



# TEST REPORT

## STIHL MS 310

**TEST CERTIFICATE HOLDER:**

**Manufacturer and applicant:**

Andreas Stihl AG & Co KG

Badstrasse 115

D-71336 Waiblingen

www: [stihl.de](http://stihl.de)

[www.stihl.de](http://www.stihl.de)





## Test Results and Evaluations

Chainsaw Stihl MS 310

Firma Andreas Stihl AG & Co KG; 71336 Waiblingen, Badstrasse 115

Test item		Test results				Evaluation
Function		Chain saw in the power class up to 4 kW, for semi-professional use				
Engine power						
Power		Engine speed	Torque	Spec. fuel consumption	NE	
max.	3.2 kW	9500 min <sup>-1</sup>	3.2 Nm	54 kW/l		
	2.5 kW	7000 min <sup>-1</sup>	max. 3.5 Nm	45 kW/l		
Fuel consumption						
		max. power		max. torque		
absolute / specific		2.0 l/h	470 g/kWh	1.8 l/h	537 g/kWh	O
Exhaust emission						
					complies with level I of the standard 2002/88 EG	O
Chain lubrication						
Oil consumption		at 5000 min <sup>-1</sup>		at 9000 min <sup>-1</sup>		
min. / max		4 ml/min / 8 ml/min		5 ml/min / 14 ml/min		O
Noise						
		idling	full load	racing		
Sound pressure level		81 dB(A)	103 dB(A)	105 dB(A)		O
Equivalent sound pressure level 102 dB(A) (operation modes idling/ full load/ racing with equal duration of exposure)						
Sound power level 113 dB(A) according to Directive 2000/14/EG						
Vibration						
		idling	full load	racing		
front handle		4.1 m/s²	4.4 m/s²	4.3 m/s²		O
rear handle		3.9 m/s²	6.4 m/s²	3.2 m/s²		
Equivalent vibration total value						
front/rear 4,3 / 4,7 m/s² (operation modes idling/ full load/ racing with equal duration of exposure)						

## Stihl MS 310

<b>Chain brake</b>					
Hand guard activation		activation force	aver. braking time	max. braking time	NE
		27 N	0.10 s	0.11 s	
Inertia activation		horizontal acceleration		vertical acceleration	NE
		330m/s²		570 m/s²	
<b>Kickback</b>					
Cutting attachment 35cm , 3/8“			Chain stop angle		NE
Half chisel tooth			<29 °		
<b>Power to weight ratio</b>					
MS 310		With cutting attachment	Without cutting attachment		+
		2.2 kg/kW	1.9 kg/kW		
<b>Operability / handling</b>					
Control elements		Easy to reach and use			+
		Fuel tank cap removable without tools.			+
Primer		not provided			O
Chain assembly		Chain sprocket easily accessible.			O
Chain tensioning		laterally in drive sprocket cover.			O
<b>Maintenance</b>					
Air filter and spark plug cover - Casing		removable without tools.			+
		not removable, cleaning awkward.			-
Air filter	cleaning	Tools required, 1 screw			+
	soiling	normal			O
<b>Reliability</b>					
		No defects during test			+
<b>Operating manual</b>					
		clear, well illustrated			+
<b>Operator safety</b>					
EG-type examination test		(DPLF) Test certificate No. K-EG-2000-3091			
GS-Test		(DPLF) Test certificate No. K-GS-2000-3092			

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

## Description and Technical Data

### Motor

- Air-cooled single-cylinder two-stroke engine;
- Engine displacement 59 cm<sup>3</sup>; bore 47 mm; stroke 34 mm;
- Fuel: minimum octane number 90 ROZ; mixed lubrication;  
2-T- special fuel with "KWF-TEST" or regular lead-free petrol;
- Spark plug Bosch WSR 6F or NGK BPMR 7A;
- Idling speed: 2800 min<sup>-1</sup>; max. speed: 13.000 min<sup>-1</sup>;
- membrane carburettor Zama.

### Cutting attachment

- Clutch drum with external chain sprocket;
- Available guide bars lengths from 32 to 50 cm;
- pitch 0,325" or 3/8", gauge 1.6 mm

### Main dimensions and weights

		MS 310	
Length,	incl. cutting attachment 37 cm	787	mm
	engine unit without spiked bumper	429	mm
Width,	engine unit	195	mm
	incl. handle	267	mm
Height,	engine unit	210	mm
	with front hand guard	255	mm
Stump height,	chain sprocket cover	20	mm
	handle	30	mm
Tank capacity	fuel	510	ml
	chain oil	270	ml
Weight,	incl. cutting attachment 35 cm	7.1	kg
	without cutting attachment	6.1	kg

## Test

### Test carried out

Kuratorium für Waldarbeit und Forsttechnik Groß-Umstadt

DLG-Testzentrum Technik & Betriebsmittel Groß-Umstadt

### Field test

Landesanstalt für Ökologie, Bodenordnung und Forsten, Arnsberg

Revierförsterei Groß-Umstadt

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### FPA/DLG-Test Committee

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

Chairman: Alois Zollner

### FPA/DLG- approval:

May 2006

FPA- Index: 1.01.4203

DLG- Test Report: 5594

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

### DLG-Testzentrum Technik & Betriebsmittel Groß-Umstadt

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