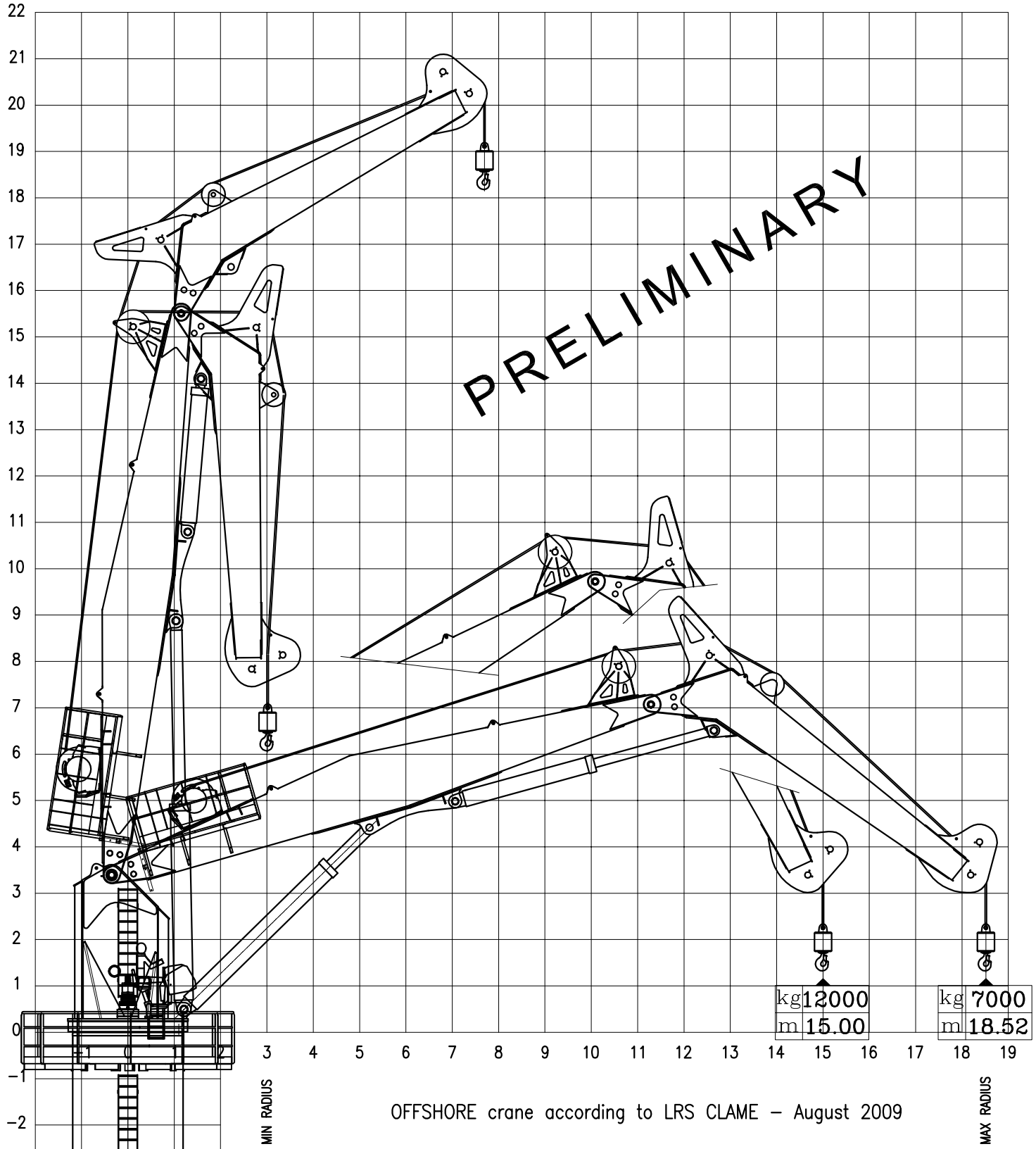
HEILA CRANES S.r.l.

HR 650/18.5-2BJ

Load Diagram by Single Fall Winch



OFFSHORE crane according to LRS CLAME – August 2009

Operational conditions:
Significant Wave Height = 3.5 m
Max List/Trim 12°/6° (with reduced capacity)
Max Wind Speed = 20 m/s

Duty Factor Fd = 1.20
Hoisting Factor Fh = 2.18

Personnel Lift SWL = 3000 kg (limited to SWH 2 m)

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Datasheet

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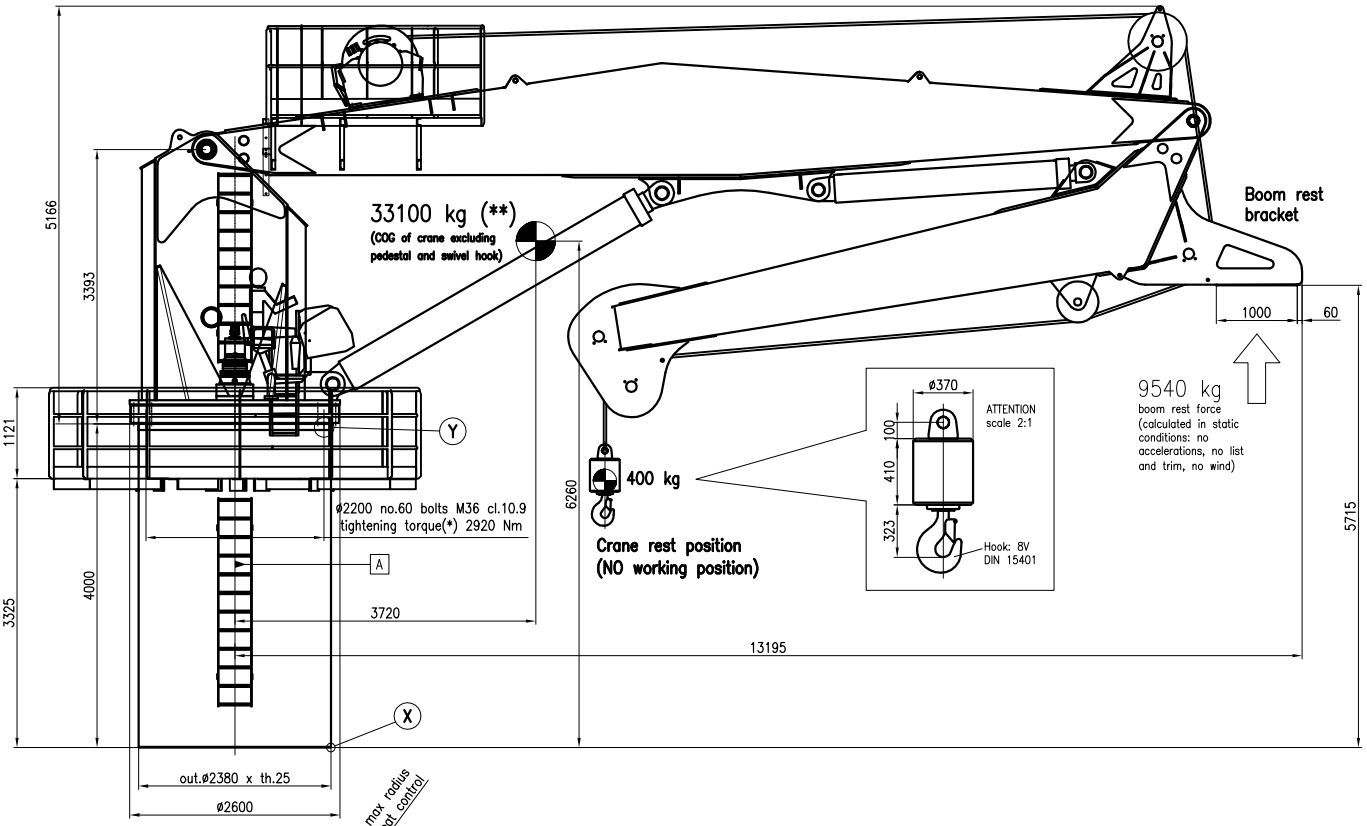
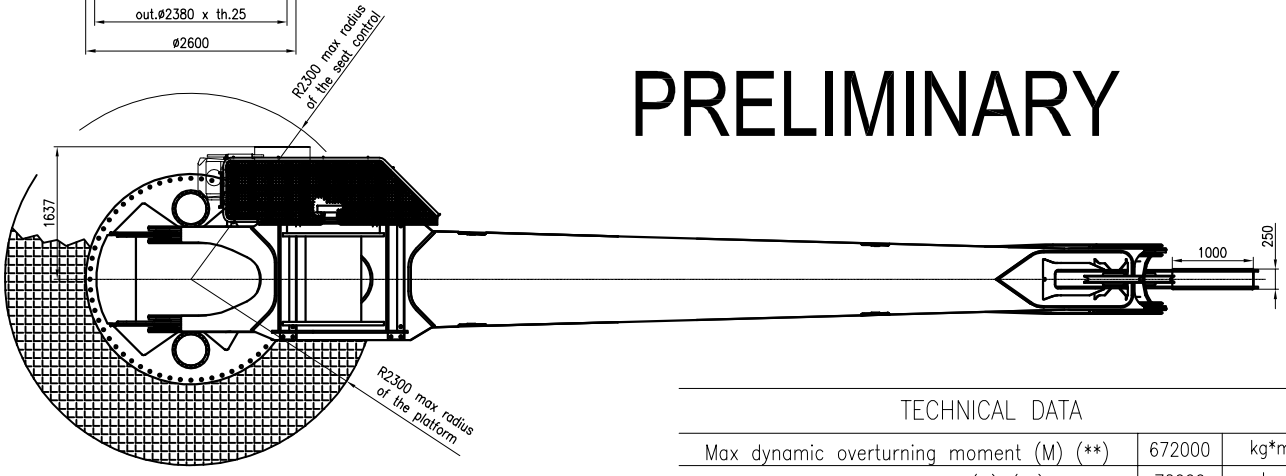
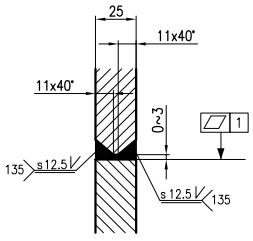


PRELIMINARY



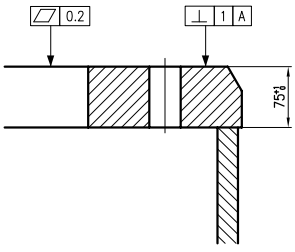
Det.X



Welding of the pedestal to the ship's counter-foundation is Yard's responsibility
- Pedestal material: S355J2 EN 10025-2
- Filler metal ER 70 S6 (AWS A5.18/95)
- Welding process: 135 according to EN ISO 4063:2010 (MAG welding)
- Welding type: full penetration
- Preheat temperature: 60°C
- Interpass max temperature: 200°C
- NDT: 100% MP + 100% UT (quality level C according to EN ISO 5817:2007)

Det.Y

After the pedestal has been welded to the vessel substructure and returned to normal temperature the Yard is responsible for checking the flatness of the flange and re-machine it to required tolerances if necessary



TECHNICAL DATA

Max dynamic overturning moment (M) (**)	672000	kg*m
Max dynamic vertical force (N) (**)	72000	kg
Max dynamic radial force (R) (**)	18000	kg
Slewing angle	Continuos	
Slewing speed	0.6	rpm
Max working pressure	290	bar
Oil flow	350	l/min
Recommended oil quantity	1000	l
Hydraulic Power Unit	90+90	kW
Mass weight (excluding pedestal and swivel hook) (**)	33100	kg
Winch Pull (nominal winch size)	12000	kg
Hook speed (average)	38	m/min
Hook travel	53	m
Total lenght of rope	80	m
Rope diameter	32	mm

(*) the tightening torque has been calculated according to VDI 2230-1:2003 under the following conditions:
- unlubricated screws
- ν (utilization factor) = 0.81
- μG (coeff of friction in the thread) = 0.15
- μK (coeff of friction in the head bearing area) = 0.15
- αA (tightening factor) = 1.86

We recommend not to lubricate the threads, and use the bolts in the as-supplied condition (dry). The tightening factor αA depends on the scatter of the tightening tool (ref to Table A8 of the VDI 2230-1:2003); the above value of αA is referred to the tools commonly used in Heila. Other tools may lead to different torques. The choice of the right value of αA is under the installer's responsibility, and the corresponding torque should be recalculated accordingly.

(**) actions at base, weight and COG may vary up to 10% more than the given values

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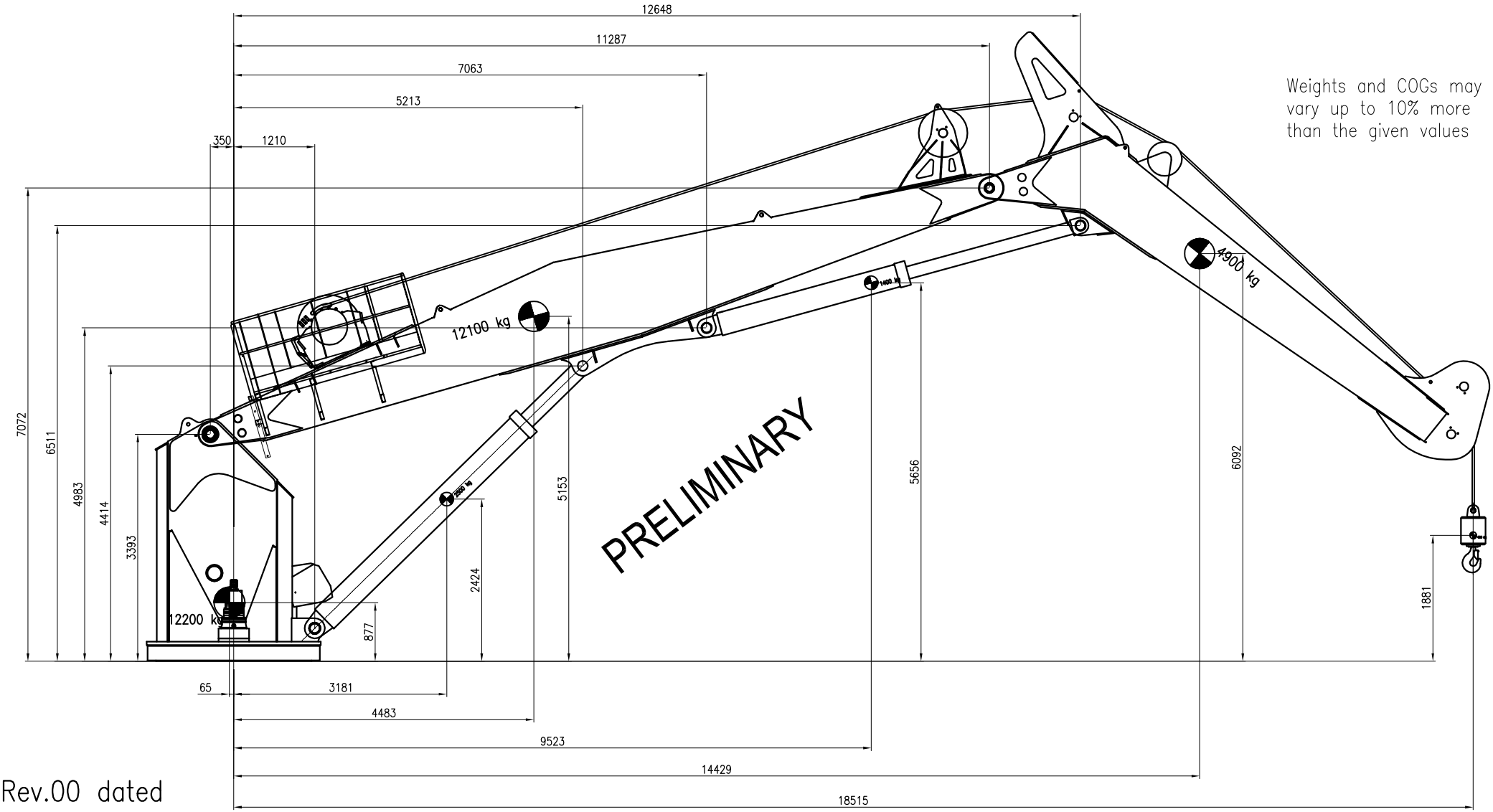
Splitted COGs for main parts
& articulation points
(at max radius condition)



Weights and COGs may vary up to 10% more than the given values

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