



# PICK AND PLACE EXPERTS

**Fine Handling**  
& Automation

POSITION ■ ORIENTATION ■ CYCLE-TIME

[www.fine-handling.com](http://www.fine-handling.com)



## CUSTOMIZED SOLUTIONS FOR



### AUTOMOBILE

Batteries, BIW Components, Dashboards, Doors, Engine Blocks, Engine Head, Glass, Seats, Instrument Panels, Sheet metal & Mechanical Parts, Wheels, Wind Shield & everything that goes into an automobile



### FURNITURE

Wooden Boards, Work in Process, Finished Goods handling, Doors making, Lamination processes



### WHITE GOODS

Electrical appliances such as AC, TV, Washing machines, Ovens/Microwaves etc.



### LOGISTICS

Fully automated loading and unloading from trucks for particular parts, handling of Cartons, Boxes etc. within the warehouse



### FOOD

Bulk Packages Bags, Bottles, Containers, Carton Boxes and Tanks



### SANITARY

Bathtub, Sinks, WC, Glass, Tiles, Building Material



### CHEMICAL

Bags, Boxes, Drums, Tins, Reels



### PAPER INDUSTRY

Bobbins, Pallets, Cartons, Boxes



### CONSTRUCTION

Paver Blocks, Bags, Boxes, Cement Bags etc



### FOUNDRY

Forged components, Casings, Cast components

# Fine Handling & Automation

## Achieve precise positioning, Accurate orientation, Desired cycle-time in handling material

Fine Handling has been pivotal in bringing world-class, highly innovative material handling solutions to the industry. Each of our products, systems and projects is focused on realization of singular goal - to enhance your safety and productivity by multi-fold!

**1200+ Installations**

**75+ Customers**

**500+ Solutions**

**Decade of Expertise**



## Why Fine Handling

Leverage our proven expertise for step-changing Productivity



## PASSION & EXPERIENCE

Fine Handling has built specialized capability to respond to your unique needs with the highest quality material handling solutions, technology, and services available in the world.

### SAFETY AT ITS HEART

Safety is deeply embedded into our solutions - right from the concept design to adding each of the features, everything is built to meet the highest standards in safety.

### RESULT-CENTRIC TECHNOLOGY

With Fine Handling you get a predictable solution that automates your material handling process in a snap. Our solutions not just bring the latest, world-leading technology to your shop-floor, but ensure that each of the superior features are implemented to leverage value that is way beyond the upfront costs.

### MADE FOR YOU!

In material handling one size does not fit all. You need scalable automation solutions to accommodate the wide range of possibilities. Our solutions are designed to deliver precise control and high performance keeping in mind the specific requirements of your lifting and handling processes.

## Our Capabilities

### DESIGN



- Specialised 'Design & Development center' with dedicated team of experts having combined design experience of more than 50 years
- Engineering Center with CAD, Solid Modeling, Simulation & Analysis Tools
- IT infrastructure to archive, retrieve and manage version control of all technical, project & engineering documentation
- Industrial design studio with specialized product development capabilities

### PROJECT MANAGEMENT



- Well proven systems for managing small as well as large and highly complex automation projects
- On-time delivery with execution of assembly as per schedule
- Manufacturing Standardization and value engineering programs
- Advanced quality assurance processes for manufacturing, components and vendors to ensure highest system reliability

### ASSEMBLY & COMMISSIONING



- 13,000 sq. ft. State-of-the-art facility for manufacturing, assembly and testing of systems
- Dedicated team of highly experienced engineers to conduct installation and commissioning with SHE compliance
- Annual Maintenance Contract (AMC)
- Extensive Operator training at our facilities or your premises

## iPick&Place The Innovation Center

At iPick&Place, your challenges in Material Handling meet our Innovations. The dedicated team of Engineers & R&D professionals follows unique process which helps us to design systems, that perfectly solves your material handling problems



### INNOVATION

Fine Handling has scored several firsts by building new and innovative features in each system and project. Our innovations are focused on building better systems by making them:

Safest | Enduring | Ergonomic

### RELIABILITY

Very high standards of reliability, the main reason why best companies in the industry choose us

- System designs with Finite Element Analysis (FEA)
- Failure Mode and Effect Analysis (FMEA) of all components and systems to ensure highest reliability

ERGONOMIC ASSIST DEVICES



Zero Gravity-Manipulators with Customized Gripper



Rail System



Zero Gravity- Air Balancers with Customized Gripper



Jib Crane



Vacuum Tube Lifter

INTEGRATED HANDLING SYSTEMS



Drum Handling

PICK & PLACE / TRANSFER DEVICES



ElbowLIFT



AccelLOADER



Gantry System



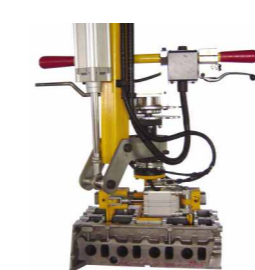
Portable Manipulator



LiftnMove



Specialized Equipment



Customized Grippers

OTHER EQUIPMENT Fold Arm | Transfer Shuttles | Conveyors | Scissor Lifts | Lifting Hoist | Ergo Seat

Manipulators

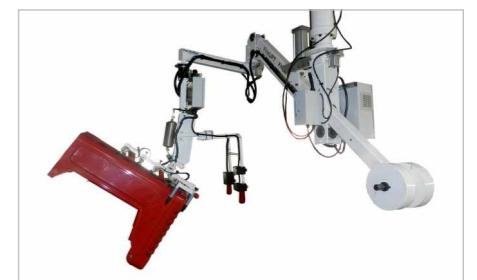
Absolutely effortless handling of material



Rail Mounted Manipulators



Column Mounted Manipulators



Overhead Manipulators



Portable Manipulators

FEATURES

- Arms to achieve maximum ergonomic reach and lift
  - Each Manipulator is designed to suit the space in which it operates
  - Easy movement of material
  - Modular Design with Ergonomic controls and switches for ease of operations
  - Thoroughly tested in site-like conditions
  - Brakes at rotary joint (fail-safe arrangement) – Brakes actuate in case of loss of air
  - Customized grippers
  - Optimally selected structural elements to ensure high strength to weight ratio
- Purely pneumatic, Electro-pneumatic with PLC controls or any other controls as per customers requirements

## ElbowLIFT

Lifting large loads with high vertical lifts in a compact head room



The ElbowLIFT is a specialized customised handling equipment designed for lifting large loads with high vertical lifts.

ElbowLIFT has two load arms and a joint similar to the human elbow, and it can lift and move components along a vertical and horizontal axis. The gripper can be customized to meet the application requirement.

### FEATURES

- Ideal for the applications where the headroom is less
- Useful in handling large size components with extreme efficiency and speed
- Can be electronically synchronized with existing material handling systems or assembly lines
- Can be integrated into a Body shop welding line or any existing line where automatic transfer is required
- Controlled acceleration and deceleration of lifting and traversing speed possible
- Servo controlled or encoder based sensing

## Air Balancers

Outstanding productivity excellent ergonomics

### ZERO GRAVITY

#### WORK WITHOUT WEIGHT

Our precision pneumatic balancing circuit for zero gravity handling systems, enables the operator to manipulate load in a state of weightlessness throughout its working area.

An Air Balancer is ideal for compact installation and quick pick & place operations. Air balancing equipment is excellent for repetitive tasks in assembly processes, repair, and production activities in many industries, including manufacturing, solar energy, automotive, railroad, aviation, health care, and food.

The FineLIFT twin-rope balancer is a perfect zero gravity balancer, which balances loads up to rated capacity as required using only air-pressure as the power source.



### FEATURES

- Loads once balanced are transferred into perfect weightless condition and can be raised or lowered with minimal efforts
- Our air-balancer uses pneumatic control technology, making it safe and cost effective while being clean and quiet
- The gripper and balancer logic can be coupled as per requirement

### OPTIONS

- Based on the specific operation, the manipulator can be equipped with
- Single stage manual balance
  - Multi stage manual balance
  - Auto sensing
  - Electro-pneumatic balance

# Grippers

Cylinder Block  
Cylinder Head  
Crankcase  
Stub Axle  
Crankshaft  
Camshaft  
Flywheel  
Rotor  
Forged Components  
Drill Bits  
Body Shop Components  
Tractor Hood  
Wheels  
Doors  
Seat  
Suspension Strut  
Windshield  
Glass  
Drums  
Cartons  
Reels  
... & many more

Gripper is the heart of every ergonomic assist device. Gripper development involves multi-disciplinary approach in order to handle specific material in a smooth, ergonomic, safe manner and without any damage.

Over the years Fine Handling has developed deep expertise in designing grippers for handling wide variety of materials. Every gripper is customized based on the design of the component and can use pneumatic, mechanical or vacuum based systems.

## FEATURES

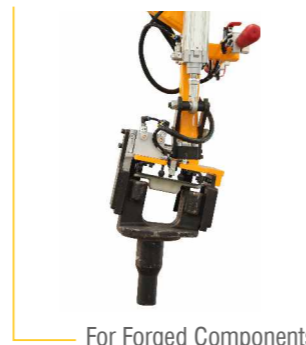
- Every gripper is simulated in CAD, extensively tried and tested before delivery
- Control logic of the gripper is designed and well coupled to ensure seamless functionality and operations
- The pneumatic/vacuum gripper (or combination of both) designed according to application
- Use of wear-pads (Nylon/PU) in the grippers to hold the component prevents component damage
- In case of specific requirement magnetic gripper or even a tackle can be used to hold the component
- Grippers can be equipped with Intelligent electro-pneumatic control/sensors to enhance the functionality.
- Grippers have an in-built part sensor to ensure safe holding of components



For Automotive Door



For Suspensions Strut



For Forged Components  
(Loading on machining centers/fixtures)



For SUV Third row Seat



For Body Shop Components



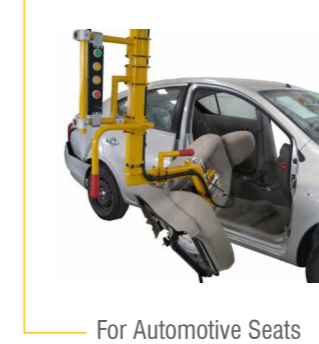
For Automotive Subframe



For Loading Components  
(on CNC Lathe)



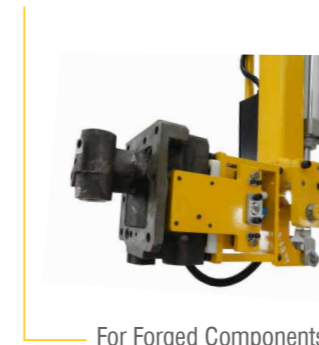
For Instrument Panel /  
Cockpit Handling



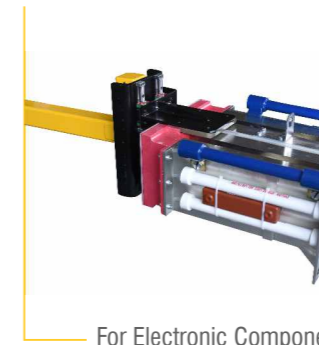
For Automotive Seats



For Aluminum Casting



For Forged Components



For Electronic Components  
of Locomotive



For Automotive Spare Wheel



For Differential Case (Cast Iron)



For Rotor Handling



For Gear Shaft

## Gantry System

Station to Station Transfer, Automated



Fine Handling & Automation specializes in the design, development and manufacture of station-to-station component handling gantry systems.

These fully automated Servo motor based family of gantries are used to transfer components from one station to the next while maintaining the takt time of the process.

### FEATURES

- Equipped with high quality servo motors
- Lateral movements perfectly guided over precision machined beams or precision extruded sections
- Integration with the fixtures possible as per customer requirement
- Customized grippers with electro pneumatic operation

## VacuumLIFTER

For safe and effective handling

VacuumLIFTER from Fine Handling is a fully customized solution for handling Sheet Metal Plates, Glass, Wood Planks etc.

VacuumLIFTER helps to achieve your specific productivity goals and is configured for highest safety standards. Modular system design ensures cost-effective upgrades or adding advanced features.

### FEATURES

- Compact, ergonomic designs
- Consistent and reliable with high load bearing capacity
- In-built safety interlocks, logic
- Remote control (optional)



## Rail Systems

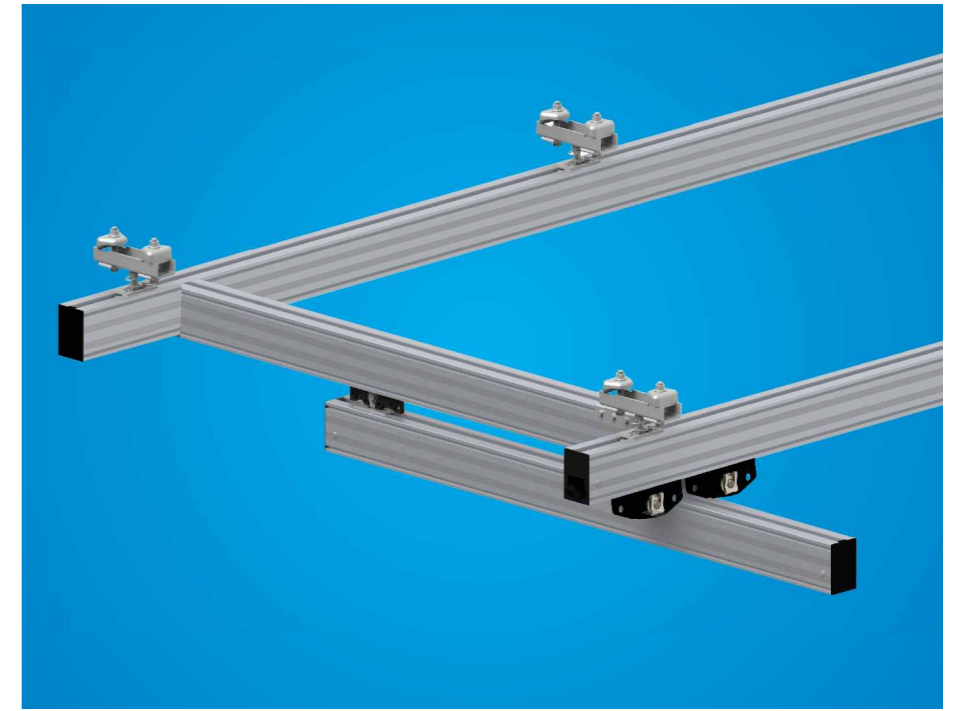
Speedy and smooth movement of your material

Our comprehensive and modular range of Rail System serves as the backbone of your handling system. Rail systems from Fine Handling are ergonomic, safe, cost effective and easy to operate.

Available in aluminum and steel options, Fine Handling's Rails are able to carry load up to 2 MT (using various rail combinations) with ease, thus reducing the human fatigue and increase efficiency.

### FEATURES

- Compact installations with various mountings on existing structure
- Easy alignment possible for smooth movement of material
- Wide range of profiles and various options for trolleys available
- Load bearing capacity of 2 MT is achievable with combination of various aluminum rails



## Vacuum Tube Lifters

Effortless material handling, rapidly and efficiently

Vacuum tube lifters are specially designed to lift all types of materials, boxes, sacks, drums, sheet metal, electronic equipment, crates and drums. The Vacuum lifters are driven by an electric vacuum pump or pneumatic vacuum pump.

### FEATURES

- Customised according to your specific needs
- Ideal for handling material up to 200 Kg.
- Suction foot customised in accordance to vacuum tube nullifying the risk of material dropping



## AcceLOADER

Easy lifting smooth movement



Manual loading/unloading of material into the trucks/containers or the docks remains one of the most inefficient tasks in intra-logistics. AcceLOADER is a unique and innovative solution to assist the worker in this task. With AcceLOADER workers can easily improve their handling capacity by up to 10 times.

AcceLOADER comes with highly energy efficient bi-directional conveyors and can be easily driven on the docks with help of hydraulic driven steering.

### FEATURES

- Significant reduction in loading/unloading time
- Multi-fold increase in box/bag/object through-put
- Almost no fatigue and injuries experienced by the workers
- Near zero wastage in handling
- Reduction in labor costs

## Specialized Material Handling Solutions

Specialized designs customised solutions

Fine Handling offers the perfect combination of world-class products and deep domain expertise in developing an unparalleled material handling solution customized for your specific requirement.

Every production activity has its unique material handling needs. At Fine Handling, we put our in-depth expertise to work and create a customized material handling solution that perfectly fits into your existing production set-up and solves its material handling challenges.

### FEATURES

- Developed according to international safety norms
- Customized according to your specific needs
- Optimum utilization of human resource



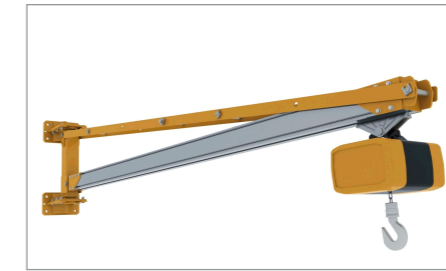
Transfer of frames from one fixtures to another in a automotive welding line

## FineLIFT JIB CRANES

Ergonomic, easy & safe lifting of material

FineLIFT Jib Cranes offer easy, ergonomic lift and transfer of repetitive loads. These small, nimble cranes are faster than motorized jibs and very affordable.

Jib Cranes are very easy to install, use, and even relocate in your work environment.



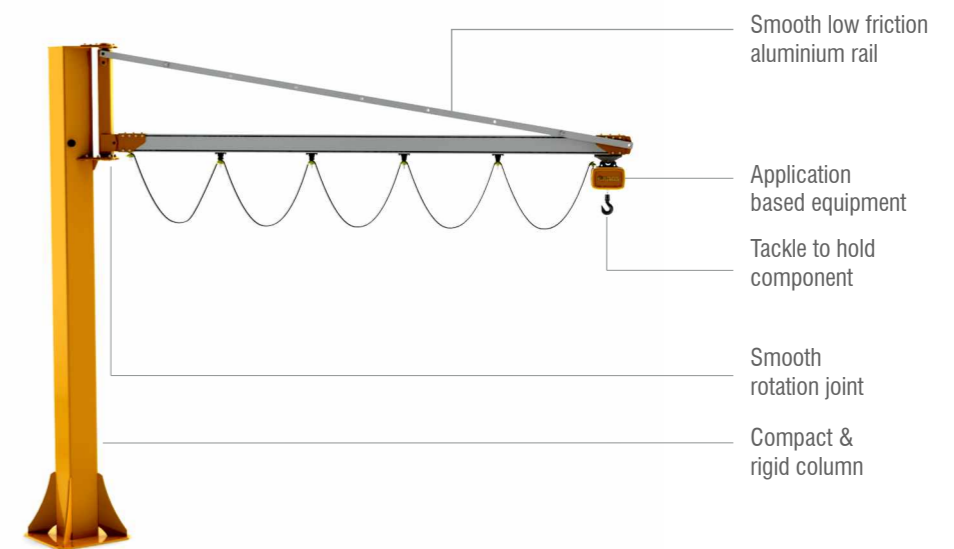
Wall Mounted



Column Mounted

### FEATURES

- **COMPACT**  
Requires practically no space in case of wall mounted or minimal space in case of column mounted Jib Cranes
- **UTILIZE EXISTING STRUCTURES**  
Can also be mounted on existing columns, beams, or any metal structures if mounting on wall is not possible
- **SMOOTH AND SPEEDY MOVEMENT**  
Can Pick and Place material in radius of 8 mts. with rotation up to 270°
- Rotation locking & sensing as per requirement



## LIFTnMOVE

The smart way to handle loads up to 100 kg.

'LIFTnMOVE' is a rechargeable light-weight material movement equipment, specifically designed to accomplish the standard load-handling directives, easing your efforts while having numerous safety features.

### FEATURES

- Superb maneuvering capacity with a lowest turning circle
- Direction locking brake on rear wheels, and a parking brake
- Motorized precision spindle allows for uniform lift and sink
- Platform can be easily customized as per application
- Standard version weight carrying capacity of 100kg & customised version for higher weights





## INNOVATIVE AUTOMATION CONCEPTS FOR YOUR CRITICAL MATERIAL HANDLING NEEDS!

At Fine Handling we empower you by step-changing efficiency of your handling and lifting processes, to meet the global benchmark. Rely on our industry leading technology, widely recognised quality and end-to-end services to achieve effortless material handling with highest efficiency.

### OUR CUSTOMERS

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ASHOK LEYLAND | ATLAS COPCO | AUDI - INDIA | BOSCH | BMW | CATERPILLER | COMAU  
CUMMINS | ESCORTS | FANUC | FIAT | FORD | GE | HONDA | JCB | JOHN DEERE  
KUKA | LUK-INDIA | MAHINDRA | MAKINO | MARUTI SUZUKI | MAZAK | MERCEDES BENZ-INDIA  
NISSAN - JAPAN | PERNORD RICCARD | RENAULT NISSAN | SWARAJ | SANDVIK | TATA  
TOYOTA | VOLVO EICHER



**Fine Handling**  
& Automation

Fine Handling & Automation Pvt. Ltd.

Gat No. 804, Pune-Bangalore Highway, Near Toll Plaza,  
Khed Shivapur, Dist. Pune - 412 205, Maharashtra, India.

Mob: +91 88888 08971 E-mail: [sales@fine-handling.com](mailto:sales@fine-handling.com)

Website: [www.fine-handling.com](http://www.fine-handling.com)

Branch Offices: Delhi | Chennai