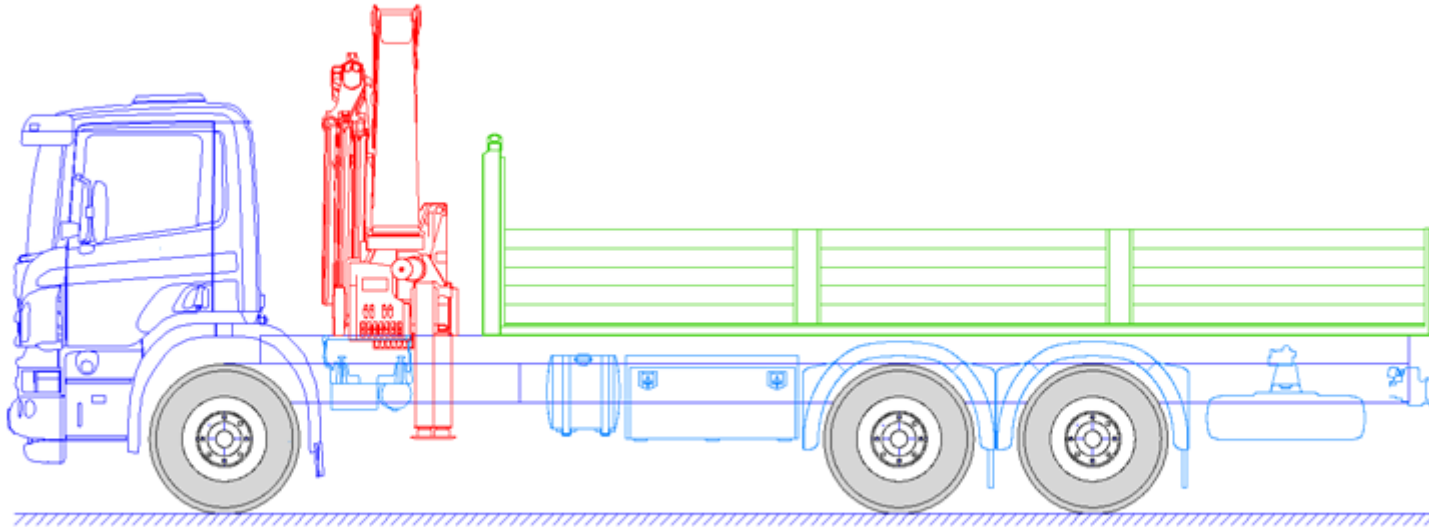


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CUSTOMER



SCANIA

Scania West Africa

CONTACT PERSON

Francois Lechat



@ francois.lechat@scania.com
<http://www.scania.com>

DEALER



Palfinger EMEA GmbH

Moosmühlstraße 1
5203 Köstendorf AT

CUSTOMER ADVISER

Michael Butler



+43 6216 7660 85197



@ m.butler@palfinger.com
<http://www.palfinger.com>

PERSON IN CHARGE

CONTACT PERSON

Michael Butler

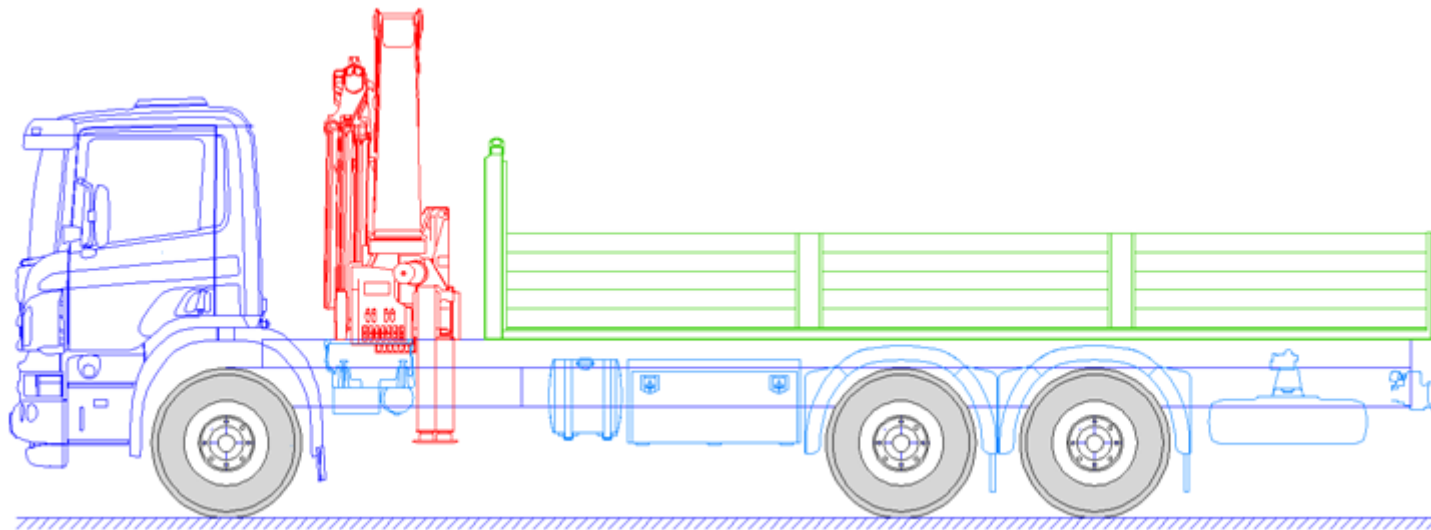


+43 6216 7660 85197



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PROJECT
19042021-MB
001 Scania
West Africa-PK



PROJECT INFORMATION AND INDEX

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|--|---|
| 1. Cover | 9. Stability Calculation Crane - Detail |
| 2. Project Information | 10. Lifting Capacity Analysis Crane |
| 3. Installation Drawing | |
| 4. Top View | |
| 5. Axle- & Payload Calculation - Graphic | |
| 6. Axle- & Payload Calculation - Detail | |
| 7. Load distribution chart calculation | |
| 8. Stability Calculation Crane - Graphic | |

PROJECT DATA

License:
ATPALFI00002H535



Version:
2017.1.6491.18070

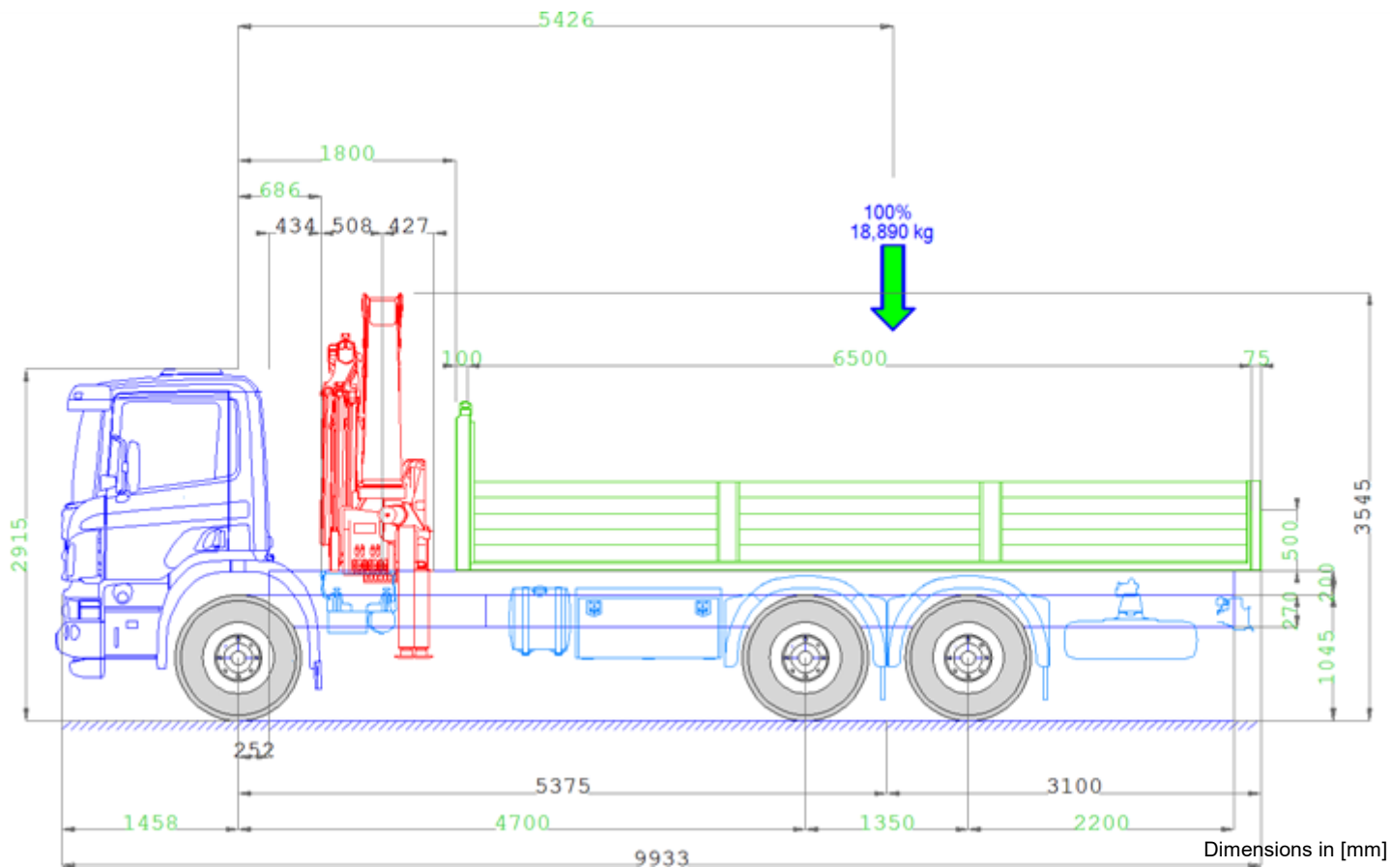
The calculation results are created with the software tool PACWIN.NET. Weights and dimensions are based on the standard chassis equipment or mentioned otherwise. Additional weights due to special equipment must be added to the calculated axle loads.

Before starting with the bodybuilding the chassis has to be weighed, the frame height has to be checked and compared with the result of the calculation. In case of deviations the calculation and position of the equipment has to be corrected.

It is not possible to consider all influences for the stability calculation. It is necessary to carry out required inspections and tests under the relevant laws in the place of registration! The calculation results are additional information only and can not replace such inspections and tests.

The calculation results are non-binding guide values. Changes and variations in production are possible and permissible. Palfinger does not accept any liability or warranty for the correctness and validity of the calculation results.

Project Number:	19042021-MB 001 Scania West Africa-PK 23500CR3X
Consignment:	
Installation Type:	Crane / Platform
Carrier:	Scania P 420 CB6X4E SZ 6x4 -
Cab:	CP14L
Wheel Base [mm]:	4,700 + 1,350
Permissible axle load [kg]:	9,000 / 13,000 / 13,000
Load Max [kg]:	34,000
Payload [kg]:	18,890
Crane:	PK23500C (s406-ska) R3X
Additional Stabilizer:	
Container Handling System:	



Project Information:

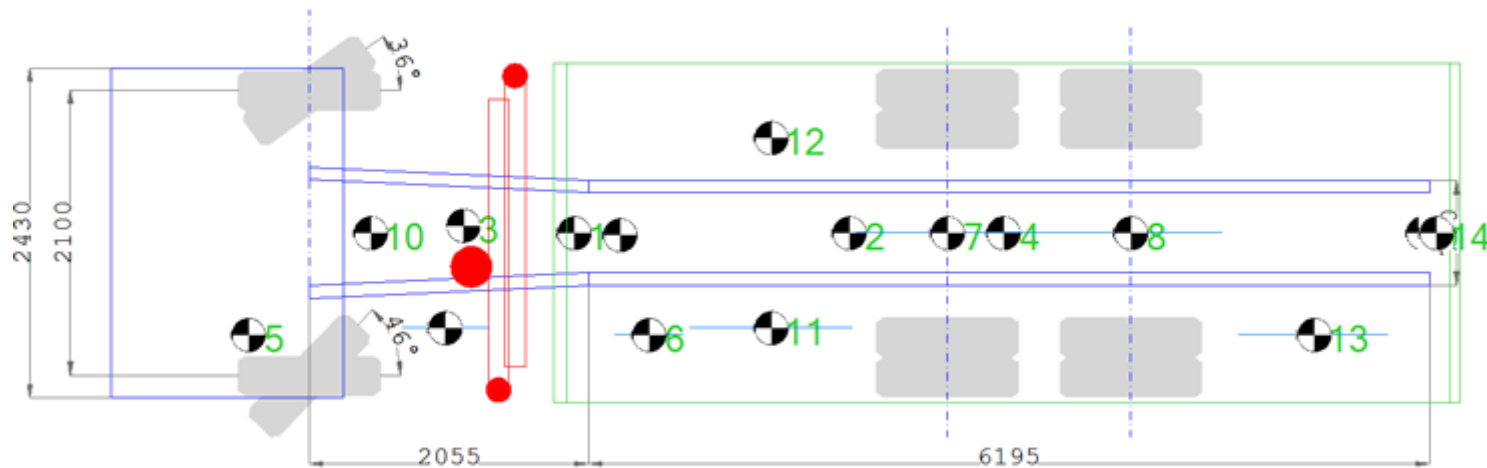
Scania P420 with PK 23500C and 6500mm body



INSTALLATION DRAWING

PROJECT DATA

Project Number:	19042021-MB 001 Scania West Africa-PK 23500CR3X
Consignment:	
Installation Type:	Crane / Platform
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Cab:	CP14L
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Permissible axle load [kg]:	9,000 / 13,000 / 13,000
Load Max [kg]:	34,000
Payload [kg]:	18,890
Crane:	PK23500C (s406-ska) R3X
Additional Stabilizer:	
Container Handling System:	



Dimensions in [mm]

Legend:

- | | |
|-----------------------------------|--------------------|
| 1 Scania P 420 CB6X4E SZ 9,319 kg | 9 Light Bar 50 kg |
| 2 Subframe 750 kg | 10 PTO 50 kg |
| 3 PK23500C 2,786 kg | 11 Tool Box 100 kg |
| 4 Africa Dropside 1,300 kg | 12 Tool Box 100 kg |
| 5 Driver 100 kg | 13 Spare 100 kg |
| 6 Fuel 300 kg | 14 Tow Hitch 75 kg |
| 7 Guards 40 kg | |
| 8 Guards 40 kg | |

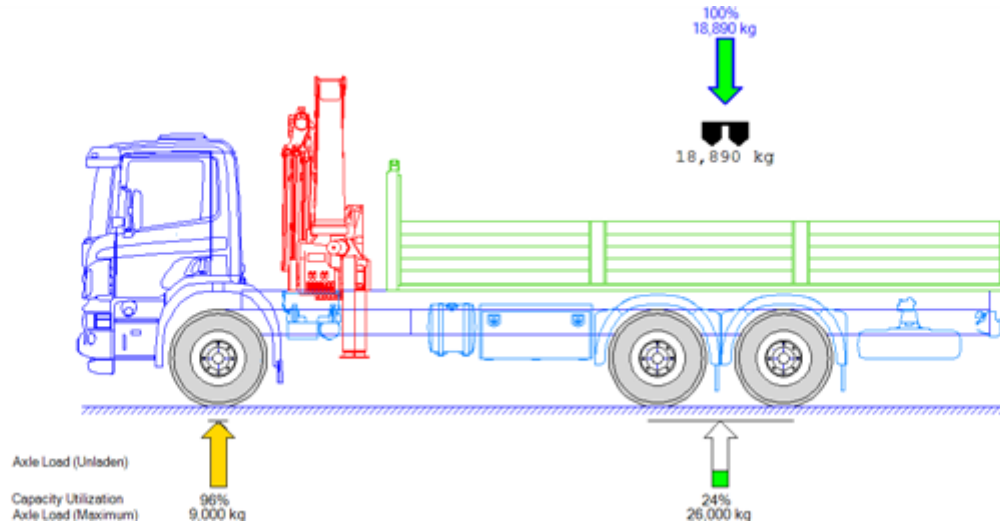
Subframe:

Distance mid of front axle to beginning of subframe: 252mm
 Length: 7,998mm

TOP VIEW

PROJECT DATA

Project Number:	19042021-MB 001 Scania West Africa-PK 23500CR3X
Consignment:	
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Carrier:	Scania P 420 CB6X4E SZ 6x4 -
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Load Max [kg]:	34,000
Payload [kg]:	18,890
Crane:	PK23500C (s406-ska) R3X
Additional Stabilizer:	
Container Handling System:	



Transport Position Crane

Default	Yes
Boom Direction	Left
Angle main boom [°]	-50
Angle knuckle boom [°]	165
Knuckle boom stroke [mm]	300
Angle FlyJib [°]	
FlyJib stroke [mm]	

Transport Position Hookloader

Transp. Stroke [mm]

Result	Weight [kg]	Location [mm]			Front axle [kg]	Rear Axle [kg]
		X	Y	Z		
Axle Load (Unladen)	15,110	2,287	-15	1,150	57% 8,680	6,430
Payload	18,890	5,426	0	1,245	-179	19,069
Payload Loss						
Axle Load (Laden)	34,000	4,031	-6	1,203	25% 8,500	25,500
Axle Load (Maximum)	34,000				26% 9,000	26,000
Recommended COG Payload: 5,284 - 5,568						

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AXLE- & PAYLOAD CALCULATION - GRAPHIC

PROJECT DATA

Project Number: 19042021-MB 001 Scania West Africa-PK 23500CR3X

Consignment:

Installation Type: Crane / Platform

Carrier: Scania P 420 CB6X4E SZ 6x4 -

Cab: CP14L

Wheel Base [mm]: 4,700 + 1,350

Permissible axle load [kg]: 9,000 / 13,000 / 13,000

Load Max [kg]: 34,000

Payload [kg]: 18,890

Crane: PK23500C (s406-ska) R3X

Additional Stabilizer:

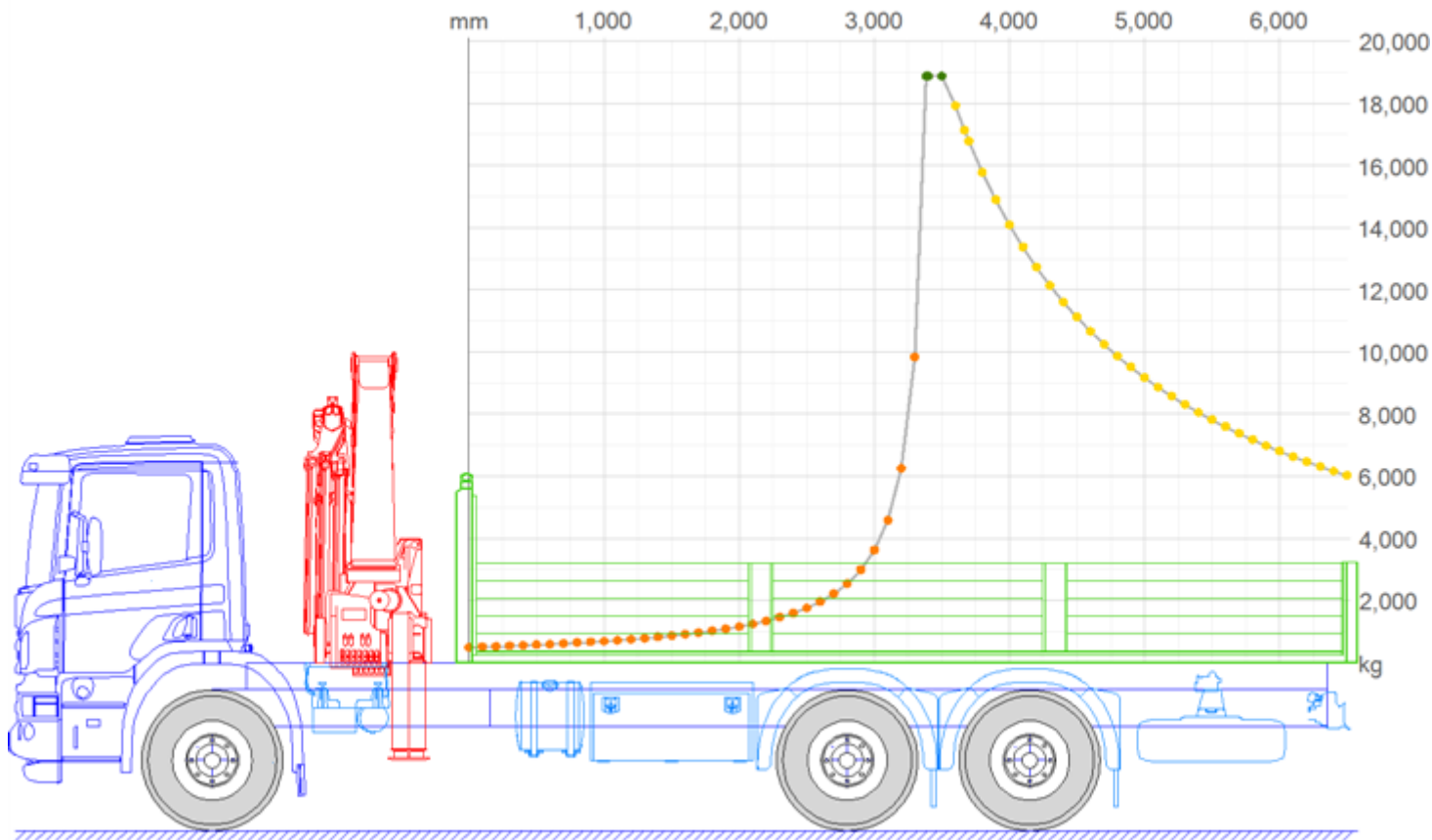
Container Handling System:

Name	Weight [kg]	Location [mm]			Front axle [kg]	Rear Axle [kg]	Relevance
		X	Y	Z			
Scania P 420 CB6X4E SZ	9,319	1,950	0	861	5,938	3,381	*
Subframe	750	3,976	0	1,145	195	555	*
PK23500C - Mounting Parts	0	1,194	0	1,245	0	0	*
PK23500C - Static Parts	1,373	1,293	-151	1,630	1,043	330	*
PK23500C - Dynamic Parts	1,413	978	256	2,428	1,156	257	*
Africa Dropside	1,300	5,110	0	1,345	64	1,236	*
Batt Box	0	1,000	-700	1,000	0	0	*
Driver	100	-450	-750	1,850	108	-8	A
Fuel	300	2,500	-750	1,100	160	140	A
Guards	40	4,700	0	1,200	5	35	A
Guards	40	6,050	0	1,200	-5	45	A
Light Bar	50	8,200	0	800	-26	76	A
PTO	50	450	0	500	46	4	*
Tool Box	100	3,400	-700	1,100	37	63	A
Tool Box	100	3,400	700	1,100	37	63	A
Spare	100	7,400	-750	1,200	-38	138	A
Tow Hitch	75	8,300	0	850	-41	116	A
Axle Load (Unladen)	15,110	2,287	-15	1,150	57% 8,680	6,430	
Payload	18,890	5,426	0	1,245	-179	19,069	
Payload Loss							
Axle Load (Laden)	34,000	4,031	-6	1,203	25% 8,500	25,500	
Axle Load (Maximum)	34,000				26% 9,000	26,000	
Recommended COG Payload: 5,284 - 5,568							

AXLE- & PAYLOAD CALCULATION - DETAIL

PROJECT DATA

Project Number:	19042021-MB 001 Scania West Africa-PK 23500CR3X
Consignment:	
Installation Type:	Crane / Platform
Carrier:	Scania P 420 CB6X4E SZ 6x4 -
Cab:	CP14L
Wheel Base [mm]:	4,700 + 1,350
Permissible axle load [kg]:	9,000 / 13,000 / 13,000
Load Max [kg]:	34,000
Payload [kg]:	18,890
Crane:	PK23500C (s406-ska) R3X
Additional Stabilizer:	
Container Handling System:	



LOAD DISTRIBUTION CHART

PROJECT DATA

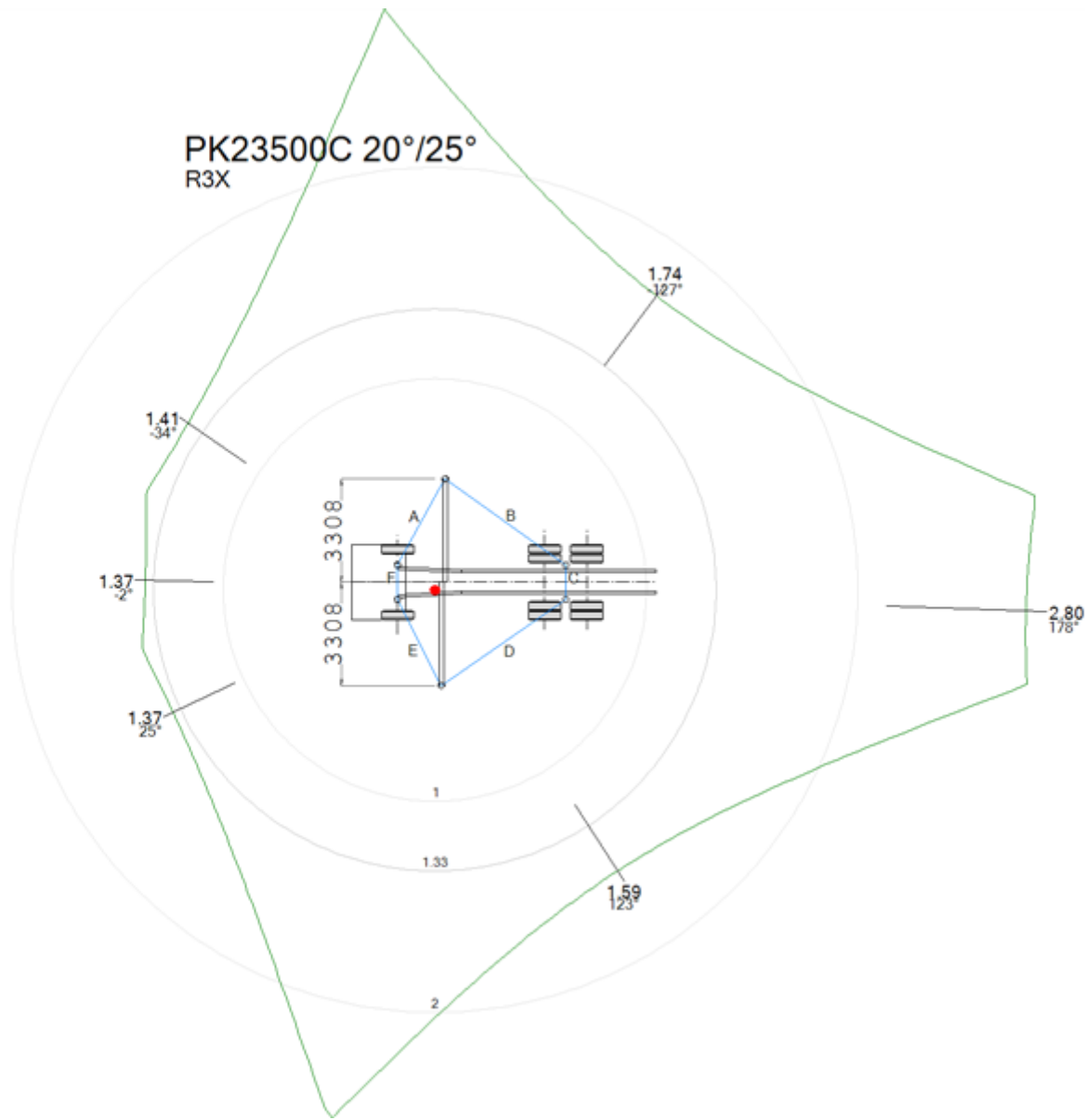
Full payload: 18,890 [kg]
 Recommended COG Payload: 3,384 - 3,500 [mm]

Min. Front Axle Load
 Percentage of total weight: 25%

Legend

- Full payload
- Payload reduced due to permissible front axle load
- Payload reduced due to permissible rear axle load
- Payload reduction due to min. front axle load for manoeuvrability

Project Number:	19042021-MB 001 Scania West Africa-PK 23500CR3X
Consignment:	
Installation Type:	Crane / Platform
Carrier:	Scania P 420 CB6X4E SZ 6x4 -
Cab:	CP14L
Wheel Base [mm]:	4,700 + 1,350
Permissible axle load [kg]:	9,000 / 13,000 / 13,000
Load Max [kg]:	34,000
Payload [kg]:	18,890
Crane:	PK23500C (s406-ska) R3X
Additional Stabilizer:	
Container Handling System:	



STABILITY CALCULATION CRANE - GRAPHIC

PROJECT DATA

Project Number:	19042021-MB 001 Scania West Africa-PK 23500CR3X
Consignment:	
Installation Type:	Crane / Platform
Carrier:	Scania P 420 CB6X4E SZ 6x4 -
Cab:	CP14L
Wheel Base [mm]:	4,700 + 1,350
Permissible axle load [kg]:	9,000 / 13,000 / 13,000
Load Max [kg]:	34,000
Payload [kg]:	18,890
Crane:	PK23500C (s406-ska) R3X
Additional Stabilizer:	
Container Handling System:	

Result

A: 1.41	D: 1.59
B: 1.74	E: 1.37
C: 2.80	F: 1.37

TL	MS [mt]	MT [mt]	D-TR [mm]	D-LC [mm]	W-CI [kg]	D-CWI [mm]	W-CO [kg]	D-CWO [mm]	F
A	29.87	21.19	2,400	10,766	1,854	1,329	932	4,568	1.41
B	30.03	17.23	2,156	9,142	2,086	2,593	700	4,079	1.74
C	41.37	14.79	2,939	8,042	2,176	3,591	610	3,516	2.80
D	28.96	18.26	2,126	9,596	2,086	2,246	700	4,534	1.59
E	29.82	21.81	2,422	11,023	1,854	1,167	932	4,802	1.37
F	29.92	21.83	2,436	11,029	1,854	1,135	932	4,809	1.37

Weight Carrier [kg] = 11,419

Legend

TL.....	Tipping Line
MS.....	Stability moment
MT.....	Tipping moment
D-TR.....	distance cog. carrier to tipping line
D-LC.....	Distance load to tipping line
W-CI.....	Crane mass inside tipping line
D-CWI.....	Distance cog. crane mass inside to tipping line
W-CO.....	Crane mass outside tipping line
D-CWO...	Distance cog. crane mass outside to tipping line
F.....	Stab. Factor

	Crane Position Lifting capacity
Angle main boom [°]	20
Angle knuckle boom [°]	25
Knuckle boom stroke [mm]	7,862
Angle FlyJib [°]	-
FlyJib stroke [mm]	-
Manual Extensions	0
Lifting capacity [kg]	1,573
Lifting capacity outreach [mm]	12,220

Stabilizer	Stabilizer Spread [mm]		Mounting Point [mm]		
	Left	Right	X	Y	Z
R3X.0	3,308	3,308	1,455	0	1,245

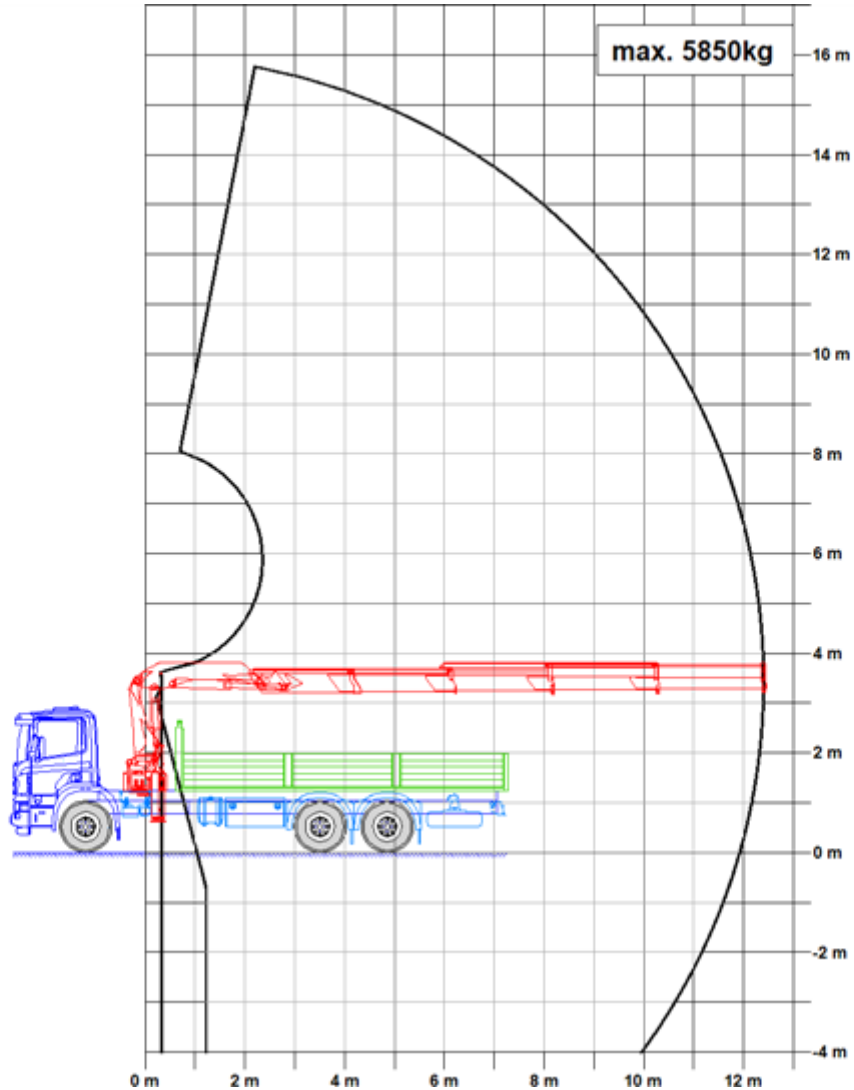
Tipping Line	Distance from front axle	
	Width	
Front Axle	1,100	0
Rear Axle	1,100	5,375

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STABILITY CALCULATION CRANE - DETAIL

PROJECT DATA

Project Number:	19042021-MB 001 Scania West Africa-PK 23500CR3X
Consignment:	
Installation Type:	Crane / Platform
Carrier:	Scania P 420 CB6X4E SZ 6x4 -
Cab:	CP14L
Wheel Base [mm]:	4,700 + 1,350
Permissible axle load [kg]:	9,000 / 13,000 / 13,000
Load Max [kg]:	34,000
Payload [kg]:	18,890
Crane:	PK23500C (s406-ska) R3X
Additional Stabilizer:	
Container Handling System:	



Crane Configuration

Angle main boom [°]	0
Angle knuckle boom [°]	0
Knuckle boom stroke [mm]	7,862
Angle FlyJib [°]	
FlyJib stroke [mm]	
Manual Extensions	0
Mounting Height [mm]	1,245

Crane performance

Outreach [mm]	12,412
Lifting Height [mm]	3,243
Lifting Capacity [kg]	0
Working Pressure [%]	100

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LIFTING CAPACITY ANALYSIS CRANE

PROJECT DATA

Project Number:	19042021-MB 001 Scania West Africa-PK 23500CR3X
Consignment:	
Installation Type:	Crane / Platform
Carrier:	Scania P 420 CB6X4E SZ 6x4 -
Cab:	CP14L
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Permissible axle load [kg]:	9,000 / 13,000 / 13,000
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Additional Stabilizer:	
Container Handling System:	