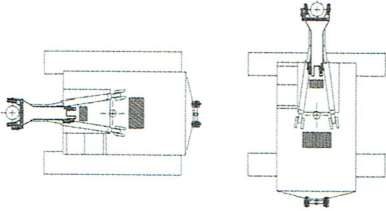
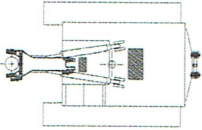
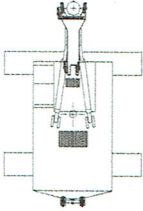


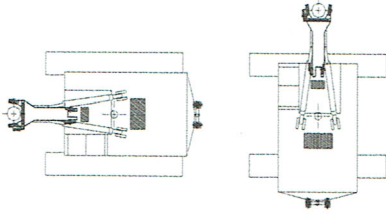
Schedule of Drilling Rig Component Weights, Dimensions, Forces and Pressures				
Rig Manufacturer :		ADLER		Rig Type : B25 D500
Operation mode:		Bottom drive		
Completed by: DAVE WEBB	11-01-19	Checked by:		0
Item	Mass (kg)	Moment arm (m)	Moment (kNm)	
UPPER WORKS	390	1.26	4.81	
LOWER WORKS	1335	-0.30	-3.93	
ROPE / KELLY / CHAIN SUSPENDED EQUIPMENT	500	1.30	6.38	
COUNTERWEIGHT	0	0.00	0.00	
OTHER	0	0.00	0.00	
TOTAL	2225	0.33	7.26	
Tracks				
Track bearing length (m)	1.1			
Track pad width (m)	0.25			
Distance between centrelines of tracks (m)	0.92			
Front Foot Pads				
Pad Bearing Area (m ²)	0.12	Actual Dimensions	250	
Pad Maximum Loading (kN)	N/A	Actual Shape	round	
Pad Moment Arm (m)	1.20			
Rear Foot Pads				
Pad Bearing Area (m ²)	0.12	Actual Dimensions	250	
Pad Maximum Loading (kN)	N/A	Actual Shape	round	
Pad Moment Arm (m)	1.00			
Forces				
Maximum Extraction Force (kN)	5.00			
Maximum Penetration Force (kN)	120.00			
Maximum Auxillary Force (kN)	0.00	Auxiliary Force Moment Arm (m)	0.00	
Pressure Summary for Platform Design (unfactored)				
MODE	BRE LOAD CASE (1 or 2)	Length (m)	Width (m)	UDL Pressure (kPa)
Standing	1	0.43	0.25	100
Travelling	1	0.81	0.25	54
Handling	NOT USED	N/A	0.25	N/A
Penetrating	2	0.48	0.25	90
Extracting	2	0.44	0.25	94
Other	NOT USED	N/A	0.25	N/A
MODE	WARNING MESSAGES	ERROR MESSAGES FOR FORCES		
Standing	None	Auxiliary Line Force OK	Extraction Force OK	Penetration Force OK
Travelling	None	Auxiliary Line Force OK	Extraction Force OK	Penetration Force OK
Handling	None	Auxiliary Line Force OK	Extraction Force OK	Penetration Force OK
Penetrating	FOOT PAD PRESSURE EXCEEDS MAXIMUM TRACK PRESSURE	Auxiliary Line Force OK	Extraction Force OK	Penetration Force OK
Extracting	None	Auxiliary Line Force OK	ERROR - EXTRACTION FORCE EXCEEDS MAXIMUM	Penetration Force OK
Other	None	Auxiliary Line Force OK	Extraction Force OK	Penetration Force OK
MODE	ERROR MESSAGES FOR FOOT PADS		Notes	
Standing	Front Foot Pad Force OK	Rear Foot Pad Force OK	Only for rig operation on level ground with a vertical mast, unless noted below ! Only for use where the rig is working on a ground supported platform ! Foot pad pressures are adjusted to equalise with the track pressures ! Rigs to be operated in accordance with manufacturer's & employer's instructions Mast must be fully retracted and tilted back to horizontal for travelling. Otherwise, assumes mast is vertical, on level ground. The information in these sheets is generated from the manufacturers data as supplied, and assumes the formula within is correct. No liability will be taken by the producer of the sheet for third party errors.	
Travelling	Front Foot Pad Force OK	Rear Foot Pad Force OK		
Handling	Front Foot Pad Force OK	Rear Foot Pad Force OK		
Penetrating	Front Foot Pad Force OK	Rear Foot Pad Force OK		
Extracting	Front Foot Pad Force OK	Rear Foot Pad Force OK		
Other	Front Foot Pad Force OK	Rear Foot Pad Force OK		
				

ADLER B25 D500		Weight (kg) / Load (kgf)	Distance to CL rotation (m)	Horizontal moment (kNm)			Mode :	Bottom drive		Other		Transformation from triangular or trapezoidal to an equivalent rectangular pressure distribution under track maintaining the load centroid			
								Relative Angle - Upper Body and Tracks (degrees)	Bearing pressure at front of L.H. track (kN/m^2)	Bearing pressure at rear of L.H. track (kN/m^2)	Bearing pressure at front of R.H. track (kN/m^2)	Bearing pressure at rear of R.H. track (kN/m^2)	ecc (m)	Bearing Len. (m)	Equivalent Bearing L (m) Q (KPa)
Lower Works		1335	-0.300	-4			0	134	0	134	0	0.333	0.652	0.435	100
Counterweight		0	0.000	0			0	134	0	134	0	0.333	0.652	0.435	100
Upper Works		390	1.258	5			0	134	0	134	0	0.333	0.652	0.435	100
Other		0	0.000	0			0	134	0	134	0	0.333	0.652	0.435	100
Rope / Kelly / Chain Suspended		500	1.300	6			0	134	0	134	0	0.333	0.652	0.435	100
Machine Weight (kg)		2225	0.333	7			0	134	0	134	0	0.333	0.652	0.435	100
					Force (kN) Max. (kN)		Foot Pad Area (m2)								
Auxiliary Line (kgf)		0	0.000	0			0.00	0.00							
Net Extraction Force (kgf)		0	1.300	0			0.00	5.00							
Net Penetration Force (kgf)		0	1.300	0			0.00	120.00							
Front Foot Pads Loading (kgf)		0	1.200	0			0.00	N/A	Front Foot Pads Equivalent Length (m) and Bearing Pressure (kN/m^2)						
Rear Foot Pads Loading (kgf)		0	1.000	0			0.00	N/A	Rear Foot Pads Equivalent Length (m) and Bearing Pressure (kN/m^2)						
Others		0	0.000	0			Track Bearing Length (m)		Maximum Equivalent Design Values						
Track Total Loading (kgf)		2225	0.333	7			Track Width Centres (m)								
					Track pad width (m)										
							BRE LOAD CASE (1 or 2)								
							1								

ADLER B25 D500		Weight (kg) / Load (kgf)	Distance to CL rotation (m)	Horizontal moment (kNm)				
Lower Works	1335	-0.300	-4					
Counterweight	0	0.000	0					
Upper Works	390	1.258	5					
Other	0	0.000	0					
Rope / Kelly / Chain Suspended	500	1.300	6					
Machine Weight (kg)	2225	0.333	7					
Auxiliary Line (kgf)	0	0.000	0		Force (kN)	Max. (kN)		
Net Extraction Force (kgf)	499	1.300	6		0.00	0.00	Foot Pad Area (m2)	
Net Penetration Force (kgf)	0	1.300	0		9.80	5.00		
Front Foot Pads Loading (kgf)	-316	1.200	-4		0.00	120.00		
Rear Foot Pads Loading (kgf)	-316	1.000	-3		3.10	N/A	0.120	
Others	0	0.000	0		3.10	N/A	0.120	
Track Total Loading (kgf)	2092	0.331	7		Track Bearing Length (m)		1.100	
					Track Width Centres (m)		0.920	
					Track pad width (m)		0.250	
BRE LOAD CASE (1 or 2)								
2								

Mode :	Bottom drive	Extracting	Transformation from triangular or trapezoidal to an equivalent rectangular pressure distribution under track maintaining the load centroid						
Relative Angle - Upper Body and Tracks (degrees)	Bearing pressure at front of L.H. track (kN/m^2)	Bearing pressure at rear of L.H. track (kN/m^2)	Bearing pressure at front of R.H. track (kN/m^2)	Bearing pressure at rear of R.H. track (kN/m^2)	ecc (m)	Bearing Len. (m)	Equivalent Bearing L (m)	Q (KPa)	
	0	125	0	125	0	0.331	0.656	0.437	94
	0	125	0	125	0	0.331	0.656	0.437	94
	0	125	0	125	0	0.331	0.656	0.437	94
0	125	0	125	0	0.331	0.656	0.437	94	
0	125	0	125	0	0.331	0.656	0.437	94	
0	125	0	125	0	0.331	0.656	0.437	94	
Front Foot Pads Equivalent Length (m) and Bearing Pressure (kN/m^2)									
Rear Foot Pads Equivalent Length (m) and Bearing Pressure (kN/m^2)									
Maximum Equivalent Design Values									

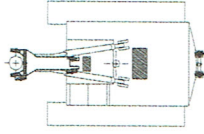
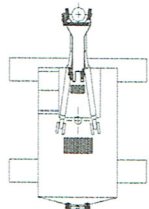
ADLER B25 D500	Weight (kg) / Load (kgf)	Distance to CL rotation (m)	Horizontal moment (kNm)	Mode :	Bottom drive					Penetrating			Transformation from triangular or trapezoidal to an equivalent rectangular pressure distribution under track maintaining the load centroid
					Relative Angle - Upper Body and Tracks (degrees)	Bearing pressure at front of L.H. track (kN/m ²)	Bearing pressure at rear of L.H. track (kN/m ²)	Bearing pressure at front of R.H. track (kN/m ²)	Bearing pressure at rear of R.H. track (kN/m ²)	Max Track loading dimensions		Equivalent Bearing L (m)	Q (KPa)
										ecc (m)	Bearing Len. (m)		
Lower Works	1335	-0.300	-4		0	0	63	0	63	-0.315	0.705	0.470	47
Counterweight	0	0.000	0		0	0	63	0	63	-0.315	0.705	0.470	47
Upper Works	390	1.258	5		0	0	63	0	63	-0.315	0.705	0.470	47
Other	0	0.000	0		0	0	63	0	63	-0.315	0.705	0.470	47
Rope / Kelly / Chain Suspended	500	1.300	6		0	0	63	0	63	-0.315	0.705	0.470	47
Machine Weight (kg)	2225	0.333	7		0	0	63	0	63	-0.315	0.705	0.470	47
Auxiliary Line (kgf)	0	0.000	0										
Net Extraction Force (kgf)	0	1.300	0										
Net Penetration Force (kgf)	0	1.300	0										
Front Foot Pads Loading (kgf)	0	1.200	0										
Rear Foot Pads Loading (kgf)	-1096	1.000	-11										
Others	0	0.000	0										
Track Total Loading (kgf)	1129	-0.315	-3										
					Front Foot Pads Equivalent Length (m) and Bearing Pressure (kN/m ²)								
					Rear Foot Pads Equivalent Length (m) and Bearing Pressure (kN/m ²)								
					Maximum Equivalent Design Values								
					FOOT PAD PRESSURE EXCEEDS MAXIMUM TRACK PRESSURE								
					BRE LOAD CASE (1 or 2)								
					2								



Force (kN)	Max. (kN)	Foot Pad Area (m ²)
0.00	0.00	0.120
0.00	5.00	0.120
0.00	120.00	1.100
0.00	N/A	0.920
10.75	N/A	0.250
Track Bearing Length (m)		
Track Width Centres (m)		
Track pad width (m)		

Auxiliary Line Force OK
 Extraction Force OK
 Penetration Force OK
 Front Foot Pad Force OK
 Rear Foot Pad Force OK

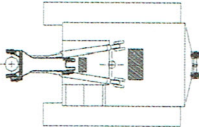
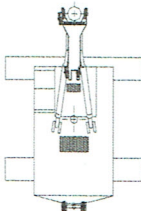


ADLER B25 D500		Weight (kg) / Load (kgf)	Distance to CL rotation (m)	Horizontal moment (kNm)	 	
Lower Works	1335	-0.300	-4			
Counterweight	0	0.000	0			
Upper Works	390	1.258	5			
Other	0	0.000	0			
Rope / Kelly / Chain Suspended	500	1.300	6			
Machine Weight (kg)	2225	0.333	7			
					Force (kN)	Max. (kN)
Auxiliary Line (kgf)	0	0.000	0		0.00	0.00
Net Extraction Force (kgf)	0	1.300	0		0.00	5.00
Net Penetration Force (kgf)	0	1.300	0		0.00	120.00
Front Foot Pads Loading (kgf)	0	1.200	0		0.00	N/A
Rear Foot Pads Loading (kgf)	0	1.000	0		0.00	N/A
Others	0	0.000	0		Track Bearing Length (m)	
Track Total Loading (kgf)	2225	0.333	7		Track Width Centres (m)	
					Track pad width (m)	
					BRE LOAD CASE (1 or 2)	
					1	

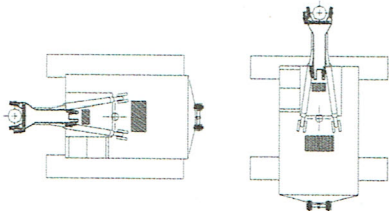
Mode :	Bottom drive		Handling				Transformation from triangular or trapezoidal to an equivalent rectangular pressure distribution under track maintaining the load centroid		
	Relative Angle - Upper Body and Tracks (degrees)	Bearing pressure at front of L.H. track (kN/m^2)	Bearing pressure at rear of L.H. track (kN/m^2)	Bearing pressure at front of R.H. track (kN/m^2)	Bearing pressure at rear of R.H. track (kN/m^2)	Max Track loading dimensions ecc (m)		Bearing Len. (m)	
0	134	0	134	0	134	0.333	0.652	0.435	100
0	134	0	134	0	134	0.333	0.652	0.435	100
0	134	0	134	0	134	0.333	0.652	0.435	100
0	134	0	134	0	134	0.333	0.652	0.435	100
0	134	0	134	0	134	0.333	0.652	0.435	100
0	134	0	134	0	134	0.333	0.652	0.435	100
Front Foot Pads Equivalent Length (m)and Bearing Pressure (kN/m^2)								0.480	0
Rear Foot Pads Equivalent Length (m)and Bearing Pressure (kN/m^2)								0.480	0
Maximum Equivalent Design Values								0.435	100
BRE LOAD CASE (1 or 2)								1	

Auxiliary Line Force OK
 Extraction Force OK
 Penetration Force OK
 Front Foot Pad Force OK
 Rear Foot Pad Force OK



ADLER B25 D500		Weight (kg) / Load (kgf)	Distance to CL rotation (m)	Horizontal moment (kNm)		
						
Lower Works	1335	-0.300	-4			
Counterweight	0	0.000	0			
Upper Works	390	0.210	1			
Other	0	0.000	0			
Rope / Kelly / Chain Suspended	500	0.000	0			
Machine Weight (kg)	2225	-0.143	-3			
					Force (kN)	Max. (kN)
Auxiliary Line (kgf)	0	0.000	0		0.00	0.00
Net Extraction Force (kgf)	0	1.300	0		0.00	5.00
Net Penetration Force (kgf)	0	1.300	0		0.00	120.00
Front Foot Pads Loading (kgf)	0	1.200	0		Foot Pad Area (m2)	
Rear Foot Pads Loading (kgf)	0	1.000	0		0.120	
Others	0	0.000	0		N/A	
Track Total Loading (kgf)	2225	-0.143	-3		0.120	
					Track Bearing Length (m)	1.100
					Track Width Centres (m)	0.920
					Track pad width (m)	0.250

Mode :	Bottom drive		Travelling				Transformation from triangular or trapezoidal to an equivalent rectangular pressure distribution under track maintaining the load centroid		
	Relative Angle - Upper Body and Tracks (degrees)	Bearing pressure at front of L.H. track (kN/m^2)	Bearing pressure at rear of L.H. track (kN/m^2)	Bearing pressure at front of R.H. track (kN/m^2)	Bearing pressure at rear of R.H. track (kN/m^2)	Max Track loading dimensions			
	0	9	71	9	71	ecc (m)	Bearing Len. (m)	Equivalent Bearing L (m)	Q (KPa)
	0	9	71	9	71	-0.143	1.100	0.814	54
	0	9	71	9	71	-0.143	1.100	0.814	54
	0	9	71	9	71	-0.143	1.100	0.814	54
	0	9	71	9	71	-0.143	1.100	0.814	54
	0	9	71	9	71	-0.143	1.100	0.814	54
	0	9	71	9	71	-0.143	1.100	0.814	54
Front Foot Pads Equivalent Length (m) and Bearing Pressure (kN/m^2)						0.480 0			
Rear Foot Pads Equivalent Length (m) and Bearing Pressure (kN/m^2)						0.480 0			
Maximum Equivalent Design Values						0.814 54			
BRE LOAD CASE (1 or 2)						1			

ADLER B25 D500		Weight (kg) / Load (kgf)	Distance to CL rotation (m)	Horizontal moment (kNm)	
Lower Works	1335	-0.300	-4		
Counterweight	0	0.000	0		
Upper Works	390	1.258	5		
Other	0	0.000	0		
Rope / Kelly / Chain Suspended	500	1.300	6		
Machine Weight (kg)	2225	0.333	7		
Auxiliary Line (kgf)	0	0.000	0		
Net Extraction Force (kgf)	0	1.300	0		
Net Penetration Force (kgf)	0	1.300	0		
Front Foot Pads Loading (kgf)	0	1.200	0		
Rear Foot Pads Loading (kgf)	0	1.000	0		
Others	0	0.000	0		
Track Total Loading (kgf)	2225	0.333	7		

Mode :	Bottom drive					Standing		Transformation from triangular or trapezoidal to an equivalent rectangular pressure distribution under track maintaining the load centroid	
	Relative Angle - Upper Body and Tracks (degrees)	Bearing pressure at front of L.H. track (kN/m^2)	Bearing pressure at rear of L.H. track (kN/m^2)	Bearing pressure at front of R.H. track (kN/m^2)	Bearing pressure at rear of R.H. track (kN/m^2)	Max Track loading dimensions			
						ecc (m)	Bearing Len. (m)		
0	134	0	134	0	0	0.333	0.652	0.435	100
0	134	0	134	0	0	0.333	0.652	0.435	100
0	134	0	134	0	0	0.333	0.652	0.435	100
0	134	0	134	0	0	0.333	0.652	0.435	100
0	134	0	134	0	0	0.333	0.652	0.435	100
0	134	0	134	0	0	0.333	0.652	0.435	100
0	134	0	134	0	0	0.333	0.652	0.435	100
Front Foot Pads Equivalent Length (m)and Bearing Pressure (kN/m^2)								0.480	0
Rear Foot Pads Equivalent Length (m)and Bearing Pressure (kN/m^2)								0.480	0
						Maximum Equivalent Design Values		0.435	100
BRE LOAD CASE (1 or 2)									
1									

Schedule of Drilling Rig Component Weights, Dimensions, Forces and Pressures

Rig Manufacturer : **ADLER**

Rig Type : **B25 D500**

Operation mode: **Bottom drive**

Completed by: **DAVE WEBB**

11-01-19

Checked by:

Main Components :

	Item	Mass (kg)	Moment arm (m)	Moment (kNm)
UPPER WORKS	Mast Assembly	315	1.20	3.71
	front stabilizers	75	1.50	1.10
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
LOWER WORKS	Base Machine	1335	-0.30	-3.93
				0.00
				0.00
				0.00
				0.00
ROPE / KELLY / CHAIN SUSPENDED EQUIPMENT	500kg 8" weight	500	1.30	6.38
				0.00
				0.00
				0.00
				0.00
COUNT.	Counterweight			0.00
				0.00
				0.00
OTHER	None			0.00
				0.00
				0.00

Main Components Totals

UPPER WORKS	390	1.26	4.81
LOWER WORKS	1335	-0.30	-3.93
ROPE / KELLY / CHAIN SUSPENDED EQUIPMENT	500	1.30	6.38
COUNTERWEIGHT	0	0.00	0.00
OTHER	0	0.00	0.00
TOTAL	2225	0.33	7.26

Tracks

Track bearing length (m)	1.1	
Track pad width (m)	0.25	
Distance between centrelines of tracks (m)	0.92	

Front Foot Pads

Pad Bearing Area (m ²)	0.12	Actual Dimensions	250
Pad Maximum Loading (kN)	N/A	Actual Shape	round
Pad Moment Arm (m)	1.20		

Rear Foot Pads

Pad Bearing Area (m ²)	0.12	Actual Dimensions	250
Pad Maximum Loading (kN)	N/A	Actual Shape	round
Pad Moment Arm (m)	1.00		

Forces

Maximum Extraction Force (kN)	5.00		
Maximum Penetration Force (kN)	120.00		
Maximum Auxillary Force (kN)	0.00	Auxillary Force Moment Arm (m)	0.00

Notes

Mast must be fully retracted and tilted back to horizontal for travelling. Otherwise, assumes mast is vertical, on level ground. The information in these sheets is generated from the manufacturers data as supplied, and assumes the formula within is correct. No liability will be taken by the producer of the sheet for third party errors.

