



an initiative by Fine Handling & Automation





#### WE HAD AMAZING HANNOVER MESSE 2018.

Fine Handling marked presence at the Hannover Messe Fair in Germany. It was an important milestone as Fine Handling reaches out to the world with its range of innovative material handling solutions.

#### Read Inside

- EXPO Hannover Messe 2018
- MESSAGE Fine Handling set to explore opportunities, globally
- SUCCESS STORY India's leading Paint manufacturer improves drum handling cycle time by 4 fold using Fine Handling's Manipulator
- SPECIALIZED SOLUTION A Solution for Safe Handling of a 4 T Earth Moving Equipment Chassis
- NEW LAUNCH VacuumLIFTER

# Overwhelming response at Hannover Messe 2018









Industrial Manipulators

Customized Grippers

**Gantry Systems** 

Customized Handling Solutions

With over 100+ visitors from India and overseas, Fine Handling's Booth received great response. Showcasing some of the most advanced material transfer equipment, the Booth attracted keen interest from visiting delegates.



#### Dear Customer

In April this year, Fine Handling marked presence at the Hannover Messe Fair in Germany. It was an important milestone as Fine Handling reaches out to the world with its range of innovative material handling solutions. As of now, Fine Handling's manipulators have been exported to highly evolved markets such as Japan as well as emerging markets such as Nigeria.

As a solution provider, Fine Handling has several unique advantages. With a team of **20+ Design specialists** having deep-domain expertise in material handling solutions helps Fine Handling to design a solution that exceeds the highest global standards, and yet deliver it at one of the most competitive price.

At the Hannover Messe, the focus was to strike win-win partnerships in several markets including Nigeria, Mexico, Brazil, Turkey, Eygypt, Dubai, Saudi, Russia, Span, Italy, Germany, France and UK. As India's largest manufacturer with 1500+ installations, 500+ Customers in over 10 industry sectors, Fine Handling is well poised to expand its global footprint.

On the projects front, this edition of iPick&Place features two unique solutions to handling materials with weight of 1 T and 4 T, respectively.

At the team level, Fine Handling has added senior resources in it installation, commissioning and services department. Yet another step in committing nothing but success to the customers.

That's it for now. Let's stay tuned through the months to come.

Best Regards,

Nilesh Karandikar Managing Director

Fine Handling & Automation Pvt. Ltd.

#### **Success Story**

ndia's leading Paint manufacturer was facing a bottleneck in scaling up its production output in the most unusual place. The logistics team wasn't able to load and unload drums in and out of the truck as fast enough. The team put 4 drums on a pallet and loaded it on to the truck using a forklift. The process offered scope for improvement on several fronts. First, it required at least 3 to 4 people to load or unload drums from the truck. Postloading the Drums had to be rolled manually in the truck to optimise space and accommodate more drums.

Fine Handling's drum handling solutions are used by some of India's leading companies. However, in this case, a new concept was required to lift the 4 drums and place it appropriately in the truck.

## Manipulator to Lift 4 drums with total load of 1,000 Kg.

Fine Handling's team set out to do a detail study of the site environment. Once the distances, constraints on the site and scope for site modification was identified the team set out to develop the solution.

Designing a Manipulator to handle a load of 1,000 Kg was a challenging. Further the gripper had to adjust the to the position of the drums in order to ensure seamless lifting and transfer.

Fine Handling's team not just met client's requirement, but developed a solution that saved time, labor and ensured better loading utilisation for the drums placed in the truck. - Anupam - Solutions Expert at Fine Handling.

The solution involved a easy to operate manipulator with an extended arm to conveniently reach the inside of the truck. The gripper was designed to lift 4 drums at a time and came with positioning arms that could be adjusted on X-Y axis to locate and grip the drums at a time.

With Fine Handling's manipulator, the team at the Client's shopfloor was able to lift the drums presented on pallets with just the press of a button. The extended arm in the manipulator ensured precise placement of the drums in the truck. Further, with the Manipulator it is now possible to stack drums in two layers thereby saving space and maximising the loading.



# India's leading Paint manufacturer improves drum handling cycle time by 4 fold using Fine Handling's Manipulator

#### **Benefits**

- Significant reduction in the cycle time for loading/unloading
- Seamless and totally safe handling of drums
- Lesser labor, space required to transfer the drums from floor to truck or vice versa
- Convenient loading/unloading with manipulator coverage across the truck/floor

# A Solution for Safe Handling of a 4 T Earth Moving Equipment Chassis

One of world's largest earth moving equipment manufacturers in the world turns to Fine Handling to solve its challenge in safe handling of a 4 T Chassis.









The Chassis weighing 4 T had to be lifted and rotated by 180 deg before starting the assembly. While the client used an EOT Crane for the operations, it was consistently found to be unsafe and highly tedious task. What looked like a simple handling task, was in fact a tough challenge given the constraints on the site.

iven the size of the Chassis, its weight and shape, gripping mechanism of any sort was just not possible in this case. This creates its own challenges for safety.

Bhushan

Project Manager at Fine Handling

Fine Handling's design team replicated a detailed layout of the site conditions. The team then evaluated multiple solution options and zeroed in on a specialised mechanism using hoist and crane. The hoist operation was synchronised with the EOT Crane to rotate the 4 T Chassis in 3 steps.

Fine Handling's team ensured it used simple to operate but highly sturdy mechanism to handle the Chassis. A special remote pendant was designed to operate the system from a distance, thereby eliminating any possibility of a mishap.

Given the simplicity and safety in operations, the Operator at the Client location took an instant liking to the solution. The task of rotation was completed in almost 1/10th of the time, that was initially required by the Operator.

ne thing was very clear to us from the very beginning - the solution had to be simple and smart for it to be safe. Any complication would have just created more safety challenges. Its the kind of challenge we love - engineering + simplicity + common sense! -

#### Abhishek

Lead Designer for the project at Fine Handling

#### Benefits to the customer

- **Easy to use, smart handling solution**
- Totally safe with remote driven operation
- Near-zero maintenance
- Low investment solution with simple engineering

Safe loading of large sheet metals on the laser cutting machines

he traditional methods of handling sheet metal plates, wooden boards and glass sheets using tackle mounted over head cranes or jib cranes is highly inefficient and unsafe owing to their bulky size, higher weights and sharp edges.

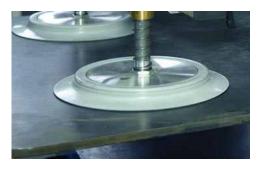
VacuumLIFTER from Fine Handling uses single to multiple vacuum pad based system to handle a variety of size, weight and shape of the components. An articulated arm provides tilting functionality, as per the requirement.



#### Safe Handling of

- Sheet Metal Plates
- Sheet Metal Parts
- Glass Sheets
- Wooden Boards

### **Challenge & Innovations**



# Safe lifting large & heavy sheet metal plates

A Vacuum based lifting equipment with chain and hoist was developed for safe lifting of the plates. Four Heavy duty Vacuum pads were used ensure part does fall off after lifting.



# Handling plates of different sizes and weights

To lift plates of different sizes, vacuum pads were provided with an adjustable lever, so that distance between the vacuum pads can be adjusted as per the requirement.



# Smooth transfer from stores to Laser cutting machine

To transfer Sheet metal plates on laser cutting machine, rail mounted chain and hoist were provided for smooth transfer. While chain and hoist ensured up and down movement, rail mounting ensured X-Y movement.

#### **Unmatched Benefits**

- Up to 99% reduction in efforts
- Up to 80% less manpower as compared to traditional methods
- Very reliable with Zero injuries
- Up to 5X faster handling





Handles Large Loads with Vertical Lifts

## **ElbowLIFT**<sup>TM</sup>







Chassis Engine Block Sheet Metal

#### **KEY FEATURES**

Ideal for lesser headroom areas
Easy Integration for automatic transfer requirements
Efficient handling of large size components



#### Fine Handling & Automation Pvt. Ltd.

Gat No. 804, Pune-Banglore Highway, Near Toll Plaza, Khed Shivapur, Dist. Pune - 412 205, Maharashtra, India. 
€ +91 88888 08971 
sales@fine-handling.com 
www.fine-handling.com

Branch Offices: Delhi I Chennai