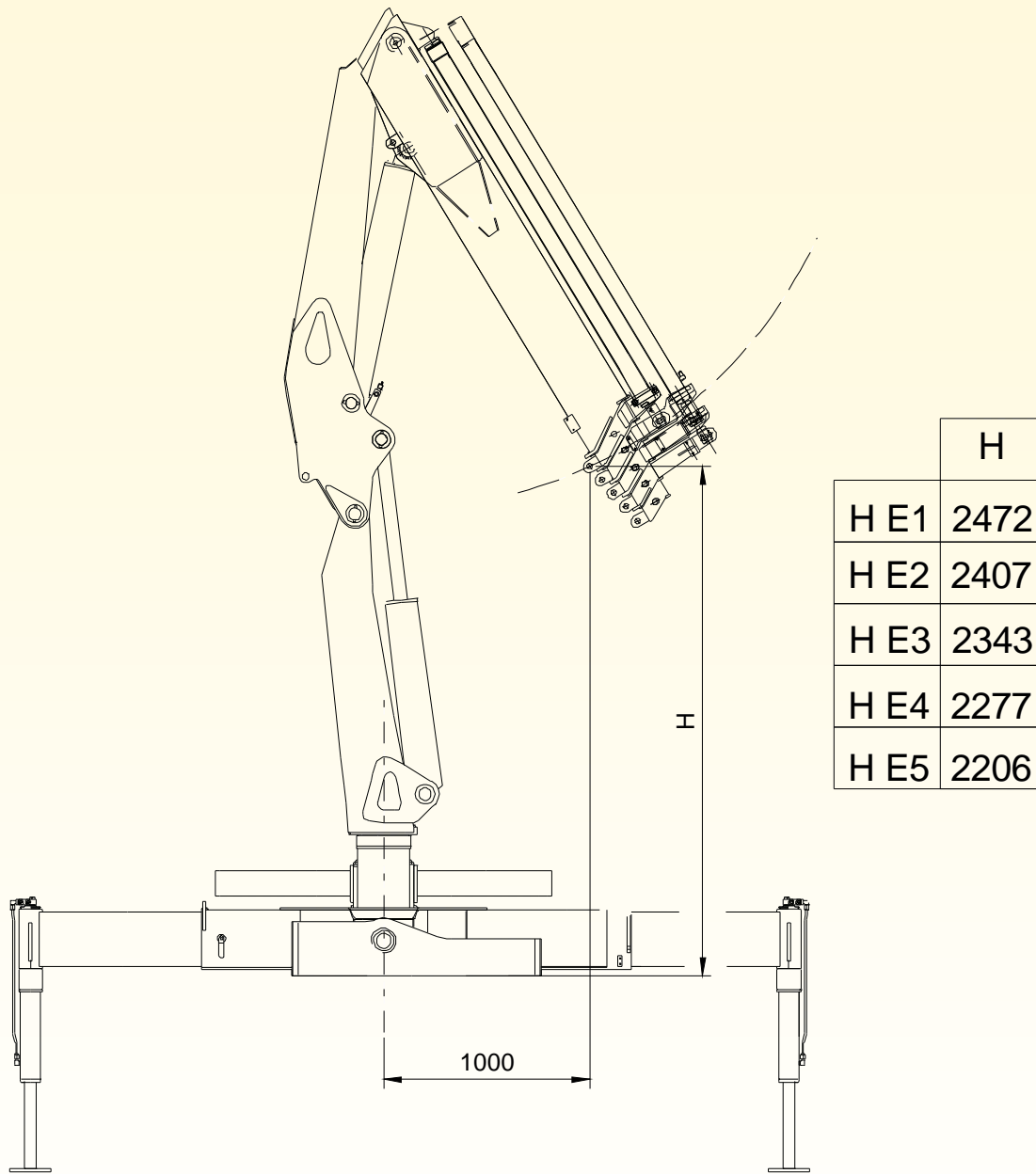




# HB150 TECHNICAL SHEET

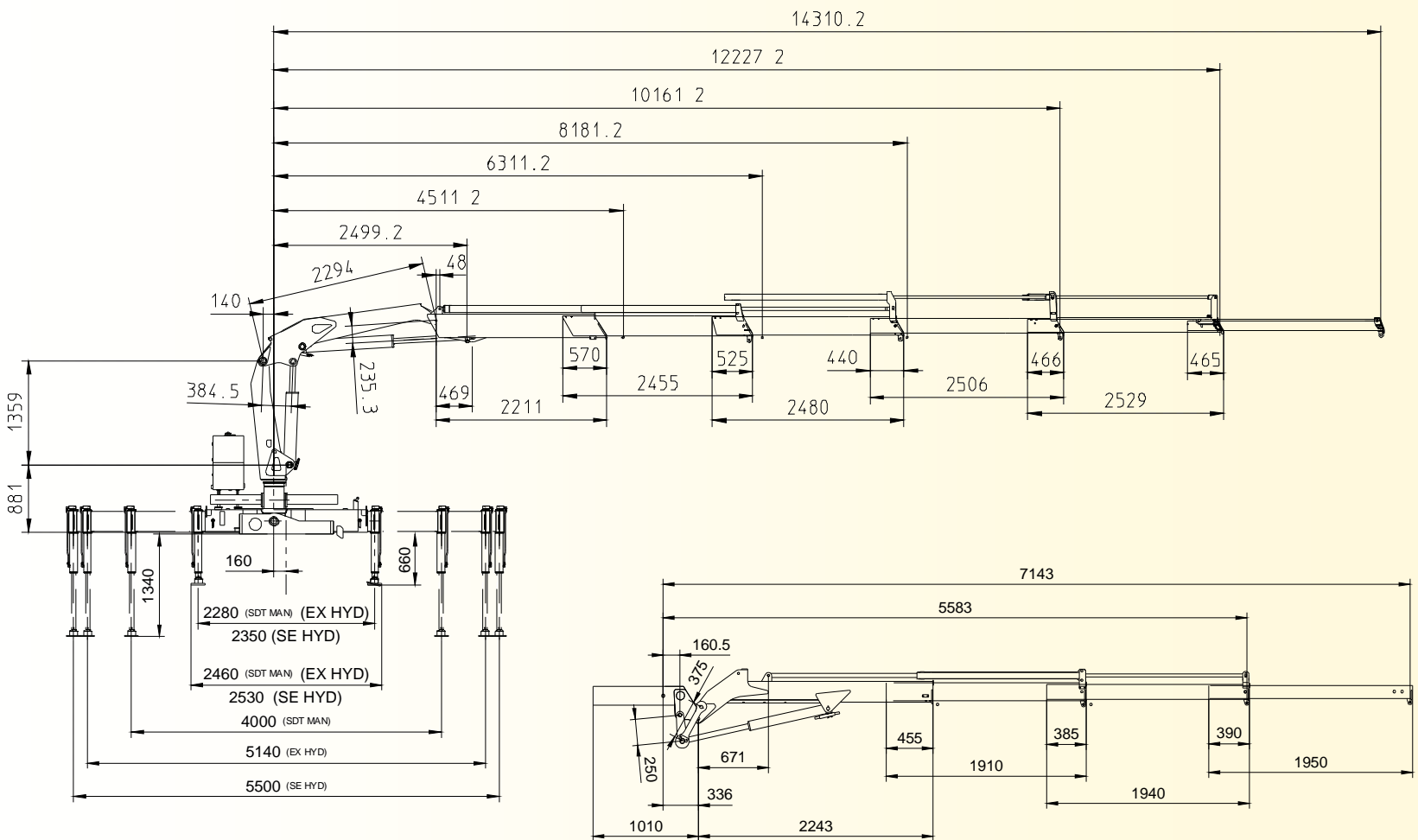
## LOAD DIAGRAM E3J2





# HB150 TECHNICAL SHEET

## BASE - COLUMN - BOOM DIMENSIONS





# HB150 TECHNICAL SHEET

## CYLINDERS AND PINS DIMENSIONS

### LIFTING CYLINDER

<i>Cylinder bore</i>	140
<i>Cyl. ext. diameter</i>	160
<i>Rod diameter</i>	70 - 0
<i>Centers (open)</i>	1743
<i>Centers (closed)</i>	1023
<i>Stroke</i>	720
<i>Artic. pin Ø</i>	55
<i>Pin material</i>	39NiCrMo3 QT

### ARTICULATION CYLINDER

<i>Cylinder bore</i>	140
<i>Cyl. ext. diameter</i>	160
<i>Rod diameter</i>	70 - 0
<i>Centers (open)</i>	2195
<i>Centers (closed)</i>	1249
<i>Stroke</i>	946
<i>Artic. pin Ø</i>	55
<i>Pin material</i>	39NiCrMo3 QT

### 1<sup>ST</sup> EXTENSION CYLINDER

<i>Cylinder bore</i>	70
<i>Cyl. ext. diameter</i>	80
<i>Rod diameter</i>	50 - 0
<i>Centers (open)</i>	3849
<i>Centers (closed)</i>	2049
<i>Stroke</i>	1800
<i>Artic. pin Ø</i>	25
<i>Pin material</i>	C40 NORM

### 2<sup>ND</sup> EXTENSION CYLINDER

<i>Cylinder bore</i>	70
<i>Cyl. ext. diameter</i>	80
<i>Rod diameter</i>	45 - 30
<i>Centers (open)</i>	2010
<i>Centers (closed)</i>	140
<i>Stroke</i>	1870
<i>Artic. pin Ø</i>	25
<i>Pin material</i>	C40 NORM

### 3<sup>RD</sup> EXTENSION CYLINDER

<i>Cylinder bore</i>	65
<i>Cyl. ext. diameter</i>	75
<i>Rod diameter</i>	40 - 25
<i>Centers (open)</i>	2120
<i>Centers (closed)</i>	140
<i>Stroke</i>	1980
<i>Artic. pin Ø</i>	25
<i>Pin material</i>	39NiCrMo3 QT

### 4<sup>TH</sup> EXTENSION CYLINDER

<i>Cylinder bore</i>	65
<i>Cyl. ext. diameter</i>	75
<i>Rod diameter</i>	40 - 0
<i>Centers (open)</i>	2120
<i>Centers (closed)</i>	140
<i>Stroke</i>	1980
<i>Artic. pin Ø</i>	25
<i>Pin material</i>	39NiCrMo3 QT

### 5<sup>TH</sup> EXTENSION CYLINDER

<i>Cylinder bore</i>	60
<i>Cyl. ext. diameter</i>	70
<i>Rod diameter</i>	40 - 0
<i>Centers (open)</i>	2100
<i>Centers (closed)</i>	140
<i>Stroke</i>	2000
<i>Artic. pin Ø</i>	25
<i>Pin material</i>	42CrMo4 QT

### ROTATION CYLINDER

<i>Cylinder bore</i>	110
<i>Cyl. ext. diameter</i>	125
<i>Rod diameter</i>	-
<i>Centers (open)</i>	-
<i>Centers (closed)</i>	-
<i>Stroke</i>	636
<i>Artic. pin Ø</i>	-
<i>Pin material</i>	-

# HB150 TECHNICAL SHEET

## JIB CYLINDERS AND PINS DIMENSIONS

### JIB ARTICULATION CYLINDER

<i>Cylinder bore</i>	80
<i>Cyl. ext. diameter</i>	90
<i>Rod diameter</i>	50 - 0
<i>Centers (open)</i>	1427
<i>Centers (closed)</i>	842
<i>Stroke</i>	585
<i>Artic. pin Ø</i>	45 - 30
<i>Pin material</i>	39NiCrMo3 QT

### 1<sup>ST</sup> EXTENSION CYLINDER OF JIB

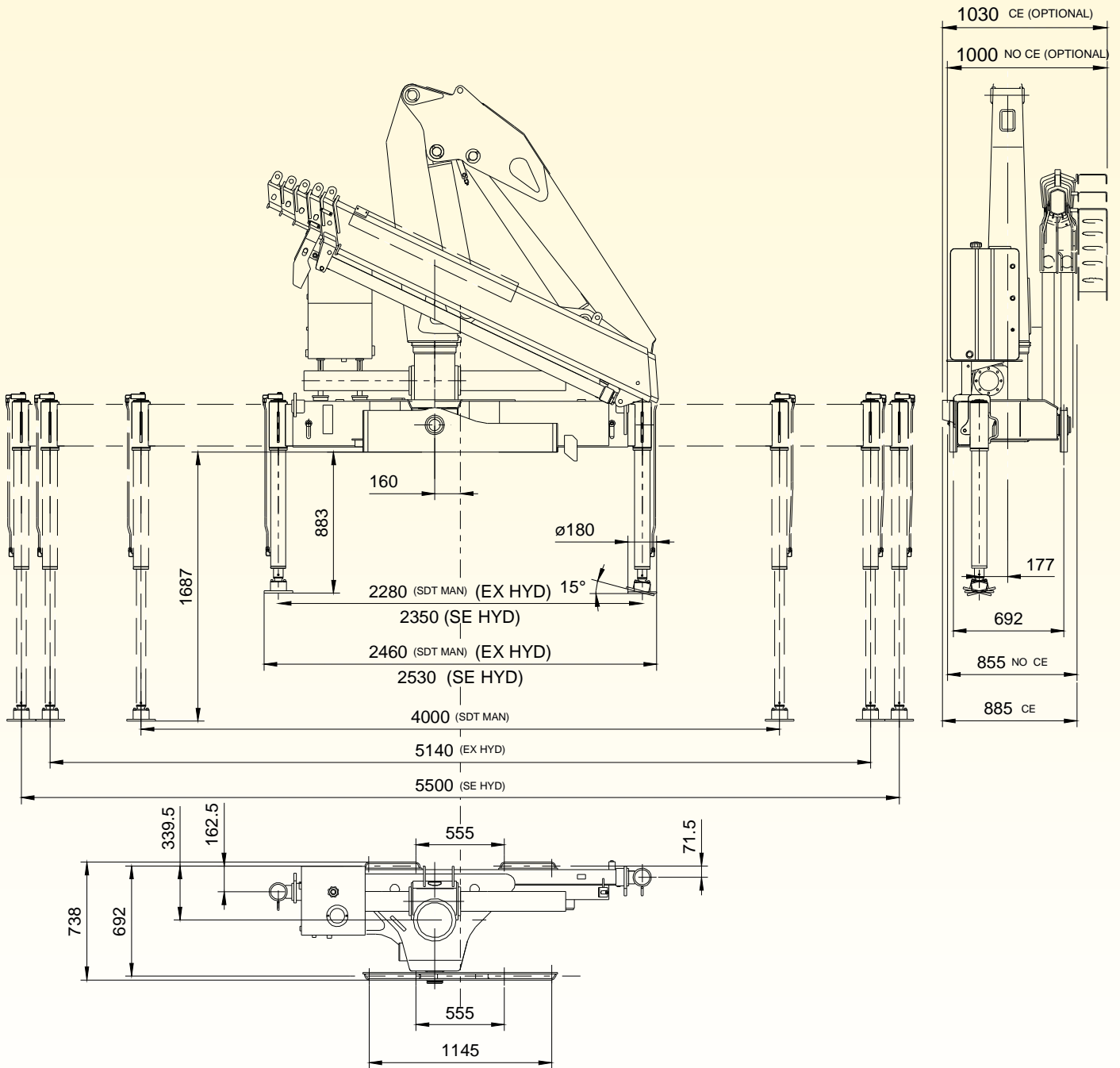
<i>Cylinder bore</i>	55
<i>Cyl. ext. diameter</i>	65
<i>Rod diameter</i>	40 - 0
<i>Centers (open)</i>	2997
<i>Centers (closed)</i>	1617
<i>Stroke</i>	1380
<i>Artic. pin Ø</i>	30
<i>Pin material</i>	C40 NORM

### 2<sup>ND</sup> EXTENSION CYLINDER OF JIB

<i>Cylinder bore</i>	50
<i>Cyl. ext. diameter</i>	60
<i>Rod diameter</i>	30 - 0
<i>Centers (open)</i>	1568
<i>Centers (closed)</i>	88
<i>Stroke</i>	1480
<i>Artic. pin Ø</i>	20
<i>Pin material</i>	39NiCrMo3 QT

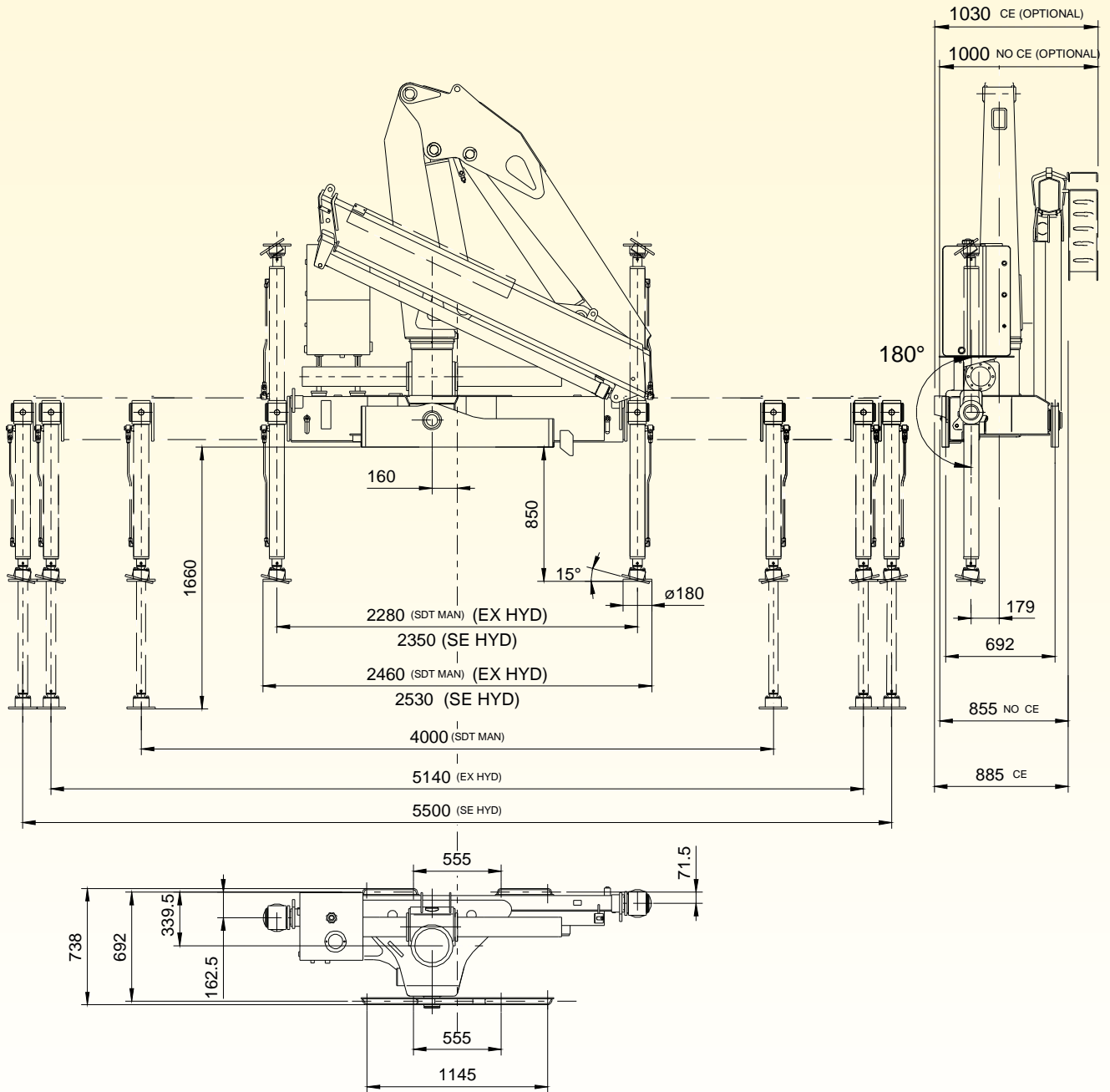
# HB150 TECHNICAL SHEET

## BASE DIMENSIONS WITH LONG STABILIZERS



# HB150 TECHNICAL SHEET

## BASE DIMENSIONS WITH TILTING STD CYLINDERS



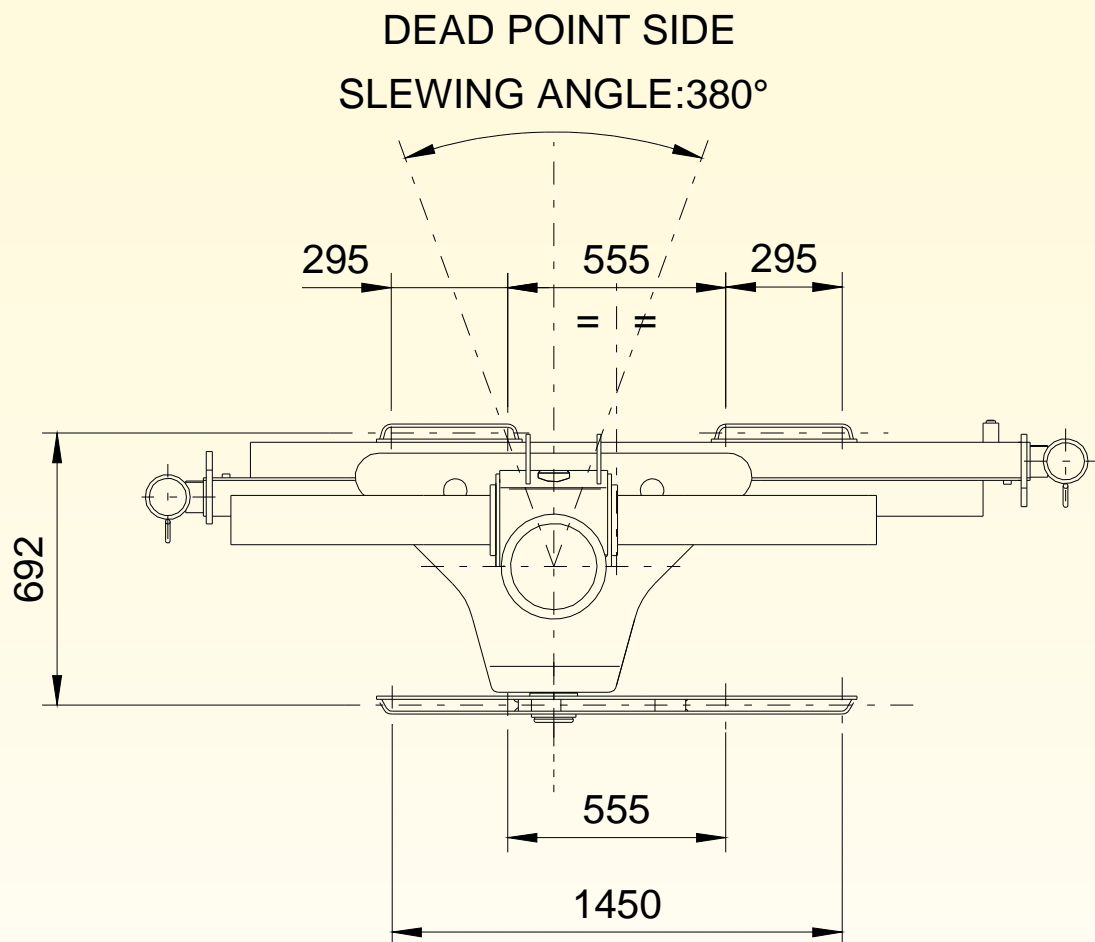
# **HB150 TECHNICAL SHEET**

## **CROSSBAR WITH LONG TILTING CYLINDER**

**NOT AVAILABLE**

# HB150 TECHNICAL SHEET

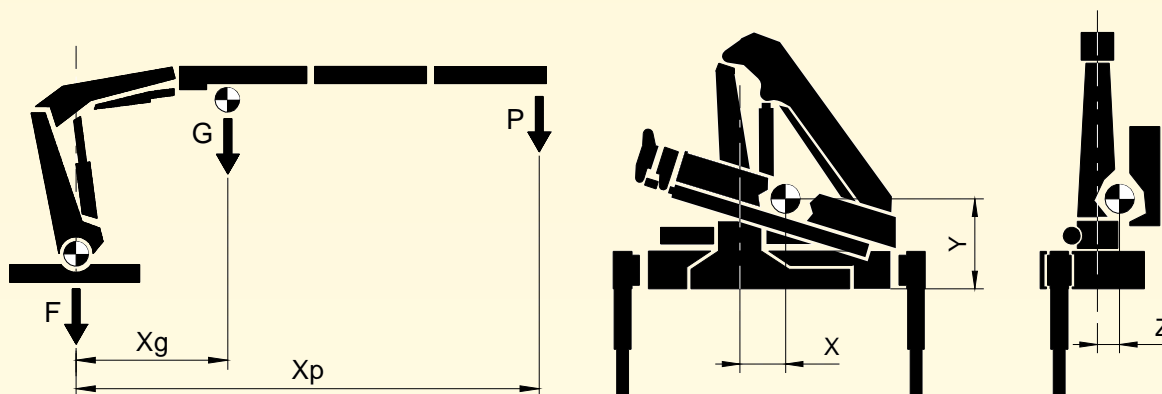
## TIE MOUNTING RODS BASE DIMENSIONS



<b>Tie mounting rods</b>	N°8 M24x2 39NiCrMo3 QT	<b>Tightening torque</b>	400 Nm
<b>Fixing bolts 1 rotation cylinder</b>	N°4 M14x35 8.8 UNI 5931	<b>Tightening torque</b>	127 Nm

# HB150 TECHNICAL SHEET

## WEIGHTS – CENTER OF GRAVITY



HB150		F (KG)	G [kg]	Xg [m]	P [kg]	Xp [m]	TL [kg]	(X,Y,Z) mm
E1		Std. man.: 1100 kg Extra hydr.: 1200 kg SE hydr.: 1210 kg	570	2.57	2240	6.14	2800	(145,755,0)
E2			700	3.34	1600	8.10	2000	(140,770,25)
E3			820	4.11	1180	10.16	1482	(135,785,40)
E4			920	4.82	880	12.23	1129	(125,800,55)
E5			1000	5.25	610	14.31	805	(120,815,65)
E3J2			1130	5.79	430	15.7	599	(95,910,80)

F = weight of fixed parts

G = weight of extension booms

Xg = distance of G from column axis

P = nominal load

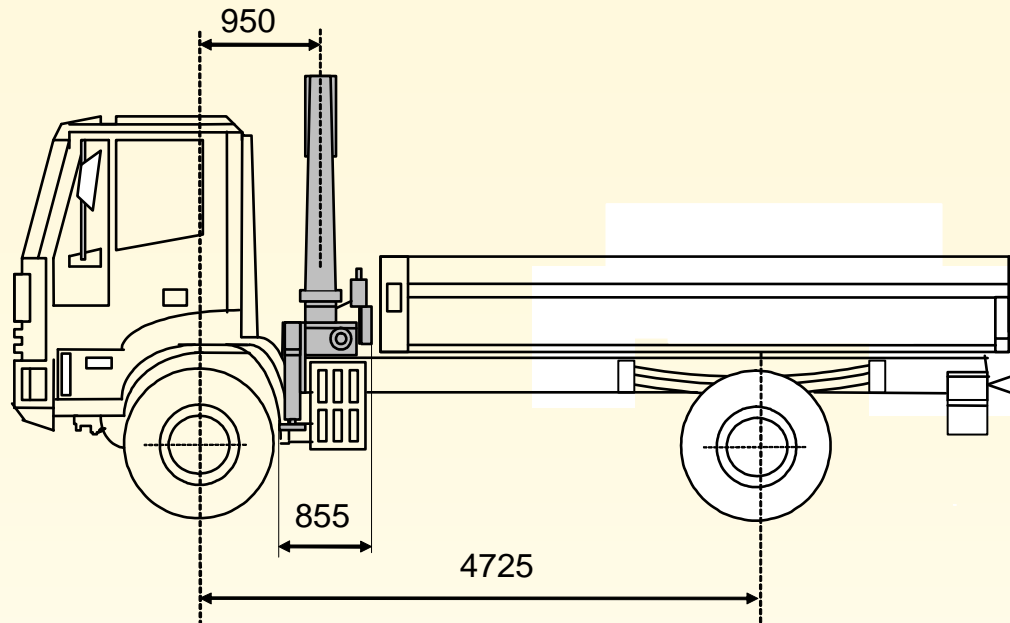
Xp = distance of P from column axis

TL = stability test load

X, Y, Z = center of gravity coordinates (closed crane)

# HB150 TECHNICAL SHEET

## MIN TRUCK WITH OUT SUPPLEMENTARY STABILIZERS



**GVW = 18 ton**

### CHASSIS DATA

#### *Front axle*

Front axle tare weight = 4185 kg

Allowable front axle weight = 7500 kg

#### *Rear axle*

Rear axle tare weight = 2115 kg

### OUTFIT WEIGHTS

Body weight = 600 kg

Crane weight = 2200 kg (HB150 E5 EXT hydr.)

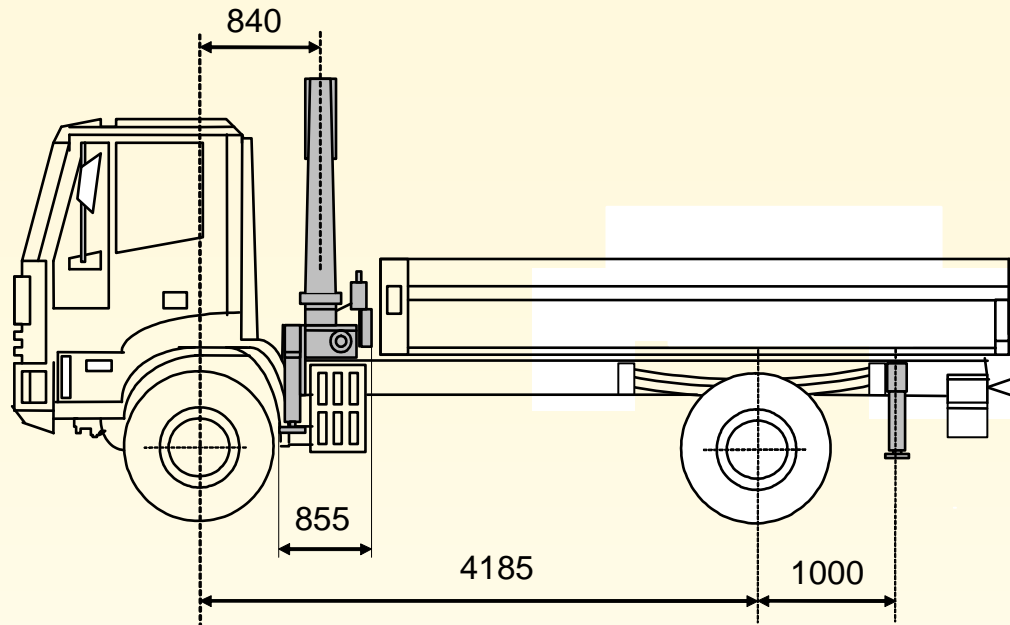
Counterframe weight = 150 kg

**Stability index = 1.47**



# HB150 TECHNICAL SHEET

## MIN TRUCK WITH SUPPLEMENTARY STABILIZERS



**GVW = 13 ton**

### **CHASSIS DATA**

#### *Front axle*

Front axle tare weight = 2815 kg

Allowable front axle weight = 4800 kg

#### *Rear axle*

Rear axle tare weight = 1375 kg

### **OUTFIT WEIGHTS**

Body weight = 600 kg

Crane weight = 2200 kg (HB150 E5 EXT hydr.)

Counterframe weight = 390 kg

### **Rear beam stabilizers**

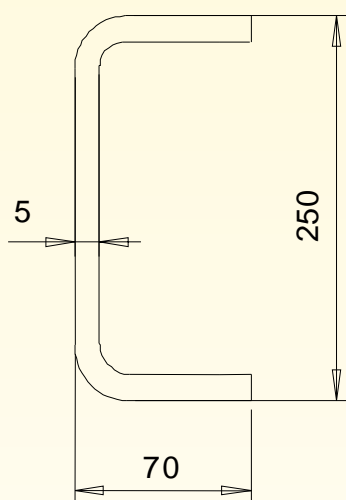
Min. width = 3000 mm

Rear stabilizer weight = 250 Kg

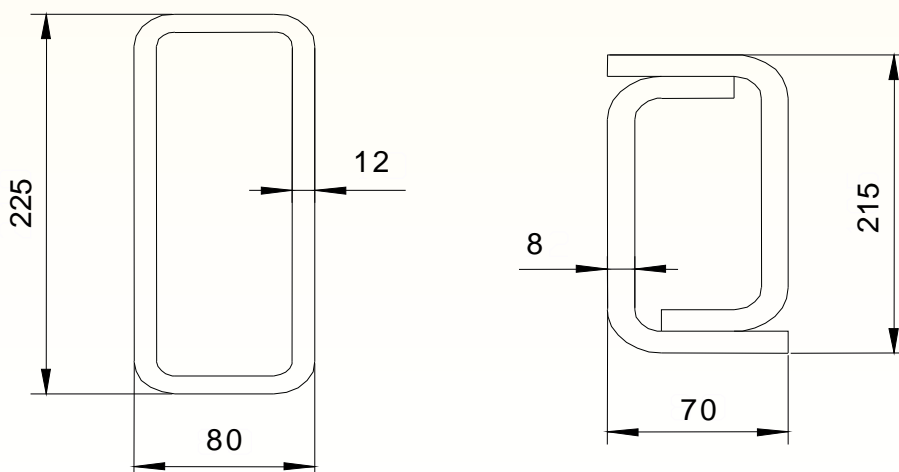
**Stability index = 1.42**

Max dynamic moment [daNm]	18110
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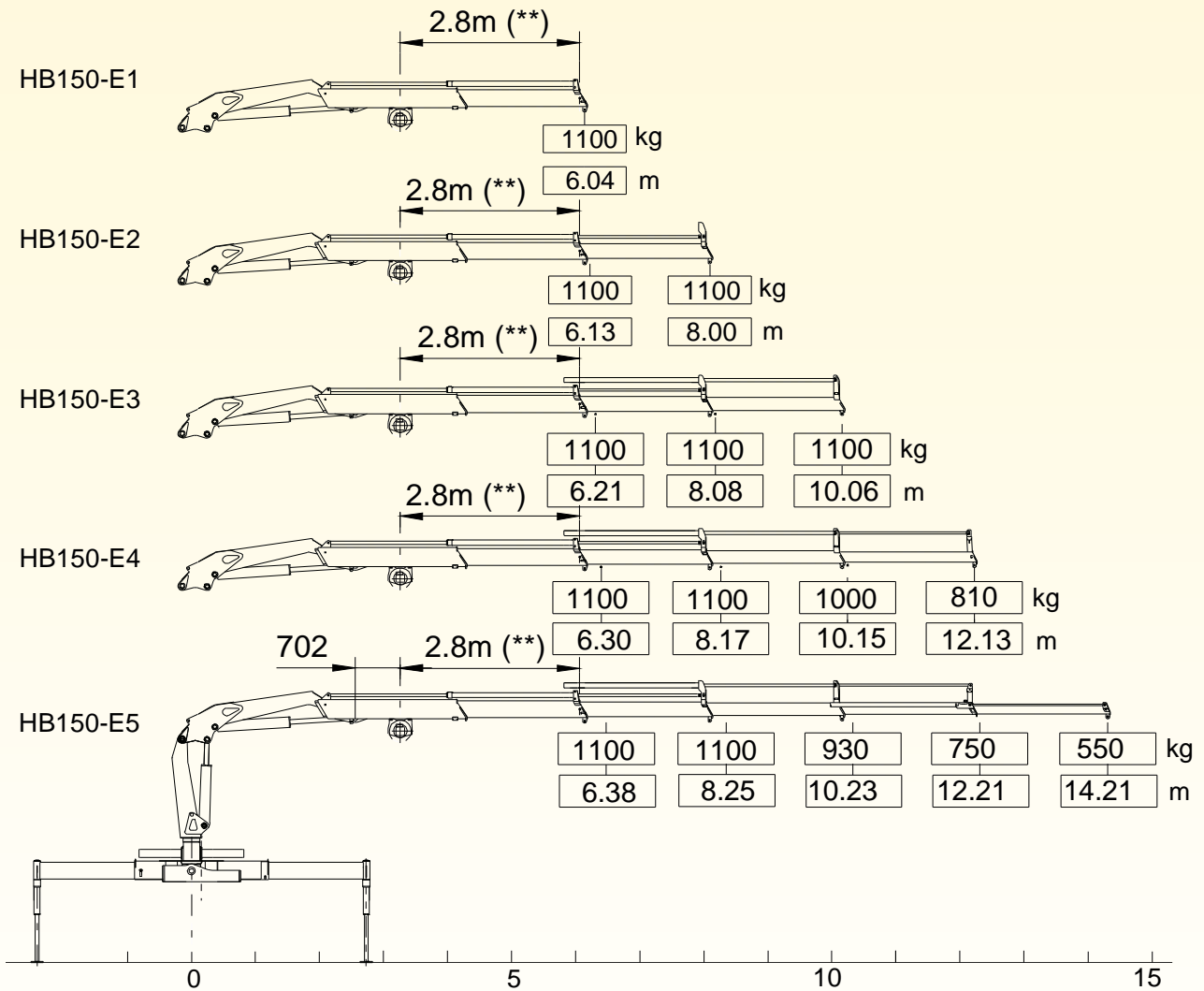
Min frame section (truck GVW = 13 ton ; steel S355)



Min counterframe section (steel S355)



Max winch direct pull [kg]	1100
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(\*\*) = Distanza minima di utilizzo argano  
 (\*\*) = Min distance for using the winch  
 (\*\*) = Min Abstand für Benutzung der Winde

# HB150 TECHNICAL SHEET

## GRAB - BUCKET DATA

Max allowable weight [kg]	420
Max working pressure [bar]	200

THE CAPACITIES OF THE ACTIVATED CRANES (FOR GRAB OR BUCKET) ARE DERATED BY 30% RESPECT TO THE STANDARD CRANES

