

68. RECIPROCATING SAW



Technical specification

1. Rated power:- Not less than 900 watt at 220 -240 volts
 2. Stroke rate (at no load): Not less than 2700/min.
 3. Stroke length : Not less than 28 mm
 4. Cutting depth(wood)- Above 165 mm
 5. Cutting depth(steel sheet) – More than 20 mm
 6. With required accessories and electrical cord of minimum 5 mtr length with 5 amp three/two pinplug along with an extension cord of 10 Mtr.
 7. Rate current- Not more than 6 amp
 8. Noise level < 100 db
 9. Spare blades for metal & wood cutting 10 Nos with suitable protective carry case.
 10. Weight- Not more than 5 Kg with blade.
 11. The starting current drawn by the motor should be limited to prevent the electric supply fuseblowing. This also prevents the tool starting with a jolt.
 12. Air cooled.
 13. Rust proof.
 14. Internationally certified on standards.
- Saw must be capable of cutting a variety of materials like- all kind of wood and metal. Firm should give live demonstration in above regard on the samples provided by NDRF.

RECIPROCATING SAW BLADE WOOD CUTTING

1. Blade type- Metal (high carbon steel) blade used for wood cutting
2. Blade length- 230 mm (minimum)
3. Compatibility- Compatible with reciprocating saw equipment
4. TPI ;:- Not less than 05 tooth per 2.54 CMS
5. Blade width :- Not less than 19 mm
6. Thickness : - Not less than 1.20 mm
7. Material – Low alloy cold rolled steel strips in hardened, tempered and polished condition having carbon, silicon, manganese, chromium, nickel, sulphur and phosphorous
8. Rust proof.
9. Marking – The saw blades shall be marked with the size and manufacturer`s name and trademark at equal spaced intervals over the bands.
11. Internationally certified on quality standards.

RECIPROCATING SAW BLADE METAL CUTTING

1. Blade type – Metal blade of bi-metal blades have a teeth of high speed steel and body material out of high carbon steel used for metal cutting
- 2. Blade length- Not less than 150 mm.**
3. Compatibility- Compatible with reciprocating saw equipment

4. TPI- Not less than 09 tooth per 2.54 cms
5. Blade width- Not less than 16 mm
6. Thickness- Not more than 1.6 mm
7. Material – The low alloy cold rolled steel strips in hardened, tempered and polished condition having carbon, silicon, manganese, chromium, nickel, sulphur and phosphorus
8. Tooth setting – the provision of the rake setting of the tooth shall be at the discretion of the manufacturer.
9. Rust proof.
10. Marking – The saw blades shall be marked with the size and manufacturers name and trademark at equal spaced intervals over the bands.
11. Internationally certified on quality standards.

Technical Specifications and TDs for Battery-Operated Reciprocating Saw



S/No	Specifications	Trial Directives
1.	18-40 V battery Battery Power- Min. 06 Ah Lithium Ion Battery.	BOO to physically check the parameter & verify through Govt/NABL approved lab test report/OEM certificate.
2.	Stroke rate (at no load): 0-3000 /min.	BOO to verify through Firm/OEM certificate.
3.	Cutting depth(wood)- Above 165 mm	BOO to physically check & verify the parameter.
4.	Stroke length: Not less than 28 mm	BOO to verify through Firm/OEM certificate.
5.	Cutting depth (steel sheet) – More than 20 mm	BOO to physically verify the parameter.
6.	Noise level < 100 db	BOO to check & verify the parameter through OEM certificate.
7.	Spare blades for metal & wood cutting 10 Nos with suitable protective carry case.	BOO to physically verify the nos.
8.	Weight- Not more than 6 kgs with 06 Ah battery	BOO to physically check the parameter using calibrated weighing scale.
9.	Spare blades for metal & wood cutting 10 Nos with suitable protective carry case.	BOO to physically check the parameters & verify through Govt/NABL approved lab test report/OEM certificate.
10.	Air-cooled.	BOO to physically check the parameters & verify through OEM certificate.
11.	Rust proof.	BOO to physically check the parameters & verify through OEM certificate.
12.	Internationally /BIS certified on standards. (Standard should be checked)	Compliance certification to be produced by Firms/OEM for BIS/EN.
13.	Saw must be capable of cutting a variety of materials like- all kinds of wood and metal.	BOO to physically check parameter.
14.	Other features may include - Tool Free Blade Change, Fixtec blade clamp for fast and easy blade changes without any key .	BOO to physically check all the accessories
15.	Anti Corrosion Blade Clamp, Wear Resistant Blade Change, Metal battery rails, Rafter Hook	BOO to physically check all the accessories
16.	Adjustable / Extendable Shoe.	BOO to physically check all the accessories
17.	LED for visibility of workplace	
18.	Service Warranty-10 Years Cost free warranty- 01 Year	BOO to physically check the parameter & verify through OEM certificate

S/No	Specifications	Trial Directives
19.	Accessories- a) Operator Manual b) Tool Kit c) Safety and Warning Labels	BOO to physically check all the accessories.
20.	Technical Specification for Battery a) Number of batteries supplied- 01 no. – Main and 01 no. – Reserve b) Battery Voltage- 18V - 40V c) Battery Capacity- 6Ah 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.
21.	Technical Specification of Charger:- b) Charger Input Voltage- 220-240 V 50 Hz c) Quick Charge Current- 5 to 15 A d) Charging Time- Not more than 140 Min e) Charging Status Indicator- Yes f) Weight of fast charger- Max – 03 Kg	a)b)c) and d) BOO to physically check & verify the parameters through Govt/NABL approved lab test report/OEM certificate. e) BOO to physically check the weight using calibrated weighing scale.

Technical Specifications and TD's for Reciprocating Saw Blade Wood Cutting

S/No	Specifications	Trial Directives
1.	Blade type- Metal (high carbon steel) blade used for wood cutting TPI; - Not less than 05 tooth per 2.54 CMS Thickness: - Not less than 1.20 mm	BOO to physically check and verify the blade type, TPI and thickness and blade material through OEM certification
2.	Blade length- 230 mm (minimum)	BOO to physically measure and verify the parameters.
3.	Compatibility- Compatible with reciprocating saw equipment	
4.	Bade width: - Not less than 19 mm	
5.	Material – Low alloy cold rolled steel strips in hardened, tempered, and polished condition having carbon, silicon, manganese, chromium, nickel, sulphur and phosphorous	BOO to check & verify the parameters through Govt/NABL approved lab test report/OEM certificate.
6.	Tooth setting – the provision of the rake setting of the tooth shall be at the discretion of the manufacturer.	BOO to check the Firm/OEM undertaking
7.	Rust proof	BOO to check & verify through OEM certification
8.	Marking – The saw blades shall be marked with the size and manufacturer's name and trademark at equal spaced intervals over the bands.	BOO to check physically and verify.
9.	Internationally certified/IS certified on quality standards.	Compliance certification to be produced by Firms/OEM for quality standards






12



Technical Specifications and TD's for Reciprocating Saw Blade Metal Cutting

S/No	Specifications	Trial Directives
1.	Blade type – Metal blade of bi-metal blades have a tooth of high-speed steel and body material out of high carbon steel used for metal cutting. TPI- Not less than 09 tooth per 2.54 cm Thickness- Not more than 1.6 mm	BOO to physically check and verify the blade type, TPI and thickness and blade material through OEM certification
2.	Blade length- Not less than 150 mm.	BOO to physically measure and verify the parameters
3.	Compatibility- Compatible with reciprocating saw equipment	
4.	Blade width- Not less than 16 mm	
5.	Material – The low alloy cold rolled steel strips in hardened, tempered, and polished condition having carbon, silicon, manganese, chromium	BOO to check & verify the parameters through Govt/NABL approved lab test report/OEM certificate.
6.	Tooth setting – the provision of the rake setting of the tooth shall be at the discretion of the manufacturer.	BOO to check physically and verify.
7.	Rust proof	BOO to check and verify the Firm/OEM undertaking in this regard
8.	Marking – The saw blades shall be marked with the size and manufacturer name and trademark at equal-spaced intervals over the bands.	BOO to check physically and verify.
9.	Internationally certified/IS certified on quality standards.	Compliance certification to be produced by Firms/OEM for quality standards.











Technical Specifications of Reciprocating Saw (Battery Operated) After Updation

S/No.	Technical Specifications	Trial Directives
1	18-40 V battery Battery Power- Min. 06 Ah Lithium Ion Battery.	BOO to physically check the parameter & verify through Govt/NABL approved lab test report/OEM certificate.
2	Stroke rate (at no load): 0-3000 /min.	BOO to verify through Firm/OEM certificate.
3	Cutting depth(wood)- Above 165 mm	BOO to physically check & verify the parameter.
4	Stroke length: Not less than 28 mm	BOO to verify through Firm/OEM certificate.
5	Cutting depth (steel sheet) – More than 20 mm	BOO to physically verify the parameter.
6	Noise level < 100 db	BOO to check & verify the parameter through OEM certificate.
7	Spare blades for metal & wood cutting 10 Nos with suitable protective carry case.	BOO to physically verify the nos.
8	Weight- Not more than 6 kgs with 06 Ah battery	BOO to physically check the parameter using calibrated weighing scale.
9	Air-cooled.	BOO to physically check the parameters & verify through OEM certificate.
10	Rust proof.	BOO to physically check the parameters & verify through OEM certificate.
11	Internationally /BIS certified on standards. (Standard should be checked)	Compliance certification to be produced by Firms/OEM for BIS/EN.
12	Saw must be capable of cutting a variety of materials like- all kinds of wood and metal.	BOO to physically check parameter.
13	Other features may include - Tool Free Blade Change, Fixtec blade clamp for fast and easy blade changes without any key	BOO to physically check all the accessories
14	Anti Corrosion Blade Clamp, Wear Resistant Blade Change, Metal battery rails, Rafter Hook	BOO to physically check all the accessories
15	Adjustable / Extendable Shoe.	BOO to physically check all the accessories
16	LED for visibility of workplace	BOO to physically check the parameter
17	Service Warranty-10 Years Cost free warranty- 01 Year	BOO to physically check the parameter & verify through OEM certificate.
18	Accessories- a) Operator Manual b) Tool Kit c) Safety and Warning Labels	BOO to physically check all the accessories.
19	Technical Specification for Battery a) Number of batteries supplied- 01 no . – Main and 01 no . – Reserve b) Battery Voltage- 18V - 40V c) Battery Capacity- 6Ah 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.
20	Technical Specification of Charger:- b) Charger Input Voltage- 220-240 V 50 Hz c) Quick Charge Current- 5 to 15 A d) Charging Time- Not more than 140 Min e) Charging Status Indicator- Yes	a)b)c) and d) BOO to physically check & verify the parameters through Govt/NABL approved lab test report/OEM certificate.

	f) Weight of fast charger- Max – 03 Kg	e) BOO to physically check the weight using calibrated weighing scale.
	Technical Specifications and TD's for Reciprocating Saw Blade Wood Cutting	
21	Blade type- Metal (high carbon steel) blade used for wood cutting TPI; - Not less than 05 tooth per 2.54 CMS Thickness: - Not less than 1.20 mm	BOO to physically check and verify the blade type, TPI and thickness and blade material through OEM certification
22	Blade length- 230 mm (minimum)	BOO to physically measure and verify the parameters
23	Compatibility- Compatible with reciprocating saw equipment	
24	Blade width: - Not less than 19 mm	
25	Material – Low alloy cold rolled steel strips in hardened, tempered, and polished condition having carbon, silicon, manganese, chromium, nickel, Sulphur and phosphorous	BOO to check & verify the parameters through Govt/NABL approved lab test report/OEM certificate.
26	Tooth setting – the provision of the rake setting of the tooth shall be at the discretion of the manufacturer.	BOO to check the Firm/OEM undertaking
27	Rust proof	BOO to check & verify through OEM certification
28	Marking – The saw blades shall be marked with the size and manufacturer's name and trademark at equal spaced intervals over the bands.	BOO to check physically and verify.
29	Internationally certified/IS certified on quality standards.	Compliance certification to be produced by Firms/OEM for quality standards
	Technical Specifications and TD's for Reciprocating Saw Blade Metal Cutting	
30	Blade type – Metal blade of bi-metal blades have a tooth of high-speed steel and body material out of high carbon steel used for metal cutting. TPI- Not less than 09 tooth per 2.54 cm Thickness- Not more than 1.6 mm	BOO to physically check and verify the blade type, TPI and thickness and blade material through OEM certification
31	Blade length- Not less than 150 mm.	BOO to physically measure and verify the parameters
32	Compatibility- Compatible with reciprocating saw equipment	
33	Blade width- Not less than 16 mm	
34	Material – The low alloy cold rolled steel strips in hardened, tempered, and polished condition having carbon, silicon, manganese, chromium	BOO to check & verify the parameters through Govt/NABL approved lab test report/OEM Certificate.
35	Tooth setting – the provision of the rake setting of the tooth shall be at the discretion of the manufacturer.	BOO to check physically and verify.
36	Rust proof	BOO to check and verify the Firm/OEM undertaking in this regard
37	Marking – The saw blades shall be marked with the size and manufacturer name and trademark at equal-spaced intervals over the bands.	BOO to check physically and verify.
38	Internationally certified/IS certified on quality standards.	Compliance certification to be produced by Firms/OEM for quality standards.