

TEST REPORT



STIHL MS 194 C

OWNER OF TEST CERTIFICATE:

Test no.: 10382

Andreas Stihl AG & Co. KG
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Test results and evaluations

Andreas Stihl AG & Co. KG, Badstrasse 115, 71336 Waiblingen - Germany

Tested with 35 cm guide bar und 3/8" semi chisel chain RM3

Application field

Chain saw in the power range up to 2 kW for professional use in young stand maintenance and landscaping.

Operation, maintenance and product safety		
Operability / Handling / Ergonomics		
Operating controls	Easy to operate even with gloves; clear arrangement, easy to reach	+
Starting procedure	Combination lever "0" "I" and "Start", separate choke lever; ErgoStart and manual fuel pump make starting easier	o
Engine control	Carburetor preset at the factory; minimal change of idle speed possible with tools	-
Chain assembly	Difficult, external clutch bell housing	-
Chain tension	Adjustable with tool; device in side of sprocket cover	o
Refueling	Hinged tank cap no tool required	o
Maintenance		
Air filter and spark plug cover	Tool-free disassembly, easily accessible	o
Air filter	Tool-free, easily accessible Low	+
Cleaning		+
Contamination		
Reliability	No damage during the tests	+
Safety and user information		
Operating instructions	Illustrated, detailed, clear, adapted to the conditions in practice, also available digitally free as pdf, pdf searchable.	+
Product safety	EC type examination certificate by a notified body is available.	n.e.

Technical data's**Main dimensions and weights**

Length	Including cutting attachment	690 mm
	Engine unit without claw stop	420 mm
Width	Engine unit	170 mm
	With handle tube	240 mm
Height	Engine unit	210 mm
	With hand guard	245 mm
Floor height	Sprocket cover	23 mm
	Handle tube	40 mm
Tank capacity	Fuel	270 ml
	Chain oil	220 ml
dry weight	Including cutting attachment	4,05 kg
	Without cutting attachment	3,58 kg

Cutting performance

Cutting performance	27 cm ² /Sec. (Cutting spruce roundwood approx. Ø 23 cm)
	45 cm ² /Sec. (cutting of KVH 14x24 cm)

Cutting attachment

- Clutch drum with internal chain wheel
- Guide bar with 8-tooth deflection sprocket
- Half-chisel tooth chain
- Pitch 3/8" with groove width 1.1 mm
- Further cutting sets available according to instructions to match the saw type

Engine data's

- Air-cooled single-cylinder two-stroke engine
- Displacement: 31.8 cm³; cylinder bore: 37 mm; piston stroke: 28 mm
- Spark plug: NGK CMR6H
- Idling speed: 3.000 min⁻¹; Rated speed: 10.500 min⁻¹

Fuel: Minimum octane number 90 ROZ (mixing ratio 1:50) or two-stroke special fuel with "KWF-Test". Manufacturer's recommendation: Stihl MotoMix

Power / torque at P _{max} = 1,4 kW, M = 1,3 Nm M _{max} = 1,6 Nm, P = 1,2 kW	Rotational speed 10.500 min ⁻¹ 6.500 min ⁻¹		Litre capacity 46 kW/l 38 kW/l		o.B.
Power-to-weight ratio	With cutting attachment 2,4 kW/kg		Without cutting attachment 2,2 kW/kg		
Fuel consumption	at max. power		at max. Torque		+
absolute / specific	0,8 l/h	430 g/kWh	0,7 l/h	470 g/kWh	
Chain lubricant consumption	at 5.000 min ⁻¹				o

Delivery rate not adjustable	4 ml/min			
Exhaust emissions				
Comply with stage V of engine class NRSh-v-1a of Directive (EU) 2016/1628.				
	Limits according to EU Regulation 2016/1628	Actual value		o.B.
CO	805 g/kWh	803 g/kWh		
HC + NO _x	50 g/kWh	40 g/kWh		
Noise emissions				
Max. Noise level (With 30 cm cutting attachment)	Idle	Full throttle	Full load	-
On operator's ear	81 dB(A)	102 dB(A)	101,5 dB(A)	
Equivalent sound pressure level according to DIN EN ISO 22868: 100 dB(A) Equivalent sound power level according to DIN EN ISO 22868: 113 dB(A)				
Vibrations				
(With 30 cm cutting attachment)	Idle	Full throttle	Full load	o
Front handle	3,5 m/s²	3,9 m/s²	3,7 m/s²	
Rear handle	2,9 m/s²	3,7 m/s²	4,2 m/s²	
Equivalent total vibration value according to DIN EN ISO 22867 Front handle: 3,7 m/s² Rear handle: 3,6 m/s²				
Rating range: ++ / + / o / - / -- ; o = standard n.e. = no evaluation ; - limit value complied with				

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".

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Test committee equipment and tools
Chairman: Dr. Johannes Windisch, Re-gensburg

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Practical work with professional users

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