



UPETROM
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TRANSPORTABLE DRILLING WORKOVER RIG W100 - DH - T



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FIELD OF APPLICATION

The **W 100 - DH - T** mobile drilling and workover rig is mounted on a trailer and intended to be utilized to perform the following jobs:

Work over jobs afferent to the oil and gas wells, such as:

- running-in and pulling-out of tubing;
- running-in and pulling-out of sucker rods;
- running-in and pulling-out of sinking pumps.

Repair and remedy jobs afferent to the wells, such as:

- straightening of oval casing strings;
- drilling of cement plugs;
- wash of sand plugs;
- fishing jobs.

Installation and removal of the Christmas tree;

Drilling up to 2000m (6562 ft) using 4.1/2" D.P. within the limits of 80 mton (180,000 lbs) hook load.

DESCRIPTION

The **W 100 - DH - T** mobile drilling and workover rig is mounted on a trailer and operated by means of a CATERPILLAR 3408 DITA Diesel engine of 503 HP, 377 kW and 2,100 rpm, which is coupled to an ALLISON M5610H hydro-mechanical transmission performing 5 + 1R* speed stages.

1R* - 1 reverse speed

SPECIFICATIONS

• Max. working hook load with 8 lines	100 mton (224,800 lbs)
• Max. recommended working depth (for a hook load limit of 100 mton) with tubing of 2 7/8 in	6,000 m (19,685 ft)
• Number of the lines	8 lines
• Drilling line size	25 mm (1 in)
• Pipe stands length	max. 18 m (59 ft)
• Operation type	Diesel and hydro mechanical operation
• Number of operating engines	1
• Operating engine type	CAT 3408 DITA diesel engine of 503 HP, 377 kW and 2,100 rpm
• Number of hydro mechanical transmissions	1



• Hydro mechanical transmission type	ALLISON M 5610 H
number of speed stages	5 + 1 reverse
• Draw works type	TFI-15
max. line pull	33721 lbs (15 mton)
number of hoisting speeds	5 + 1 reverse
number of drums	1
main brake type	band brake
auxiliary brake type	FH-560 hydraulic brake
• Mast type	MU-100/135
hook load with 8 lines	100 mton (224,800 lbs)
clear mast height (from the ground up to the crown block beam)	32 m (105 ft)
racking capacity (stands of 18 m) for tubing of 2 7/8 in	6,000 m (19,685 ft)
racking capacity (stands of 18 m) for drilling pipes of 4. 1/2 in	2,000 m (6562 ft)
section number	2 U-shape telescopable sections
mast tilting	by means of 2 hydraulic cylinders (risers)
mast telescoping	using telescoping line wound on a hydraulically-actuated drum
• Substructure type	tiltable monoblock parallelogram
max. load of the rotary table beams	100 mton (224,800 lbs)
max. load at the setbacks	80 mton (180,000 lbs)
simultaneously-applied max. load	180 mton (404,800 lbs)
working floor height	4.6 m (15 ft)
clear height under the rotary table beams	3.66 m (12 ft)
substructure tilting	by means of the handling system of the rig
• Rotary table type	MRS-205
max. opening	520.7 mm (20.1/2 in)
max. static load	320 mton (720,000 lbs)
max. transmitted power	500 HP
max. rotor speed	300 rpm
max. rotor torque (when rotated)	1,600 kgf.m (11,573 lb-ft)
max. static torque of the rotor	8,000 kgf.m (57,864 lb-ft)



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• Crown block type	(4 + 2).25.GF-100
max. hook load	100 mton (224.800 lbs)
number of sheaves	4
number of running sheaves	1
sheave number (dead end of the line)	1

• Hook block type	4.25.560.MC-100W
max. hook load	100 mton (224,800 lbs)
number of sheaves	4

• Swivel type (optional)	GH 125W
max. static load	125 mton (281,000 lbs)
max. working pressure	210 bar (3045 PSI)
bore size	70 mm (2.3/4")
max. speed	300 rpm
thread for connection between the stem and the sub	4.1/2 in REG-LH type
thread for connection between the sub and the kelly	6.5/8 in REG-LH type
thread for connection to the rotary hose	LP 3 in type

• Air system	
air compressor type	6 C1 with pistons
number of air compressor	2
mechanical operated	1
electrical operated	1
flow rate at 10 bar pressure	1 m ³ /min (35.3 CFM)
max. discharge pressure	12 bar (174 PSI)
nominal pressure	10 bar (145 PSI)
air tank	2 x 210 l = 420 l (14.83 cu.ft)

• Fuel system to supply the rig engines, the unitized pumps and the electric power generating set	
total volume of stored fuel, as follows:	23 m ³ (145 BBL)
daily tank	4 m ³ (25 BBL)
storing tank	19 m ³ (119.5 BBL)

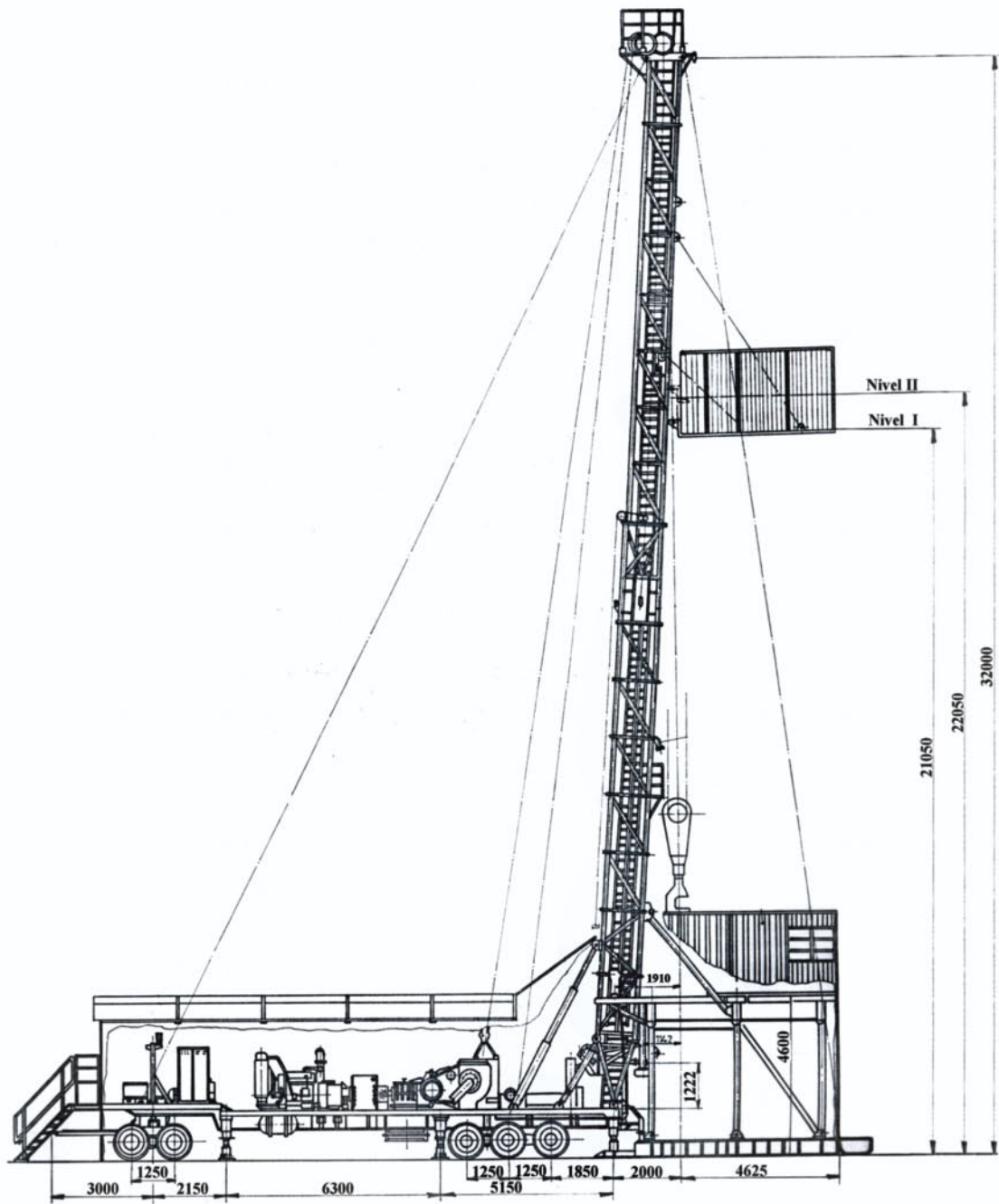


• Electric system for lighting and auxiliary aggregata	conceived for having its “zero” earthed normally manufactured (dust - and rain - tight), explosion-proof
supply voltage for:	
power receivers	3 x 380 V x 50 Hz
normal-lighting receivers	220 a.c.V x 50 Hz
safe-lighting receiver	24 V d.c.
• Electric power generating set	CAT 3406 type with SR 4 generator or CAT C15 generator
number of electric power generating sets	1
power	365 kVA (292 kW)
speed	1,500 rpm
voltage	3 x 400 / 231 V
frequency	50 Hz
• Rig trailer	
number of driving axles:	
front axle number	2
rear axle number	3
wheel track:	
front wheels	2,000 mm (78.3/4 in)
rear wheels	2,000 mm (78.3/4 in)
axle base	1,250 + 8,625 + 1,250 + 1,250 mm
min. distance from the ground	300 mm (11.8 in)
tyres:	
type	12.00R 20/18 PR
tyre quantity	20 + 2 spare tyres
max. running speed	30 km / h (18.6 MPH)
• Environmental temperature	-10°C to +50°C

UPETROM can manufacture the drilling rigs for working under temperature-range conditions of -40 Celsius degrees to +40 Celsius degrees, too. Such case stands require the drilling rigs to be equipped with an adequate heating system.



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w 100-DH TRAILER MOUNTED
DRILLING & WORKOVER RIG



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