secalt

building maintenance units

Sabanci Center, Istanbul

Tractel Group

The TRACTEL Group and

With several thousand Building Maintenance Units installed in more than 50 countries, the TRACTEL Group is now the world leader in this market. Designed and manufactured in Europe and North America, these systems combine skill, imagination, technical expertise and, above all, safety.

The TRACTEL Group:

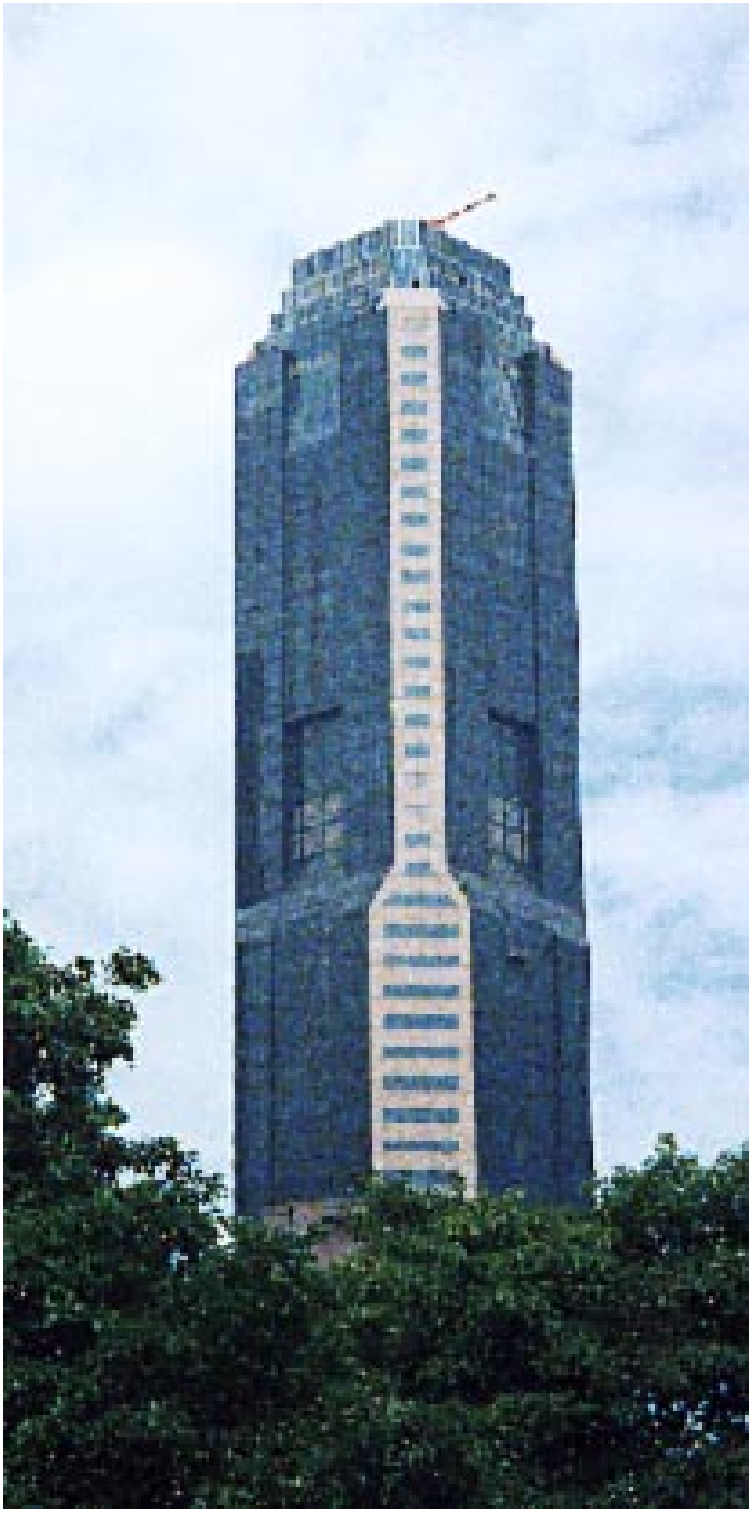
Above: Debahy Building, Beirut/Lebanon.
Below: Bank of China,International Finance Center, Shenzen/China.

Torre Optima, Mexico

Sheik Al Mujrin Building, Dubai.

Place de la Cathédrale, Montreal/Canada.
Wisma Genting Building, Kuala Lumpur/Malaysia.

world leader for . . .



Republic Plaza Building, Singapour.

Above: "Lilla Bommen" Building, Gothenborg/Sweden.
Below: World Trade Center - Sofitel Hotel, Bucharest/Rumania.

. . . building maintenance

Above: Collines de la Défense, Paris.
Below: International Congress Center, Brussels/Belgium.

Java Road Building, Hongkong.

Mellon Bank, Pittsburgh/USA.

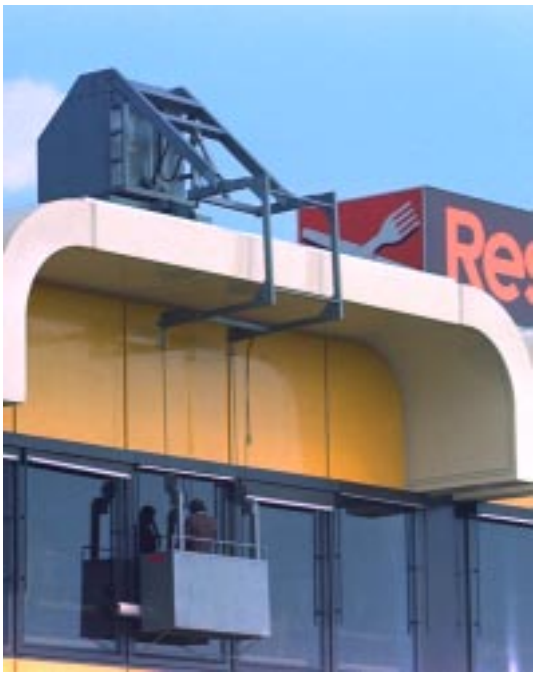
Building Maintenance Units

The range of SECALT roof-mounted Building Maintenance Units provides a complete system of access to all external parts of buildings at the touch of a button. All movements are controlled safely from the push-button control panel. Access to the cradle and to its garage is from the roof and the operator has nothing to assemble or dismantle. The built-in safety devices control and monitor all the operations to ensure complete operator safety and peace of mind for the building owner.

The cradle is lifted and lowered using the TWIN-TIRAK powered wire rope hoist. The TWIN-TIRAK with two wire ropes is an original design and a technical advance for Building Maintenance Units. Manufactured within the TRACTEL Group, it is recognised throughout the world that this technique can be adapted to even the tallest building.

To eliminate heavy control cables hanging down the facade, potentially dangerous in windy conditions, SECALT has developed the MAGTRON system which is another original design. The MAGTRON system uses the wire rope to transmit all the control and safety instructions, as well as the telephone communications, without any external interference.

All SECALT Building Maintenance Units, whether on concrete track or rails, are completely self-stable. Heavily galvanised, using stainless steel nuts and bolts, SECALT machines are designed and made to last whatever the weather.



Above: *VENUS machine on concrete track. Havas Building, F-Neuilly-sur-Seine.*

Below: *MINI machine on concrete track. Banca d'Italia, Roma/Italy.*

JUNIOR machine on concrete track. Sherotel Hotel, Moscow/Russia.

JUNIOR machine with articulated jibs, on rails. Motorway restaurant, Verlaine/Belgium.

MINI, JUNIOR, SENIOR

SECALT models suit a wide variety of buildings, each allowing access to the structure with integrated safety devices as standard and a range of options to suit the application.

The **SECALT MINI** is designed for low-rise buildings up to 40 m with a limited maintenance area. Intended only for use on a concrete track, the MINI is a relatively lightweight and economic solution. The cradle is suitable for one operator together with his tools and cleaning materials.

The **JUNIOR** models are the heart of the SECALT range of BMU's. They are suitable for a wide range of applications, running on rails or concrete track, for buildings up to 120 m. The cradle for the JUNIOR BMU is designed to take two people, working quickly and effectively in complete safety.

The **SENIOR** machines are designed for high-rise buildings or for structures where access is particularly difficult; they allow access to buildings of 200 m and over, with dimensions kept to a minimum.

Special design: modern architecture can even defy the ingenious design of standard models of SECALT machines. Our technology and know-how adapt very well to the non-standard solutions. Nevertheless, the earlier the access problem is broached, the easier and less complicated will be the solution.

The VENUS model is a particularly economic solution for buildings up to 40 m height. The system comprises a mobile roof trolley on which is suspended a cradle for one or two persons or a working seat. The lifting hoists are fitted on the cradle.

SENIOR machine with articulated cradle. The Concourse Building, Singapour.

Above: SENIOR machine with single jib and articulated cradle. Sofitel Hotel, Luxembourg.
Below: Special machine with telescopic jib (9-14 m). Republic Plaza Building, Singapour.

other equipment . . .

Where standard models cannot be used through lack of roof space or where areas to be inspected are fragmented or not continuous, the SECALT machines can offer alternative solutions which are safe and adaptable to the particular application.

DAVIT jibs

Mobile jibs allow the cradle to be moved from one section to another to reach the different areas of the building's facade. Turning the jibs is particularly easy. The cradles are fitted with TIRAK hoists, safety devices and reelers, and are usually stored on the roof.

Travelling jibs

Travelling jibs, mounted on rails fixed to the parapet, combine the versatility of DAVITS and make moving from one working position to another even easier. For roofs which are particularly crowded, travelling jibs are sometimes the only way of overcoming the access problem.

Above: *Platform suspended from movable jibs (Davits), Post Office, Port Elisabeth/South Africa.*
Below: *Powered travelling jibs on parapet. Loma Negra Building, Buenos Aires/Argentina.*

400 m of RAILSCAF rails with 8 powered traversing trolleys and 1 powered ALTA solo cradle. Royal Abjar Hotel, Dubai.

675 m of RAILSCAF rails, of which certain sections (130 m) are sloped at more than 60°. Gasprom Building, Moscow/Russia.

. . . for alternative solutions

Monorails

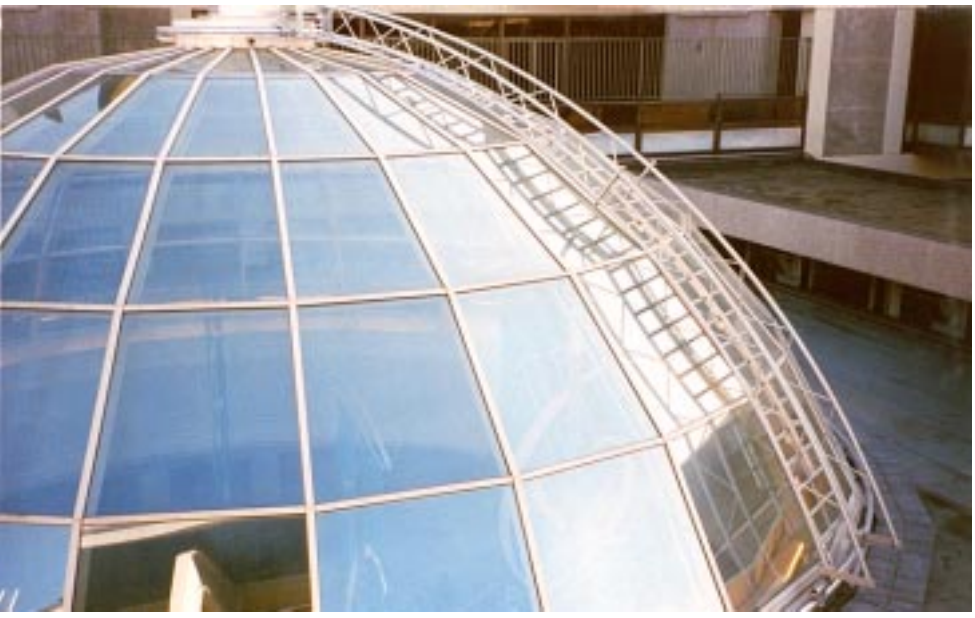
For recessed or overhanging facades, for buildings with a sloped roof and especially for cleaning the inside of glazed atria, such as those covering modern commercial centres, monorails are sometimes the only practical solution.

Monorails closely follow the line of the facade, with cradles suspended from manual or powered trolleys to reach the various points of the facade or roof. Our RAILSCAF monorail system even permits access on inclined roof sections.

Travelling ladders and platforms

A wide variety of solutions use ladders and platforms which are either vertically mounted or sloped, guided along rails and designed to blend in with the shape and colour of the background of the building. Travelling ladders and platforms are simple and economic solutions, but still require detailed study of the installation.

If consultation takes place at an early stage it may be possible to simplify the system even further.

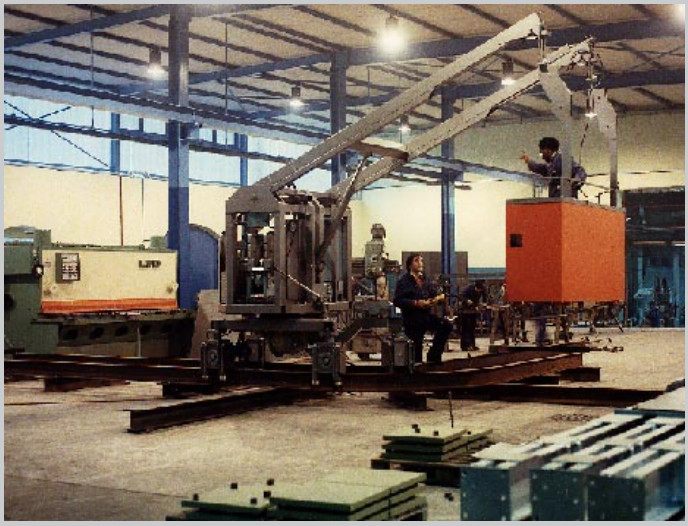


Traversing ladder for cleaning the exterior of a glazed roof .
Hoog Catharijne Building, Utrecht/The Netherlands.

Above:
Powered mobile ladder, Stratosphere, Las Vegas/USA.
Below:
Traversing ladder for cleaning the inside of a glazed roof.
Savings Bank, Altenkirchen/Germany.

know-how and follow-up. . .
rely on the TRACTEL Group

SECALT S.A. has developed its facilities to produce the best solutions to the problems of building maintenance: from design to manufacture; from assembly to maintenance, for improved reliability, ease of operation and, above all, safety.



Qualified welders, mechanics, electricians and electronics engineers, combined with a close monitoring of work, ensure complete quality control. The engineers and technicians of the SECALT design office have the most up-to-date computer-aided design and calculation systems, drawing on a wealth of 20 years' experience, together with a knowledge of all the standards and regulations applicable in each country. They are capable of matching the challenge of modern architecture.

Architects, developers and contractors can rely on the expertise of the TRACTEL Group, with considerable knowledge and understanding of a wide variety of applications.

Our teams of assemblers have strong experience from around the world. They are professionals who are able to solve the difficulties of working on even the largest construction sites.

Our maintenance technicians, and those of our agents overseas, ensure that SECALT equipment is in full working order year after year.

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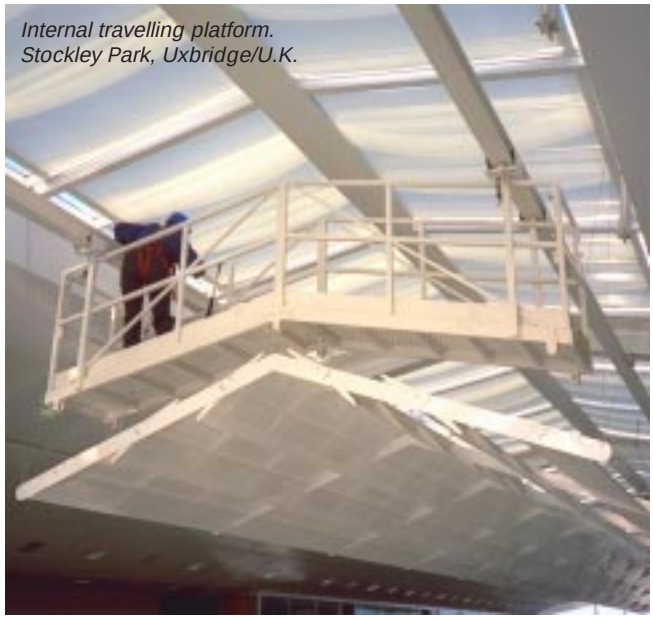
permanent access systems

RAILSCAF circular system.
Maximilian reception centre,
Nuremberg/Germany.

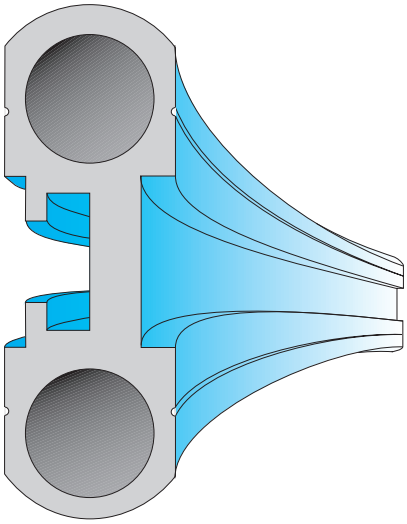


Internal travelling platform.
Stockley Park, Uxbridge/U.K.

External travelling ladder.
Manchester Airport/U.K.

Tractel Group

railscaf® monorail system for horizontal and inclined operation



RAILSCAF is an access system comprising a monorail fixed to the perimeter of a building at roof level and used as the trackway for a traversing trolley from which may be suspended a cradle or SOLSIT powered seat.
The aluminium profiled monorail is fixed to the building using special support brackets anchored to the facade or on the roof.

The trolley is manually or power operated, although a manual trolley is generally sufficient for most applications since the traversing effort required is relatively low.
*The standard model of trolley **traverses horizontally.***

◁ *RAILSCAF with support brackets anchored to the facade.*
Grottaperfetta building, Rome/Italy.

*However, for operating on an **inclined section,** the RAILSCAF rail has an integrated chain whereas the trolley is fitted with a pinion which engages in the chain, giving safe and reliable traversing.*
Above:
Sheffield Hallam University, Sheffield/U.K.
200 m of RAILSCAF rails with special powered trolley and powered mono cradle.

Support brackets anchored on the roof.
Héron-Science office complex, Brussels/ Belgium. 308 m of RAILSCAF rails, 10 powered traversing trolleys and 2 powered mono cradles.

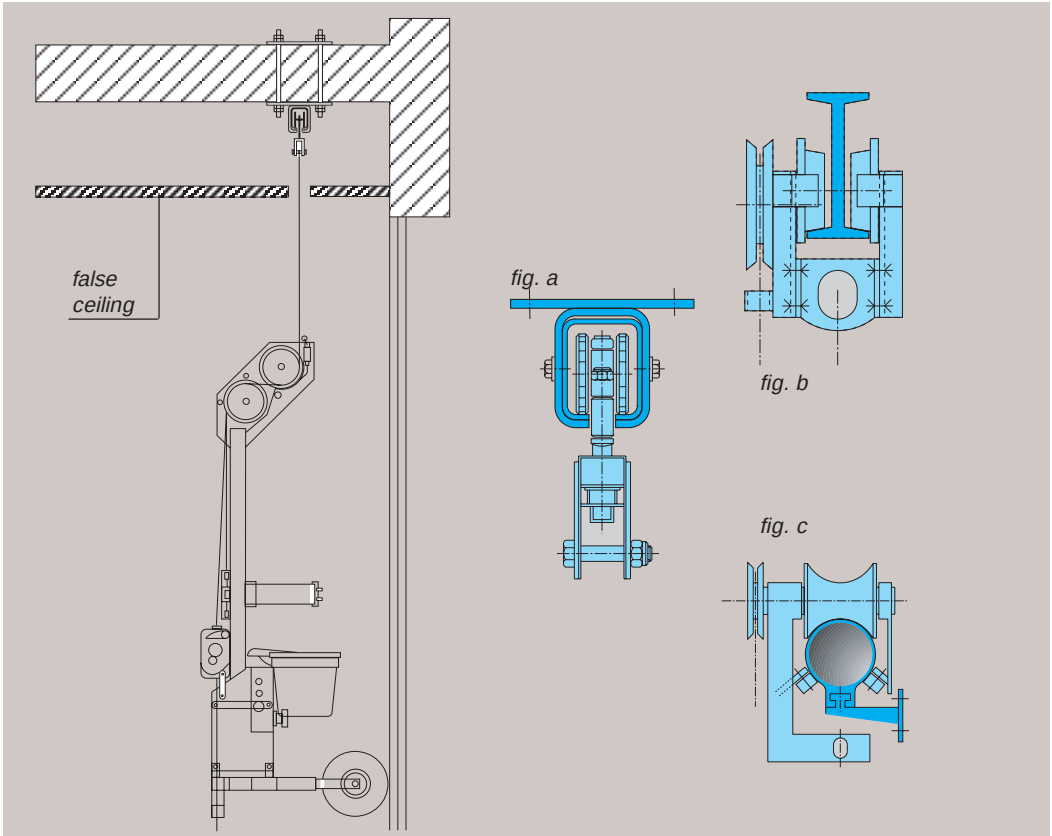
New ARBED office building, Esch-sur-Alzette/Luxembourg.
230 m of RAILSCAF rails with powered traversing trolley and powered mono cradle.

other monorails

Depending on the design of the building or the architect's requirements, other types of monorail may be considered for horizontal traversing:

– an enclosed C-shape rail (fig. a), which can be mounted in a recess or false ceiling, and is therefore a particularly aesthetic solution;
– "I" rail (fig. b) and round tube (fig. c) using manual or powered trolley are alternative monorails, depending on the requirements of the application.

RAILSCAF adapts well to both internal and external applications, easily following the shape of the building. RAILSCAF is available in various colours (anodised or electro-statically painted) to blend perfectly into its surroundings.
Above: 100 m of RAILSCAF rails with manually operated traversing trolley and powered cradle for interior access of the National Library in Algers/Algeria.



RAILSCAF colours (white and blue) adapted to the colours of the facade.
Royal Abjar Hotel, Dubai.
400 m of RAILSCAF rails with 8 powered traversing trolleys and 1 powered mono cradle.

Lovell Park, Leeds/UK.
Round tube monorail, with manual traversing trolley and 2 m ALTA powered cradle with 2 suspension points.

travelling ladders and platforms

Ladders, mounted vertically or inclined, travel on special trackways. The rubber tread rollers are designed to run on various surfaces and the ladders can be supplied with fixed, modular or folding guard rails, with circular guard rails for vertically mounted ladders.
The **rail and platform systems for glazed atria** are supplied with specially designed aluminium profiles to suit the working conditions. Open meshed floor panels blend well with the structure of the building. Guard rails may be fixed, modular or folding depending on the architectural requirements.
The finish for travelling ladders and platforms is anodised or painted, to match the colour of the roof structure.

◁ *External inclined travelling ladder fitted with a fall-arrest system. Powered traverse. Manchester Airport, U.K.*

△ *Travelling ladder with fixed guard rail. Shape and colour to suit the roof structure. Main auditorium of Radio Marconi, Lisbon/Portugal.*

◁ *Vertical travelling ladder with adjustable platform. Manual traversing on a monorail. Meadowhall, Sheffield/U.K.*

▽ *Travelling platform. Eaton Centre, Toronto/Canada.*

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