

TRUCK MOUNTED CRANE HB450



HYVA[®] CRANE

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HB450 TECHNICAL SHEET


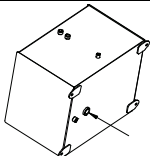
TECHNICAL DATA

Max dynamic moment (daNm)	53880
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	Version	Q _{max}
Max load (kg)	E2	10700
	E3	10300
	E4	10030

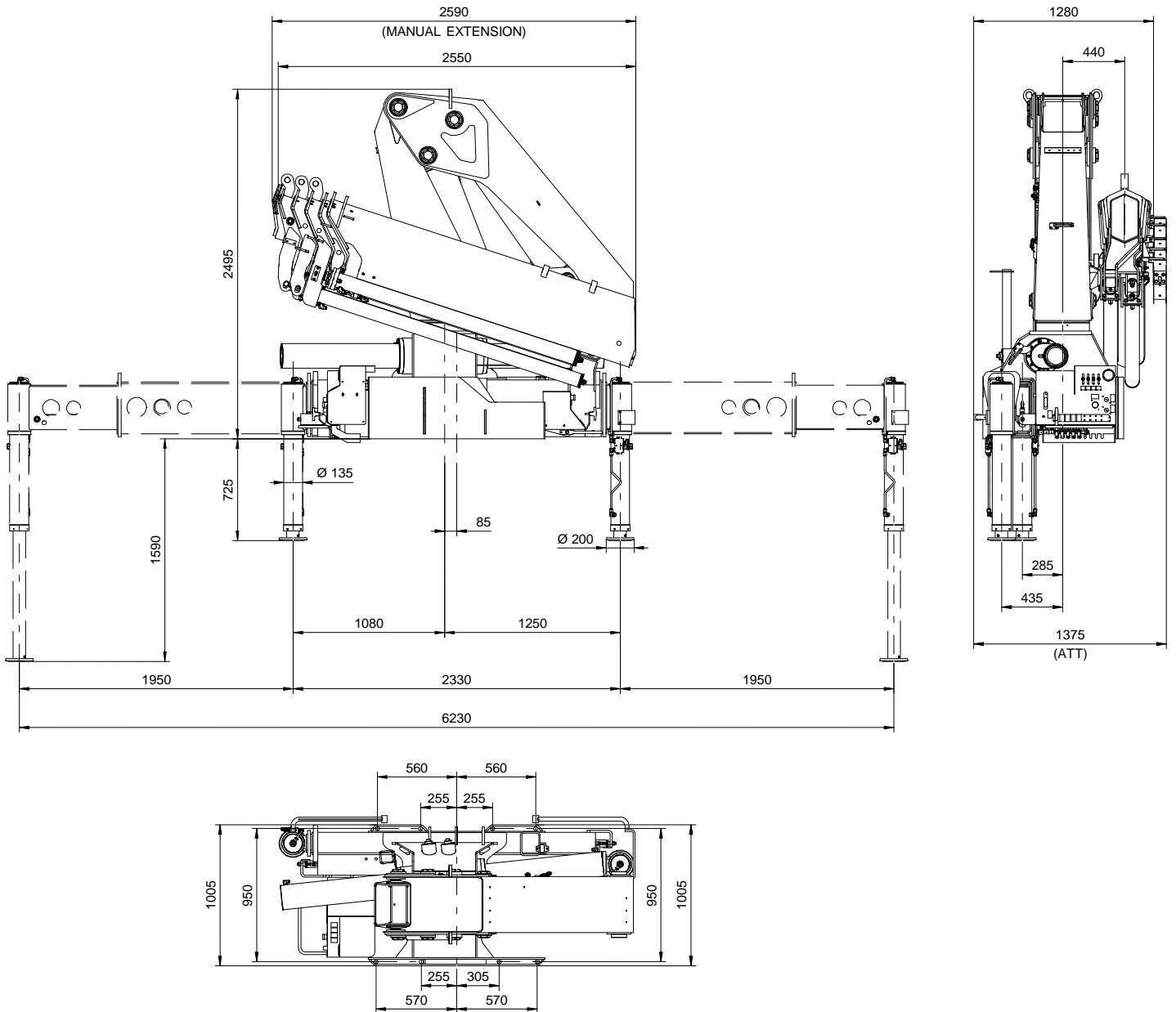
	Version	HB450
Crane weight (kg)	E2	4625
	E3	4865
	E4	5070

Max force on the stabilizer leg	17785 daN
Max standard stabilizer pressure on the ground	56.6 daN/cm ²
Max working pressure	270 bar
Max oil flow	50 l/min
Oil tank capacity	250 l
Slewing moment	6500 daNm
Slewing angle	385°
Absorbed power	29.3 kW 40.2 HP
Design standard	DIN 15018 EN 12999

Fittings for connection with pump		
Control valve pressure line		M 7/8 – 14 JIC
Tank suction line		F2" BPS

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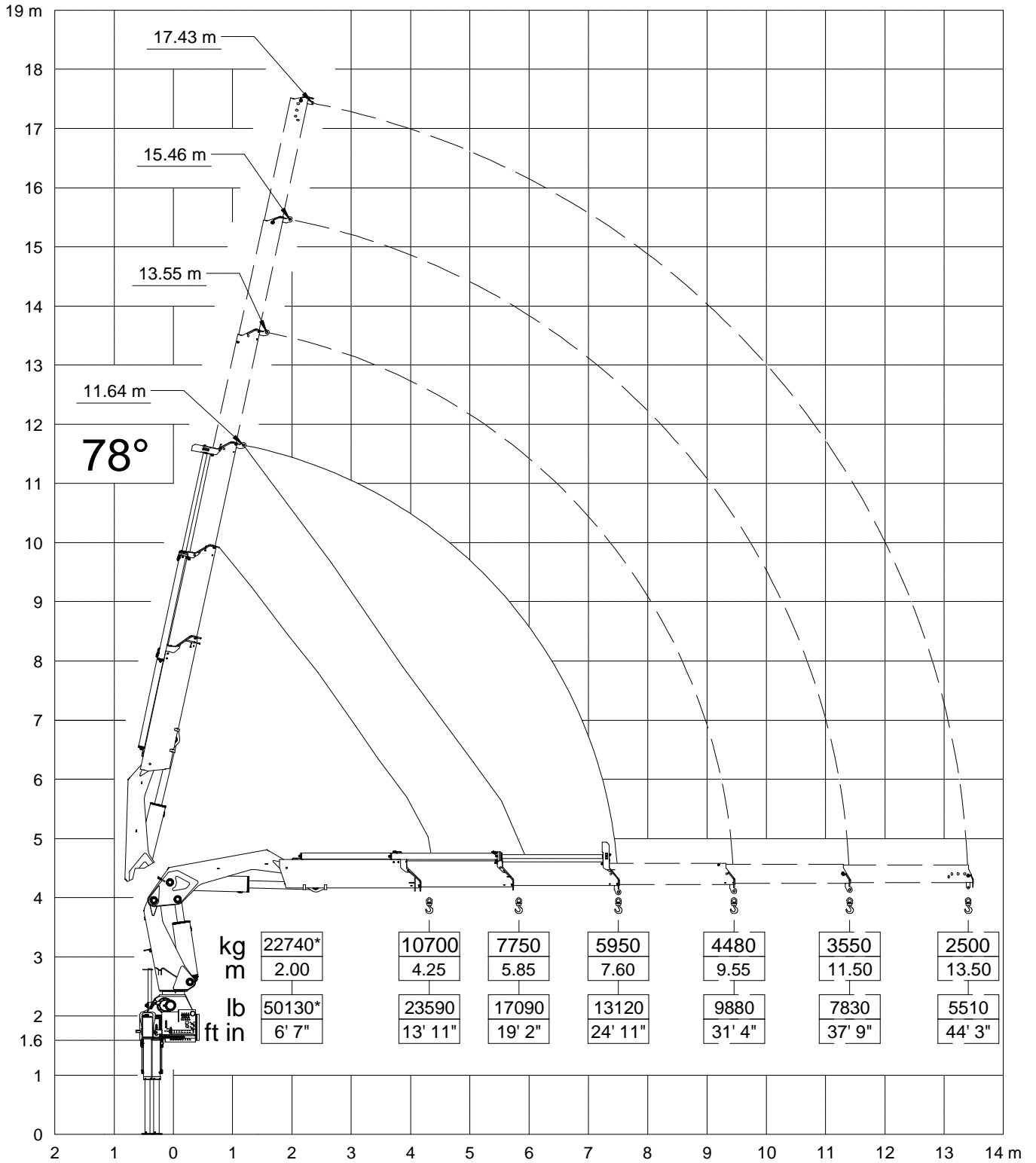
OVERALL DIMENSION



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LOAD DIAGRAM

HB450 E2

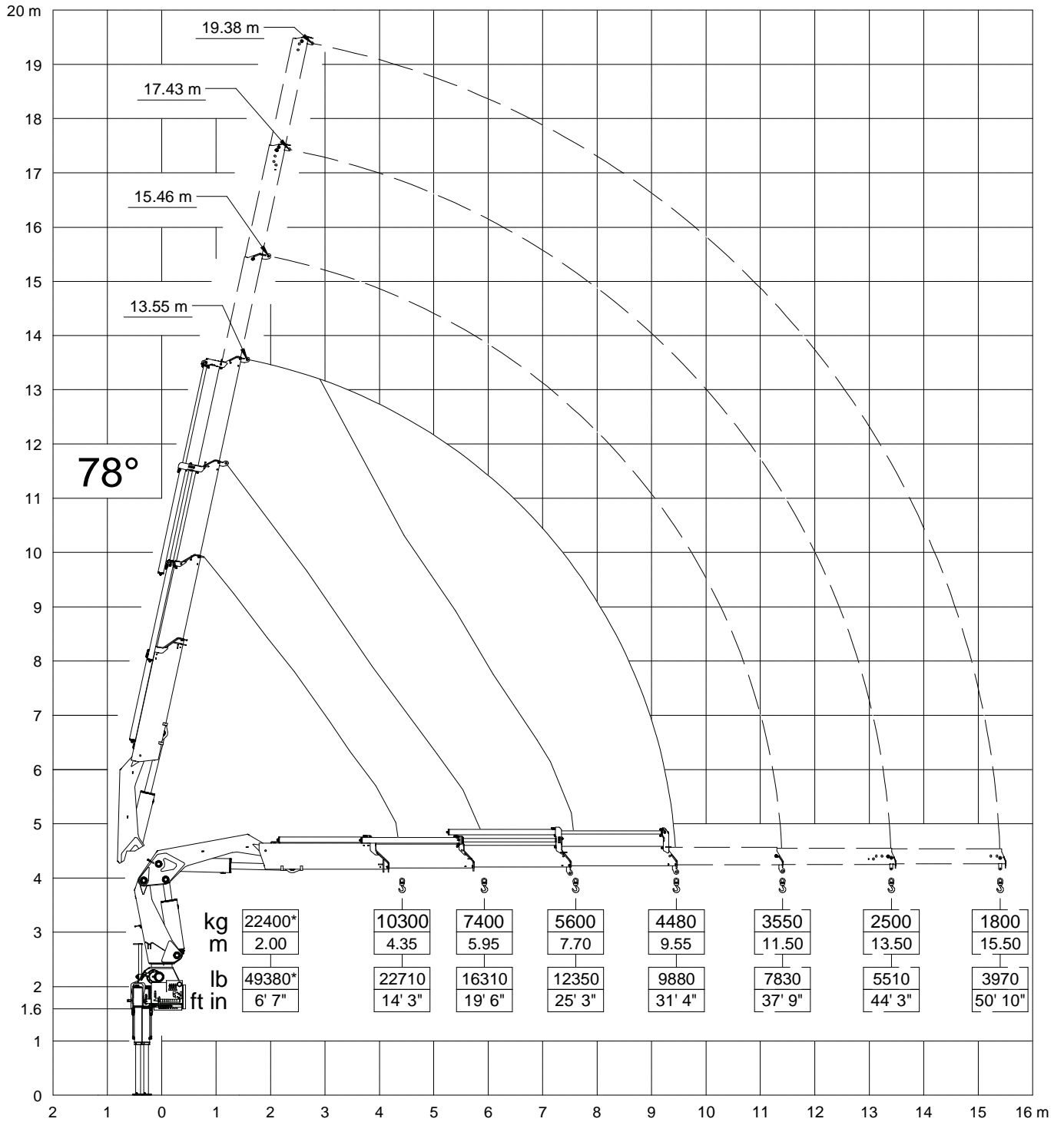


* Theoretical lifting capacity

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LOAD DIAGRAM

HB450 E3

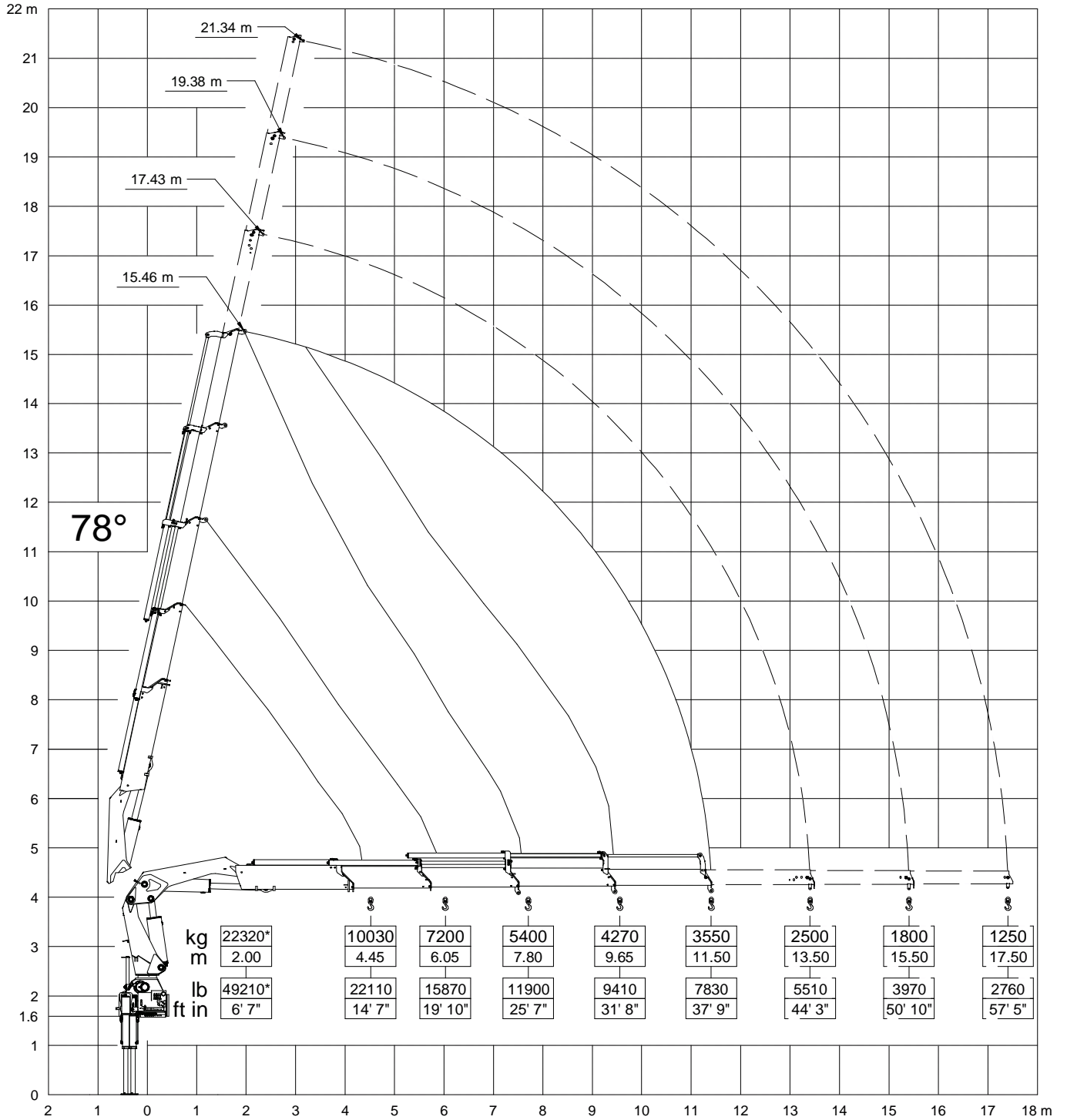


* Theoretical lifting capacity

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LOAD DIAGRAM

HB450 E4

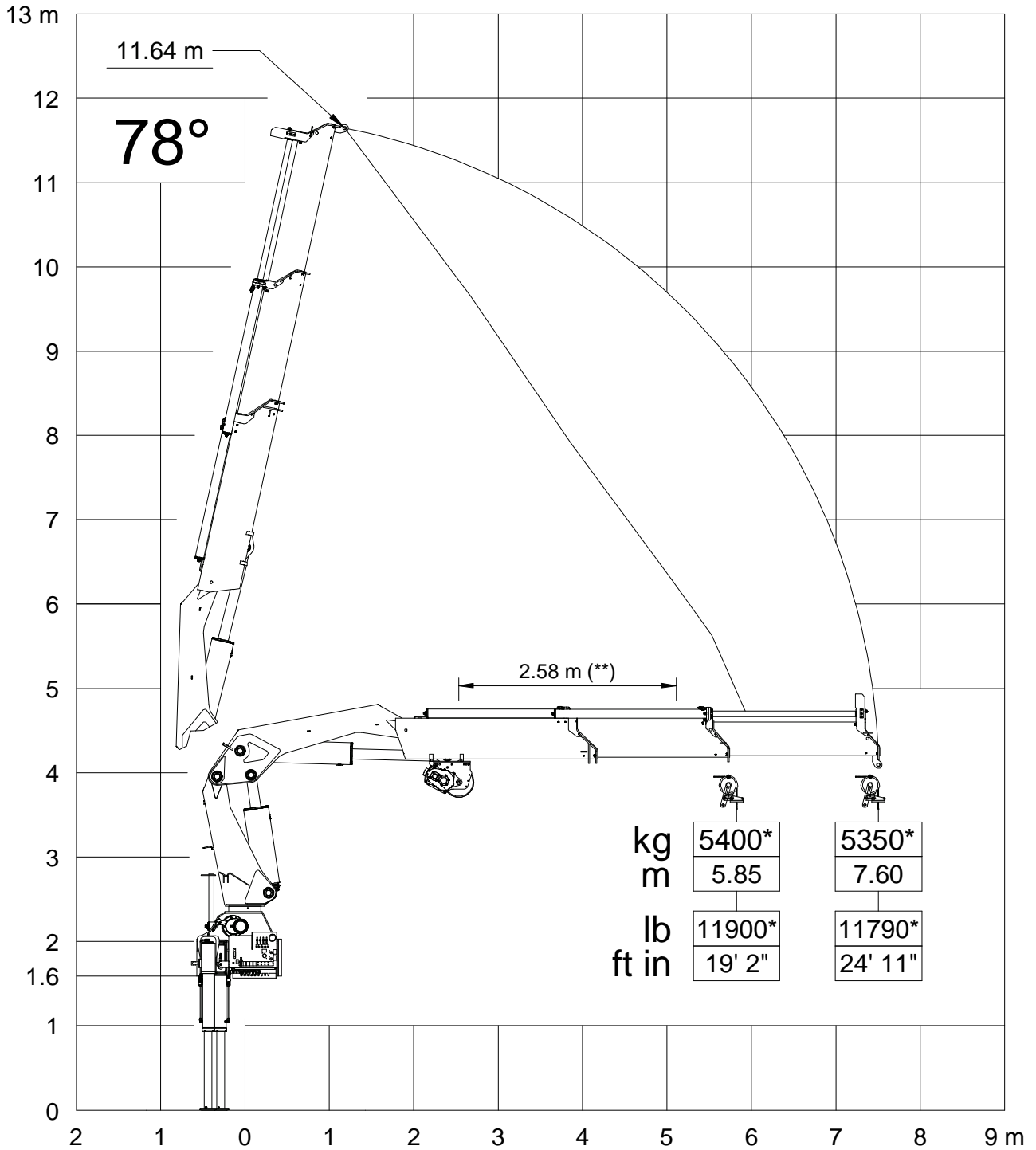


* Theoretical lifting capacity

HB450 TECHNICAL SHEET

WINCH LOAD DIAGRAM

HB450 E2



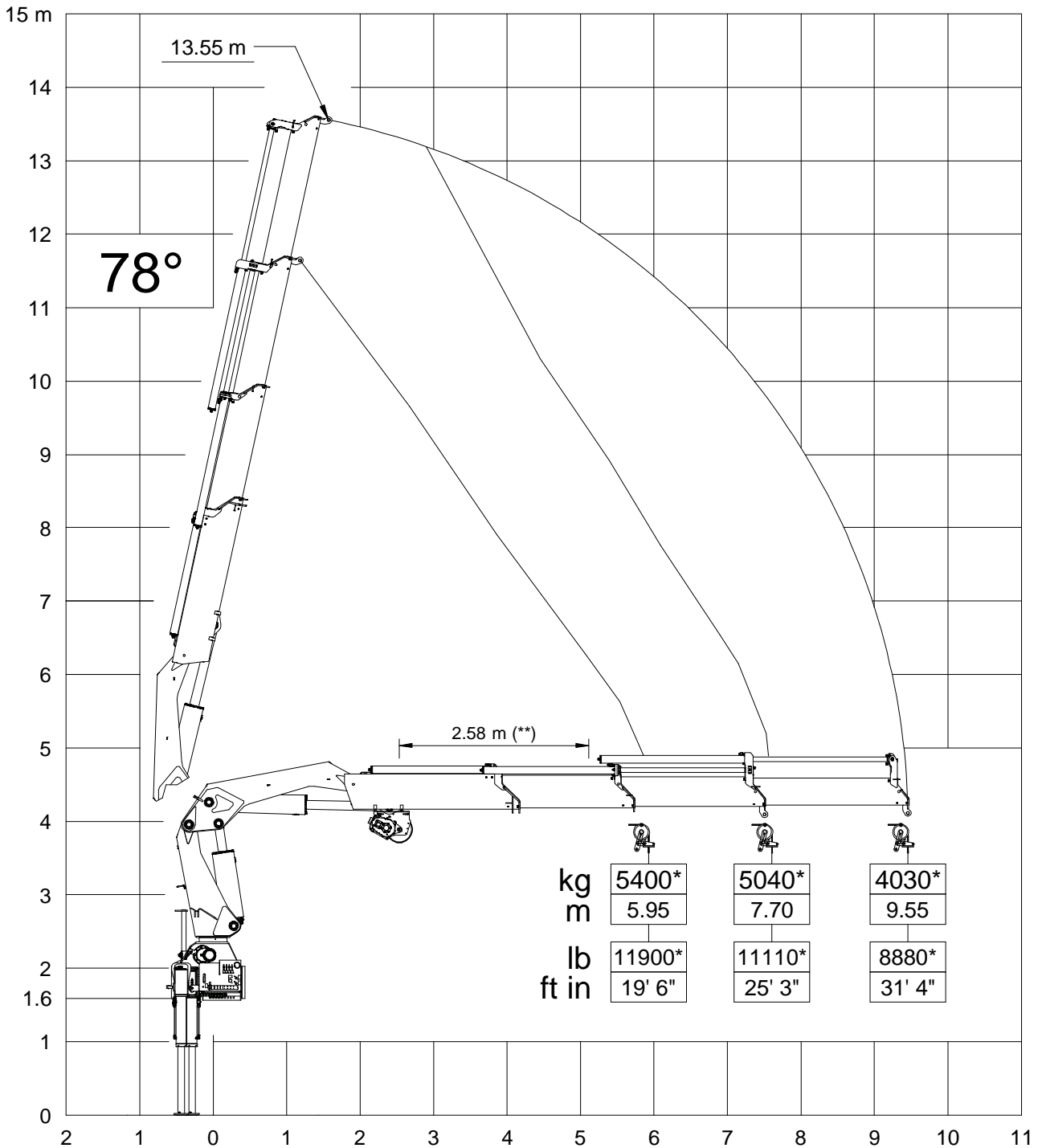
(*) = Winch pulley with double line pull (**) = Min distance for using the winch

OSTA Winch OS-3500 -- MAX Winch direct pull 2700 kg

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WINCH LOAD DIAGRAM

HB450 E3



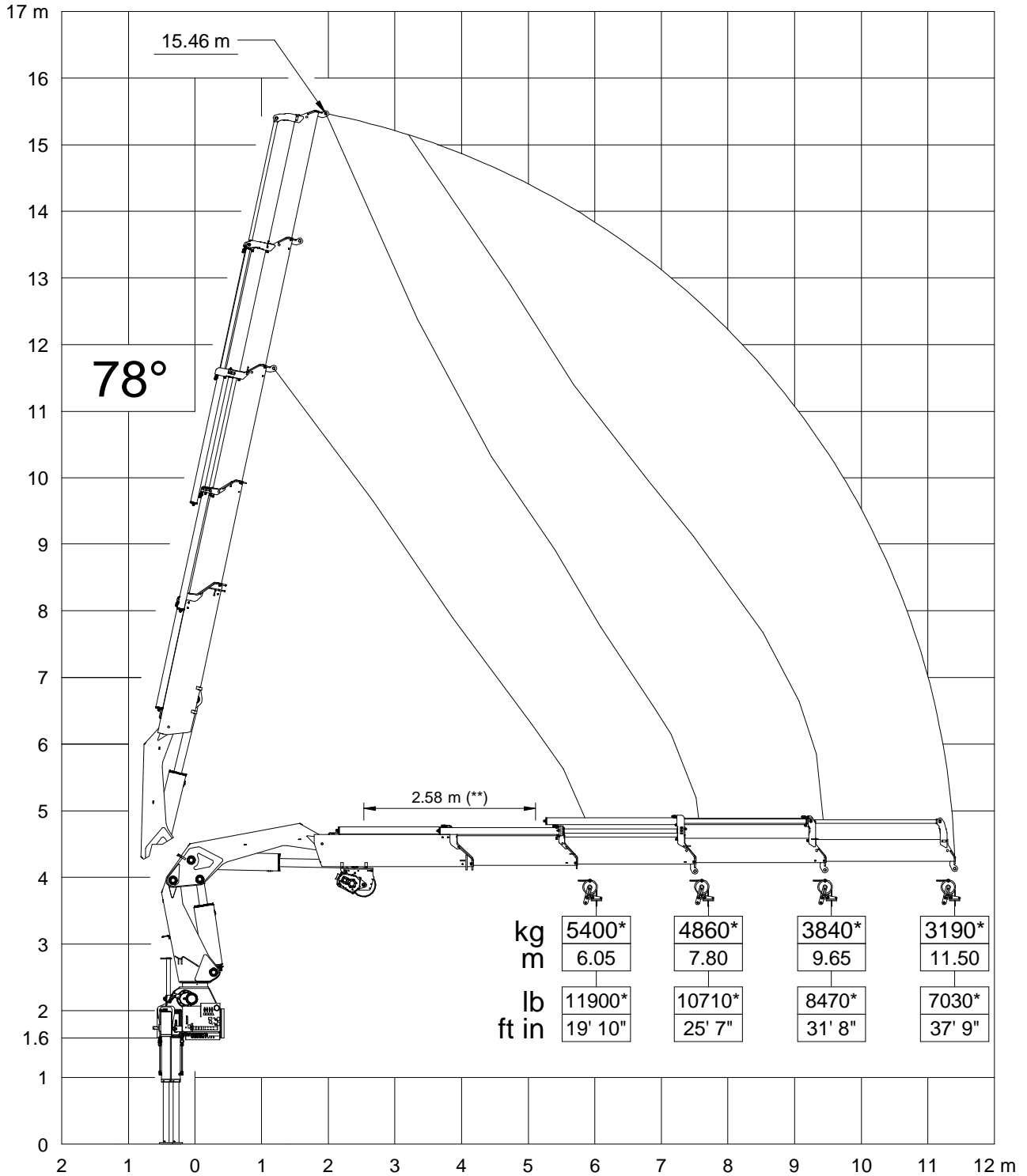
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WINCH LOAD DIAGRAM

HB450 E4

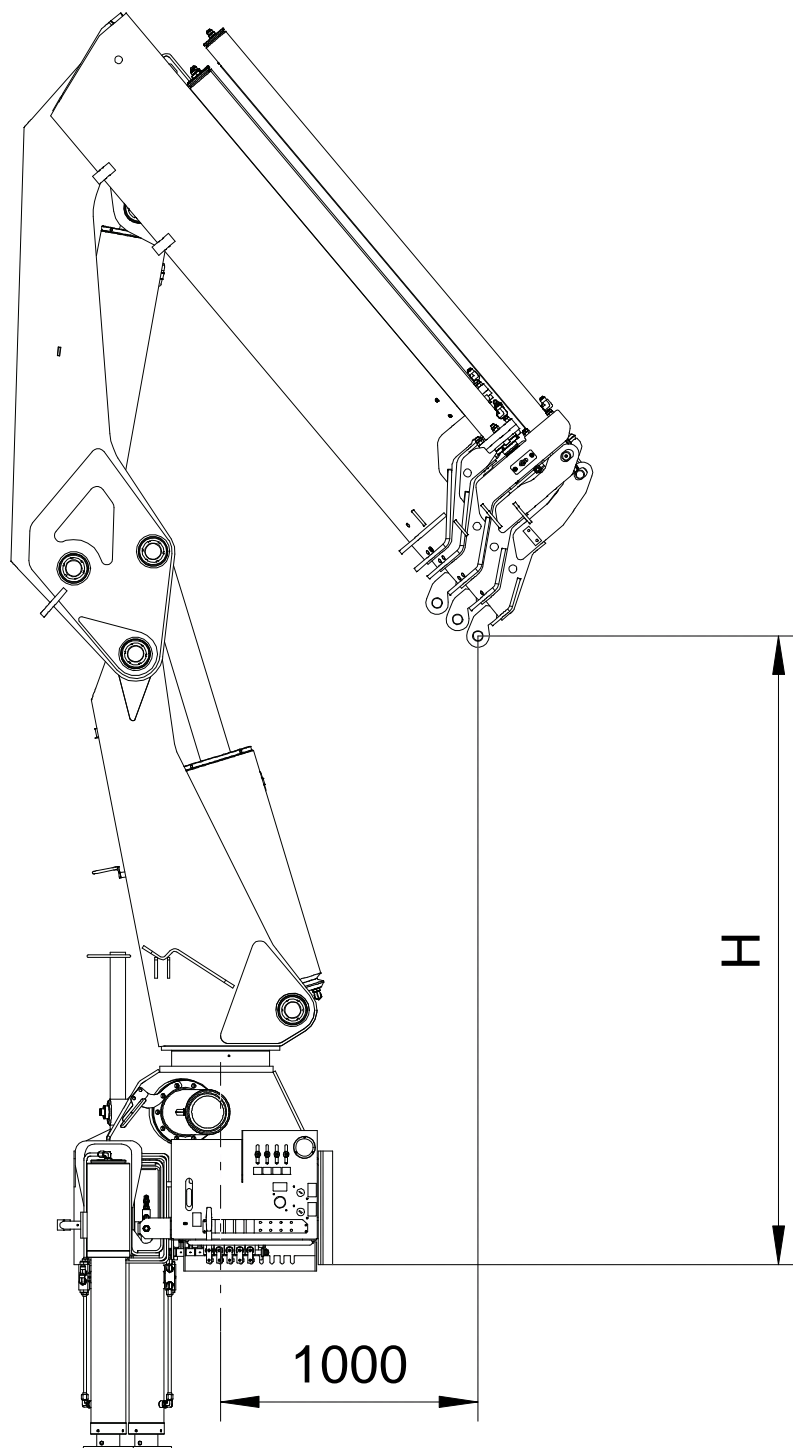


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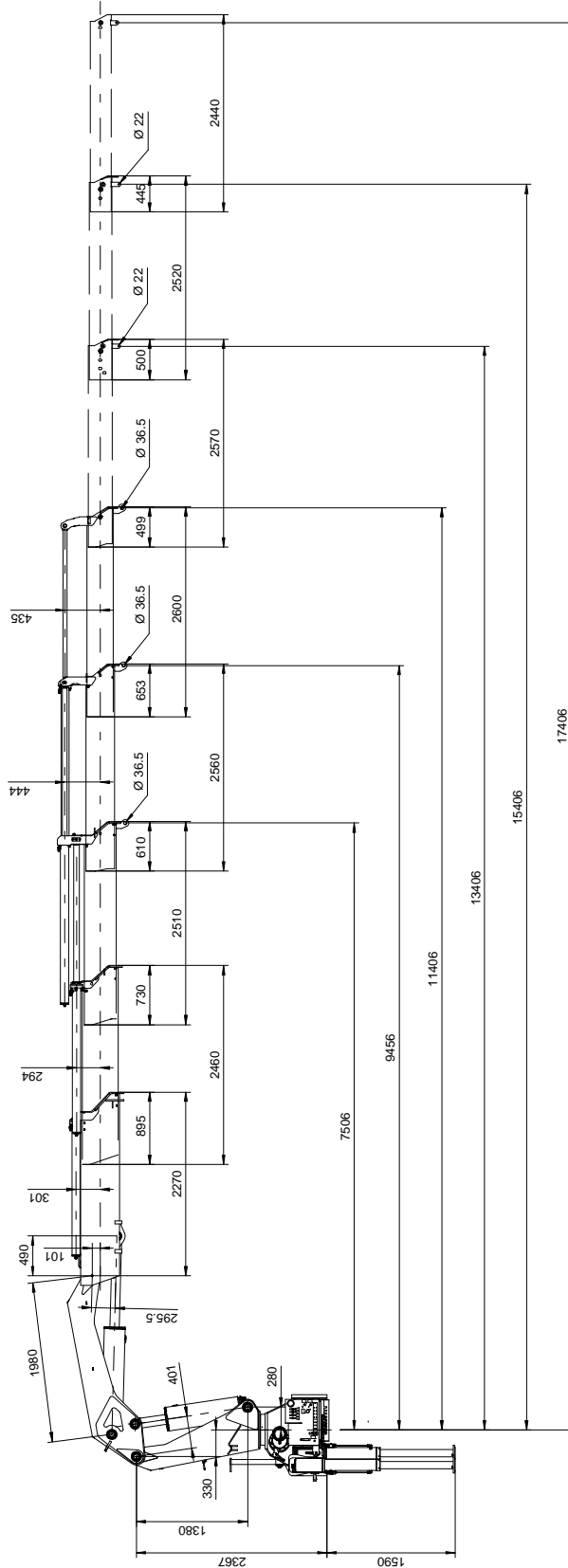
HOOK HEIGHT



	H [mm]
E2	2665
E3	2550
E4	2435

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COLUMN - BOOM - DIMENSIONS



LIFTING CYLINDER

Cylinder bore	250
Cylinder external diameter	295
Rod diameter	120
Pitch (open)	1858
Pitch (closed)	1111
Stroke	747
Fittings	1/2" G
Articulation pin Ø	70
Pin steel	39NiCrMo3

ARTICULATION CYLINDER

Cylinder bore	220
Cylinder external diameter	260
Rod diameter	120
Pitch (open)	2455
Pitch (closed)	1402
Stroke	1053
Fittings	1/2" G
Articulation pin Ø	70
Pin steel	39NiCrMo3

1ST EXTENSION CYLINDER

Cylinder bore	90
Cylinder external diameter	105
Rod diameter	65 - 50
Pitch (open)	1640
Pitch (closed)	130
Stroke	1510
Fittings	3/4" G
Fixing pin Ø	35
Pin steel	39NiCrMo3 Bnf

2ND EXTENSION CYLINDER

Cylinder bore	90
Cylinder external diameter	105
Rod diameter	65 - 50
Pitch (open)	1810
Pitch (closed)	130
Stroke	1680
Fittings	3/4" G
Fixing pin Ø	35
Pin steel	39NiCrMo3 Bnf

3RD EXTENSION CYLINDER

Cylinder bore	85
Cylinder external diameter	100
Rod diameter	60 - 40
Pitch (open)	1979
Pitch (closed)	129
Stroke	1850
Fittings	1/2" G
Fixing pin Ø	35
Pin steel	39NiCrMo3 Bnf

4TH EXTENSION CYLINDER

Cylinder bore	80
Cylinder external diameter	95
Rod diameter	50
Pitch (open)	1978
Pitch (closed)	128
Stroke	1850
Fittings	1/2" G
Fixing pin Ø	35
Pin steel	39NiCrMo3 Bnf

ROTATION CYLINDER

Cylinder bore	150
Cylinder external diameter	175
Rod diameter	-
Pitch (open)	-
Pitch (closed)	-
Stroke	922
Fittings	-
Articulation pin Ø	-
Pin steel	-

STABILIZER CYLINDER

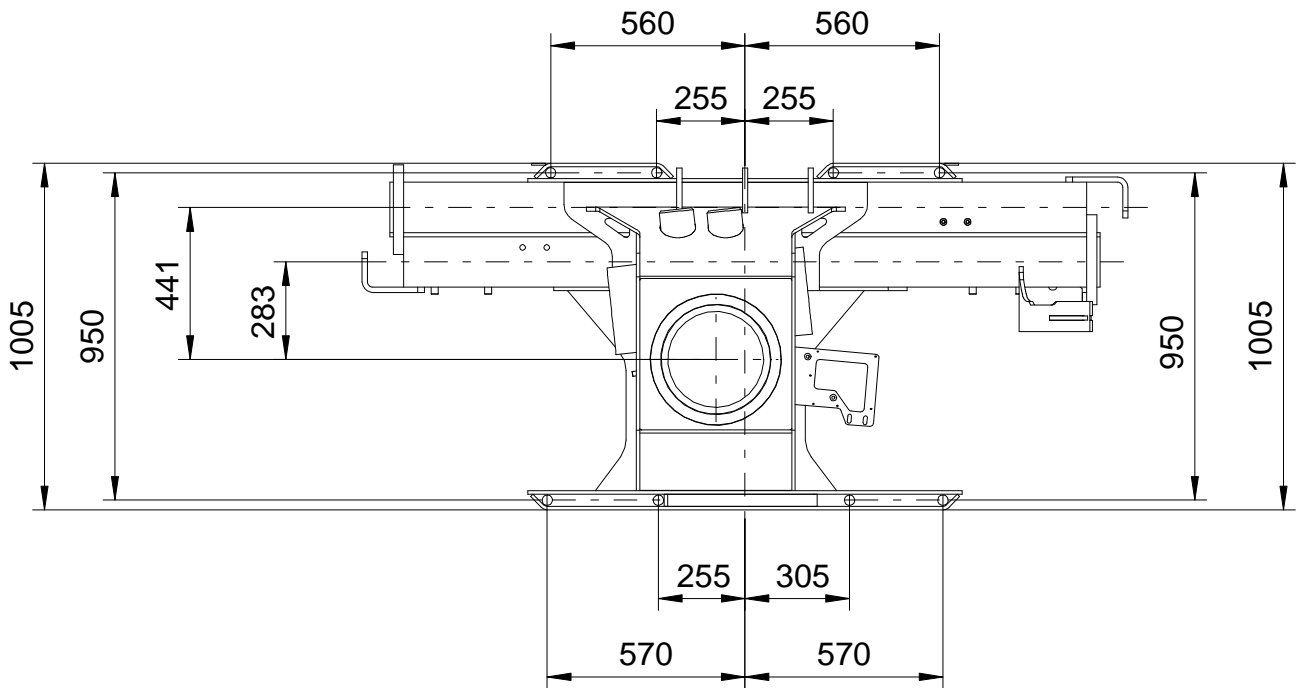
Cylinder bore	120
Cylinder external diameter	135
Rod diameter	90
Pitch (open)	1627
Pitch (closed)	603
Stroke	764
Fittings	3/8" G
Fixing pin Ø	-
Pin steel	-

STABILIZER EXTENSION CYLINDER

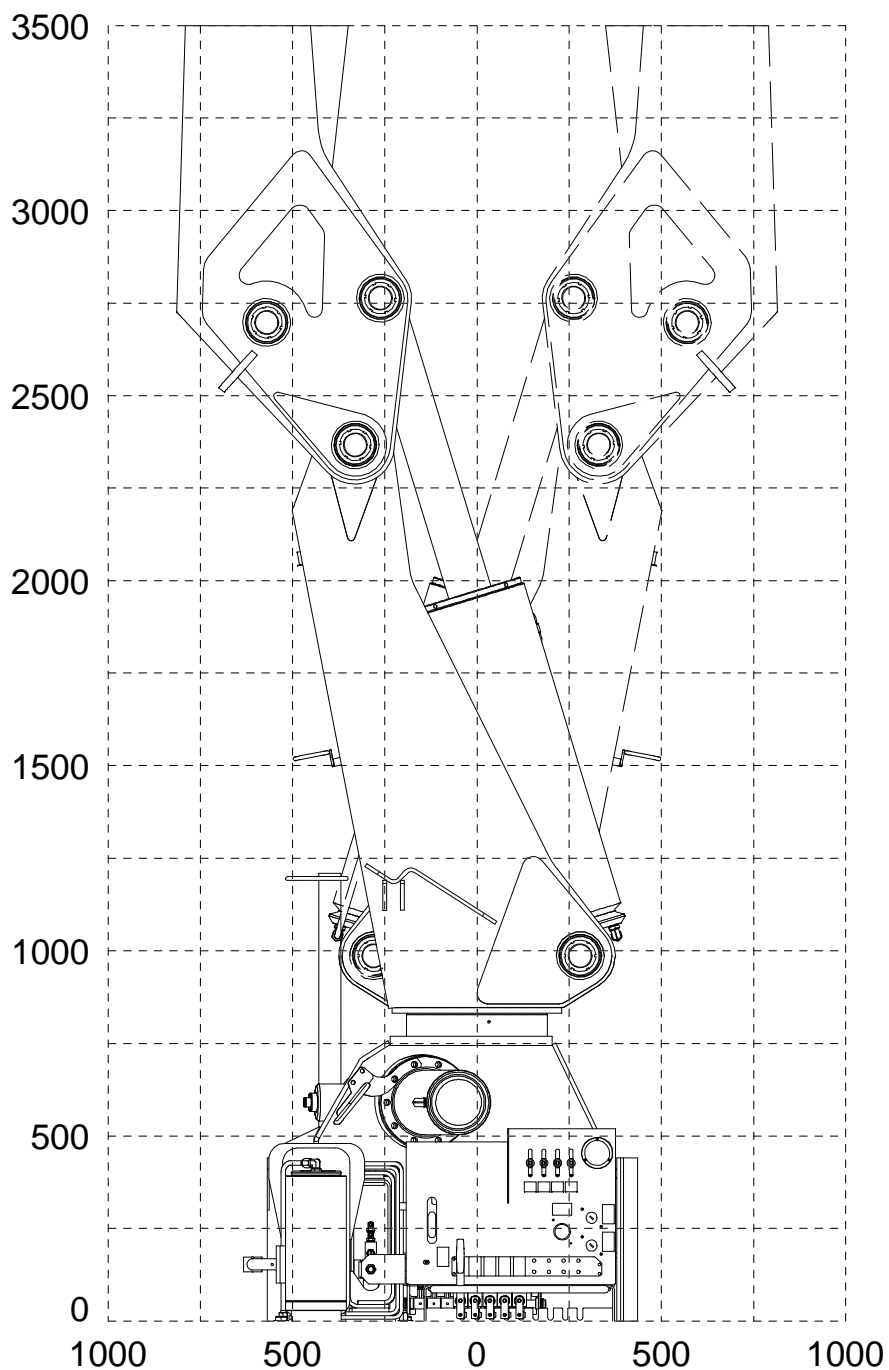
Cylinder bore	40
Cylinder external diameter	50
Rod diameter	25
Pitch (open)	4084
Pitch (closed)	2134
Stroke	1950
Fittings	9/16 - 18 JIC
Articulation pin Ø	20
Pin steel	C40

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BASE DIMENSIONS, TIE MOUNTING RODS & ROTATION SCREWS

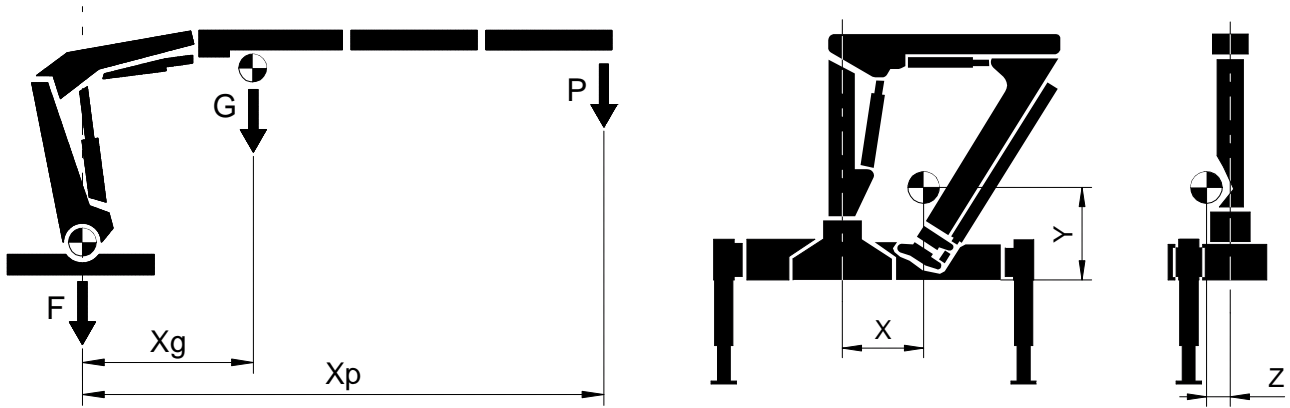





Tie mounting rods	N°8 M30x2 42CrMo4 BNF
Fixing bolts for 1 rotation cylinder	N°10 M16x60 12.9 UNI 5931 Tightening torque 235 Nm



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WEIGHTS - CENTER OF GRAVITY

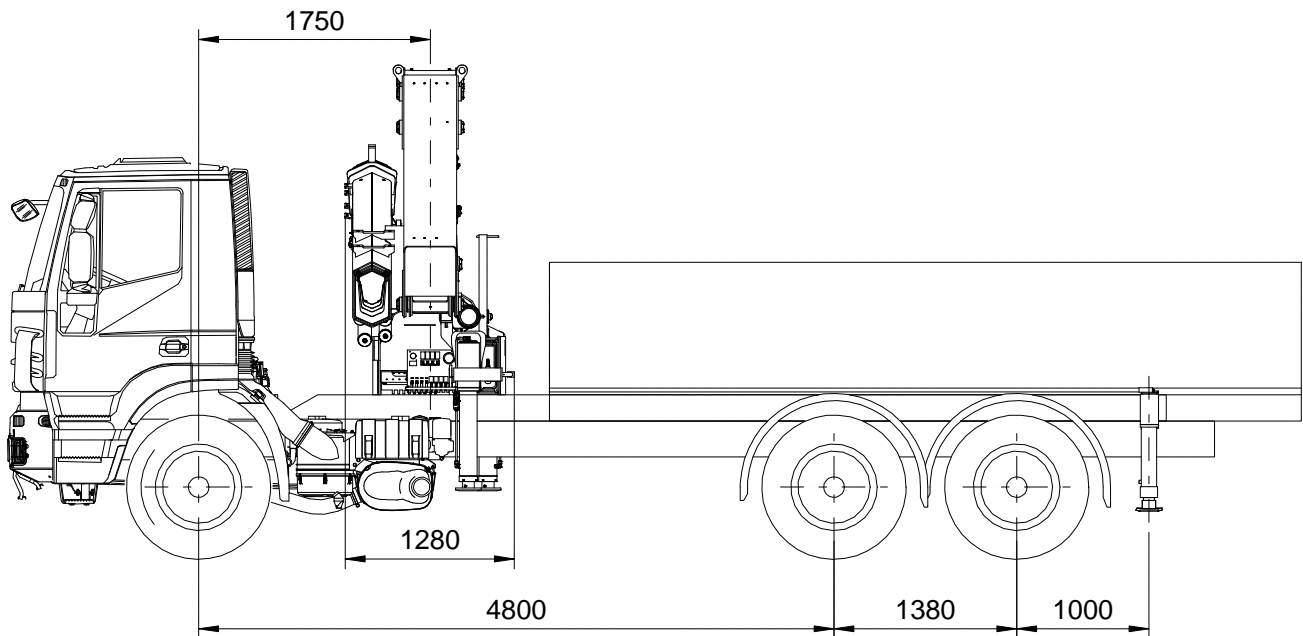


HB450	F [kg]	G [kg]	Xg [m]	P [kg]	Xp [m]	TL [kg]	X [mm]	Y [mm]	Z [mm]
E2 	2940	1685	2.59	5950	7.60	7438	145	895	25
E3 		1925	3.26	4480	9.55	5600	135	900	0
E4 		2130	3.88	3550	11.5	4438	120	910	-15

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)

HB450 TECHNICAL SHEET

MIN TRUCK WITH SUPPLEMENTARY STABILIZERS



GVW= 26 t

CHASSIS DATA

Front axle

Front axle tare weight = 4515 kg

Allowable front axle weight = 8000 kg

Rear axle

Rear axle tare weight = 3975 kg

OUTFIT WEIGHTS

Body weight = 1500 kg

Crane weight = 5070 kg (HB450-E4)

Counterframe weight = 585 kg

Rear beam stabilizers

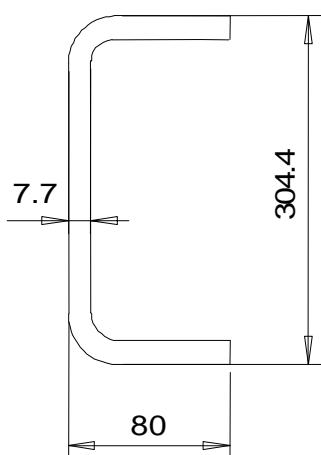
Min. width = 5000 mm

Rear stabilizer weight = 575 kg

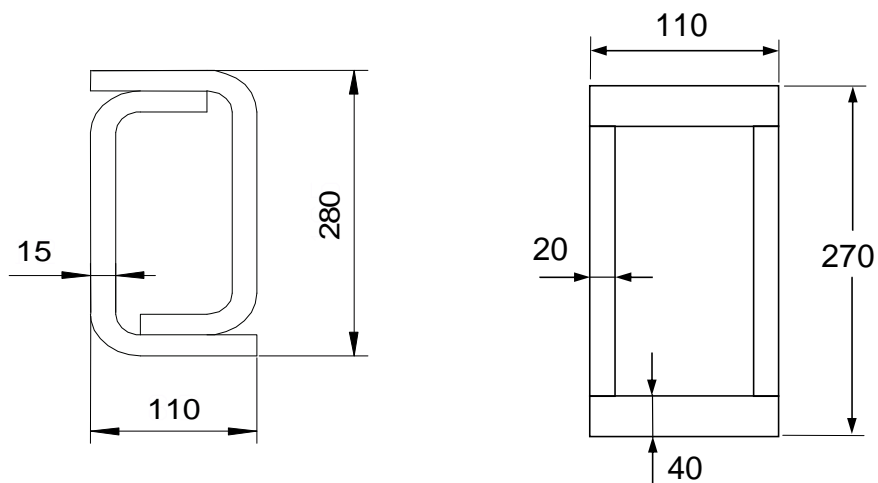
Stability index = 1,30

Max dynamic moment (daNm)	53880
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Min frame section (truck GVW 26 ton)



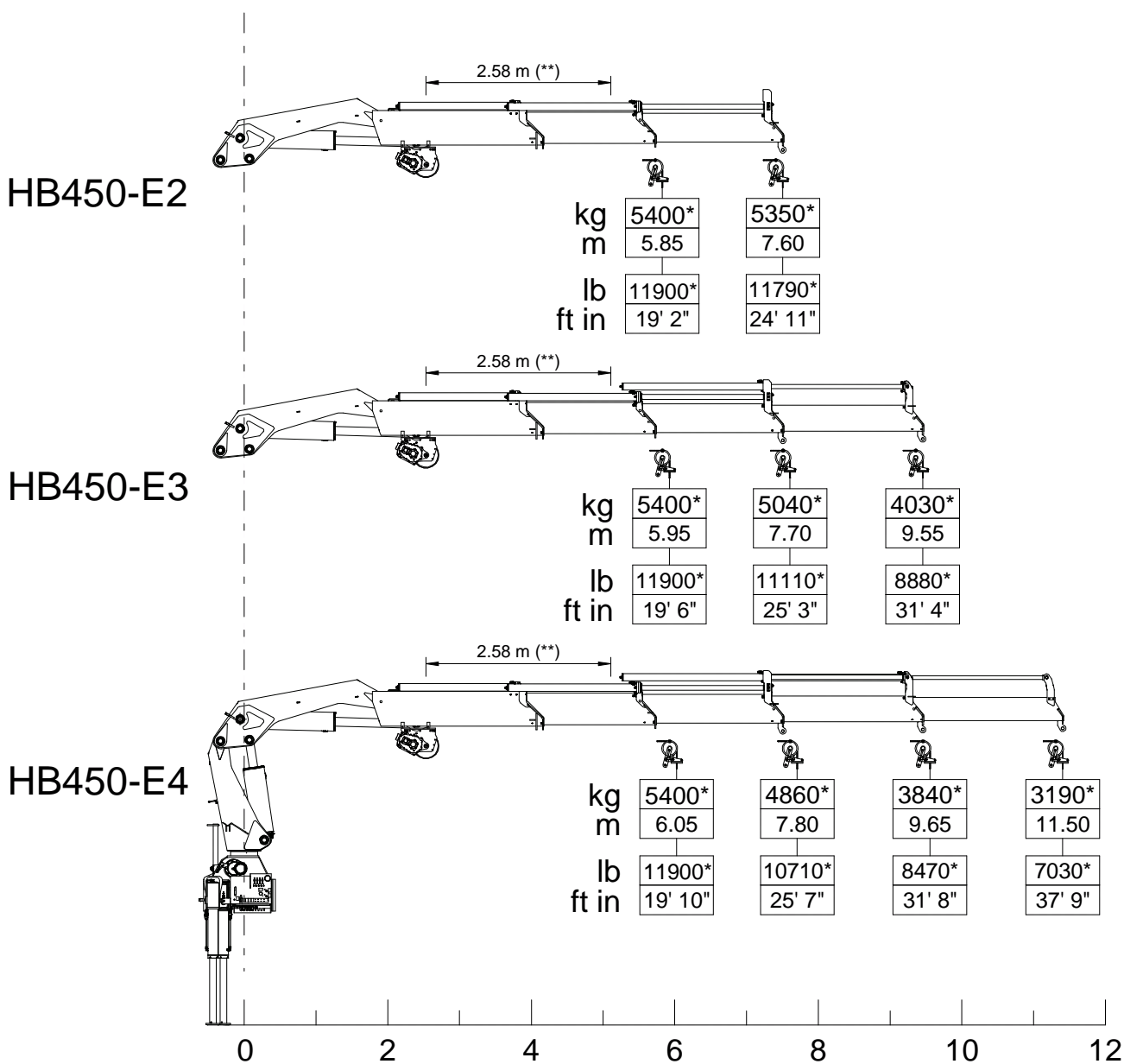
Min counterframe section (steel S355)



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HYDRAULIC WINCH DATA

Max winch direct pull (kg)	2700
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GRAB BUCKET DATA

Max allowable weight (kg)	420
Max working pressure (bar)	240

