

TEST REPORT



Dolmar PS-6100

Test number: 6679

OWNER OF THE TEST CERTIFICATE:

Applicant:

Makita Engineering Germany
Jenfelder Strasse 38
D- 22045 Hamburg

www.makita.de



Test Results and Evaluations

Chain saws

DOLMAR PS-6100 (standard model)

DOLMAR PS-6100 H (with handle heating)

Tested with 50 cm Power Match Bar and 3/8" full chisel saw chain 73LP

Makita Engineering Germany; Jenfelder Strasse 38; D- 22045 Hamburg

| Test item | Test results | | | | Evaluation |
|---|---|-----------------|---------------------------|-----------|------------|
| Class | Chain saw in the power class between 3 and 4 kW, for professional use | | | | |
| Engine power | | | | | |
| P _{max} = 3.4 kW | Engine speed | Torque | Spec. fuel consumption | | N.E. |
| Md _{max} at 2.6 kW | 9250 min ⁻¹ | 3.4 Nm | 56 kW/l | | |
| | 6500 min ⁻¹ | 3.8 Nm | 43 kW/l | | |
| Fuel consumption | | | | | |
| | max. power | | max. torque | | |
| absolute / specific | 1.9 l/h | 395 g/kWh | 1.5 l/h | 395 g/kWh | + |
| Exhaust emissions | | | | | |
| Comply with type approval Level II of the guideline 2002/88/EG | | | | | o |
| Approval number: e1*97/68SH3-IIA*2012/46*0763*00 | | | | | |
| Chain lubrication | | | | | |
| Oil consumption | at 5000 min ⁻¹ | | at 9000 min ⁻¹ | | |
| min / max | 4 ml/min | 6 ml/min | 9 ml/min | 16 ml/min | o |
| Noise | | | | | |
| | idling speed | full load speed | Full throttle no load | | |
| at ear of the operator | 79 dB(A) | 102 dB(A) | 108 dB(A) | | o |
| Equivalent sound pressure level, according to DIN EN ISO 22868: 105 dB(A) | | | | | |
| (average between: idling/ full load/ full throttle) | | | | | |
| Acoustic power, according to DIN EN ISO 22868: 117 dB(A) | | | | | |
| (50:50 Mix: full throttle / full load) | | | | | |

| Vibration | | | | |
|--|--|--|---------------------------|------|
| | idling speed | full load speed | Full throttle no load | |
| front handle | 5.9 m/s ² | 3.9 m/s ² | 4.2 m/s ² | ○ |
| rear handle | 4.9 m/s ² | 3.7 m/s ² | 3.9 m/s ² | |
| Total equivalent vibration according to DIN EN ISO 22867 front handle 4.8 m/s ² ; rear handle 4.2 m/s ² | | | | |
| Chain brake | | | | |
| Handguard activation | Actuating force | aver. braking time | max. braking time | N.E. |
| | 26 N | 0.05 s | 0.1 s | |
| Inertia activation | horizontal acceleration | | vertical acceleration | |
| | 331 m/s ² | | 654 m/s ² | |
| Kickback | | | | |
| Chain stop angle | 36 ° | | | N.E. |
| Weight | | | | |
| Weight per unit power | With cutting equipment | | Without cutting equipment | ○ |
| | 2.0 kg/kW | | 1.8 kg/kW | |
| Operability / handling | | | | |
| Control elements | Easy to reach and use | | | ○ |
| Machine start | Mechanical starter (Easystart), Combined switch for engine ON-OFF and CHOKE | | | + |
| Engine control | The setting range for the carburettor/idling screw has been restricted because the carburettor is factory adjusted for emission optimization | | | ○ |
| Chain assembly | Easy to reach and operate | | | ○ |
| Chain tensioning | Simple, side chain tensioner | | | ○ |
| | side tensioner under chain sprocket cover, tools required | | | ○ |
| Fuel tank | Fuel tank covers can be opened without tools, easy to access | | | ○ |
| Maintenance | | | | |
| Engine, air filter and spark plug cover, casing | | Simple, clips removable using combination wrench | | ○ |
| Air filter | cleaning | No tools required | | + |
| | soiling | low | | + |
| Reliability | | After 30 fuel tank refills, one sample model experienced power loss. The replacement machine (ver- | | ○ |

| | | |
|--------------------------|--|-------------|
| | sion October 2013) worked flawlessly during the test period. | |
| Operating manual | clear, well illustrated | + |
| Operator safety | | |
| EG-type examination test | DPLF K-EG-2012/6559 | N.E. |
| GS- Prüfung | DPLF K-GS-2012/6561 | |

Rating: ++ / + / o / - / --./.(o = Standard / NE= no evaluation, complies with tolerance value)

Threshold values and evaluation criteria are described in the “Information about the Utility Value Test” available from the DLG and the KWF.

Description and technical data

Engine

- Air-cooled single-cylinder two-stroke engine
- Engine displacement 61 cm³; bore 47 mm; stroke 35 mm
- Fuel: minimum octane number (fuel mix ratio 1:50) or 2-stroke special fuel with "KWF-TEST";
Manufacturers recommendation: Aspen
- Spark plug NGK BPMR 7A
- Idling speed 2700 min⁻¹; max. speed 13800 min⁻¹

Cutting attachment

- Clutch drum with external chain sprocket
- Guide bar with 11-tooth sprocket nose
- Half or full chisel tooth chain
- pitch 3/8", gauge 1.5 mm
- additional guide bars and chain types incl. chains with a pitch of 0.325" are available for this chainsaw

Main dimensions and weights (measured values)

| | | |
|---------------|-----------------------------------|--------|
| Length | incl. cutting attachment 45 cm | 850 mm |
| | engine unit without spiked bumper | 440 mm |
| Width | engine unit | 205 mm |
| | incl. handle | 240 mm |
| Height | engine unit | 230 mm |
| | with front hand guard | 300 mm |
| Stump height | chain sprocket cover | 16 mm |
| | handle | 12 mm |
| Tank capacity | fuel | 830 ml |
| | chain oil | 500 ml |
| Weight | incl. cutting attachment 43 cm | 6.9 kg |
| | without cutting attachment | 6.0 kg |

Test

Test facilities

Kuratorium für Waldarbeit und Forsttechnik, Gross-Umstadt
DLG-Testzentrum Technik & Betriebsmittel, Gross-Umstadt

Field test

Waldarbeitsschule Kunsterspring
Waldwirtschaft Verband Schweiz Solothurn
Landesbetrieb Wald und Holz NRW Arnsberg

Authors

P. Müßig, KWF, Gross-Umstadt
W.Stindt, DLG, Gross-Umstadt




FPA/DLG-Test Committee

" Equipment and tools"
Chairman: Sebastian Paar, FBZ Laubau

FPA/DLG- approval until January 2019

In acknowledgement of the results of the test carried out by the KWF the approved product is also entitled to carry the following test marks: "DLG SIGNUM TEST"

Published by

| | | |
|--|---|---|
|  | DLG-Testzentrum Technik & Betriebsmittel Max-Eyth-Weg 1 D-64823 Gross-Umstadt | Telephone: +49 069/24788-611 Fax: +49 069/24788-110 E-mail: J.Albert@dlg.org Internet: www.dlg-test.de |
|  | ENTAM European Network for Testing of Agricultural Machines c/o ENAMA Via Venafro, 5 I-00159 Rome | Telephone: +39 06 40860030 Fax: +39 06 4076264 E-mail: inf@entam.com Internet: www.entam.com |
|  | Kuratorium für Waldarbeit und Forsttechnik e.V. Forsttechnischer Prüfungsausschuss (FPA) Spremlinger Strasse 1 D-64823 Gross-Umstadt | Telephone: +49 06078/785-0 Fax: +49 06078/785-50 E-mail: Muessig@kwf-online.de Internet: www.kwf-online.de |
| Supported by the Federal Ministry of Consumer Protection, Food and Agriculture per decision by the German Bundestag and the State Forest Administrations | | |