

# TEST REPORT



## Stihl MS 880

Test number: 3758

**OWNER OF THE TEST CERTIFICATE:**

Manufacturer and applicant:

Andreas Stihl AG & Co. KG

Badstrasse 115

71336 Waiblingen - Germany

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





## Test Results and Evaluations

### Chain saws STIHL MS 880

Tested with 63 cm Rollomatic E bar and 3/8" full chisel saw chain

Andreas Stihl AG & Co. KG; Badstrasse 115; 71366 Waiblingen - Germany

Test item	Test results				Evaluation
Class	Chain-saw classified above 4 kW for professional use				
Engine power					
P <sub>max</sub> = 6,4 kW	Engine speed	Torque	Spec. fuel consumption	N.E.	
Md <sub>max</sub> at 5,5 kW	8.500 rpm	7.2 Nm	52 kW/l		
	6.750 rpm	7.8 Nm	45 kW/l		
Fuel consumption					
	at maximum power		at maximum torque		
absolute / specific	4.3 l/h	504 g/kWh	3.7 l/h	500 g/kWh	+
Exhaust emission					
Complies with type approval regulations stage I of 97/68/EG in version (EU) 2016/1628, approval number: e1*97/68SH3-IA*2004/26*0244*01					o
Chain lubrication					
Oil consumption	at 5000 rpm		at 9000 rpm		
min / max	6 / 16 ml/rpm		13 / 27 ml/rpm		o
Sound pressure level					
(63 cm saw bar)	idling speed		full load speed		
at ear of the operator	87 dB(A)		106 dB(A)		-
Equivalent sound pressure, total value according to DIN EN ISO 22868: 103 dB(A)					
(50:50 Mix: Idling/full load)					
Accoustic power according to DIN EN ISO 22868: 116 dB(A)					
(50:50 Mix: Idling/full load)					
Vibration					
(63 cm saw bar)	idling speed		full load speed		
front handle	6.4 m/s²		8.4 m/s²		-
rear handle	9.1 m/s²		6.4 m/s²		
Total equivalent vibration according to DIN EN ISO 22867					
Front handle 7.5 m/s²; rear handle 7.8 m/s²					

Chain brake				
Handguard activation	Actuating force	Average braking time	Maximum braking time	N.E.
	33 N	0.11 s	0.14 s	
Inertia activation (40 cm bar)	horizontal acceleration		vertical acceleration	
	96 m/s²		664 m/s²	
Weight				
Power/weight ratio	With cutting equipment		Without cutting equipment	
	1.9 kg/kW		1.6 kg/kW	
o				
Operability / handling				
Controls	easily accessible and easy to use			o
	Decompression valve available			+
Starting procedure	Mechanical starting aid (damping element in starter handle) available, a combined switch for engine ON, OFF, CHOKE cold and warm start			o
Motor control	Ex-factory carburettor pre-adjusted for exhaust gas optimization, therefore setting range of carburetor / idler screws limited			o
Chain assembly	Easily accessible and easy to use			o
Chain tension	easy, lateral chain tension			o
	laterally in the sprocket cover, with tools			o
Refueling	Tank caps can be operated without tools easily accessible			o
Maintenance				
Engine, air filter and spark plug cover	Simple, clips removable using combination wrench			o
Air filter	cleaning	No tools required		+
	soiling	normal		o
Reliability	No damage reported during tests			o
Operating manual	clear, well-illustrated			+
Work safety				
GS- Test	DPLF K-GS-2009/3759			N.E.

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

## Description and technical data

### Engine

- Air-cooled single-cylinder two-stroke engine
- Displacement 121.6 cm<sup>3</sup>; bore 60 mm; stroke 43 mm
- Fuel: minimum octane number 90 RON (ratio 1:50), or 2T-special fuel with "KWF-TEST"; manufacturer recommended fuel: MotoMix
- Spark plug NGK BPMR 7A
- Idling speed 2.800 rpm

### Cutting equipment

- Clutch drum with external chain sprocket
- Guide bar with and without tooth sprocket nose available
- full or half chisel tooth chain
- pitch 3/8" an 0.404" gauge 1.6 available

### Main dimensions and weights (measured values)

Length	incl. cutting equipment 37 cm	1.130 mm
	engine unit without spiked bumper	550 mm
Width	engine unit	225 mm
	incl. handle	275 mm
Height	engine unit	245 mm
	with front hand guard	340 mm
Stump height	chain sprocket cover	20 mm
	handle	15 mm
Tank capacity	fuel	1.300 ml
	chain oil	700 ml
Net weight	incl. cutting equipment 50 cm	12.3 kg
	without cutting equipment	9.9 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**     **August 2019**  
**Approval until:**     **August 2024**  
**First approval**     **August 2003**  
**Responsible test engineer**  
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**practical application carried out by professional user**

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