LiftMaster

Product Presentation

- Loaded Container Handling Forklift
The FANTUZZI renowned innovative design philosophy has generated another legacy of equipments that are destined to shape the future of the container handling industry: LIFTMASTERS. They represent the renaissance of the MAST truck concept; faster, tougher, allmighty, easier to drive and operate, but still simple and reliable just as a Liftruck can be. True masterpieces of engineering and technology, they will revive the frontlift handling concept. All this thanks to a combination of solutions that only the undisputed world leader of container lifting systems could dare: the FANTUZZI Group of Companies.

Unique LIFTMasters features

- Unmatched longitudinal and lateral stability
- Sturdy machined mast profiles
- Extra-strong telescopic spreader
- Exclusive combination rollers design
- Hydraulic rear suspensions
- Rear disc Brakes
- “High speed” hydraulics
- Revolutionary hydraulic brake/oil cooling system
- State-of-the-art OPERA F cabin
- Advanced on-board computer with faults diagnostic (option)
- “Tier 2 “ QSM 11 CUMMINS ENGINE
Capacity

<table>
<thead>
<tr>
<th>Capacity</th>
<th>40 TON at 67”</th>
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<tbody>
<tr>
<td>Load Centre</td>
<td>67” + 35”</td>
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<tr>
<td></td>
<td>= 102”</td>
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<tr>
<td>Lifting Momentum</td>
<td>40T x 102”</td>
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<tr>
<td></td>
<td>= 340 TON/ft</td>
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</table>
STABILITY FACTOR

<table>
<thead>
<tr>
<th>Q₁ = 88,000 Lbs:</th>
<th>Truck Moment</th>
<th>Overtipping Moment</th>
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<tbody>
<tr>
<td>P x Y</td>
<td>Q x (X + C)</td>
<td></td>
</tr>
<tr>
<td>13,499,200 Ft Lbs</td>
<td>8,976,000 Ft Lbs</td>
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\[
\text{Stability Factor} = \frac{13,499,200}{8,976,000} = 1.50
\]

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<td>P x Y</td>
<td>Q x (X + C)</td>
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<tr>
<td>13,499,200 Ft Lbs</td>
<td>6,854,400 Ft Lbs</td>
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\[
\text{Stability Factor} = \frac{13,499,200}{6,854,400} = 1.97
\]

Longitudinal Stability with spreader and vertical mast

Rated Truck Capacity Under spreader: 88,000 Lbs
Maximum legal load: 67,200 Lbs
Load Centre: 67”
Front wheel to Spr.: 35”
Wheelbase: 236”
Rear Axle Weight (unladen with spreader): 57,200 Lbs
Visibility

• With Panoramic CAB

The unique FANTUZZI rear high mounted panoramic cab provides:
• The best front visibility both when stacking and driving
• As well as the best rear visibility
• Driver's neck strain is minimized and comfort and safety of operation is maximized.
CAD Visibility Simulation

• REAR Panoramic CAB
• REGULAR Front CAB

• FDC 500G5 9'6" high - 20'/40' Container to/from 5 ft high chassis
• FDC 500G5 Panoramic CAB 9'6" high 20'/40' Container to/from 5 ft high chassis
• FDC 500G5 Panoramic CAB 9'6" high 20'/40' Container to/from 5 ft high chassis

• CAD Visibility Simulation

• Regular Front CAB
• FDC 500G5 9'6" high - 20'/40' Container to/from 5 ft high chassis

CAD Visibility Simulation

• REAR Panoramic CAB
CAD Visibility Simulation

- REAR Panoramic CAB
- REGULAR Front CAB

- FDC 500G5 Stacking FIVE 9'6" high - 20'/40' containers
- FDC 500G5 Panoramic CAB Stacking FIVE 9'6" high - 20'/40' containers
• REGULAR Front CAB

• FDC 500G5 Panoramic CAB Stacking FIVE 9'6" high - 20'/40' containers
• REAR Panoramic CAB

• FDC 500G5 Stacking FIVE 9'6" high - 20'/40' containers

CAD Visibility Simulation
CAD Visibility Simulation

- REAR Panoramic CAB
- REGULAR Front CAB

• FDC 500G5 9'6" high - 40' Length container to/from ground
• FDC 500G5 9'6" high - 20' Length container to/from ground
FDC 500G5 9'6" high - 40' Length container to/from ground

CAD Visibility Simulation

• REAR Panoramic CAB
CAD Visibility Simulation

• Regular Front CAB

• FDC 500G5 9'6" high - 20' Length container to/from ground
• Hydraulic Movements

OUTREACH
± 5”

PILE SLOPE

Hydraulic ± 3°
Mechanic ± 2°

Telescopic Spreader

SIDESHIFT
± 12”

SLEW
± 5°
Rear axle brakes apply deceleration behind the unit’s center of gravity providing a pulling effect to eliminate the tip over tension caused by front brakes.

CG = Centre of Gravity
• **Simplicity**

- Minimized wiring.
- All components are plug-connected and easily replaceable.
- Fully enclosed IP 55 standard complying system.
- All wires are colour and number coded for easy tracking.
- Faulty relays and fuses are signaled by LEDs or back-lit lights for easy fault diagnostic.

• **Electric System**

• **Faults diagnostics**
The rear suspensions greatly enhance the truck side stability area and so for greatly increase the truck lateral stability. Moreover, by always keeping the truck body planar irrespective of ground conditions, they sensibly reduce lateral shocks on chassi and mast, and notably improve driver’s comfort.
• Extra Large Hydraulic Tank

• Simple Powerful Reliable Gear Pumps

• Hydraulic oil and brake cooling system

• Oversized components and low working pressure
• To activate functions the Joystick must be securely held

DEAD MAN HANDLE (non trigger type)

BOOM FUNCTIONS
- LOWERING
- TILTING BACKWARD
- TILTING FORWARD
- LIFTING

SPREADER FUNCTIONS
- 1
- 2
- 3
- 4

TWIST LOCKS
- UNLOCKING
- LOCKING

PILE SLOPE
Eases routine maintenance as the mast can be greased from ground level.
• Clark 36000

• Transmission

  Last generation
  Fully automatic
• **CUMMINS QSM 11 “Tier 2” COMPLIANT**

• **Engine 330 BHP**
• All machines supplied by FANTUZZI today are fitted with Wet Disc Brakes as standard.

• Wet Disc Brakes put an end to time-consuming and expensive repair. Exhaustive tests show that these brakes give full braking effort without any fading even when working under extreme conditions.

• Brakes are an essential component in machines used for transport and load handling. When the new asbestos-free brake lining materials were put into service, problems also arose concerning the brakes fitted on machines used for really tough handling operations. This was also the reason why FANTUZZI started to use Wet Disc Brakes.

• Because the system is entirely free from any wear, no brake adjustment is required and there is only a minimum need for service and maintenance. It is easy to understand what this implies: lower maintenance costs and extra productivity. Your truck can be used when other trucks fitted with more conventional types of braking system are taken out of service for brake repair and service.

• A unique feature of the FANTUZZI Wet Disc Brakes System is the complete separation of brake oil system from main hydraulic oil system (separate circuit, circulation pump, tank and cooling system). This avoids contamination of hydraulic oil from brake oil (longer life of main hydraulic system components) and very limited quantity of brake oil to change (lower maintenance cost).
• Steering Axle

• Oscillating Heavy Duty Structure

• Double Acting Single Steering Cylinder & Dry Disc Brakes on Rear Wheels
- Heavy Duty Design
- Oscillating Concept
- Mono-bar Structure
- Single Cylinder Equalizer Architecture
- ACKERMANN Steering Geometry
- Fully Greasable in every joint
- King Size Knuckles
- Disc Brakes (option)
By simply selecting the automatic function, the FDC 500G5 Cab will automatically tilt back when lifting at least four high.

The cab will automatically return to the original position when spreader is lower than four high.

The Results:
• Outstanding Visibility
• Outstanding Improvement in Operator Comfort.
# Driver’s Controls and Onboard Safety System

<table>
<thead>
<tr>
<th>Standard Cabin Type</th>
<th>Standard Electronic Safety System</th>
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<tbody>
<tr>
<td><img src="image1.png" alt="Opera Logo" /></td>
<td><img src="image2.png" alt="Logicontrol Logo" /></td>
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**Opera**

**Symphony**

**Logicontrol**
• FANTUZZI FDC500G5 features the deluxe, comfortable and futuristic OPERA CABIN. Developed over two years of intensive studies and in-field testing.

The Cabin

This cab is a major step towards machine productivity achieved through enhancement of human factor abilities.
The FANTUZZI FORMULA 1 Contstacker range comes standard with LOGICONTROL, an onboard computer monitoring the functions of the most important machine components, and greatly enhancing operator safety and ease of operation. LOGICONTROL means:

- Real time comprehensive Information
  - For lifting operations and working conditions of key components
- Capillary Faults Diagnostics
  - For easy, fast and effective trouble shooting
- Increased Safety
  - Covering and safeguarding the operator and the integrity of the truck structure and components.
- Astounding Ease of Operations
  - Achieved through innovative and simple operator aid functions.
- NO Impact on Machine Reliability
  - Logicontrol is additional and works in parallel with a conventional electric system.
Designed up to the extreme detail
New, powerful, CAD-layouted (regenerative) hydraulic system
New extra-smooth steering system

- Oversized steer cylinder
- Extralarge steel casted knuckle and king pin assembly
- Hydraulic suspension
Extra-strong super reliable electric system (faults self-detective)

- Minimized wiring
- All (54) electric supply wires individually fused
- Back lighting fault signalling individual fuse/relay light/LED
- Transparent system box cover for immediate fault individuation
- Service orientable light in electric compartment
- Waterproof/weatherproof system/wiring sealing
Colour/number coded electrics and wiring system
Steel pipes are used instead of rubber hoses in the whole axle assembly especially at wheel hubs where mud, dirt, ice, grease, stones and other wearing and tearing elements can impact.
Twin priority steer system valves enable smooth finger tip action on steering wheel both at low and high engine reving and irrespective of truck speed
Brake oil system has an independent circuit with an independent tank easily reachable (and eventually removvable) dipstick is provided to allow handy check of oil level.
All weather proof multipin plugs of electric cables connecting to the mast spreader are hosted on the back external side of the mast to avoid obstruction of front visibility. Plugs cables are made disappear in the chassi to straightly reach main electric box.
Servo valves rack is of latest generation modularly made of pipe coupler and easily removable valve block. Valves are all of the same size and fully interchangeable. They can all be rated at on/off or proportional opening mode.

Benefits:
- Standardization of componentry
- Ease of maintenance
- Highest reliability
Battery are hosted in a separate compartment fully protected from penetration of dirt and dust and are safely secured at top and bottom.
Aircon blower+radiator assembly is incorporated in truck body sides away from cab, not obstructing operational visibility, in a protected position easy reachable and fended by a steel net that protects the radiator and avoid accidental contact with blower fans.
Eye sight level indicator of hydraulic oil (and similarly for fuel) are hosted in an appropriate recess which ensures its protection against crashing. It also contains thermometer for a simple easy check of hydraulic oil temperature.
The whole electric system is colour referenced also for main cable terminals and plugs, to easily and safely perform components assembly/replacement.
Engine compartment opening is assisted by heavy duty “gas-springs” which ensure easy and effortless handling of the heavy thick steel covers. The high quality rubber sealing system isolates noise, vibration and keeps water out.
Hydraulic oil tank breathing is a multistage system with expansion bottle and replaceable mushroom filter on top. High efficiency and easy maintenance are guaranteed.