



# Test Report

## DOLMAR PS 4600

**OWNER OF THE TEST CERTIFICATE:**

**Manufacturer and applicant:**

Dolmar GmbH

Jenfelder Strasse 38

D-22045 Hamburg

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





## Test Results and Evaluations

**DOLMAR PS 4600/ PS 4600 S chain saw with 38 cm cutting length**

Type SS" with a higher max. engine speed

Dolmar GmbH, Jenfelder Strasse 38; D-22045 Hamburg

<i>Test item</i>	<i>Test results</i>				<i>Evaluation</i>
<b>Function</b>	Chain saw in the power class up to 3 kW; for professional use				
<b>Motorleistung</b>					
Power	Engine speed	Torque	Spec. fuel consumption		<b>NE</b>
max 2.6 kW	10000 min <sup>-1</sup>	2.5 Nm	57 kW/l		
1.9 kW	6500 min <sup>-1</sup>	max. 2.8 Nm	42 kW/l		
<b>Fuel consumption</b>					
	max. power		max. torque		
absolute / specific	1.5 l/h	433 g/kWh	1.3 l/h	503 g/kWh	<b>+</b>
<b>Exhaust emission complies with level 1 of the standard 2002/88 EG</b>					
<b>Chain lubrication</b>					
Oil consumption	at 5000 min <sup>-1</sup>		at 9000 min <sup>-1</sup>		
min / max	3 ml/min	5 ml/min	6 ml/min	9 ml/min	<b>O</b>
<b>Sound pressure level</b>					
	idling speed	full load speed	Full throttle no load		
at ear of the operator	82 dB(A)	103 dB(A)	104 dB(A)		<b>-</b>
Equivalent sound pressure level, total value: <b>102 dB(A)</b> ; (average between: idling/ full load/ full throttle)					
Acoustic power <b>112 dB(A)</b> according to the standard 2000/14/EG					
<b>Vibrations</b>					
	idling speed	full load speed	Full throttle no load		
front handle	5.1 m/s <sup>2</sup>	3.5m/s <sup>2</sup>	3.6 m/s <sup>2</sup>		<b>+</b>
rear handle	4.1 m/s <sup>2</sup>	3.9 m/s <sup>2</sup>	2.6 m/s <sup>2</sup>		
Total equivalent vibration front/rear: <b>4,1 / 3,6 m/s<sup>2</sup></b>					
<b>Chain brake</b>					
Handguard activation	Actuating force	aver. braking time	max. braking time		<b>NE</b>
	26 N	0.07 s	0.11 s		

Inertia activation	horizontal acceleration	vertical acceleration	<b>NE</b>
	325 m/s <sup>2</sup>	848 m/s <sup>2</sup>	
<b>Kickback</b>			
Cutting equipment 38 cm, 0,325"	Kickback angle with brake	Chain stop angle	<b>NE</b>
Full chisel tooth	28.8°	17.7°	

<b>Mass</b>			
Weight per unit power	With cutting equipment	Without cutting equipment	
	2.3 kg/kW	2.0 kg/kW	+
<b>Operability / handling</b>			
Control elements	Easy to reach and use		+
Primer	No decompression valve		o
Chain assembly	easy, drive sprocket easily accessible		o
Chain tensioning	simple, on the side in the chain sprocket cover		o
<b>Maintenance</b>			
Air filter and spark plug cover, casing	Quick release for easy access, but requires combination wrench		+
Air filter	cleaning	No tools required	+
	soiling	low	+
Tank caps	The filler opening is insufficiently protected against dirt;		-
<b>Special features</b>			
	Compensator for optimal fuel/air mixture when air filter is clogged-up		+
<b>Reliability</b>			
	Fuel tank cap easily come loose. This defect has been rectified since May 2005.		o
<b>Operating manual</b>			
	clear, well illustrated		
<b>Operator safety</b>			
EG-type examination test	TÜV Product Service No. M6 0407 24243 056		
GS-Test	TÜV Product Service No. AL 0407 24243 055		

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

Tolerance values and evaluation criteria are described in the "Informationen zur Gebrauchswertprüfung" ("Information about the type examination test"). This publication is available from the DLG and the KWF.

## Description and Technical Data (measured values)

### Engine

- Air-cooled single-cylinder two-stroke engine;
- engine displacement 46 cm<sup>3</sup>; bore 43m; stroke 31m;
- Fuel: minimum octane number 91ROZ; mixed lubrication, 2T-special fuel with "KWF-TEST"
- Spark plug Bosch NGK BPMR 7A.

- Idling speed 2500 min<sup>-1</sup>; max. speed 13500 min<sup>-1</sup>; Type "S": 14500 min<sup>-1</sup>  
(electronic speed regulator)
- Shipped with two different air filters (fleece and nylon filter)

### Cutting equipment

- Clutch drum with external chain sprocket;
- Guide bar with sprocket nose
- full chisel tooth chain, 3/8" or 0.325" pitch, groove width 1.5 mm.

### Additional equipment (not tested)

- Guide bars for 33 to 53 cm cutting lengths;
- Heated handle

### Main dimensions and weights

Length,	incl. cutting equipment 38 cm	775 mm
	engine unit with spiked bumper	405 mm
Width,	engine unit	190 mm
	incl. handle	228 mm
Height,	engine unit	208 mm
	with front hand guard	282 mm
Stump height,	chain sprocket cover	15 mm
	handle	20 mm
Tank volume,	fuel	0.45 l
	chain oil	0.28 l
Weight,	incl. cutting equipment 38 cm	6.1 kg
	without cutting equipment	5.2 kg

## Test

### Test carried out by

Kuratorium für Waldarbeit und Forsttechnik", Groß-Umstadt  
DLG-Testzentrum Technik & Betriebsmittel, Groß-Umstadt

### Field test

Waldarbeitsschule Kunsterspring

Landesanstalt für Ökologie, Bodenordnung und Forsten, Arnsberg

Forstl. Bildungszentrum Rheinland Pfalz, Hachenburg

Nieders. Forstl. Bildungszentrum Münchehof, Seesen

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### FPA/DLG- testing commission

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

Chairman: Josef Berthold, Waldarbeitsschule Laubau

### FPA/DLG- approval:

May 2005

FPA-Index: 1.01.4039

DLG-Test Report: 5496

The declarant is entitled to display the test mark on machines of this type according to the test regulations and to use the certification for advertising purposes.

### DLG-Testzentrum Technik & Betriebsmittel

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