

# TEST REPORT



## STIHL MS 194 T

Number: 10383

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# Results and evaluations

Tested with 30 cm bar and 3/8" semi chisel saw chain

## Field of application

Chain saw for tree service. Use exclusively for tree service work by specially trained personnel. Not suitable for conventional chain saw work (e.g., felling, limbing, cutting to length).

Operation, maintenance and product safety		
Usability / Handling / Ergonomics		
Operational controls	Good operability even with gloves, clear arrangement, good accessibility	+
Starting procedure	Combination lever "0" "I" and "Start", separate choke lever ErgoStart and manual fuel pump facilitate the starting process	o
Engine control	Carburetor preset at the factory; minimal change of idle speed possible with tools	-
Chain assembly	Complicated by internal sprocket	-
Chain tensioning	Adjustable with tool, device on the side of the sprocket cover.	o
Refuelling	Hinged lid tank caps no tools required	o
Maintenance		
Air filter and spark plug cover	Tool-free disassembly, easily accessible	+
Air filter	Tool-free, easily accessible Low	+
Cleaning		+
Contamination		
Reliability	No damage in the course of 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.	o

## Technical data

### Main dimensions and weights

Length	Including cutting attachment	520 mm
	Motor unit without claw stop	255 mm
Width	handle unit	165 mm
	With handle tube	220 mm
Height	engine unit	205 mm
	With hand guard	235 mm
Stump height	Sprocket cover	23 mm
	Handle tube	-
Tank capacity	Fuel	270 ml
	Chain oil	220 ml
Dry weight	Including cutting set	3,8 kg
	Without cutting attachment	3,3 kg

### Cutting performance

Maximum cutting performance	27 cm <sup>2</sup> /Sec. (Spruce log cutting approx. Ø 23 cm)
	45 cm <sup>2</sup> /Sec. (cutting solid construction timber 14x24 cm)

### Cutting attachment

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

### Engine data's

- Air-cooled single-cylinder two-stroke engine
- Displacement: 31.8 cm<sup>3</sup>; cylinder bore: 37 mm; stroke: 28 mm
- Spark plug: NGK CMR6H
- Idling speed: 3.000 min<sup>-1</sup>; Rated speed: 10.500 min<sup>-1</sup>
- 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		Speed		Litre output		o.B.
P <sub>max</sub> = 1,4 kW, M = 1,3 Nm		10.500 min <sup>-1</sup>		46 kW/l		
M <sub>max</sub> = 1,6 Nm, P = 1,2 kW		6.500 min		38 kW/l		
Power-to-weight ratio	With cutting attachment		Without cutting attachment		++	
	2,4 kW/kg		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 lubrication consumption	at 5.000 min <sup>-1</sup>				o	
Flow rate not adjustable	4 ml/min					

Exhaust emissions				
Comply with stage V of engine class NRSh-v-1a of Directive (EU) 2016/1628.				
Approval number available on the type plate				
	Limits according to EU regulation 2016/1628	Real value	o.B.	
CO	805 g/kWh	803 g/kWh		
HC + NO <sub>x</sub>	50 g/kWh	40 g/kWh		
Noise emissions (maximum values according to manufacturer)				
Max. Noise level (Cutting attachment 30 cm)	Idling	Full throttle no load	Maximum load	-
on the ear of the operator	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)				
Vibration (Maximum values according to manufacturer)				
Max. Vibration (Cutting attachment 30 cm)	Idling	Full throttle no load	Maximum load	o
Front handle	2,7 m/s²	3,2 m/s²	2,8 m/s²	
Rear handle	3,0 m/s²	4,0 m/s²	3,1 m/s²	
Equivalent total vibration value according to DIN EN ISO 22867				
Front handle: 2,9 m/s²				
Rear handle: 3,4 m/s²				
Rating range: ++ / + / o / - / -- ; o = standard				
o. B. = without evaluation ; - limit value complied with				

**This report is based on practical tests and measurements carried out by professional users according to the specifications of the Expert Committee on Equipment and Tools of KWF e.V.**

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