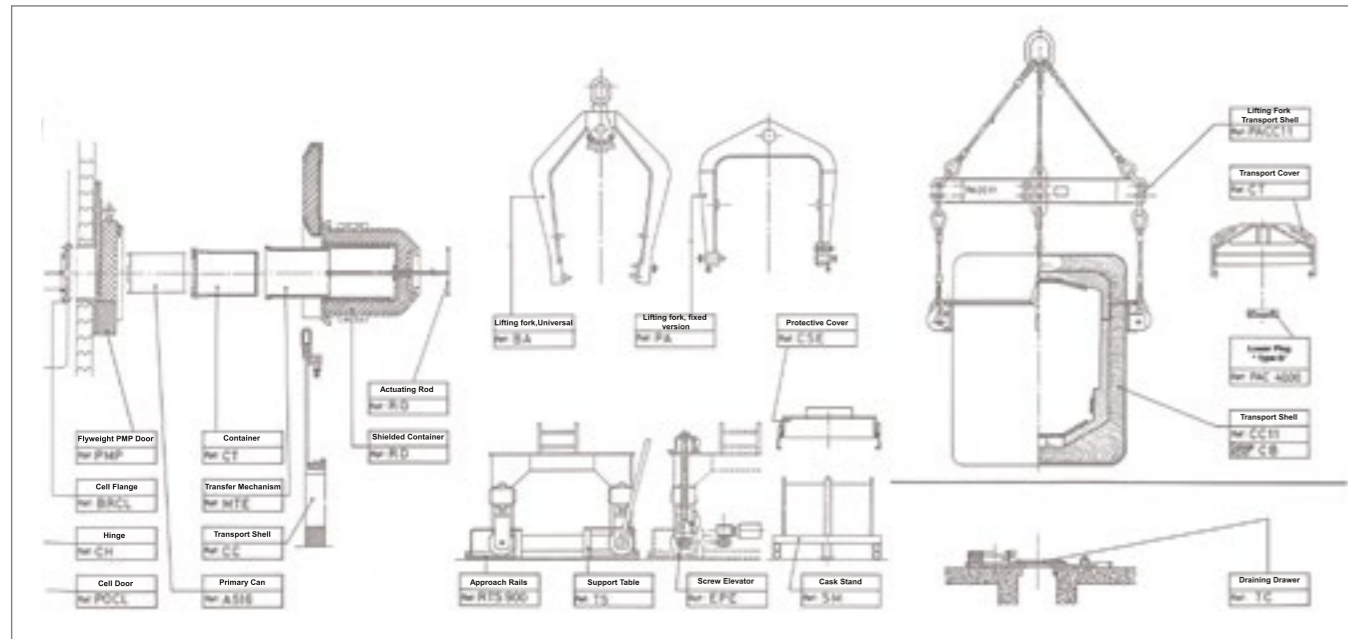


### PADIRAC™ System Components

- Cask (RD 15 ou RD 20).
- Universal swing arm (RD 15).
- Swing arm support.
- Protection cover for storage between uses.
- Additional key connected to the supporting table which facilitates the opening of the sliding door (shielded table) of the shielded container.
- Manual rod, manual rod extension with position indicator.

- Handling support for deck handling (except RD 20) and for installing the container on the PTS support table.
- Flyweight shielded cell door.
- Motorised support table (PTS) with screw elevator for docking to the cell.
- Transport shell.
- Lifting Fork for Transport Shell
- Hanging set for truck transportation
- Maintenance toolkit.
- Plug and «type B» lower plug.

- A PADIRAC™ cask tightness control kit.
- Container door support with telescopic rails or mounted on rollers.
- A DPTE® 270.
- A container (polyethylene or stainless steel).
- Draining drawer.



LACALHENE 

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La Calhène is an active member of:



La Calhène 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 La Calhène supplies 4 product lines: remote manipulators, transfer systems (the DPTE® range, standard and special applications), Glove Box ports, and shielded casks for transfer / transport. La Calhène 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-BetaBags®).

LACALHENE 



**PADIRAC™**  
A robust, safe transfer  
and transport solution



# A tried and tested system for internal transfer and public road transport



The PADIRAC™ is designed for a wide variety of transfers between installations which require a very high level of containment. In connection to La Calhène's leaktight transfer system (DPTE®), the PADIRAC™ provides complete protection against Alpha, Beta and Gamma risks at all times, maintaining the integrity both of the shield and of the containment.

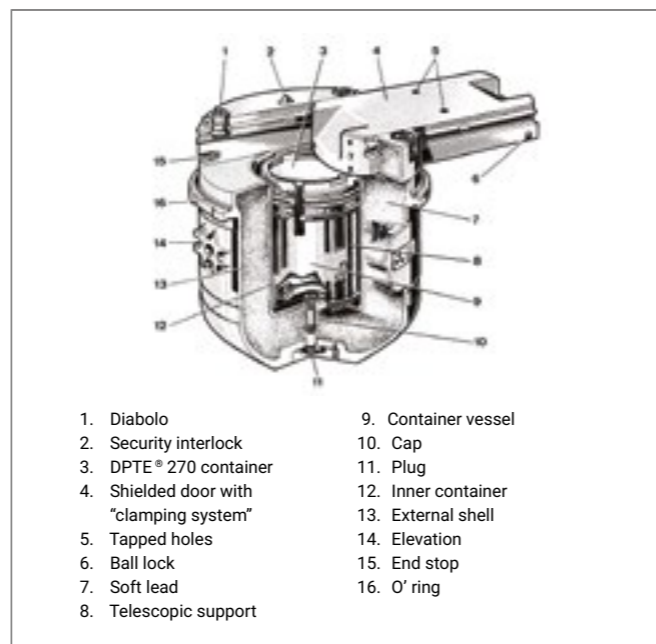
More than 250 units are in operation worldwide.

The system makes it possible to perform transfers to and from installations requiring confinement (highly contaminated) by making only simple mechanical gestures, which are easy to carry out behind shielding.

### Design:

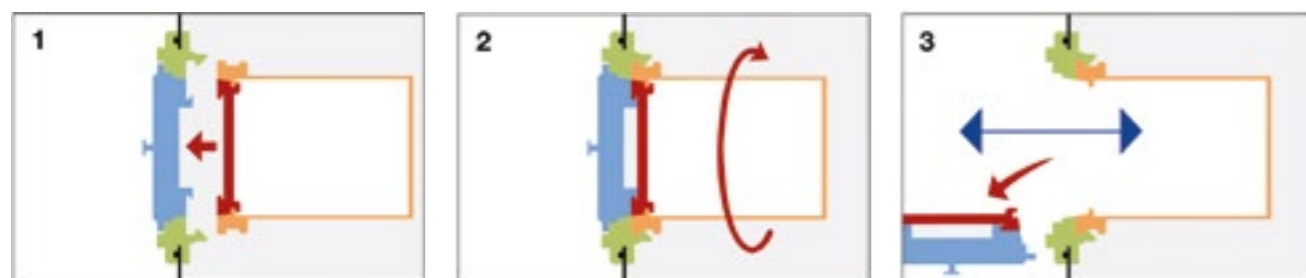
The PADIRAC™ is a tight transfer system comprising a DPTE® cell flange fixed to a hot cell wall and a standard DPTE® container (diameter 270, depth 400 mm useful length) inside a shielded cask.

The PADIRAC™ is a lead shielded container (7) opening with a shielded door (table shield) (4), which ensures the continuity of the gamma protection. A DPTE® 270 container (3) in either polyethylene (waste) or stainless steel, depending on the work to be done, is placed inside a telescopic support (MTE) or on rollers (MTP). The cask has an approximate mass of 2650 kg (RD 15).



### DPTE®, or Double Porte de Transfert Etanche

A solution to avoid breach of containment during product transfers.



During connection by 60° rotation, both ports Alpha and Beta of our unique La Calhène system, join together to form a single unit. At the same time both doors are detached from their respective flanges and fixed together, while the flanges and seals continue to maintain leaktightness of this new joined assembly.

# A transfer mechanism and gamma protection, designed to protect both the operator and the environment

### Radiation Protection: Alpha, Beta and Gamma

The PADIRAC™ is available in two standard versions, depending on the activity of material to be moved between hot cells or between installations:

- RD 15 (150 mm thick lead)
- RD 20 (200 mm thick lead)

- The flyweight cell door (PMP) also contributes to the biological system protection during transfers. Its thickness varies according to the intended use (50, 100, 150, 200, 250 and 300 mm of lead).

- The DPTE® 270 container has a 20 liter capacity.

### Installation Procedure

- Open the PADIRAC™ table shield, insert the container (PE or stainless steel) in the PADIRAC™, and close the table shield.

- Put the PADIRAC™ onto the PTS, dock the PADIRAC™ to the cell door (PMP).

- Raise (electrically or by using a deck) the table shield, which pushes the PADIRAC™ shield out and takes its place (the additional table shield has a hole to fit the container).

- Push the container through using the rod then turn 60° to lock the container on the cell flange (BRCL). The DPTE® transfer system inside the cell can now be opened on the hot side.



### Transport Packaging

- A tight shockproof and fireproof transport cover made of cast iron is used to transport shielded PADIRAC™ containers on public roads. The assembly can withstand a drop of 9 meters and a fire of 800°C for 30 minutes, in accordance with international regulations. The CC11 shell is designed for shielded containers with 15 cm of lead.

- by a specific lifting beam designed to move the entire assembly.

### Public Roads Transport

The PADIRAC™ RD 15 IIB packaging has a type B approval certificate from the ASN\*, according to the IAEA\*\* regulations.

\* A.S.N.: Autorité de Sûreté Nucléaire

\*\* I.A.E.A.: International Atomic Energy Agency



Shielded door (PMP)



Support table (PTS)



Swing arm (BA)



PADIRAC™ with transport cover (CT)