

### 38. CIRCULAR SAW (ELECTRIC) 16"



Circular saws are heavy duty power tools required in search and rescue operation for various carpentry tasks associated with access and extrication like cutting and sawing of timber, wooden beams, door frames, fallen trees etc. Typically these are light enough to be used by one operator and are electrically powered

#### **SPECIFICATION**

1. Electrically powered motor operating in 100 to 250 volts with power consumption between 1600 to 2500 watts .15 ampere three core electrical cord 5 meter length with three pin plug will be provided.
2. Idling speed of motor up to 2000 to 3000 rpm with a maximum load rpm of 1200 to 1500 rpm. The motor should have a minimum endurance for continuous operation up to 60 minutes.
3. Should incorporate easily locatable push button start and an electric brake quick stoppage.
4. Size of blade : More than 12 inches diameter with an arbor not exceeding 3.2cm (1.25inches) the blade provided will be carbide tipped blade with minimum 32 teeth
5. The cutting capacity of the blade should exceed 125 mm at 90 degrees and 82mm at 45 degrees the saw should enable stable blade rotation and a depth adjustment lever. A shaft lock will be provided for effecting blade damage.
6. The weight of the saw with blade should not more than 17kg.
7. Rubberized wrap around saw and support handles with protection arrangement for shielding operator from debris and kick backs will be provided.
8. Noise level during operation at full load should not exceed 100Dbat a distance of one meter.

#### **ACCESSORIES**

9. The equipment will be supplied with following.
  - a) Two Spare carbide tipped blades.
  - b) Tool Kit
  - c) Operating and Maintenance manual.

### 39. CIRCULAR SAW CARBIDE TIPPED BLADE, DIA -235 mm

Specifications of blade as per SL No. 38

## Technical Specification and TD's for Battery Operated Circular Saw



S/No.	Specifications	Trial Directives
1.	Circular saws are heavy duty power tools required in search and rescue operation for various carpentry tasks associated with access and extrication like cutting and sawing of timber, wooden beams, door frames, fallen tress etc. Typically, these are light enough to be used by one operator and are electrically powered.	
2.	<ul style="list-style-type: none"> <li>i) Powered by 18 V- 40 V battery</li> <li>ii) No. of battery required to operate-01 No</li> <li>iii) Minimum 8Ah Lithium Ion Battery</li> </ul>	<ul style="list-style-type: none"> <li>i) &amp; iii) BOO to physically check the parameters &amp; verify through Govt/NABL approved lab test report/OEM certificate.</li> <li>ii) BOO to physically check the parameter.</li> </ul>
3.	Idling speed of motor up to 3000 RPM rpm with no load speed. The motor should have a minimum endurance for continuous operation up to 60 minutes	BOO to check & verify the parameter through OEM certificate.
4.	Should incorporate easily locatable push button start	BOO to physically check the parameter.
5.	Size of blade: Minimum 12 inches diameter with an arbor not exceeding 3.2cm (1.25inches). The blade provided will be carbide tipped blade with min 32 teeth	BOO to physically check the parameter & verify through OEM certificate.
6.	The cutting capacity of the blade should exceed 125 mm at 90 degrees and 82mm at 45 degrees the saw should enable stable blade rotation and a depth adjustment lever. A shaft lock will be provided for effecting blade damage	BOO to physically check and verify the parameter.
7.	The weight of the saw with blade should not more than 15kg.	BOO to physically check the parameter using calibrated weighing scale.
8.	Rubberized wrap around saw and support handles with protection arrangement for shielding operator from debris and kickbacks will be provided.	BOO to physically check the parameter & verify through OEM certificate.
9.	Noise level during operation at full load should not exceed 100 dB at one meter.	BOO to check & verify the parameter through lab test report of Govt/NABL approved lab.
10.	<p><b>ACCESSORIES</b></p> <p>The equipment will be supplied with following.</p> <ul style="list-style-type: none"> <li>a) Two Spare carbide tipped blades.</li> <li>b) Tool Kit.</li> <li>c) Operating and Maintenance manual.</li> </ul>	BOO to physically check the items of the accessories & supplied components.

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S/No.	Specifications	Trial Directives
11.	Operating Temp- -15 to +50 degree C	BOO to check & verify the parameter through Govt/NABL approved lab test report for operating temperature & Environmental test in extreme conditions.
12.	Technical Specification for Battery  a) Number of batteries supplied- 01 no . – Main and 01 no . – Reserve b) Battery Voltage- 18V - 40V c) Battery Capacity- 8Ah high output battery d) Battery type- Li-ion	a) BOO to physically check the parameter.  b), c) & d) BOO to physically check & verify the parameters through Govt/NABL approved lab test report/OEM certificate for battery power/ battery type.
13.	Uniform charging and discharging - Yes	BOO to verify through Govt/NABL approved lab test report.
14.	Overload Voltage protection- Yes	BOO to verify through Govt/NABL approved lab test report.
15.	Battery Level Indicator- Yes Battery weight- Maximum 02 Kg	BOO to physically check the parameters.
16.	Customized ABS Box	BOO to physically check the parameter & verify through OEM certificate.
17.	Service warranty-10 Years Cost-free warranty -01 Year	BOO to physically check the parameter & verify through OEM certificate.
18.	Certification- BIS/EN/CE	Compliance certification to be produced by Firms/OEM for BIS/EN. Firm/OEM to provide IEC 62133 or BIS 16046- test reports.
19.	Technical Specification of Charger:- a) Charger Input Voltage- 220-240 V 50 Hz b) Quick Charge Current- 5 to 15 A c) Charging Time- Not more than 140 Min d) Charging Status Indicator- Yes e) Weight of fast charger- Max – 03 Kg	BOO to physically check & verify the parameters through Govt/NABL approved lab test report/OEM certificate. BOO to physically check the weight using calibrated weighing scale.
20.	<b>Other features may include -</b> a) Dual action trigger b) Large metal chip/Dust collector c) Battery protection against overloading d) LED lights for better information of work area e) Guide rail capability for precision cutting	a) , b) d) & e) BOO to physically check the parameter.  c) BOO to check & verify the parameter through OEM certificate for battery protection against overloading.
21.	<b>Other Accessories</b>  a) Operator's Manual b) Blades: - Carbide-Tipped c) Grease and Lubricants d) Safety and Warning Labels e) Any other accessories required with the equipment	BOO to physically check all the accessories.