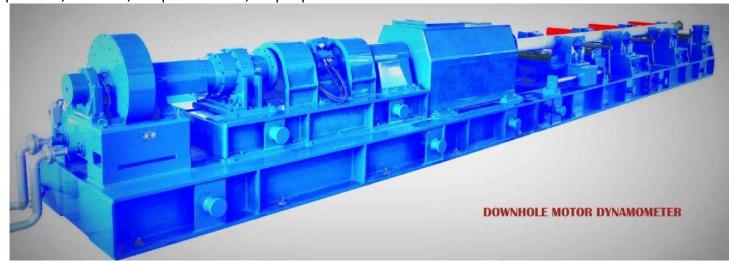


## DOWNHOLE MOTOR DYNAMOMETER

**CHE** Downhole Motor Dynamometer consists of host machine, dynamical system, circulatory system, hydraulic control system, cooling system and testing system. It is engineered to test performance in all aspects of downhole drilling motors ranging from 111/16" to 11 1/4" sizes by simulating actual downhole conditions. This design adopted advanced control system to implement automatic, semi-automatic or manual testing in loading torque, adjusting flow rate, collecting data such as torque, rotating rate, differential pressure, flow rate, temperature etc., output performance data and curve of the downhole motor.

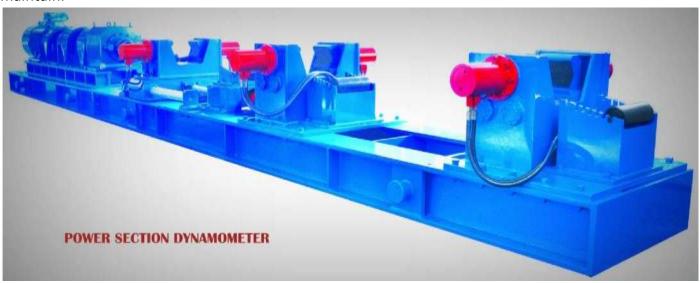


## **Specifications**

Descriptions	1LSY		5LSY		20LSY		30LSY	
Motor O.D.	43mm -	1 11/16"-	73mm -	2 7/8" -	73mm -	2 7/8" -	95mm -	3 3/4" -
	73mm	2 7/8"	120mm	4 3/4"	244mm	9 5/8"	286mm	11 1/4"
Working Torque	0 - 1	0 - 738	0 - 5	0 - 3,690	0 - 20	0 -14,750	0 - 30	0 -22,120
Range	kN.m	ft-lbs	kN.m	ft-lbs	kN.m	ft-lbs	kN.m	ft-lbs
Rotating Rate	50 – 1,000	50 - 1,000	50 - 600	50 - 600	50 - 500	50 - 500	50 - 500	50 - 500
Range	r/min	rpm	r/min	rpm	r/min	rpm	r/min	rpm
Starting	0 -16MPa	0 -	0 -	0 -	0 -	0 -	0 -	0 -
Pressure		2,320psi	16MPa	2,320psi	16MPa	2,320psi	16MPa	2,320psi
<b>Exiting Pressure</b>	0 - 1 Mpa	0 - 145psi	0 - 1MPa	0 - 145psi	0 - 1MPa	0 - 145psi	0 - 1MPa	0 - 145psi
Starting Flow Rate Starting Fluid Temperature Test Fluid	0 - 6 L/s 0° - 100°C	0 - 95.1gpm 32 <sup>o</sup> - 212 <sup>o</sup> F	0 -16 L/s 0° - 1000C Water /	0 - 253gpm 32 <sup>0</sup> - 2120F Drilling Mud	0 - 45L/s 0° - 1000C	0 - 713gpm 32 <sup>0</sup> - 2120F	0 - 45L/s 0° - 1000C	0 - 713gpm 32 <sup>0</sup> - 212 <sup>0</sup> F

## POWER SECTION DYNAMOMETER

**CHE** Power Section Dynamometer consists of host machine, circulation system, hydraulic control system, data acquisition and processing. It is engineered to test coordination, compatibility of stator and rotor ranging from 2 7/8" to 9 5/8" sizes to provide reliable, accurate test data, it is easy and safe to operate and maintain.



## **Specifications:**

Descriptions	301	MD	20MD		
<b>Motor Power</b>	132kW	177hp	110kW	150hp	
Max. Output Torque	30kN.m	22,130ft-lbs	20kN.m	14,750ft-lbs	
Output Rotating Rate	30- 60 r/min	30- 60 rpm	47 r/min	47rpm	
Differential Pressure	<=12MPa	<=1,740psi	<=12MPa	<=1,740psi	
Diameter	73 - 244mm	2 7/8" - 9 5/8"	73 - 197mm	2 7/8" - 7 3/4"	
Dimensions	11,000 x 1,400	433.1" x 55.1"	11,000 x 1,300	433.1" x 51.2" x	
(LxWxH)	x 1,170 mm	x 46.3"	x 1,150 mm	45.3"	
Total Weight	16,000kg	35,274lb	14,000kg	30,864lb	