

**MST**



**CIVIL AND CONSTRUCTION**  
**MOBILE STRADDLE TRANSPORTER**



**CIMOLAI Technology® spa**  
Special Equipment

# MST

## MOBILE STRADDLE TRANSPORTER

Available as:

### A. DOUBLE-GIRDER VERSION

with two beams on which the lifting trolleys (2 - one per beam; or 4 - two per beam) move; a wide range of spreaders (for beams, segments or other concrete elements) can be applied

### B. SINGLE-GIRDER VERSION

with a single girder on which one or both trolleys move. This system is also suitable to be used in tandem to transport beam elements

### EXTENDED WIRE ROPE LIFE

Longer service life and duration of the wire ropes thanks to:

- increased number of load-bearing sections and optimized wire rope diameters;
- constant clockwise/counter-clockwise spooling;
- grooved winch drums with maximum 2 winding layers

### LAYOUT

Customized machine's dimensions and features to meet the customer's requirements

### OIL FILTRATION SYSTEM

Hydraulic circuit for lifting and travelling: 10 micron

Oil tank recirculation: 5 micron

### PAINTING

High-performance anti-corrosion coating for long-term protection

### PIPES AND FITTINGS

Galvanized steel pipes with additional high-performance anti-corrosion coating. Fittings with high performance zinc-nickel long-term treatment against corrosion

### PULLEYS

Pulleys in high-resistance material with 2 rows of cylindrical roller bearings for extended duration, light weight and corrosion resistance

### REMOTE CONTROL

Lightweight and ergonomic wireless remote control with colour display for machine diagnosis and lifted load visualization

### OPERATOR INTERFACE

User-friendly touchscreen display in a rugged IP65/IP66 enclosure, placed on the power unit for onsite machine setting and diagnosis

### EMERGENCY CONTROLS

Wired emergency control

Manual hydraulic distributors on the power unit

### STANDARD STEERING SYSTEM

Achieved via hydraulic cylinders on 2 or on 4-wheel groups following the Ackermann principle

### LIFTING TROLLEYS

Trolleys moving along the top beam(s) to displace the max load

### STRUCTURE

100% manufactured in CIMOLAI's workshops in Italy, steel plates exclusively from primary European Companies. The structure is designed as per the latest FEM and UNI EN standards and is made of box girders with inner stiffening elements, optimizing the structural resistance

### BOLTED FLANGE

Structures prearrangement for easy future width and height modification



### HYDROSTATIC WINCH DRIVE

The hydrostatic drive-powered 2-speed winches are controlled via hydraulic distributors with LSS - Load Sensing System for extremely precise synchronization and extended service life (lower oxidation) of the hydraulic oil

### RUBBER TIRES

Suitable for heavy-duty work conditions. Air inflated, water or foam filled

### POWER UNIT

Sound-proofed power unit with large inspection lids for easy access and maintenance

### HYDROSTATIC WHEEL DRIVE

The hydrostatic 2-speed drive ensures stepless speed control for highly sensitive and smooth operations. Engine rpm is reduced, resulting in optimised fuel consumption. Each wheel is independently driven, improving the manoeuvrability and reducing wear and tear of each tyre

## OPTIONAL

### COMMAND POST

Different solutions available:

- Command cabin(s): possibility of controlled-temperature heating or air-conditioning systems
- Open cockpit

### ELECTRIC DRIVE

Full electric drive machine with zero emission and guaranteed power

### ELECTRONIC STEERING SYSTEM ON ALL WHEELS

Achieved via heavy duty slew drives equipped with hardened worm-gears and powered by hydraulic motors. Automatically controlled by a PLC, the system allows 6 different steering configurations, including the PATENTED concentric 360° steering

### EQUALIZING SYSTEM FOR UNEVEN TERRAIN

Pivot trunnion to cope with antithetic slopes or uneven surfaces allowing the machine to work always in isostatic conditions

### HYDRAULICALLY ADJUSTABLE HEIGHT

Telescopic legs to vary the machine's height (with load suspended) and then fit into shed doors and provide alternative / additional lifting stroke

### HYDRAULICALLY ADJUSTABLE TRACK

Telescopic transversal beam to vary the machine's track (with load suspended) and then fit to different dock spans, to enter shed doors and to optimize parking space

### LED LIGHTS

Work lights for low light conditions available upon request

### MAINTENANCE ACCESS

Stairs, walkways and ladders for easy access during maintenance operations

### REMOTE ASSISTANCE AND DIAGNOSIS

In-house developed software and GSM or Wi-Fi connection to supervise the machine status in real time from our after-sales office and promptly assist the customer's operators on site

### LIFTING SPREADERS

Wide range of spreaders for a better picking of the concrete elements. Long, fixed and telescopic spreaders for beams. Compact, mechanical or hydraulic spreaders for segments. Customized spreaders as per the customer needs

### WEIGHING SYSTEM

With dedicated load cells to display the total weight as well as the weight lifted by each lifting line

### IN-LINE WHEELS

Wheel group transversal dimension reduction by means of wheels' alignment

### STAINLESS STEEL PIPES AND FITTINGS

ASTM 316L stainless steel pipes with zinc-nickel treated fittings



Capacity: **230 t**  
SPAIN



Capacity: **160 t** - THAILAND



Capacity: **160 t** - QATAR - Single girder version



TELESCOPIC

Capacity: **220 t**/each  
PHILIPPINES  
Hydraulically  
adjustable height

N.2 units single girder version  
suitable to be used in tandem



Special hydraulic  
clamps for concrete  
segments



Capacity: **150 t** - AUSTRALIA



Capacity: **190 t**  
UAE





Capacity: **140 t** - VENEZUELA



Capacity: **135 t/each** - MEXICO  
N.2 units also suitable to be used in tandem



Capacity: **130 t/each** - SPAIN



Capacity: **130 t/each** - USA - N.2 units also suitable to be used in tandem



Capacity: **120 t/each**  
MALAYSIA



Capacity: **120 t**  
ITALY - Hydraulic  
telescopic spreader





Capacity: **100 t**/each - USA

N.2 units suitable to work in tandem



Capacity: **100 t**/each - CANADA - N.2 units suitable to work at -40°C

Capacity: **100 t**/each  
SPAIN  
N.2 units suitable to be used in tandem



Capacity: **100 t**  
UAE



Capacity: **100 t** - SPAIN



Capacity: **80 t** - ITALY





Capacity: **80 t** - QATAR - Single girder version



Capacity: **40 t/each**  
HUNGARY  
N.2 units single girder version  
suitable to be used in tandem

Capacity: **65 t**  
SPAIN



Capacity: **30 t/each**  
ALGERIA  
N.2 units single girder version  
suitable to be used in tandem



Capacity: **50 t**  
FRANCE



Capacity: **30 t/each** - GERMANY  
N.2 units single girder version  
suitable to be used in tandem



## CERTIFICATIONS



**CIMOLAI Technology® spa**  
Special Equipment



**ESNA-SOA**  
Società Organismo di Attestazione S.p.A.



Lloyd's  
Register



**Cimolai Technology SpA** headquarters span a **total area of 53,000 m<sup>2</sup> - 22,000 m<sup>2</sup>** of which are fully covered and used as fabrication area and offices.

The company can count on all services required by a dynamic and constantly growing firm and is based in Carmignano di Brenta (Province of Padua), Italy.



**Armando Cimolai**  
Centro Servizi s.r.l.

The steelworks for Cimolai Technology SpA are fabricated by **Armando Cimolai Centro Servizi**, a factory in San Quirino (PN) – Italy **that occupies an overall area of 180,000 m<sup>2</sup>**, of which 60,000 are fully covered.



[www.cimolaitechnology.com](http://www.cimolaitechnology.com)  
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