



## Application

The Eiffel Tower has more than 6 million visitors every year. Its lifts are the most critical dynamic systems of the building and their availability must be maximized to ensure the 100,000 km distance covered every year (a lift every 8 minutes).

### System Operating parameters:

Flow rate: 15 L/min (4 US gpm) HP line  
75 L/min (20 US gpm) Return line

Pressure: 250 bar (3625 psi) HP line  
20 bar (290 psi) Return line

Fluid: ISO 46 Mineral oil at a max temperature of 60°C (104°F)

## Problem

As part of a hydraulic system improvement program, it was decided to upgrade the current filtration in order to:

- reduce filter maintenance time
- provide improved protection to sensitive components, such as servo-valves

## Solution

Replace existing filtration with:

- 3 x **Ultipleat** SRT UH219 -13" length High Pressure filters, on the feed circuit of the high pressure pump
- 4 x **Ultipleat** SRT UR219 -13" length Low Pressure filters in the return line

## Results

- Reduction in the number of replacement element part numbers managed in stock (only one - UE219AP13H)
- Simple, quick & safe filter element replacement procedures
- Increased availability rate of lifts for visitors (~1,000 visitors/hour)

## Ultipleat® SRT filters protect hydraulic lift circuits of the Eiffel Tower, France



UH219 Series High Pressure Filters



UH219 (foreground) & UR219 Series filters

Contact us at [www.pall.com](http://www.pall.com)