KCP GMBH

KB-M24Z	Placing Boom System Layout

6770(max.23.2M)

1110

901

12811

10000

800
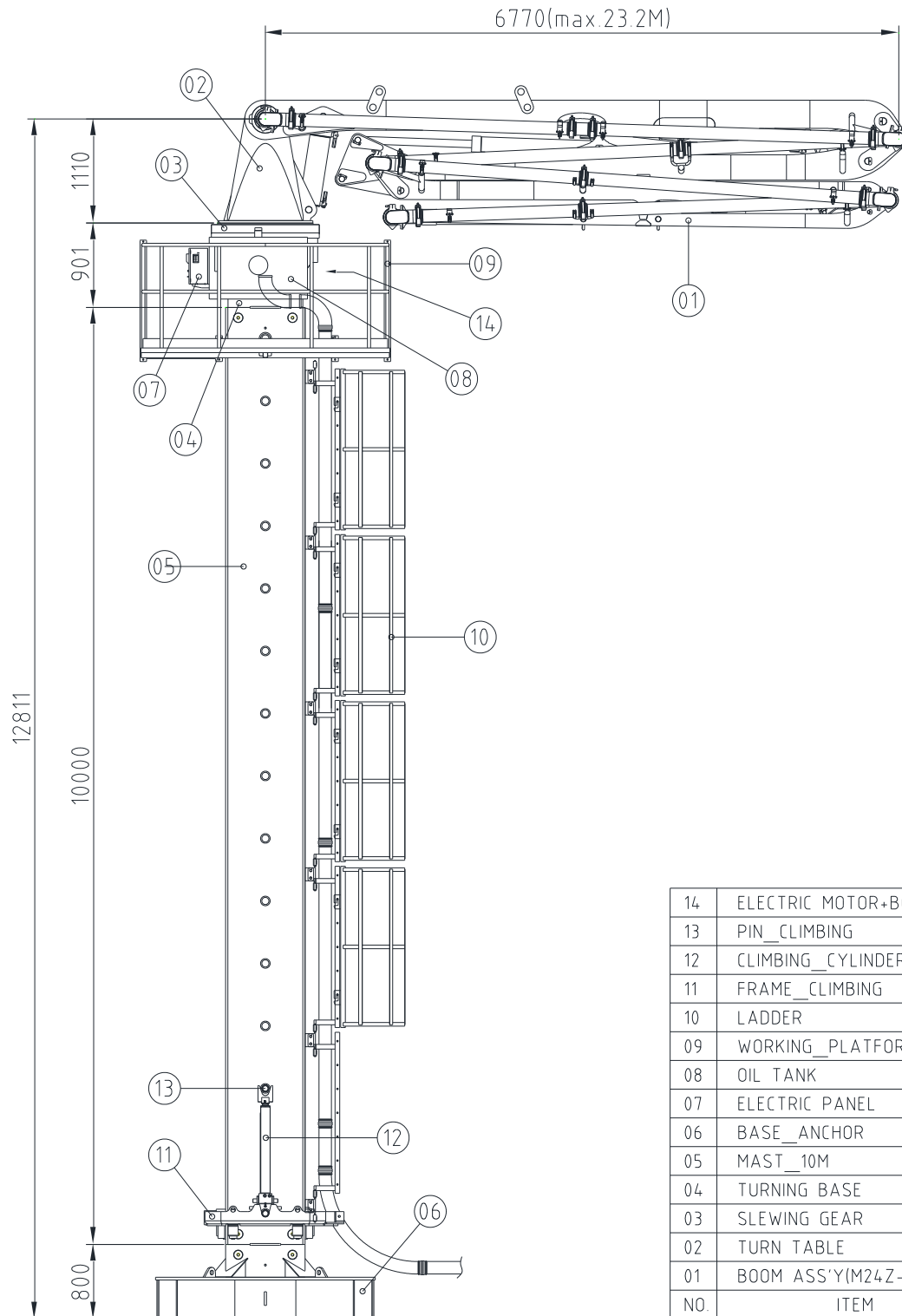
14	ELECTRIC MOTOR+BOOM PUMP
13	PIN_CLIMBING
12	CLIMBING_CYLINDER
11	FRAME_CLIMBING
10	LADDER
09	WORKING_PLATFORM
08	OIL TANK
07	ELECTRIC PANEL
06	BASE_ANCHOR
05	MAST_10M
04	TURNING BASE
03	SLEWING GEAR
02	TURN TABLE
01	BOOM ASS'Y(M24Z-4SEC)
NO.	ITEM

A4(210 × 297)

KB-M24Z Placing Boom System Working diagram

25m
82'1"

20m
65'7"

15m
49'3"

10m
32'10"

5m
16'5"

0m

5m
16'5"

10m
32'10"

15m
49'3"

20m
52'6"

180°

180°

180°

250°

92°

245°

Vertical reach 23181 [76'-1"]

Horizontal reach 23181 [76'-1"]

19862.1 [65'-3"]

3M

25m
82'1"

20m
65'7"

15m
49'3"

10m
32'10"

5m
16'5"

0m

5m
16'5"

10m
32'10"

A4(210 × 297)

KCP GMBH
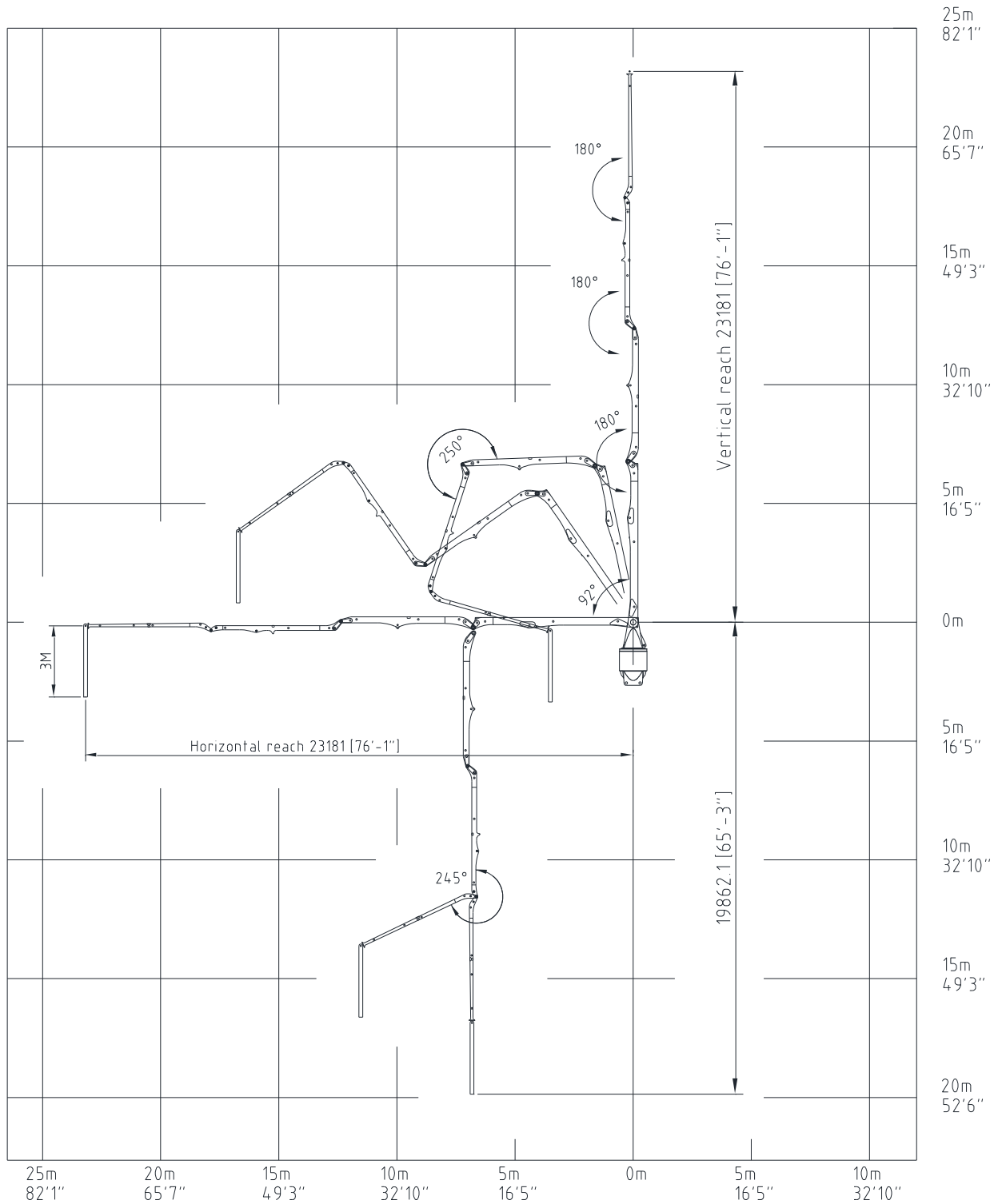
KB-M24Z — Placing Boom System Technical data

frontal wind direction
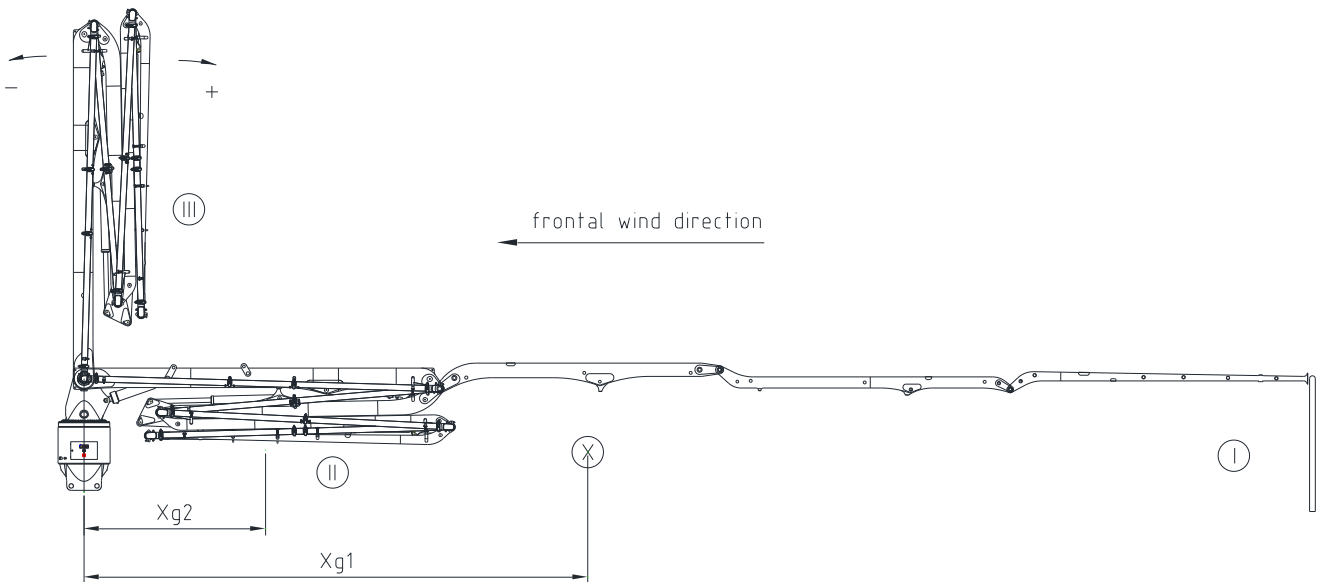
MOMENT [KNm]

Position of boom		Moment(boom side) → +
I	with concrete in pipe-line	→ 600 KNm
II	without concrete in pipe-line	→ 200 KNm
III	without concrete in pipe-line	→ 32 KNm

Total weight [kg] - boom, table, base(with oil), motor, pump, (+concrete)

In operation	7,300 kg	Out of operation	6,500 kg

Wind-exposed areas [㎡]

Position of boom	Wind-exposed area	Center of gravity distance	remark
I II	11.3 ㎡ boom-side 11.3 ㎡ boom-side	Xg1 = 9.7 m Xg2 = 3.8 m	Wind surface perpendicular to frontal wind
I/II III	2.3 ㎡ 10 ㎡	Ys = 1.4 m Ys = 4.2 m	Exposed area in frontal wind

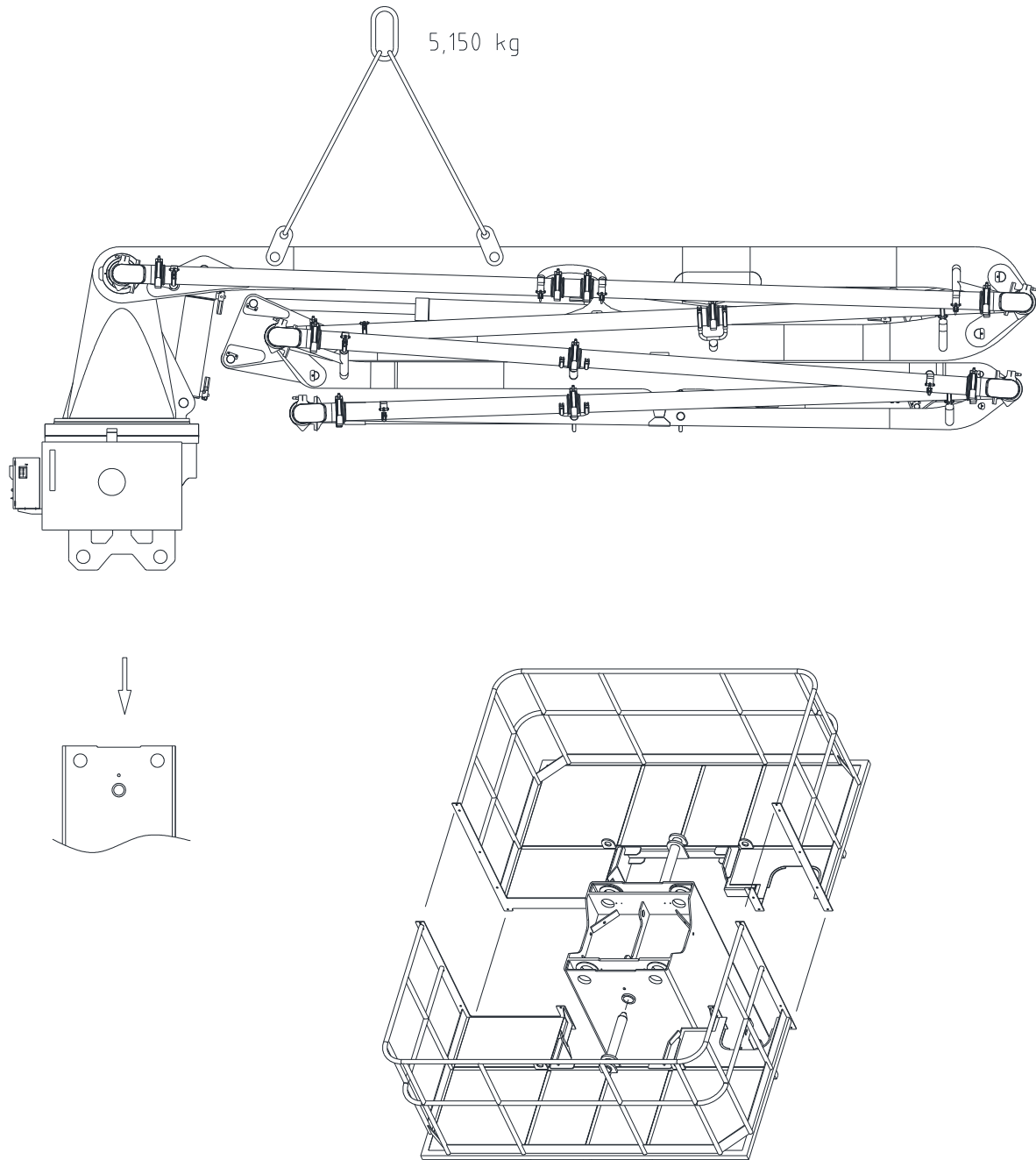Comment : lateral thrust due to wind is calculated according to DIN 1055

Absolute altitude [m]	0~8	8~20	20~100	Above 100
W [N/㎡]	800	1280	1760	2080

F = W × A

F : wind force	W : lateral thrust due to wind	A : wind surface area

A4(210 × 297)

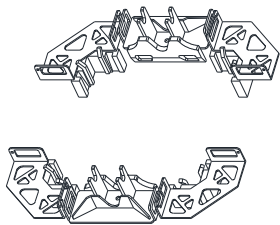# KB-M24Z

PLACING BOOM SYSTEM ----- [BOOM ASS'Y & UPPER PARTS]

5,150 kg

KB-M24Z

PLACING BOOM SYSTEM ----- [MAST]

□850

□850

□850

10 M

6 M

4 M

STANDARD
4000 kg

STANDARD
2900 kg

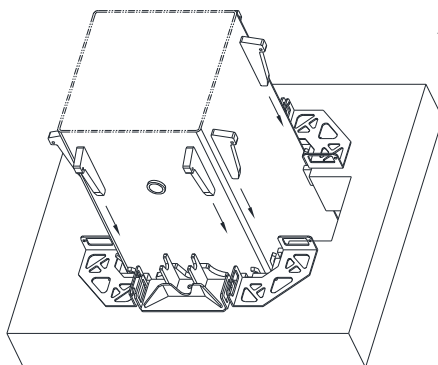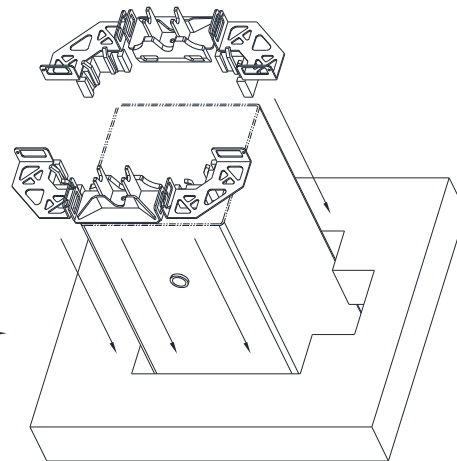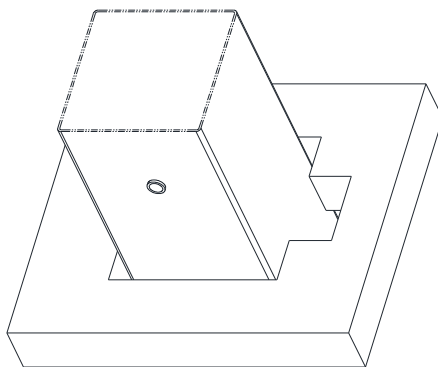*STANDARD*
2200 kg

A4(210 × 297)
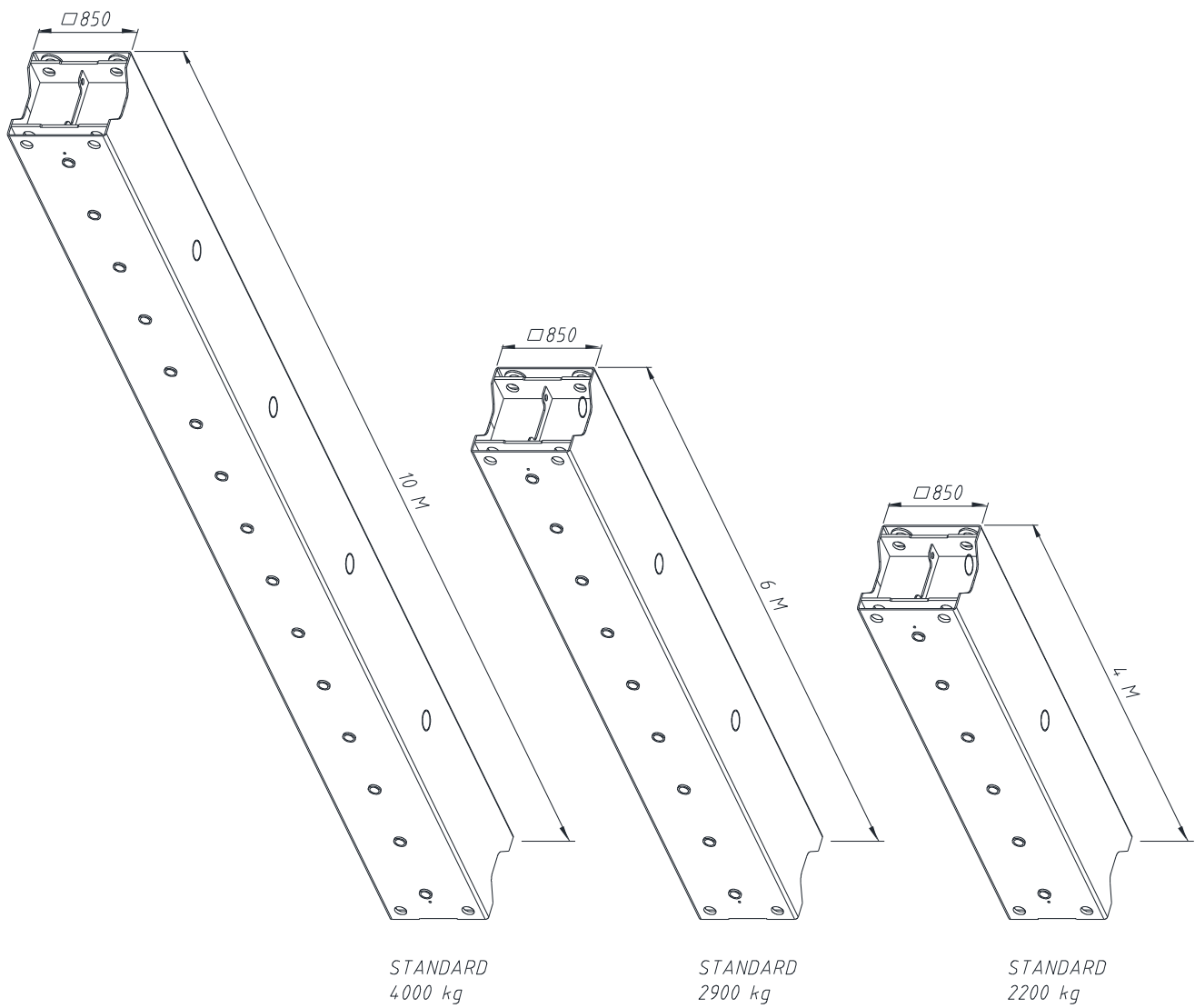
KB-M24Z

PLACING BOOM SYSTEM ----- [FRAME _ CLIMBING, CLIMBING_CYLINDER]

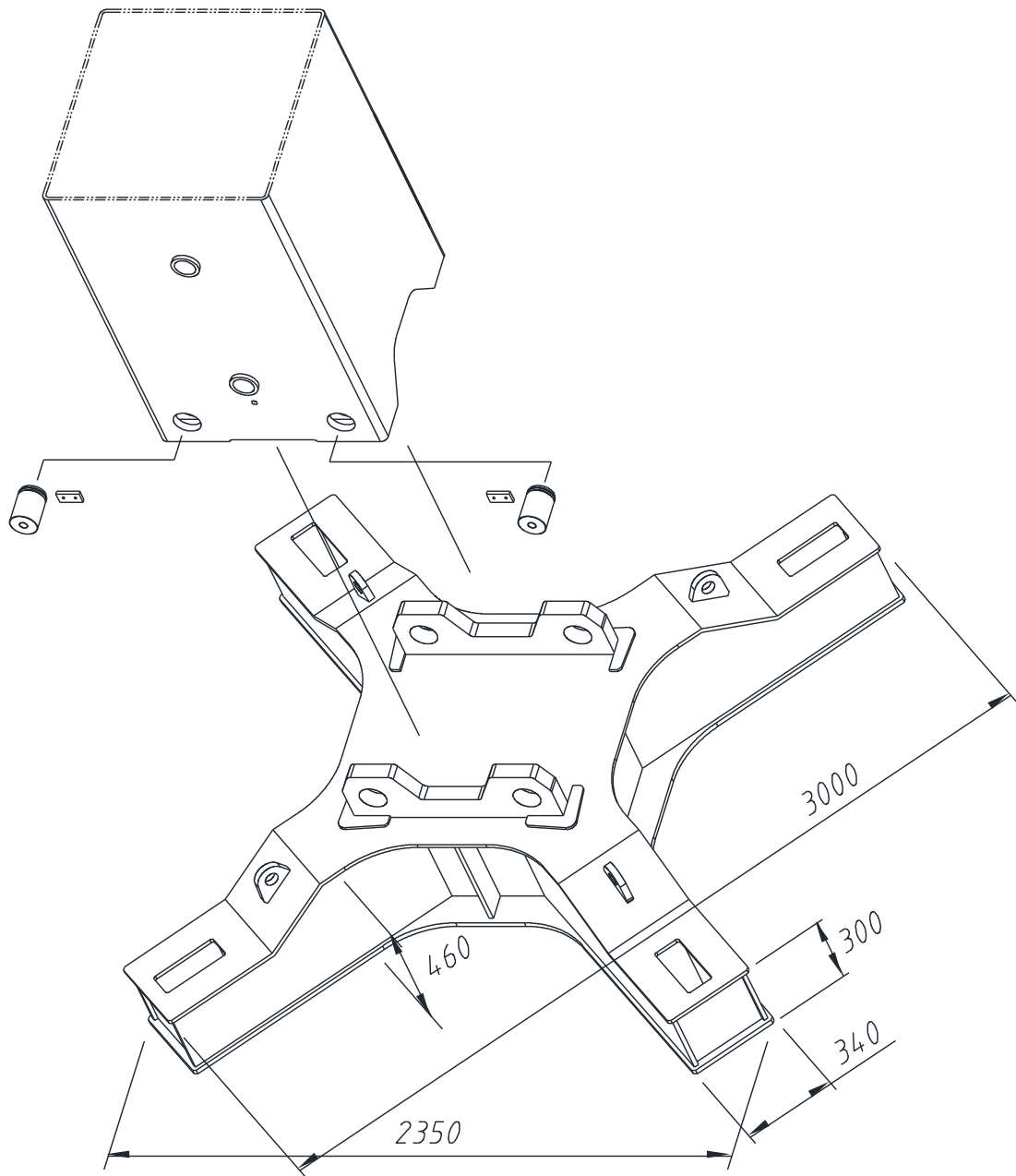WEDGE BLOCK
CLIMBING SHOE
TOTAL : 160 kg

1000

1000

450

1250

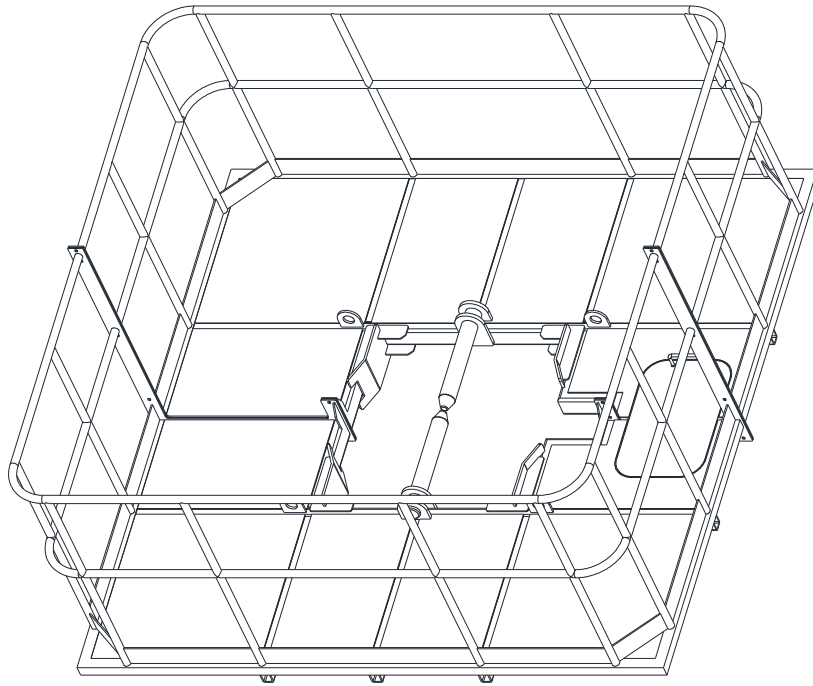A4(210 × 297)
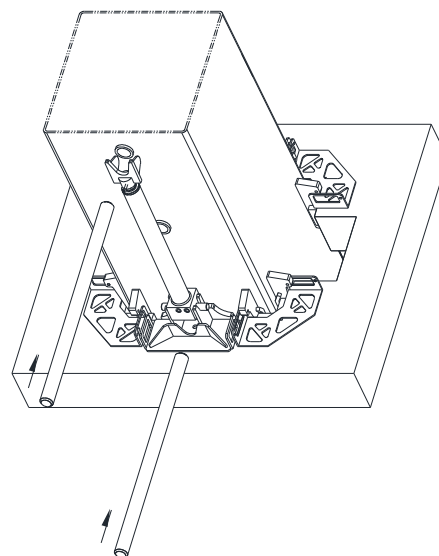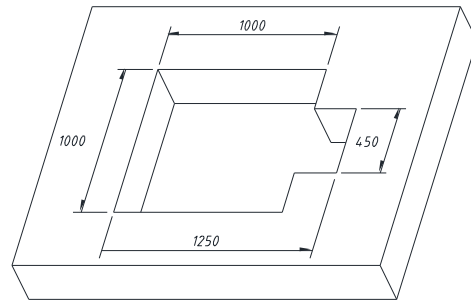
KB-M24Z

PLACING BOOM SYSTEM ----- [BASE_ANCHOR]

3000
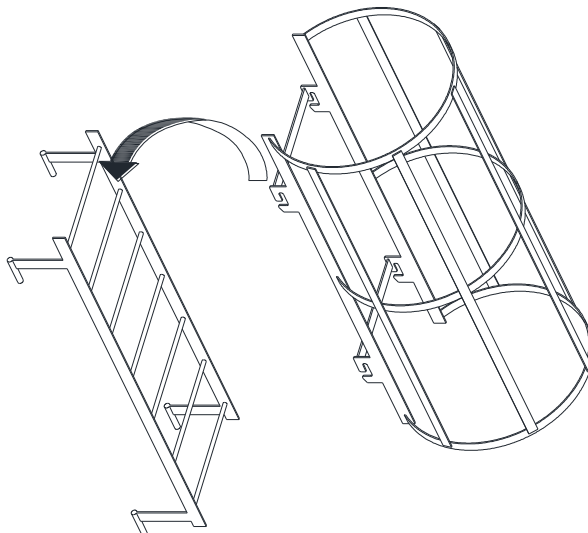
300

460

340

2350

BASE ANCHOR
1,850 kg

A4(210 × 297)

KB-M24Z

PLACING BOOM SYSTEM ----- [WORKING PLATFORM & LADDER]

WORKING PLATFORM
570 kg

LADDER - STD
20 kg + 30 kg = 50 kg