

## EFFICIENCY

All the sprayer preparation controls are grouped together on the left of the sprayer, the side most operators get into the tractor to save time and give greater efficiency. All MACK are fitted with a chemical probe.

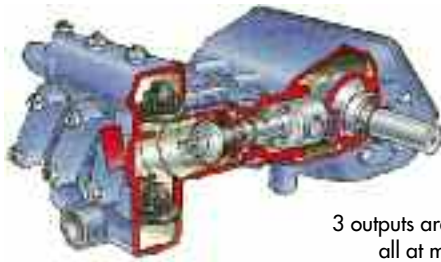
**THE BERLOGIC** operation panel is designed to facilitate the selection of each function and make it as trouble free and user friendly as possible. 1 operation = 1 number.

## THE TANK

The tank with its smooth interior has a pyramid-shaped sump which ensures complete emptying of the tank without depriming the pump in most circumstances. The maximum capacity of the tank is 5 % bigger than nominal capacity.



## THE GAMA PISTON PUMPS



### GAMA 101 - 130 -160

Gama 3-cylinder piston pumps are volumetric pumps giving outstanding accuracy and reliability.

3 outputs are available : 105, 130, 160 L/minute all at maximum 20 bar (290 p.s.i.) pressure.

They guarantee a long working life for your sprayer and unparalleled accuracy through years of use. 3-cylinder Gama pumps eliminate the complication of air-bells to stop pulsation. Crankshafts are oil-bath lubricated and mounted on ball-bearings. The whole pump is designed and built to handle liquid fertiliser.

## NOZZLE



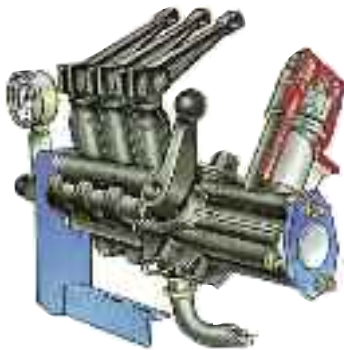
All **BERTHOUD** nozzle holders are fitted with a diaphragm antidrip system as well as Kwix 1/4 turn nozzles for instantaneous positioning of the nozzle.

Those nozzle holders are of 2 types :

- QUICK JET is a single jet holder - QUADRIX is a 4 nozzle holder with stop position for immediate use **BERTHOUD** recommends the **NOZAL** nozzles.

## THE CONTROL SYSTEMS

### BERARC



The MACK 2 is fitted with a D.P.M. control system (output proportional to tractor engine speed) which makes it possible to spray a constant volume per hectare for every single engaged gear.

A flow dividing valve is fitted between the pump and the tank to ensure that the output of the pump is divided proportionally between the spray at the boom and the return to tank irrespective of changes in engine RPM, i.e. of the forward speed for every single engaged gear.

The control of the D.P.M. valve is manual as standard equipment. As optional equipment the D.P. ELEC allows an in-cab remote control.



### D.P. elec

The electric controls are made up of electric motorized valves for each of the boom sections. The whole boom on/off depends on the handling of all the boom section valves.

### BERJUST 2000



A "monitor" device. The BERJUST 2000 is simple and accurate to control the agrochemical application.

The BERJUST 2000 shows the following information:

- sprayed volume per hectare
- forward speed in km/hour
- number of sprayed hectares (\*)
- distance travelled
- total volume sprayed in litres (\*)

All this information is calculated by a micro controller based on data supplied from:

- a magnetic speed sensor
- a flow meter with an axial turbine

(\*) All boom sections open.

### D.P.CONTROL D.P.TRONIC

**A new range of electronic controls which are comprehensive, accurate, informative, user friendly and adaptable :**

- D.P.CONTROL : spray monitor by flowmeter
- D.P.TRONIC : second generation of electronic spraycontrol by pressure sensor,

On single control box for :

- boom spray section controls
- boom hydraulic function controls
- D.P.CONTROL or D.P.TRONIC.



## DIMENSIONS AND WEIGHT

	MACK 2 10	MACK 2 12	MACK 2 15
Tank width	1,80 m	1,80 m	1,93 m
Tank height	1,59 m	1,75 m	2,04 m
Tank depth	1,10 m	1,10 m	1,21 m
Weight without boom	430 kg	480 kg	530 kg

Average dimensions and weight according to basic equipment and options mounted.

# BERTHOUD<sup>®</sup> agricole

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**BERTHOUD®**

**MACK II**

berarc - berjust 2000

dp elec - dp control - dp tronic

**10**  
**12**  
**15**

E



**berlogic**

# MAC 10-12-15



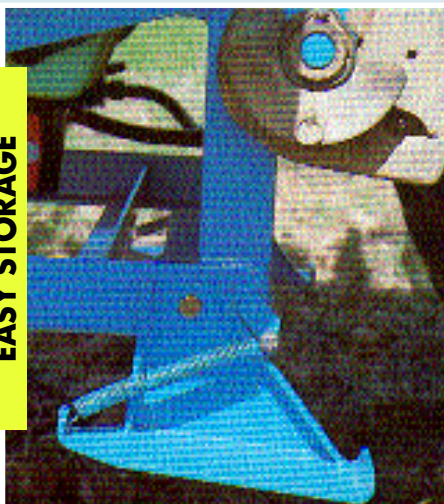
*With **BERTHOUD**, you are 100% sure that it is a 100% **BERTHOUD** machine.*

## HITCH SYSTEM



Automatic hitch system operated from within the cab-just one movement to hitch up.

## EASY STORAGE



For easier hitching operation, MACK mounted are fitted with removable and oversized supports to ensure complete stability of the sprayer.

## ACCESSIBILITY



Foldable step with anti skid form makes access to the filling hole 100 % safe.

A **BERTHOUD** sprayer is designed, engineered and built by **BERTHOUD**.  
**BERTHOUD** :

- PUMPS (GAMA 101, 130, 160)
- D.P.ELEC + BERJUST 2000
- D.P.TRONIC
- BERLOGIC
- BOOMS (RCS.I., RLD, SXXXE)

## BOOMS

BERTHOUD booms have AUTOSTABLE suspension

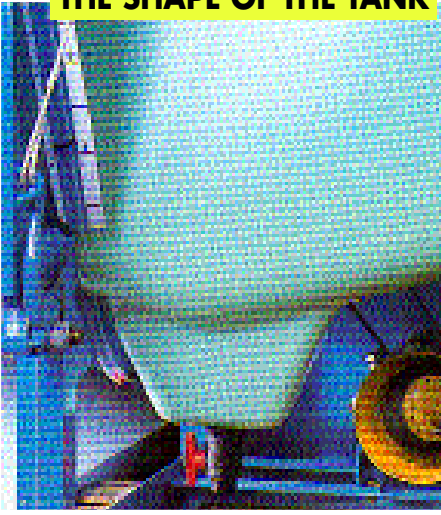
BERTHOUD paint system  
After shot blasting all parts are:

- rinsed
- primed with phosphate
- dried
- polyester powder coated with electrostatic activation.

**You can rely 100 % on a BERTHOUD.**



## THE SHAPE OF THE TANK



The shape of the tank with emphasis in capacity on the lower part ensures:

- greater stability even on steep slopes.
- optimum weight distribution reduces the loading on the tractor lift arms.

## FUNNEL



An optional chemical pre-mix funnel. Operates at waist level and swings under the main tank when not in use. Safe and easy direct incorporation of powder and liquid chemicals.

Water circuit ensures:

- well mixed powders,
- rapid dilution of liquids,
- can washing rinses the funnel after use.

## RINSE TANK



120 liters capacity gives at least 2 rinses of the tank of the spray circuit.

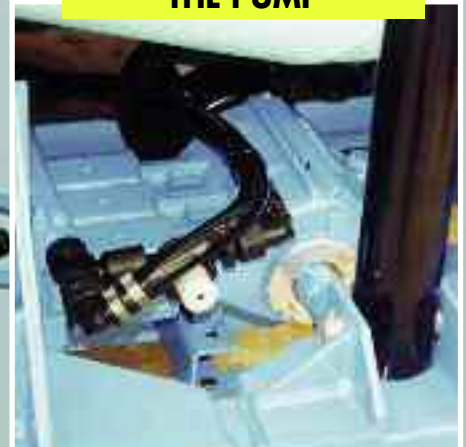
A clear-water tank (18 liter) allows quick elimination of chemical projections. Support for liquid soap is near the rinsing tap.

## A FILLING CHAMBER



The tank is filled by means of a hydroinjector (for GAMA 101 and 130) or directly with GAMA 160 pumps. The large tank opening is situated on the left hand side of the machine and is easy accessible from the step (except on 800 l)

## THE PUMP



The 3-cylinder pump is mounted at the rear of the chassis to optimise P.T.O. shaft angle and allow easy connection.

## FILTERS



MACK mounted are fitted with three stage filtration: refilling, suction and delivery.

The suction filter can be isolated for cleaning whilst chemical is still in the tank.

## FLOAT LEVEL GAUGE

## HAND WASH TANK

## VEC



BERTHOUD MACK II is fitted in series with VEC electric valves and 18 litres handwash tank. As an option MACK II can receive a float level gauge that can be easily seen from the seat as well as from the filling station.