



TEST REPORT

STIHL MS 660/MS 660 W chain saw

with 50 cm cutting length

OWNER OF THE TEST CERTIFICATE:

Manufacturer and applicant:

Andreas Stihl AG & Co KG

Badstrasse 115

D-71336 Waiblingen

www.stihl.de



Test Results and Evaluation



Chain saw STIHL MS 660/MS 660 W with 50 cm cutting length

Andreas Stihl AG & Co. KG, Badstraße 115, D-71336 Waiblingen

| Test item | Test results | | | | Evaluation |
|---|---|--------------------------|---------------------------|-----------|------------|
| Function | Chain saw in the power class over 4 kW; for professional use | | | | |
| Engine power | | | | | |
| Power | Engine speed | Torque | Spec. fuel consumption | | NE |
| max 5.2 kW | 9500 min ⁻¹ | 5.2 Nm | 56.8 kW/l | | |
| 3.8 kW | 6000 min ⁻¹ | max. 6.0 Nm | 41.5 kW/l | | |
| Fuel consumption | | | | | |
| | max. power | | max. torque | | |
| absolute / specific | 3.2 l/h | 463 g/kWh | 3.8 l/h | 582 g/kWh | O |
| Chain lubrication | | | | | |
| Oil consumption | at 5000 min ⁻¹ | | at 9000 min ⁻¹ | | . |
| min / max | 6 ml/min | 9 ml/min | 11 ml/min | 18 ml/min | O |
| Sound pressure level | | | | | |
| at ear of the operator | idling speed | | full load speed | | |
| | 85 dB(A) | | 104 dB(A) | | — |
| Vibrations | | | | | |
| front handle | idling speed | | full load speed | | |
| rear handle | 4.1 m/s ² | | 4.1 m/s ² | | o |
| | 4.7 m/s ² | | 6.9 m/s ² | | |
| Chain brake | | | | | |
| Handguard activation | Actuating force | aver. braking time | max. braking time | | NE |
| | 28 N | 0.071 s | 0.084 s | | |
| Inertia activation | horizontal acceleration | | vertical acceleration | | NE |
| | 224 m/s ² | | 740 m/s ² | | |
| Kickback | | | | | |
| Cutting equipment 50 cm, 3/8“ Halbmeißelzahn | Kickback angle with brake | Chain stop angle | | | NE |
| | Measurement not required | Measurement not required | | | |
| Mass | | | | | |

| | | | |
|---------------------------------|--|---------------------------|----|
| Weight per unit power | With cutting equipment | Without cutting equipment | ++ |
| | 1.7 kg/kW | 1.4 kg/kW | |
| Operability / handling | | | |
| Control elements | Easy to reach and use | | + |
| Regulator for oil pump | Awkward to operate (position, dirt) | | - |
| Primer | Decompression valve | | + |
| Chain assembly | easy, drive sprocket easily accessible | | o |
| Chain tensioning | simple, on the side | | o |
| Maintenance | | | |
| Air filter and spark plug cover | Removable without tools | | + |
| Housing | Removal requires tools | | o |
| Air filter cleaning | No tools required | | + |
| soiling | normal | | o |
| Special features | Compensator for optimal fuel/air mixture when air filter is clogged-up | | + |
| Reliability | | | |
| | No defects during the test | | + |
| Operating manual | | | |
| | clear, well illustrated | | + |
| Operator safety | | | |
| EG-type examination test | (DPLF) Test certificate No. 2002/3619 | | |
| GS-Test | (DPLF) Test certificate No. K-GS-2002/3620 | | |

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

Tolerance values and evaluation criteria are described in the "Informationen zur Gebrauchswertprüfung" ("Information about the type examination test"). This publication is available from the DLG and the KWF.

Description and Technical Data (measured values)

Engine

- Air-cooled single-cylinder two-stroke engine;
- engine displacement 91,6 cm³; bore 54 mm; stroke 40 mm;
- Fuel: minimum octane number 90 RON; mixed lubrication,
Special fuel according to Swedish standard SS 155 461 or normal unleaded gasoline;
- Spark plug Bosch WSR-6F or NGK BPMR 7A.

- Idling speed 2500 min⁻¹; max. speed 13000 min⁻¹
- Membrane carburettor Walbro.

Cutting equipment

- Clutch drum with external chain sprocket;
- Guide bar with sprocket nose, type Rollomatic E;
- Full chisel tooth, 3/8" pitch.

Additional equipment (not tested)

- Guide bars for 40, 63, 75 and 90 cm cutting lengths;
- Heated handle

Main dimensions and weights

| | | |
|---------------|--------------------------------|--------|
| Length, | incl. cutting equipment 50 cm | 940 mm |
| | engine unit with spiked bumper | 470 mm |
| Width, | engine unit | 205 mm |
| | incl. handle | 267 mm |
| Height, | engine unit | 221 mm |
| | with front hand guard | 320 mm |
| Stump height, | chain sprocket cover | 23 mm |
| | handle | 33 mm |
| Tank volume, | fuel | 0.82 l |
| | chain oil | 0.36 l |
| Weight, | incl. cutting equipment 50 cm | 9.0 kg |
| | without cutting equipment | 7.3 kg |

Test

Test carried out by

Kuratorium für Waldarbeit und Forsttechnik
 Division "Prüfwesen und Normung", Groß-Umstadt
 DLG-Prüfstelle für Landmaschinen, Groß-Umstadt

Field test

Forestry department Dieburg
 Forest worker school Itzelberg

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FPA/DLG Testing commission

„Geräte und Werkzeuge“ (“Equipment and tools”) with 16 members

Chairman: Alois Zollner, Laubau

FPA Approval:

March 2008

Test No:3636

DLG- No.: 50104

The applicant is entitled to display the test mark on machines of this type according to the test regulations and to use the certification for advertising purposes.

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DLG-Testzentrum, Technik und Betriebsmittel

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