

# TEST REPORT



## Stihl MS 261 C-M

Test number: 6909

**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)



MS 261



MS 261 C-M



MS 261 C-MWV



MS 261 C-BM



MS 261 C-MQ



## Test Results and Evaluations

### Chain saws

STIHL MS 261 (with non-electronic engine management)

STIHL MS 261 C M (with electronic engine management)

STIHL MS 261 C MQ (with electronic engine management and Quickstop)

STIHL MS 261 C BEM (with electronic engine management, Ergostart and quick chain tensioner)

STIHL MS 261 C M VW (with electronic engine management, handle and carburetor heating)

Tested with 40 cm Stihl Rollomatic E guide bar and 26 RS saw chain

Andreas Stihl AG & Co. KG; Badstrasse 115; D- 71336 Waiblingen

Test item	Test results				Evaluation
<b>Class</b>	Chain saw in the power class up to 3 kW for professional use				
<b>Engine power</b>		Engine speed	Torque	Spec. fuel consumption	<b>N.E.</b>
$P_{max} = 3,0 \text{ kW}$		10500 min <sup>-1</sup>	2.8 Nm	59 kW/l	
$Md_{max}$ at 2,4 kW		7500 min <sup>-1</sup>	3.0 Nm	48 kW/l	
<b>Fuel consumption</b>		Max. power	max. torque		<b>+</b>
absolute / specific	1.8 l/h	436 g/kWh	1.5 l/h	451 g/kWh	
<b>Exhaust emission</b>	Complies with type approval regulations stage IV of 97/68/EG in version (EU) 2016/1628, approval numbers: Standard version: e1*2016/1628*2016/1628SHB3/P*0043*00 M- Tronic version: e1*2016/1628*2016/1628SHB3/P*0109*00				<b>o</b>
<b>Chain lubrication</b>		at 5000 min <sup>-1</sup>		at 9000 min <sup>-1</sup>	
Oil consumption					
min / max	3 ml/min	5 ml/min	4 ml/min	9 ml/min	<b>o</b>
<b>Noise</b>		idling speed	full load speed	Full throttle no load	<b>-</b>
at ear of the operator	87 dB(A)	104 dB(A)	107 dB(A)		
Equivalent sound pressure level according to DIN EN ISO 22868: 104 dB(A) Acoustic power according to DIN EN ISO 22868: 116 dB(A) (average of full load/full throttle)					

Test item	Test results			Evaluation
<b>Vibration</b>				
	idling speed	full load speed	Full throttle no load	
front handle	3.0 m/s <sup>2</sup>	4.5 m/s <sup>2</sup>	3.0 m/s <sup>2</sup>	○
rear handle	3.0 m/s <sup>2</sup>	4.5 m/s <sup>2</sup>	3.0 m/s <sup>2</sup>	
Total equivalent vibration according to DIN EN ISO 22867 Front handle 3.5 m/s <sup>2</sup> ; rear handle 3.5 m/s <sup>2</sup>				
<b>Chain brake</b>				
Handguard activation	Actuating force	aver. braking time	max. braking time	N.E.
	25 N	0,05 s	0,07 s	
Inertia activation	horizontal acceleration		vertical acceleration	
	387 m/s <sup>2</sup>		738 m/s <sup>2</sup>	
<b>Kickback</b>				
Kickback angle	25 °			N.E.
<b>Weight</b>				
Weight per unit power	With cutting equipment		Without cutting equipment	++
	1.9 kg/kW		1.6 kg/kW	
<b>Operability / handling</b>				
Control elements	Easy to reach and use			○
Machine start	Decompression valve, mechanical starter (shock absorber in starter handle)			○ +
Engine control	Factory-adjusted carburettor, minimal alteration of idling speed possible with tools Models MS 261 C-M, without regulator screws, therefore automatic optimal adaptability to current conditions (surroundings, dirt, fuel).			++
Chain assembly	Easy to access and use			○
Chain tensioning	simple, tensioning on the side of machine model MS 261 C-BM, side tensioner under the chain sprocket cover, no tools required			○ +
Refilling	Fuel tank covers can be opened without tools, easy to access			○

Test item	Test results	Evaluation
<b>Maintenance</b>		
Engine, air filter and spark plug cover, casing	Simple, clips removable using combination wrench	o
Air filter cleaning	No tools required	+
soiling	low	+
<b>Reliability</b>	no further damages during the test	o
<b>Operating manual</b>	clear, well-illustrated	+
<b>Operator safety</b>		
EG-type examination test	DPLF K-EG-2009/5306	o. B.
GS- Test	DPLF K-GS-2009/5307	

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

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

## Description and technical data

### Engine

- Air-cooled single-cylinder two-stroke engine
- Displacement 50.2 cm<sup>3</sup>; bore 44.7 mm; stroke 32 mm
- Fuel: minimum octane number 90ROZ (Mixture 1:50) or two-stroke special fuel with “KWF-Test”; manufacturers recommendation: Stihl MotoMix
- Spark plug NGK BPMR 7A
- Idling speed 2800 min<sup>-1</sup>; max. speed 14000 min<sup>-1</sup>

### Cutting equipment

- Clutch drum with external chain sprocket
- Guide bar with 11 tooth sprocket nose
- Half or full chisel tooth chain
- Pitch 0.325“ gauge 1.6 mm
- Various guide bar lengths and chain types available for this saw model

**Technical data's** (measured values)

Length	incl. cutting equipment 40 cm	825 mm
	engine unit without spiked bumper	425 mm
Width	engine unit	180 mm
	incl. handle	245 mm
Height	engine unit	200 mm
	with front hand guard	285 mm
Stump height	chain sprocket cover	30 mm
	handle	30 mm
Tank volume	fuel	500 ml
	chain oil	250 ml
Weight	incl. cutting equipment 40 cm	5,9 kg
	without cutting equipment	4,9 kg

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 anerkannt".

**Test committee: tools and equipment**  
**Chairman: Dr. Sebastian Paar, Laubau**

**Inspection closed: November 2016**

**Approval until: November 2021**

**First approval: May 2012**

**Responsible test engineer**

**Patrick Müßig**

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**practical application carried out by professional user, product is further made unchanged**

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