Supplementary report on test in accordance with OECD STANDARD CODE I for the Official Testing of Agricultural Tractor Performance

Full Code **OECD No.** **1257**

This report and the report already approved under OECD No. 1257 Restricted Code, constitute a complete test report according to CODE I

Agricultural Tractor
CASE-IH 5120-MAXXUM (4WD)
Model denomination 5120 A

Manufacturer
JI CASE GmbH
D-4040 Neuss

Deutsche Landwirtschafts-Gesellschaft e.V. · Zimmerweg 16
D-6000 Frankfurt a. M. 1 · Telefon: (069) 71680
Telex: 413185 dlg-d · Btx * 20063 # · Telefax (069) 7241554

This is a report on supplementary tractor tests in accordance with OECD STANDARD CODE for the Official Testing of Agricultural Tractor Performance (Code I), which were carried out to complete the preceding OECD Test Report No. 1257 Restricted Code (acc. to Code II) on the same tractor tested previously (with the same serial number).

It does not contain an evaluation of the tractor on practical work.

Duration of supplementary tests: February till March 1990

DLG-Testing Station for Agricultural Machinery, Max-Eyth-Weg 1,
D-6114 Groß-Umstadt

This report has been approved by the OECD Co-Ordinating Centre (CEMAGREF, France) as being in accordance with the OECD STANDARD CODE.

Date of approval: 6th February 1991

OECD No. 1257
Full Code

In this report all performance characteristics are given corresponding to the International System of Units.

The reference to the former used Technical System of Units is given by the following relations:

Forces	1 kN	=	1000 N	=	102 kp
Powers			1 kW	=	1,36 PS
Pressures	1 MPa	=	10 bar	=	10,2 kp/cm²
	100 kPa	=	1000 mbar	=	750,10 mm Hg

Printed in the Federal Republic of Germany
February 1991; DLG-No. 258-A

PRÜFUNGS-ABTEILUNG

CASE-IH 5120 Test No. 89-192

The tests were carried out with the NAO-version of tractor,
fitted with tyres set 2 front 14.9R24 126 A8 KLEBER
rear 18.4R34 144 A8 CONTINENTAL

TABLE OF CONTENTS

PRÜFUNGS-ABTEILUNG

CASE-IH 5120 Test No. 89-192

TEST CONDITIONS

for the ballasted tractor

Overall dimensions

Length mm	Width mm	Height at top of	
		protective structure mm	exhaust silencer mm
5830	2685	2670	2690

Tractor mass

	Without driver kg	With driver kg
Front	3085	3100
Rear	5140	5200
Total	8225	8300

Front ballast	1 frame	90 kg
	23 weights, total	890 kg
	water in the tyres	310 kg
Rear ballast	1 frame	300 kg
	27 weights, total	1014 kg
	water in the tyres	696 kg

PRÜFUNGS-ABTEILUNG

CASE-IH 5120 Test No. 89-192

Tyres and track widths specifications

	Front	Rear
Tyres:	KLEBER	CONTINENTAL
dimensions	14.9 R 24	18,4 R 34
type	radial	radial
ply rating/load index	-/126	-/144
speed index	A8	A8
maximum load	1700 kg	2800 kg
inflation pressure	160 kPa	160 kPa
radius index	590 mm	770 mm
Chosen track width	1830 mm	1830 mm
Rims	W12x24	DW15x34
Technically permissible axle load	3100 kg	5200 kg
Technically permissible total weight	8300 kg	

Oils and lubrication

See in test report OECD No. 1257 RESTRICTED CODE page 21

Fuel

Type: ARAL Diesel-fuel in conformity with DIN 51601

Density at 15°C: 0,826 g/cm³

PRÜFUNGS-ABTEILUNG

CASE-IH 5120

1 DRAWBAR PERFORMANCE

Date of tests: 7th till 12th March 1990

Type of track: Concrete

Gear	Speed km/h	Drawbar pull kN	Power kW	Engine speed rev/min	Slip of wheels %
1.1 MAXIMUM POWER IN TESTED GEARS (ballasted tractor)					
1 N I	1,73	79,02	38,0	2260	14,9
2 N I	2,05	79,19	45,1	2212	15,1
3 N I	2,59	67,25	48,4	2148	10,6
4 N I	3,32	53,47	49,3	2152	7,6
1 N II	4,14	43,48	50,0	2148	5,6
2 N II	5,08	35,08	49,5	2152	4,4
3 N II	6,34	27,92	49,2	2150	3,5
1 N III	6,99	25,12	48,8	2150	2,9
4 N II	7,90	21,68	47,6	2150	2,5
1.1.1 FIVE-HOUR-TEST at 75% of pull at maximum power					
1 N III	7,43	18,84	38,9	2269	2,2
1.1.2 FIVE-HOUR-TEST at pull corresponding to 15% wheel slip					
2 N I	2,04	79,27	44,9	2210	-

Oil consumption during ten hours duration of tests 1.1.1 and 1.1.2: 28 g/h

PRÜFUNGS-ABTEILUNG

Test No. 89-192

	Tyre inflation pressure	
Height of drawbar above ground	Front	Rear
410 mm	150 kPa	150 kPa

Specific fuel consumption g/kWh	Specific energy kWh/l	Temperatures Fuel °C	Coolant °C	Engine oil °C	Atmospheric conditions Tempe-rature °C	Relative humidity %	Pressure kPa
354	2,33	34	81	90	10	74	100,6
333	2,48	35	80	90	10	76	100,6
310	2,66	34	81	93	11	74	100,6
305	2,71	35	82	93	11	75	100,6
300	2,75	32	81	91	10	78	100,6
303	2,72	34	82	93	10	74	100,6
305	2,71	34	81	93	10	76	100,6
308	2,68	34	82	92	10	74	100,6
315	2,62	34	81	92	10	74	100,6

in 1 N III gear

340	2,43	36	82	96	17	64	100,2

with additional ballast: 276 kg

-	-	34	83	96	13	78	100,3

Those figures not quoted are irrelevant due to the additional ballast.

PRÜFUNGS-ABTEILUNG

CASE-IH 5120 Test No. 89-192

2 TURNING AREA AND TURNING CIRCLE
(front wheel drive disengaged)

	With brakes		Without brakes	
	left-hand mm	right-hand mm	left-hand mm	right-hand mm
Radius of turning area	4,01	3,95	4,58	4,49
Radius of turning circle	3,71	3,65	4,28	4,19

3 LOCATION OF CENTRE OF GRAVITY

Height above ground	988 mm
Distance forward from rear axle centre	929 mm
Distance from tractor's median plane, to the right	4 mm

PRÜFUNGS-ABTEILUNG

CASE-IH 5120 Test No. 89-192

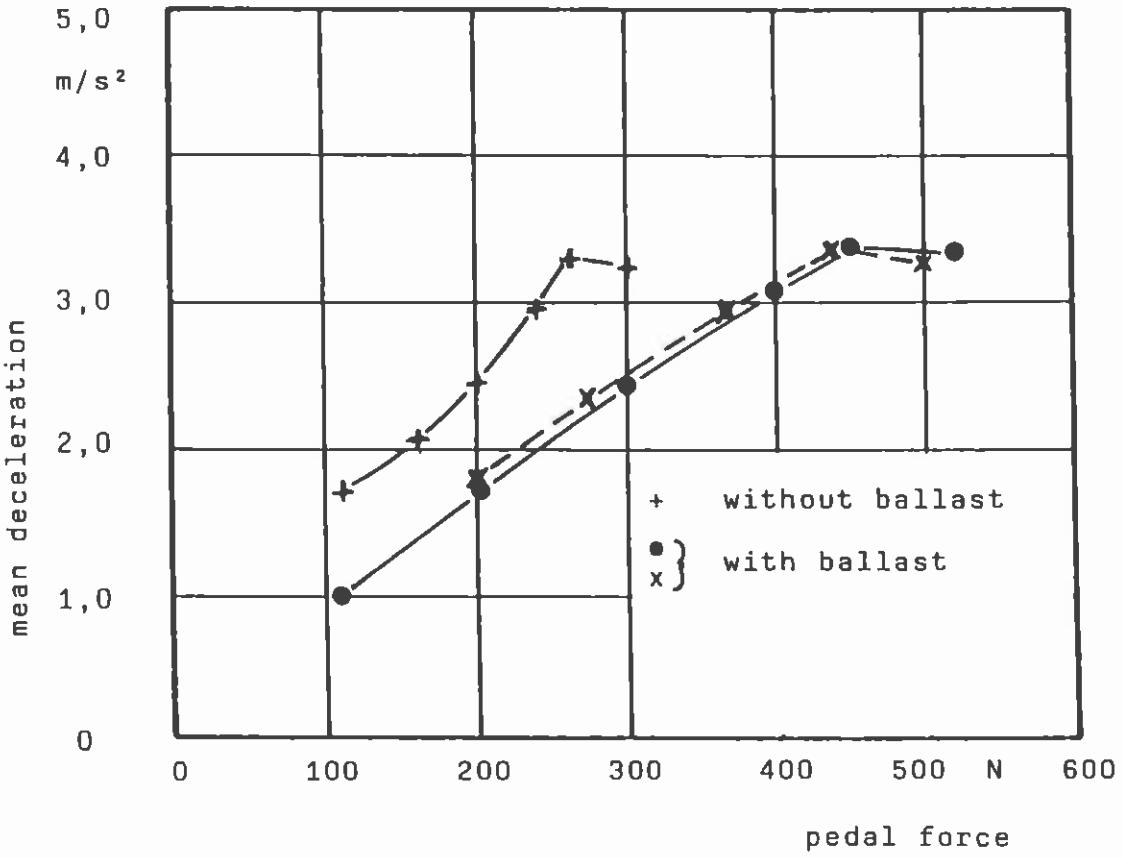
4 BRAKING (front wheel drive disengaged)

Date of tests: 22nd and 27th February 1990

	Tractor mass (with driver) front kg	rear kg	total kg	Speed before application of brakes km/h
Without ballast	1980	3020	5000	31,0
With ballast	3100	5200	8300	31,1

4.1 Cold service braking device test ————————

4.2 Fade test - - - - - - -



No significant deviation of tractor from original course and no abnormal vibrations

Brakes-heating: Actuating of brake for 1 km with pedal force corresponding to 1 m/s²

4.3 Parking braking device test

	Ballasted tractor on 18% - slope up	down
Braking device control force N	70	70

PRÜFUNGS-ABTEILUNG

CASE-IH 5120

Test No. 89-192

5 MEASUREMENT OF EXTERNAL NOISE LEVEL

Date of test: 8th March 1990
Type of track: Concrete
Type of sound level meter: BRÜEL & KJAER model 2233

Front axle drive disengaged

Results of test

Gear: 4 N IV

Travelling speed before acceleration:	23,3 km/h
Sound level:	84,0 dB(A)

REPAIRS None

REMARKS None