



# 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](http://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
<b>Function</b>	Chain saw in the power class over 4 kW; for professional use				
<b>Engine power</b>					
Power	Engine speed	Torque		Spec. fuel consumption	NE
max 5.2 kW	9500 min <sup>-1</sup>	5.2 Nm		56.8 kW/l	
3.8 kW	6000 min <sup>-1</sup>	max. 6.0 Nm		41.5 kW/l	
<b>Fuel consumption</b>					
	max. power		max. torque		
absolute / specific	3.2 l/h	463 g/kWh	3.8 l/h	582 g/kWh	O
<b>Chain lubrication</b>					
Oil consumption	at 5000 min <sup>-1</sup>		at 9000 min <sup>-1</sup>		.
min / max	6 ml/min	9 ml/min	11 ml/min	18 ml/min	O
<b>Sound pressure level</b>					
at ear of the operator	idling speed		full load speed		
	85 dB(A)		104 dB(A)		–
<b>Vibrations</b>					
front handle	idling speed		full load speed		
rear handle	4.1 m/s <sup>2</sup>		4.1 m/s <sup>2</sup>		O
	4.7 m/s <sup>2</sup>		6.9 m/s <sup>2</sup>		
<b>Chain brake</b>					
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 <sup>2</sup>		740 m/s <sup>2</sup>		
<b>Kickback</b>					
Cutting equipment 50 cm, 3/8“ Halbmeißelzahn	Kickback angle with brake		Chain stop angle		NE
	Measurement not required		Measurement not required		
<b>Mass</b>					

Weight per unit power	With cutting equipment	Without cutting equipment	++
	1.7 kg/kW	1.4 kg/kW	
<b>Operability / handling</b>			
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		0
Chain tensioning	simple, on the side		0
<b>Maintenance</b>			
Air filter and spark plug cover	Removable without tools		+
Housing	Removal requires tools		0
Air filter	cleaning	No tools required	+
	soiling	normal	0
Special features	Compensator for optimal fuel/air mixture when air filter is clogged-up		+
<b>Reliability</b>			
	No defects during the test		+
<b>Operating manual</b>			
	clear, well illustrated		+
<b>Operator safety</b>			
EG-type examination test	(DPLF) Test certificate No. 2002/3619		
GS-Test	(DPLF) Test certificate No. K-GS-2002/3620		

Rating: ++ / + / 0 / - / --./.(0 = 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 cm<sup>3</sup>; 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<sup>-1</sup>; max. speed 13000 min<sup>-1</sup>
- 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

## Authors

H. Krämer, DLG, Groß-Umstadt

D. Ruppert, KWF, Groß-Umstadt

## 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

Max-Eyth-Weg 1

D-64823 Groß-Umstadt

Telephone: 069/24788-0

Fax: 069/24788-110

E-mail: [albert@dlg.org](mailto:albert@dlg.org)

Internet: [www://dlg-test.de](http://www://dlg-test.de)

## Kuratorium für Waldarbeit und Forsttechnik e.V. (KWF)

Forsttechnischer Prüfungsausschuss (FPA)

Spremlinger Straße 1

D-64823 Groß-Umstadt

Telephone: 06078/785-0

Fax: 06078/785 50

E-mail: [ruppert@kwf-online.de](mailto:ruppert@kwf-online.de)

[www.kwf-online.de](http://www.kwf-online.de)