



## **VERTICAL & HORIZONTAL TRANSPORTATION (VHT) MODERNIZATION SERVICES**

### **Introduction**

Reliability is a measure of performance. Normal wear and tear, obsolete technology and abuse drastically impact reliability of the VHT system as well as compromise safety of the equipment.

The expectations on the performance change over a period of time. What was once considered normal becomes unacceptable as newer bench marks are set due to constant changes in the social landscape.

VHT equipment and their reliability, determine the value of an asset as they form the lifeline. Interior Circulation in buildings is a critical and complex activity. People & materials move throughout the building using Elevators, Escalators & Travelators. Keeping them in good performing condition and compliant to latest codes are important.

### **What is Vertical Transportation Planning & Engineering?**

Planning, Engineering and selection of VHT equipment requires substantial collaboration among various expert trades. The process starts with traffic analysis based on population estimates and selecting the right equipment that is contemporary, safe and meets all governing standards. Although the calculations are simple, easy to understand and use, the application of these calculations is complex and requires expertise and experience.

Space efficiency is a key factor since VHT Equipment utilize substantial space and thus affect the building's amount of usable or saleable space. Nevertheless, the building must also have enough elevator capacity to operate properly. Design neutrality will allow the building promoters/ owners to have flexibility in selecting a vendor of their choice.

Planning & Engineering involves providing dimensions, specifying the right operating & safety features as well as ensuring the equipment meets the latest codes and standards.

## **Why choose PAPL Corp For VHT Modernization?**

PAPL has over the past thirteen years assisted many clients in modernizing their equipment and has played a major role in improving the VHT performance in buildings within the available constraints. PAPL is domain expert and a leader in planning, Engineering & Inspection of VHT Systems, across all sectors of the built environment. Our dedicated team of engineers are experts in dealing with the challenges of VHT equipment irrespective of size, scope or complexity of the project. We work directly with Developers, Architects and Asset Owners and apply our knowledge of the latest innovations and advances in the lift industry to help buildings upgrade.

## **What services does PAPL Corp offer?**

### **Site and Equipment Survey**

Site survey to evaluate the equipment condition and establish the quantum of modernization requirement

### **Modernization / Upgrade / Replacement Recommendations with Budget Costs**

Recommendation based on equipment survey and closer to market values budget prices based on price data available with us.

### **Theoretical Traffic Analysis and Simulation**

When full replacements are considered, Traffic analysis based on actual site data is carried out to establish adequacy of VT system and suggest enhancements within the available parameters.

### **Elevator Dimension Matrix**

In case of full replacement, we provide best fit elevator dimension to maximize the size and capacity to the extent possible.

### **Electrical and Structural Loads**

Planning information on civil and electrical requirement in case of replacement of elevators

### **Layout Drawings in case of Full Replacement**

For complete replacement, detailed AutoCAD drawings providing all dimensional parameters are issued

### **Design Brief Reports**

Any complete replacement assignment is supported by a detailed design brief covering all aspects of the elevator design including interphase required from other agencies and approvals from other consultants

### **Specifications**

Detailed specifications covering modernization aspects are prepared and in case of complete replacement, specifications containing close to 200-line items pertaining to all aspects including safety, performance, operating system etc. are prepared.

## **Bid Documents**

Detailed bid documents covering technical data sheet, scope of work, price schedule, tests and certificates requirements etc.

## **Bid Evaluation**

Objective bid evaluation. 50-point scoring system for a very objective & transparent decision making.

## **Specification Approval**

Check and approve specifications to ensure the vendor complies with the agreed specifications and does not deviate or avoid compliance to critical requirements

## **Drawing Approval**

Approve vendor GA drawings and check if the drawings are in line with architectural drawings and with the site. Drawing approval is generally done for Major structural modernization or full replacement.

## **Project Related Inspection & Reviews**

- Factory Inspections
- Quality Plan Review
- Methods Statement Review
- Material Checking
- In Process Checks
- O&M Manual Review

## **Pre Handing over Inspection**

- NBC 2016 based inspection for complete replacement
- Compliance and specification conformity inspection for partial modernization
- Generation of sang report
- Re-inspection if required
- Issue of certificate of inspection on criteria fulfilment
- Provide inspection stickers

## **What value does PAPL Corp bring?**

- We are leaders in the VHT Domain with abundant experience and resource. We have the ability to handle even the most complex projects
- PAPL has worked on many modernization projects and replacements including in some heritage buildings.
- We are independent, impartial and demonstrate our design neutrality so you can have confidence that our advice represents your best interests
- With PAN India experience behind us, we offer comprehensive and responsive service matching every market requirement.
- Most of our processes are automated including preparation of specifications, technical evaluation and inspection reports. This ensures standardization and eliminates errors in all the processes.

- We are an accredited inspection body and comply with ISO/IEC 17020:2012, an affirmation of our competence.

### **Further information**

If you need further details or need our services, please write to us at [info@paplcorp.com](mailto:info@paplcorp.com) or call us at +919884507535 and we will be happy to assist you.