# References

References	Handle models	Type of remote manipulator			
		Models	Bevel gears Ø	Buttons number	N° of plan
17570	PPM97	MT 200	Ø 20	6	3007-18-00
21662	PPM97	MT 200	Ø 19,05	6	3007-18-00
32918	PPM97	MT 120	Ø 20	4	3012-24-01-00
20043	PPM97	MA 11	Ø 19,05	2	5400-06-00
20868	PPM97-HT	MA 11	Ø 19,05	2	5400-06-80
22735	PPM97	MA 30	Ø 19,05	0	5440-08-00
S520883	PPM97-HT	-	Ø 19,05	3	5400-06-80
6007014857	PPM18	MT 200	Ø 20	6	3007-18-200
6007014856	PPM18	MT120	Ø 20	4	3007-18-200

LACALHENE





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LaCalhene is an equipment manufacturer specialized in material to protect human beings in a hostile environment, protect a product against the surrounding environment, and protect the environment from hazardous products. Its customer base is half in the nuclear field and half in the pharmaceutical field.

In the nuclear sector LaCalhene supplies 4 product lines: remote manipulators, transfer systems (the  $\mathsf{DPTE}^{\texttt{0}}$  range, standard and special applications), glove box ports, and shielded casks for transfer / transport. LaCalhene supplies to 5 market segments: nuclear fuel manufacture, spent fuel recycling, radiopharmacy, laboratory / universities / units of research, and dismantling / decommissioning / sanitization.

On the basis of its long experience in the nuclear sector, Getinge La Calhène developed a set of solutions and equipment for the pharmaceutical industry, in particular for isolators and sterile transfer systems (DPTE® and DPTE-BetaBag®).

LaCalhene is an active member of:





Beti

The PPM97 range Remote manipulator handles

# An ambidextrous handle, fitting all LaCalhene's remote manipulators range

The PPM97 handle was developed by LaCalhene in order to equip its entire range of remote manipulators with an ambidextrous, ergonomic and robust handle. The PPM97 handle is available in several versions, with or without electrical control buttons depending on the remote manipulator type.

## Design and features :

The PPM97 handle is designed for remote manipulators with a capacity from 2 kg to 20 kg. It is adaptable to wrists by bevel gears with a diameter of 20 or 19.05 mm.

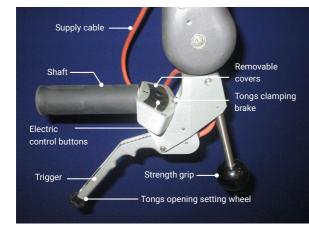
The PPM97 is fitted with a strength grip to ease heavy object manipulations and for optimal precision when manipulating small objects. The handle shaft and trigger are long, giving forceful gripping with minimal operator effort. In order to increase the comfort of the operator, the trigger width and the electrical control buttons position are adjustable.

The PPM97 can be adapted for right handed, left handed and ambidextrous working.

#### **Operating conditions :**

- Operating temperature range: between 0°C and 40°C.
- The handle is designed to resist a torque of 21 N.m, i.e. 35 daN gripping force with a manipulator equipped with PMC 97 tongs.
- · Please contact us for other operating conditions.

### The PPM97 handle



PPM97-HT handle for MA 11-80



PPM97-HT handle for MA 30

Adjustment for an ambidextrous, left- or right-handed handle (MT 200 application)



Left-hand handle



Ambidextrous handle



**Right-hand handle** 







Clockwise = Tongs opening

Counter clockwise = Tongs closing

#### Use of tongs clamping brake





Brake off

Brake on

#### Handling setting





Standard handle opening

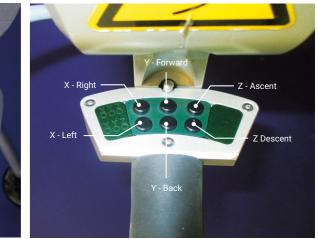
Adjustment of the handle opening

- CHC M4 (length 5) screw.
- Using this screw slightly limits the opening width of the tongs. For example, on a MT 200 remote manipulator equipped with PMC 97 tongs, the maximum opening width drops from 90 mm to 75 mm.



To adapt the tongs gripping force to the object size, the opening of the tongs is adjustable using the setting wheel.





**Electrical control buttons** for MT 200 remote manipulator





Limited handle opening

• Depending on the type of work in hot cell, and/or for better ergonomics, the operator can limit the opening of the handle by using a