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Concord Ascentech Designs and Engineers Complete Elevator Systems, Elevator Components and Kits

Engineering excellence for future-ready elevator systems and components

by Fali Palkhivala

Built on our strong foundation spanning 50 years, Concord Ascentech specializes in delivering end-to-end vertical- and horizontal-transportation solutions. Our core activities span the entire product life cycle — from conceptualizing and designing to integrating, manufacturing and supplying advanced, field-friendly elevator components and kits. Every solution we create is engineered to support seamless installation, enhanced performance and long-term efficiency for elevator companies and field technicians alike.

At Concord Ascentech, our mission is to empower elevator companies with sophisticated, universal and future-ready components and kits, reducing the need for manpower and overall costs for the companies that choose to use our technology/equipment. We aim to provide products that offer maximum convenience, adjustability and flexibility, enabling effortless adaptation to diverse site conditions and architectural requirements. Through continuous innovation and a deep commitment to quality, we strive to elevate industry standards and contribute to smarter, safer and more versatile vertical-transportation (VT) systems, employing our patented technologies.

One of our technologies is the Future Ready Adjustable and Flexible Chassis System for which patents have been filed with the World Intellectual Property Organization (WIPO) and the intellectual property office of the Government of India, which administers Indian law for patents, designs, trademarks and more. The system is also registered with the Patent Cooperation Treaty (PCT), an international treaty managed by WIPO, securing patents in all the 158 contracting countries under this treaty.

The Future Ready Adjustable and Flexible Chassis System has been conceptualized, designed and developed by elevator experts especially for the elevator industry. This Chassis System has culminated from decades of exposure, from the elevator layout design, shop floor execution, pre-dispatch quality control, logistics/storage, site handling/installation/alteration, maintenance and modernization.

This system eliminates the need to generate unique set (per elevator dimension/type) of elevator layout drawings to production drawings, creating nesting drawings and setting parameters for CNC laser-cutting machines, bending drawings and setting parameters for the CNC bending presses, running quality control at various stages of processing and assembly of the car frame system. The quality control process, which is required for all these stages, is completely eliminated, as this is a standardized chassis system that can be configured and assembled as per the requirement of any elevator installation within its configuration range.

Further, this chassis system is packed and shipped in very small and compact packages configurable for a car frame. Packages can be as small as about 500 mm wide X 500 mm height x 1,550 mm length, eliminating the need for large storage space and transportation space, saving warehouse space, labor and transportation costs.

The Future Ready Adjustable and Flexible Chassis System provides adjustable distance between guides (DBG), adjustable height, can accommodate any component/attachment which could require changes/alterations due to multiple lapses in the above-mentioned process chain or due to unforeseen site limitations/deviations.

Patented Adjustable and Flexible Chassis System — Car Frame System and Configurations

The chassis system is configured and will fulfil all possible needs of various elevator systems. Current applications of the Future Ready Adjustable and Flexible Chassis System are as follows:

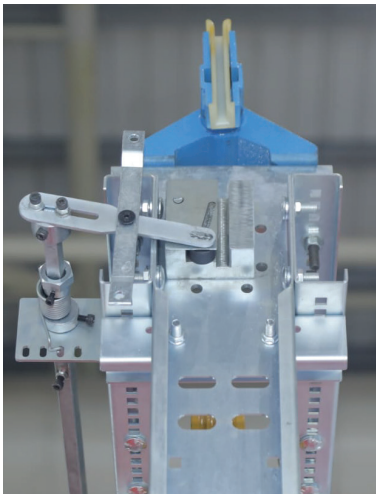
- DBG adjustability of approximately 400 mm
- Load capacities range to cover the standard ranges required
- Various cabin dimensions are incorporated.
- Suitable for 1:1 and 2:1 suspension types
- Above suspension and below suspension (under slung) position possibilities
- Rope suspension and flat belt suspension
- Instantaneous safety gear and progressive safety gear incorporation possibilities
- Safety gear positioning can be at the top or at the bottom of the car frame system.
- Numerous safety gear activation linkage incorporation possibilities
- Numerous safety gear activation linkage positioning incorporation possibilities
- Suitable for slider guide shoe/roller guide shoes
- Numerous subassembly incorporation possibilities

- Numerous accessory incorporation possibilities
- Sheet-formed sections with multiple bends for better structural integrity

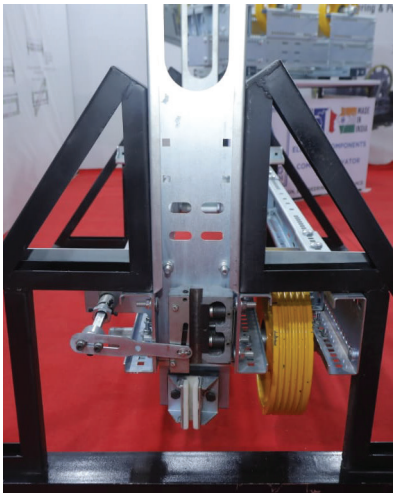
In addition to the above advantages of the Future Ready Adjustable and Flexible Chassis System configured for the car frame system, it can be very easily and completely modernized/ upgraded in the future to achieve the following:

- Upgrade from instantaneous safety gears to progressive safety gears
- Changing the position of the safety gears, linkage and activation mechanism from left to right or from bottom to top/vice versa
- Upgrade from conventional safety gears/blocks, linkage and activation mechanism to integrated safety gears with linkage and activation mechanism
- Upgrade from conventional safety gears/blocks, linkage and activation mechanism to on-board governors with integrated safety gears/blocks, linkage and activation mechanism
- Upgrade from conventional safety gears/blocks, linkage and activation mechanism to remote activated safety gears/blocks with integrated linkage and activation mechanism
- Upgrade from fixed guide shoes to spring-loaded guide shoes or from slider shoes to roller guide shoes
- Change from over slung suspension to underslung suspension
- Upgrade/change the suspension medium from conventional wire ropes to TPU/CTP ropes and also possible to change to thermoplastic polyurethane flat belts
- Add buffer striker plate as required
- Add under-cabin platform load-weighing device
- Add attachments for compensation chain/s as required

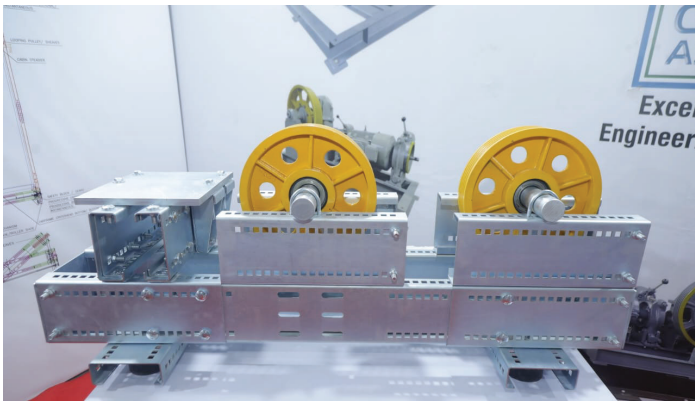




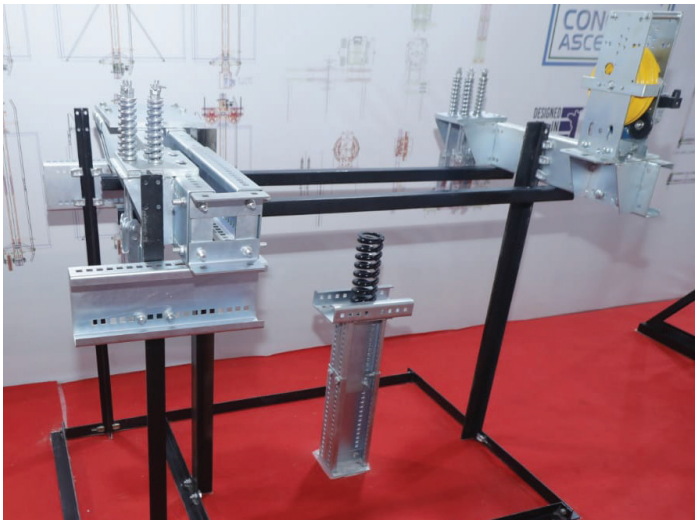
Instantaneous safety gear/block with activation and linkage mechanism installed at the top of the car frame/cross head level



Progressive safety gear with activation and linkage mechanism installed at the bottom of the car frame/bottom plank level



Machine base frames for conversion of geared to gearless machine room installations



Machine base frames, governor and hitch plate mounting for machine-room-less installations and buffer stands/supports/ hydraulic cylinder supports

Patented Adjustable and Flexible Chassis System – Machine Base Frames for MR and MRL Installations and Configurations

- Machine-Room (MR) installation and MRL installations
- Can be configured and adjusted as per the required car and counterweight centers of conventional car frame installations
- Can be configured and adjusted as per required car and counterweight centers cantilever car frame installations
- Can be used for various suspension mediums
- Can be incorporated for new installations
- Can be incorporated for conversion for geared installations to gearless installations

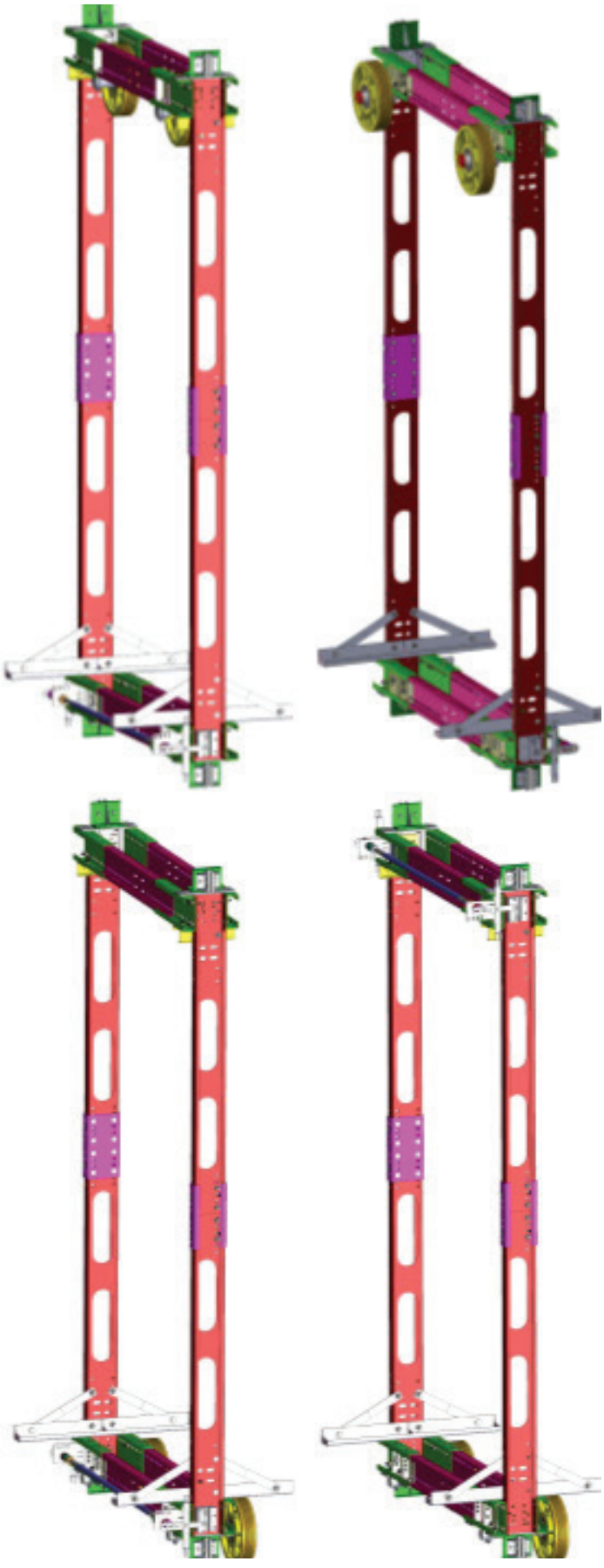
The Future Ready Patented Adjustable and Flexible Chassis System is an ideal product to be integrated in all elevator installations, especially for elevator companies, elevator kit suppliers, elevator solution providers and component traders having a reasonable / high volume and variety of elevator installations.

This Chassis System has culminated from decades of exposure, from the elevator layout design, shop floor execution, pre - dispatch quality control, logistics/storage, site handling/ installation/alteration, maintenance and modernization.

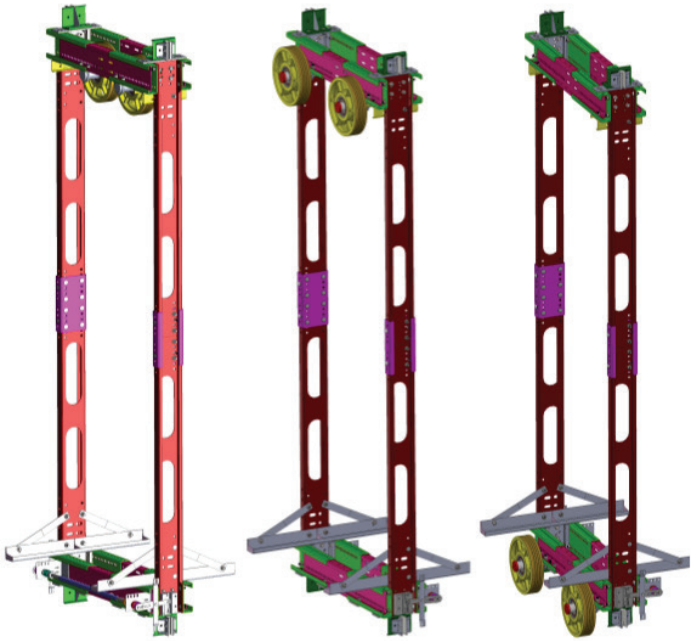
Advantages of the Future Ready Patented Adjustable and Flexible Chassis System

- Reduces design integration engineering inputs and time on projects
- Eliminates coordination between the engineering, purchase team and vendor as one design covers all varieties of installations
- Pre-dispatch inspection of material will be substantially reduced/negated.
- Reduces delivery lead time due to the system's flexibility to cover various kind of requirements
- Simplifies process and understanding between the store in-charge and site in-charge as one product fits all.
- One design allows multiple variations like:
  - Over slung single- or double-looping sheaves in the crosshead
  - Over slung cantilever twin-looping sheaves
  - Over slung looping sheaves perpendicular to crosshead
  - Under slung cantilever twin-looping sheaves
  - Under slung twin looping sheaves with support member
  - Over slung/under slung cross sheave installations
- Reduces storage space and costs
- Reduces packing costs
- Reduces transportation costs
- Reduces hidden overhead costs and increases profitably
- Uplifts your brand value as this will help to substantially reduce total project turnaround time

*Every solution we create is engineered to support seamless installation, enhanced performance and long -**term efficiency for** elevator companies and field technicians alike.*



Future Ready Patented Adjustable and Flexible Chassis System 3D schematics – few MAX DBG car frame configurations



Future Ready Patented Adjustable and Flexible Chassis System 3D schematics – few MIN DBG car frame configurations

About the Author

With 36 years of experience in the elevator and vertical mobility industry, Fali Palkhivala brings a combination of entrepreneurship, product innovation and future-ready system design. His core expertise lies in creating intuitive, high-performance elevator components and systems that enhance user experience while maintaining the highest standards of reliability, safety, sustainability and operational ease. He has consistently championed bespoke solutions, tailoring products to specific client and project needs without compromising industry standards. In his role, he plays a pivotal part in strengthening the Concord brand legacy, taking complete ownership from concept to execution. His leadership style is deeply client-centric, fostering close collaboration with architects, developers and stakeholders to deliver maximum value. He has also been instrumental in supply chain and vendor development, enabling partners to adopt advanced technologies, while driving process optimization for greater efficiency and responsiveness. Under his leadership, Concord has earned a reputation for design excellence, engineering innovation, ethical values and long-term client relationships, with many clients retained since 1979 and a strong culture of internal talent growth.

