

Responsibility and recognition



Performing competent authority:
Julius Kühn-Institute (Germany)
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This test is recognized by the ENTAM members:

	BLT - Francisco Josephinum, Wieselburg (Austria)	010/09
	Cemagref - Institut de recherche pour l'ingénierie de l'agriculture et de l'environnement (France)	CEMAGREF/ENT/09/005
	HIAE Hungarian Institute of Agricultural Engineering (Hungary)	D-5/2009
	ENAMA Ente Nazionale per la Meccanizzazione Agricola (Italy)	ENTAM „Rapporto di prova prestazionale“ 02/2009
	PIMR - Przemyslowy Instytut Maszyn Rolniczych Industrial Institute of Agricultural Engineering (Poland)	PIMR - 26/ENTAM/09
	CMA Generalitat de Catalunya Centre de Mecanització Agrària (CMA) (Spain)	EB 002/09
	ART - Agroscope Reckenholz-Taenikon (Switzerland)	D-05.09



ENTAM - Test Report



Trade mark:

Model:

Equipment type:

Field of application:

Pressure range:

Lechler

IDK 90-02 ceramic

hydraulic nozzle, flat spray

Wine / orchard spraying

2 - 15 bar tested

Manufacturer:

Lechler GmbH
Ulmer Strasse 128
72555 Metzingen
Germany

Feb 2009

Test report: D - 1835

Test results

This nozzle has been tested without accessories.

This nozzle is appropriate for the use of spraying in wine, orchards, tree nursery, special crops and ornamental plants with a liquid pressure of 2.0 - 20 bar.

The front page image of this report shows the demountable nozzle parts (right side) and the assembled nozzle in a 90° twisted position (left side).

- The deviation between the measured single nozzle flow rate and the flow rate table is between -2.55 % (at 15 bar) and 3.08 % (at 2 bar). The maximum allowed deviation is 5 %.

- The max. deviation of the single nozzle flow rates from the mean flow rate is between -2.2 % and 2.3 %.

- A spray angle of 87 ° (at 5.0 bar) was determined.

Note for hydraulic nozzles: the spray angle is varying depending of liquid pressure.

- The nozzle fulfils the discharge rate requirement of the color code according ISO 10625 (color code: Zinc yellow, 0.8 l/min at 3 bar). See tab.1.

Test results

Pressure (bar)	Discharge rate without accessories (l/min)	droplet size ¹⁾
2.0	0.66	very coarse
5.0	1.04	coarse
8.0	1.30	coarse
10.0	1.46	coarse
15.0	1.78	coarse

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

1) according BCPC scheme (additional information)

Additional information

At the time of publishing this report the nozzle is listed in the drift reduction classes 50 % and 75 % of the German drift reduction system, depending on the regulations of use. For more information about the assessment of this nozzle relating to the **German drift reduction system** see: www.jki.bund.de

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.

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