

# Introducing the CoxGomyl 1000 Range

The CoxGomyl 1000 Series range is designed for use on buildings of low complexity, where the building design can be more flexible to accommodate a relatively standard access solution. When developing concepts using the 1000 Series range, the sales team at CoxGomyl select from a collection of relatively standard equipment, to achieve a simple and economical solution. For more complex access requirements that cannot be solved by using the 1000 Series range, the designers at CoxGomyl can always find a suitable solution within the 5000 Series range and even within the 7000 Series range for unique and highly complicated structures.

The 1000 Series range is divided into two main groups, which in turn, are divided into sub-groups as follows:

## 1- Systems Based on Travelling BMU Machines on the Roof of the Building:

- a EC range: Economical choice for a roof machine equipped with a drum hoist
- b. K range: Light-weight roof trolley used in conjunction with a self-powered cradle
- c. U range: Larger roof trolley used in conjunction with a self-powered cradle.

# 2- Systems Based on Various Types of Roof Rigs and Travelling Gantries:

- a. Monorail range: Economical and simple trackmounted on the outer side of the building
- b. Davit range: Economical rigging arms mainly for isolated areas on the roof
- Gantry range: Special access solution for skylights and atriums
- d. Self-powered cradle: A range of self-hoisting platforms to be used in conjunction with the above systems.

The selection keys beside each product are designed to help in the identification of the most suitable product type at a high level, based on machine outreach and general application as criteria. Operational options and movements are also listed to assist in indicating the range of possibilities within the 1000 Series. It is recommended that you consult with a CoxGomyl design expert who can work with you on identifying the optimal solution for your unique requirements.

# Travelling BMU's or Roof Cars



Banhofplatz Aarau, Switzerland

## Selected if:

- The shape of the building or the lifting / cradle requirements are not complex
- Looking for the most economical solution
- Required outreach from the front wheels is 0-3.5m
- Building heights up to 130m.

## EC-TYPE: The Economical Short Reach Choice Using a Drum Hoist

The EC Type machines are made from standardised components and are designed to be an economical choice, with reach of up to 3.5 metres. With a well thought out design, EC-type machines are low maintenance and safe to operate.

## **EC - Machine Features**

- Single fixed-length jib, always with jib luffing.
  This feature is needed to launch the cradle out over the side of the building, and to return it to the roof to allow the operators to exit.
- · Generally uses standard cradles.
- Can be offered with a rotating crossbar at the tip of the jib as an option for more manoeuvrability.
- Can be offered with two track types: concrete runway with a guide rail or a twin track type.



Shing Wan Rd, Hong Kong

### Selected if

- The shape of the building or the lifting / cradle requirements are not complex
- Looking for the most economical solution
- Required outreach from the front wheels is 0-3m
- Cradle can be used for other systems installed on the building
- Building heights up to 100m (depending on local regulations).

# K-TYPE: The Economical Short Reach Choice Using a Self-powered Cradle

Like the EC, the K Type machines are also made from standardised components and are designed to be an economical choice, with reach of up to 3 metres. The K Type is an ideal choice for applications where the roof of the building does not offer a continuous and levelled runway for a single BMU. In these cases, a multitude of different types of systems need to be deployed. By sharing a common self-powered cradle between the different systems, a significant cost saving for the client is achieved.

## **K - Machine Features**

- Single fixed-length jib, always with jib slewing.
  This feature is needed to launch the cradle out over the side of the building, and to return it to the roof to allow the operators to exit.
- Generally uses a standard, self-powered cradle.
- Usually offered with a rotating crossbar at the tip of the jib for proper manoeuvrability.
- Can be offered with two track types: concrete runway with a guide rail or a twin track type.



Dubai Mall, Dubai

## Selected if:

- The shape of the building or the lifting / cradle requirements are not complex
- Looking for the most economical solution
- Required outreach from the front wheels is 0-10m
- Cradle can be used for other systems installed on the building
- Building heights up to 100m (depending on local regulations).

# U-TYPE: The Economical Medium Reach Choice Using a Self-powered Cradle

Like the K Type, the U Type machines are also made from standardised components and are designed to be an economical choice, with reach of up to 10 metres. The U Type has the same selection criteria as the K Type with the extra advantages of having a higher mast, and is therefore able to go over higher parapets with extra reach capability.

## U - Machine Features

- Single fixed-length jib, always with jib slewing.
  This feature is needed to launch the cradle out over the side of the building, and to return it to the roof to allow the operators to exit.
- Generally uses a standard 2 meter self-powered cradle
- Usually offered with a rotating crossbar at the tip of the jib for extra manoeuvrability.
- Can be offered with two track types: concrete runway with a guide rail or a twin track type, depending on the reach.



Bernabeu Stadium, Madrid

# Other Rigs – Monorails, Davits, Gantries

# MONORAIL: The Flexible Choice Using a Self-powered Cradle

The monorail system consists of an aluminium track, fixed with steel brackets on the side of the building or underhung in a recess. They can also be used internally for atriums. A choice of manual or motorised trolleys can be used to move a self-powered cradle along the length of the area of the building that needs to be accessed. The monorail system is ideal for buildings that do not allow enough space on the roof slab for a roof-based machine. This system is also ideal where large recesses in building elevations cannot be reached with an approaching system within the 5000 Series.

## **Monorail - Machine Features**

- · Horizontal, inclined or vertical track layout.
- Manual or motorised trolleys for horizontal layout, and climbing trolleys for inclined and vertical layouts.
- Track can be bent around corners and in light curves to follow the shape of the building.
- A wide choice of track profiles and bracket shapes are available to cover the building design requirements.
- Used in conjunction with a self-powered cradle.



Dubai Mall, Dubai

## Selected if

- There is not enough space on the roof for a roof-based machine
- Looking for the most economical and flexible solution
- There are no projections in the elevation bigger than 0.5m
- Cradle can be used for other systems installed on the building
- Building heights up to 100m (depending on local regulations).



Dubai Marina, Dubai

### Selected if

- There is not enough space on the roof for a roof-based machine
- Looking for the most economical solution with no visual impact when not in use
- Maximum reach from centre of base 2.5m
- Cradle can be used for other systems installed on the building
- Building heights up to 100m (depending on local regulations).

## DAVIT: The Economical, Most Discrete Choice Using a Self-powered Cradle

Mounted on steel bases on the roof, the davit system consists of aluminium or steel arms that can be dismantled and moved to a different set of bases on the roof to access a different area of the building. Davits are used in conjunction with a self-powered cradle that can go up to 8 metres in length. After use, the davits and the cradle can be stored in dedicated areas so they are out of sight, allowing the whole roof area to be used for other purposes.

## **Davit - Machine Features**

- They can be of aluminium or steel construction.
- Low height davits can be used where the cradle is launched from and parked on ground level.
- High post davits can be used when the cradle is required to park on and launch from the roof level.
- They can be slab mounted or parapet mounted.



Herriots, Frankfurt

Senate of Spain, Madrid

## **GANTRY: The Right Choice for Atriums and Skylights**

The gantry system is the best and safest access solution for an atrium or skylight on a low-rise building. It consists of an aluminium or steel truss on the sides with a deck or steps made of galvanized steel grate.

## **Gantry - Machine Features**

- They can be of aluminium or steel construction.
- They travel on steel or aluminium tracks along and around a skylight.
- They can be installed on the inside and outside of the skylight to access both sides of the glass.
- They can be designed in different shapes to match the architecture of the structure: horizontal, inclined, curved, telescopic and cantilevered.
- They can travel manually or electrically.
- If provided with a parking area, they can be hidden from sight when not in use.

## Selected it

- A roof area that cannot be accessed by operators on foot (not load-bearing)
- A ceiling not accessible from the level below it
- A cone, a dome, a pyramid, or any structural shape above the roof level of a building.

## SELF-POWERED CRADLE: The Most Flexible Self-hoisting Mechanism

Also known as the platform, scaffold, cage or gondola, the self-powered cradle is a key component of the 1000 Series, as it can be used with any rigging system conceivable. A rigging system can be as simple as an overhead eye bolt in the ceiling, a davit, a monorail, a gantry, a roof based machine, a crane etc. The advantage of this type of cradle is that a minimum number are required to achieve an acceptable cleaning cycle. Using a self-powered cradle combination with as many rigging systems as are required to cover the building delivers significant savings.

## **Self-powered Cradle - Machine Features**

- They are constructed out of a combination of aluminium and steel.
- They use one, two or three traction hoists to achieve vertical movement.
- They can be of fixed length or modular, with lengths from 1.5m to 12m.
- They can be straight, built at an angle, curved or circular.

### Selected if:

- The cradles need to be exchanged between different roof rigs
- Looking for the most economical solution
- Building heights up to 100m (depending on local regulations).



## Façade Restraint Options for Self-powered Cradles:

- ISA pins with lanyards
- Soft rope system
- · Pull in system
- · Mullion guides.

As per most national standards, a cradle needs to be restrained to the façade for heights greater than 40 meters. The choice of restraint type can vary between the above options as per the requirements of the building. For further information you can discuss your needs and application with your CoxGomyl client representative.

# CoxGomyl Machines Don't Compromise on Safety

Safety is quite literally at the heart of each 1000 Series BMU component, with multiple standard features to make them as safe and as reliable as possible.

## Safety Wire Rope System

On all cradles used in the 1000 Series range, the cradle is supported by two wire ropes for each suspension point. In the unlikely event of a rope failure, the cradle is still suspended horizontally, providing increased safety to the operators.

## **Traction Hoist**

Although the traction hoist requires a little more attention and service frequency compared to a CoxGomyl drum hoist within the 5000 and 7000 Series, it remains a safe, smart and efficient component

in all the applications of the 1000 Series. Traction hoists use friction on the suspension wire rope for vertical movements while the secondary safety rope passes through a safety device, which is automatically activated in the unlikely situation of a rupture or slippage of the suspension rope, thus keeping the cradle safely suspended. All wire ropes come out of the traction hoists to be wound properly on a cable reel on each side of the cradle keeping them away from damage.

In addition, there are a host of other safety devices that help ensure that the whole system performs safely; please talk to your CoxGomyl representative to learn more.

# How Can We Help?

## **Our Services**

We take responsibility for producing outstanding building and façade solutions, and as such, are the largest full service provider in the industry. We don't just make machines; we have local experts in engineering, design, project management, implementation, safety and maintenance, to bring a complete, end-to-end spectrum of capabilities to your corner of the globe.

We can offer design consultancy from the start of your project in order to incorporate the latest thinking in building surface maintenance into your building design. Importantly, if done early enough, we can save you money in the long term by designing cost-effective solutions up front, in conjunction with your building design team.

Once the contracts have been let, we can work with you on final drawings and engineering calculations to ensure that all areas of the surface are reached, loads are understood and our project managers are integrating with your teams. From there we go into production and delivery to location, with no site too challenging. CoxGomyl has been involved in thousands of building solutions over the past six decades in over 50 countries around the world.

Our local and regional network of sales offices, project managers, and installation teams will work with you to deliver an installation that is smoothly executed on time and on budget.



Belleview, Malaysia



Mall of the Emirates, Dubai

After installing, we remain available to assist with the servicing and maintenance during the DLP period, as well as offering ongoing full maintenance and service packages. There is a peace of mind that comes from having your long-life capital equipment maintained fully by the manufacturer. It ensures up time, a clean and well-maintained building, lower cost of ownership, and ultimately assists in the delivery of your value proposition with clients and tenants.

If you would like to discuss the 1000 Series further, please contact your regional office (see over for details). Remember to consult the 5000 Series and 7000 Series brochures if you feel you require a more complex system than outlined within the capabilities of the 1000 Series.

When dealing with the unique nature of buildings, and such a vast product range, we recommend you consult directly with a CoxGomyl technical advisor, who can assist in developing the optimal solution, with smooth end-to-end planning and execution of your project. We offer a full service spectrum from planning to installation and maintenance, to make your job as simple as possible. As a global leader, our products can be designed to meet your local industry standards such as EN1808 (European), AS1418.13 (Australian), EN1808 (British, replaces BS6037), ASME A120.1 and OSHA1910.66 (American), GB19154.2003 (Chinese), CAN/CSA.Z271.98 (Canada), SS CP 20/1999 (Singapore) or PB.10.518.02 (Russian). See our Design, Project Management and Installation publication for further information.

At CoxGomyl, our team of technical experts, engineers and project managers speak your language, and can combine their skills with yours, to ensure a strategic, economical, practical and safe solution, to keep your building looking exactly as you intend for it to be: immaculate.

CoxGomyl Office locations:

## **Head Office**

182 Normanby Road Southbank, Vic 3006, Australia Phone: +61 3 9673 4444 Fax: +61 3 9673 4400 Email: headoffice@coxgomyl.com

### **Asia Region**

Hong Kong and South China Office Flat 04A, 11th Floor, Eastern Centre 1065 King's Road, Quarry Bay Hong Kong SAR, China

Phone: +852 2802 2221 Fax: +852 2824 9626

Email: hongkong@coxgomyl.com

Central and North China Office Rm.606 Tong Sheng Tower No. 458 FuShan Road Shanghai, China 200122 Phone: +86 21 5465 2455 Fax: +86 21 6467 7507 Email: shanghai@coxgomyl.com

South East Asia Office 18 Boon Lay Way, Tradehub 21 #03-125

Singapore 609966 Phone: +65 6513 4780

Fax: +65 6425 6100 Email: singapore@coxgomyl.com

## **Europe Region**

Western Europe and Latin America Office Calle de la Venta, no 19 28880 Meco, Madrid Spain

Phone: +34 9188 77000 Fax +34 9188 60514

Email: madrid@coxgomyl.com

United Kingdom Office 19 Schooner Park, Schooner Court, Crossways Business Park, Dartford, DA2 6NW, United Kingdom Phone: +44 1322 221414

Phone: +44 1322 221414 Fax: +44 1322 228419 Email: london@coxgomyl.com

Russia and East Europe Office 3Pl. Tverskaya Zastava, Office 240 Moscow, Russia, 125047

Phone: +7 499 250 8975 Fax: +7 499 250 2729 Email: russia@coxgomyl.com

## Rest of the World (ROW) Region

Australia and NZ Office 182 Normanby Road Southbank, Vic 3006, Australia

Phone: +61 3 9673 4444 Fax: +61 3 9673 4400

Email: melbourne@coxgomyl.com

Middle East Regional Office PO Box 33654 Dubai, UAE

Phone: +971 4 511 8200 Fax: +971 4 511 8300 Email: dubai@coxgomyl.com

Abu Dhabi Commercial Mussafah ME 12, Building 232, Office M1

Abu Dhabi, UAE Phone: +971 4 511 8200 Fax: +971 4 511 8300

North America Office 216 North Avenue East Cranford, NJ 07016, USA

Phone: +1 908 325 6587 Fax: +1 908 967 6042 Email: usa@coxgomyl.com

## coxgomyl.com

