







Responsibility and recognition



Performing competent authority:
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This test is recognized by the ENTAM members:

	BLT - Francisco Josephinum, Wieselburg - Biomass, Logistics, Technology (Austria)	014/14
	CMA Generalitat de Catalunya Centre de Mecanització Agrària (CMA) (Spain)	EB 001/14
	ENAMA Ente Nazionale per la Meccanizzazione Agricola (Italy)	ENTAM „Rapporto di prova prestazionale“ 01/2014
	HIAE Hungarian Institute of Agricultural Engineering (Hungary)	D-84/2014
	IRSTEA - National Research Institute of Science and Technology for Environment and Agriculture (France) (formerly CEMAGREF)	IRSTEA/CEMAGREF/ ENTAM/ 4/001
	PIMR - Przemyslowy Instytut Maszyn Rolniczych Industrial Institute of Agricultural Engineering (Poland)	PIMR-105/ENTAM/14



ENTAM - Test Report



Trade mark:	Lechler
Model:	PRE 130-05 POM
Equipment type:	hydraulic nozzle, flat spray
Field of application:	Field crop
Pressure range:	1 - 8 bar tested
Standard working height:	50 cm (40 cm - 60 cm tested)

Manufacturer:
Lechler GmbH
Ulmer Strasse 128
72555 Metzingen
Germany

Test report: D - 1981

March 2014

Test results

- This nozzle has been tested without accessories.
This nozzle is appropriate for the use of spraying in field crops with a liquid pressure of 1.0 - 8.0 bar and on booms with distances of 500 mm between the nozzles.
- The nozzle is designed for pre-emergent spraying, with the spray directed horizontally backwards.
- The front page image of this report shows the assembled nozzle.
- The cross distribution CV¹⁾ is between 4.6 % (6 bar) and 7.9 % (1 bar) for the tested pressure range 1.0 - 6.0 bar at a standard working height of 50 cm. For a pressure of 4.0 bar, the CV varies from 5.3 % (60 cm) to 6.30 % (40 cm). The maximum allowed CV for one working height and one pressure (specified by the manufacturer) is 7 %, for all heights and pressures is 9 %.
- The mean deviation between the measured single nozzle flow rate and the flow rate table is between 0.23 % (at 1.5 bar) and 3.1 % (at 3 bar).
- The max. deviation of the single nozzle flow rates from the mean flow rate is between 1.6 % and 3.0 %.
- The nozzle fulfils the discharge rate requirement of the color code according ISO 10625 (color code: nut brown, 2.0 l/min at 3 bar). See tab.1.

Free download of the test report under: www.ENTAM.net
or: www.jki.bund.de

Test results

Pressure (bar)	Discharge rate without accessories (l/min)	droplet size ²⁾
1.5	1.55	very coarse
3.0	2.06	very coarse
5.0	2.52	very coarse
8.0	3.05	very coarse

tab.1: Discharge rate and droplet size depending on liquid pressure.

- 1) on a spray boom with 50 cm nozzle distance
2) according BCPC scheme (additional information)

Additional information

At the time of publishing this report the nozzle is listed in the drift reduction classes 90 % and 95 % of the German drift reduction system, depending on the regulations of use.

The tested nozzles (24) were picked out at random of a stock of 200 nozzles. Testing takes place according to the Technical Instructions for ENTAM-Tests of Spray nozzles, rel.1.

This procedure was developed by the competent testing authorities of the European countries participating in ENTAM and is based on the ISO 5682 standard: „Equipment for crop protection - Spraying equipment; Part 1 Test methods for sprayer nozzles“ and on EN 12761 standard: „Agricultural and forestry machinery - Sprayers and liquid fertilizer distributors - Environmental protection; Part 2“. This test is only a technical performance test which takes place without an accompanying field test. The test results apply only to the tested appurtenances of the sprayer. Statements on the behaviour of different appurtenances cannot be derived from these results.