

TEST REPORT



Husqvarna 543 XP[®] / 543 XP[®]G

OWNER OF TEST CERTIFICATE:

Test no.: 7566

Husqvarna AB

SE-561 82 Huskvarna
www.husqvarna.com





Test results and evaluations

Husqvarna AB, SE 561 82 Huskvarna

Husqvarna 543 XP (w/ quick start system)

Husqvarna 543 XPG (w/ quick start system and heated handles)

Tested with a 33 cm cutting set, Micro-Lite and full chisel chain (0,325")

Application field

Petrol chainsaw in the power range up to 3 kW for professional use.

Operation, maintenance and product safety		
Control elements	Easy to reach and operate.	o
Starting the engine	Quick start system (Smart Start) and manual fuelpump facilitates the startup process. Seperated switch for engine ON/OFF and choke-lever.	+
Engine control	Manual carburettor setup with adjusting screw.	o
Mounting of the saw-chain	Dufficult, external clutch bell. Sprocket cover fixed with two nuts.	o
Chain tensionung	Lateral chain tensioner.	o
Refilling	Tank openings good to reach. Tank caps not tool-free. Oil tank opening comparable small.	o
Engine-, airfilter- and spark plug cover	Good, tool-free due to knurled screw.	+
Airfilter Cleaning Soiling	Good, tool-free due to knurled screw. Little.	o
Operational safety	No noticeable problems in the course of the tests.	o
Instruction manual	Clearly, well illustrated.	+
Work safety	EC type-examination SMP certificate 5F010871 2015-10-05	o. B.

Technical data					
Main dimensions and weights					
Length	Including cutting set 45 cm			683 mm	
	Engine unit w/o bumper spike			382 mm	
Width	Engine unit			181 mm	
	w/ handle			233 mm	
Height	Engine unit			211 mm	
	w/ handguard			277 mm	
Stump hieght	Sprocket cover			25 mm	
	Handle			27 mm	
Tank volumes	Fuel			420 ml	
	Chainoil			265 ml	
Empty weight	Including cutting set 45 cm			5,37 kg	
	w/o cutting set			4,68 kg	
Cutting set					
<ul style="list-style-type: none">• Clutch bell w/ inside sprocket• Guide bar w/ sprocket nose• Full chisel chain• Pitch 0,325“, gauge 1,3 mm• Further guide bar lenghts and chain types fitting the saw type available					
Engine data					
<ul style="list-style-type: none">• Air-cooled single-cylinder two-stroke engine• Displacement: 43,1 cm³; cylinder bore: 42 mm; piston stroke: 31,1 mm• Spark plug: NGK CMR7H• Idle speed: 2700 min⁻¹; nominal speed: 9600 min⁻¹ <p>Fuel: minimum octane index 90 ROZ (mixture ratio 1:50) or two-stroke alkylate gasoline with „KWF-Test“</p>					
Power / torque at P _{max} = 2,2 kW, M = 2,0 Nm M _{max} = 2,2 Nm, P = 2,0 kW		revolutions 9600 min ⁻¹ 7000 min ⁻¹		Power / dis- placement 51 kW/l 46 kW/l	w/o r.
Power to weight ratio		w/ cutting set 45 cm 0,41 kW/kg	w/o cutting set 0,47 kW/kg	+	
Fuel consumption		at max. power output		at max. torque output	
absolute / spezific		1,4 l/h	467 g/kWh	- l/h	- g/kWh
Exhaust emissions		Limits according to EU regulation 2016/1628		Manufacturer informa- tion	
CO		805 g/kWh		- g/kWh	
HC + NO _x		50,0 g/kWh		- g/kWh	
Max. noise emissions (Cutting set 63 cm)		Idle	Full throttle	Full load	

At the operator's ear	82 dB(A)	102 dB(A)	104 dB(A)	-
Equivalent sound pressure level according to DIN EN ISO 22868: 101 dB(A)				
Equivalent sound power level according to DIN EN ISO 22868: 112 dB(A) (Mix: idle / full throttle)				
Max. vibrations (Cutting set 33 cm)	Idle	Full throttle	Full load	
Front handle	3,0 m/s²	2,0 m/s²	3,2 m/s²	o
Rear handle	3,3 m/s²	3,2 m/s²	4,0 m/s²	
Equivalent total vibration value according to DIN EN ISO 22867				
Front handle: 2,8 m/s²; Rear handle 3,5 m/s²				
Chain brake				
Actuation through handguard	Actuation force	Avg. brake time	Max. brake time	o. B.
	31 N	0,08 s	0,09 s	
Activation through mass momentum of inertia (40 cm guide bar)	Horizontal acceleration		Vertical acceleration	
	266 m/s²		507 m/s²	
Rating: ++ / + / o / - / -- ; o = standard ; w/o r. = w/o rating ; – compliance with threshold value				

In the field of measurement tolerances, the Husqvarna 543 XP/XPG is still manufactured unchanged.

Published with funding from the Federal Ministry of Food and Agriculture on the basis of a resolution of the German Bundestag and by the Federal State Ministries of Forestry by:



Test committee equipment and tools

Chairman: Dr. Johannes Windisch, Regensburg

Test completion **August 2021**
Approval until **August 2026**
First approval **August 2016**
Responsible test engineer
Sebastian Wagner
sebastian.wagner@kwf-online.de

Practical work with professional users

Kuratorium für Waldarbeit und Forsttechnik e.V.
Spremlberger Straße 1
D - 64823 Groß-Umstadt
Phone: 06078-785-0
Fax: 06078/785-39
Homepage: www.kwf-online.de