

WHY CIFA



Formworks



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CIFA**

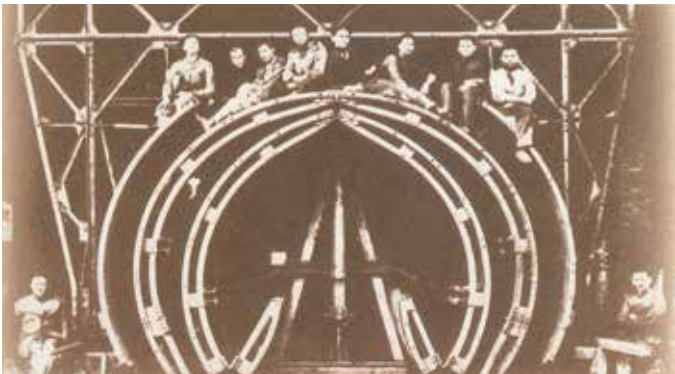
THE BEST SOLUTION FOR EVERY JOBSITE



“CIFA Formworks is one of the leading world players in the Tunneling Equipment Industry and has always promoted new technologies close to customer’s needs, representing the traditional partner all over the World.

Passion, honesty, strong financial resources along with consolidated know-how are the bases that make CIFA Formworks success and Customers satisfaction.

Supported by over 85 years of worldwide experience and by the ability to provide expert advices, CIFA Formworks offers the Underground industry unparalleled project solutions, becoming customer’s best partner.



LEASING



Available in **Italy, Russia, China, South Africa, Australia, USA and Germany**

MADE IN ITALY



CIFA Formworks are 100% made in Italy.
All the components are European brand

TRAINING FOR OPERATORS





MAIN TUNNELS

MAIN INFRASTRUCTURAL TUNNELS

Traditional tunnel forms with anchorage system and self-reacting formwork, to allow higher concrete rising speeds and displacement control under casting. New concepts and modern techniques to facilitate the work, providing interesting and cost-saving solutions as well. This equipment is integrated with solutions which respond to the most advanced technology of concreting systems.





MAIN TUNNELS WITH VENTILATION SLABS

Main forms for the crown casting and special steel forms for the horizontal slab casting in second step. All type of forms with traveller for the casting of the dividing walls.





Telescopic and multi-section formwork for continuous “slipforming” or step by step concreting pours. Self-launching forms to operate in all slopes conditions. Fully mechanized movements integrated with automatic concreting system.



FULL-ROUND LINING



CROSS PASSAGE AND SERVICE TUNNEL



Special formwork for small sections with elements for intersection casting with the main formwork. Niches and steel forms for box culverts with different sections. The easiest and the most modern solution for movement and transport.





LARGE SECTION

LAY-BAY TUNNEL AND CAVERNS

Steel forms for widening and large-size caverns to be moved by special advanced traveller on rails or tyred traveller.



STEEL MOULDS FOR TUNNEL SEGMENTS

FIXED MOULDS

CIFA segment moulds have a strong base structure (tunnel intrados) with high gloss finish surface for smooth finished segments. The side plates are fully machined on computer controlled milling machines and centering, opening and closing systems, allow close tolerances required for modern linings with gasket grooves. Equipment can include dismantling and tilting devices, air or electric vibrators and steam curing stations.





MOULD CAROUSEL SYSTEM

The steel moulds are mounted on travellers moving on production lines with operation stations determined by the enclosed, heated, curing zones on each line. The travellers move forward at approximately 10 minute intervals and stations cover re-bar placing, positioning inserts, casting and vibration, surface finishing, curing, strip-out and cleaning. The process can be integrated with a concrete batching plant, re-bar cage preparation area and segment finishing area where inspection, dressing, gasketing and marking take place.



SPECIAL-PURPOSE EQUIPMENT

CIFA will collaborate with the clients' engineers to design a wide range of machines to mechanize site processes.

These include:

- . Re-bar carries
- . Membrane gantries for waterproofing
- . Gantries for steel lining or steel ribs
- . Self-propelled track laying vehicles for railway work
- . Curing and profiling carriers
- . Bolting and injection gantries
- . Special shotcrete equipment for TBM



SPECIAL PURPOSE EQUIPMENT

UNDERGROUND CONCRETE MACHINERY



SHOTCRETE MACHINE CSSE
 Boom 3 sections, max vertical reach 17 m
 Theoretical output 5÷30 m³/h, pressure on concrete 65 bar
 Dosing output 1÷21 l/min
 Installed power kW@rpm 50@3600



SHOTCRETE MACHINE CSS-3 EVO
 Boom 3 sections, max working height 16 m
 Concrete output 5-30 m³/h
 Dosing output 50-1250 l/h
 Shotcreting in Diesel and electric power

Drive cabin closed type ROPS-FOPS
 Frame 4WD . 4WS
 Power 72 kW / 90 kW
 Max speed 25 Km/h



SHOTCRETE MACHINE CSS-3 CRAWLER
 Boom 3 sections, max working height 16 m
 Concrete output 3-25 m³/h
 Dosing output 50-950 l/h
 Shotcreting in electric power

Crawler frame
 Power 55 kW
 Max speed 4 Km/h



SHOTCRETE MACHINE CST 8.20
 Boom 2 sections, max working height 10 m
 Concrete output 3-20 m³/h
 Dosing output 50-1250 l/h
 Shotcreting in electric power

Drive cabin closed type ROPS-FOPS
 Articulated frame 4WD
 Power 55 kW / 72 kW
 Max speed 20 Km/h



SHOTCRETE MANUAL MACHINE PCS209
 Concrete output 0-20 m³/h
 Dosing output 50-550 l/h
 PCS209 D Shotcreting in Diesel power
 PCS209 E Shotcreting in electric power



PORTABLE PUMPS
 Big range of concrete portable pumps
 Concrete output from 30 to 140 m³/h
 Available with electric or Diesel motor



MINING MIXER COGUARO 4
 Nominal capacity 4 m³
 Drive cabin closed type ROPS-FOPS
 Frame 4WD . 4WS
 Power 122 kW
 Max speed 20 km/h



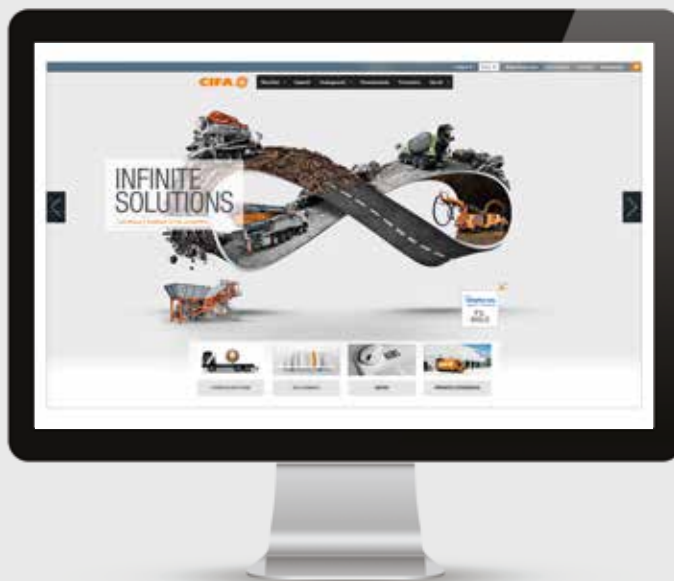
MC 50 WHEELS - MC 55 WHEELS
 Horizontal mixer on roll-off frame,
 designed for standard articulated trucks



CPC506 E
 Train concrete pump
 Output 50 m³/h, 60 bar
 Electric operating 55kW 400V 50Hz / 400V 60Hz
 Available with different gauge railway



MC 40 - 60 - 80 - 100 EI
 The train mixer dedicated to transport the concrete on railways
 Electric operating 400V 50 Hz / 440 V 60 Hz
 Available capacity 4 m³ - 6 m³ - 8 m³ - 10 m³ capacity with different gauge railways



Discover more at www.cifa.com

Distributor



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