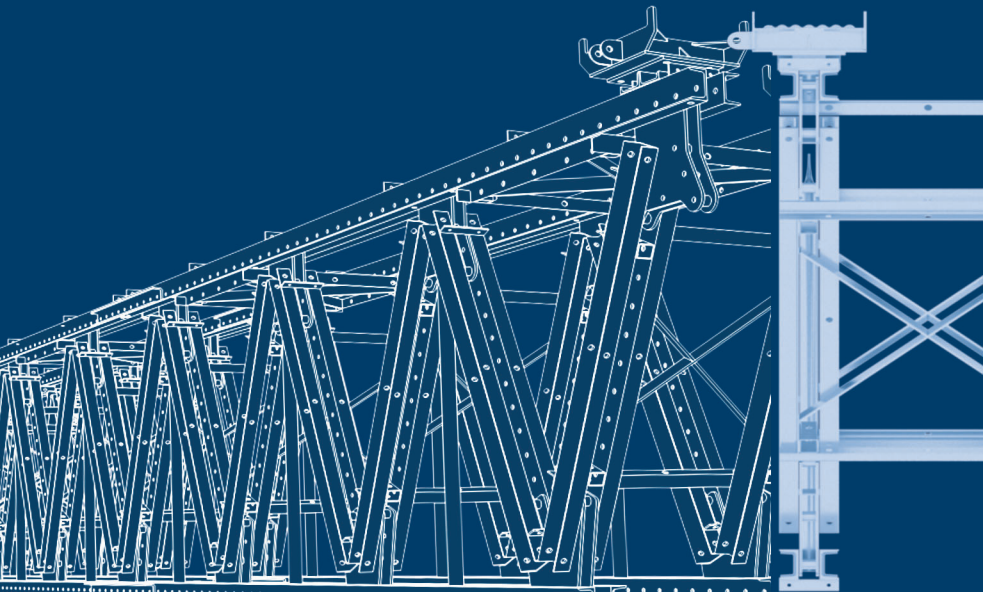
WORCA FORMWORK

PROVIDING SOLUTIONS, IMPROVING CONSTRUCTION

PRODUCT Portfolio



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01 BRIDGES

BRIDGE TABLE-FORM

HEAVY DUTY · COST EFFECTIVE · COMPATIBLE · HIGHLY WORKABLE · MOVABLE · SPECIAL PARTS

TABLE ADJUSTMENT · TIME SAVER · LOADING TABLE · TABLE LOWERING

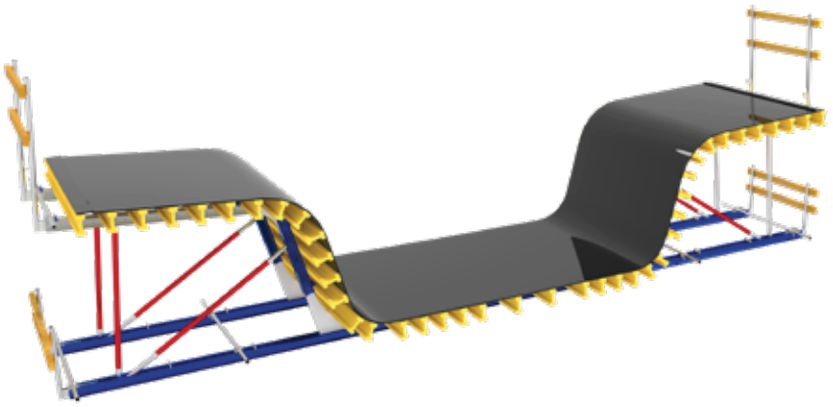
WORCA BRIDGE TABLE-FORM is one of the most ideal systems that suits different bridge sections and loads. All elements and accessories are assembled only once at the beginning of the jobsite, then freely moved from one location to another by means of a tower crane, forklift or truck.

APPLICATIONS

- Bridge decks of both uniform & variable sections [Depth and Width].
- Underpasses and flyovers.
- Viaducts.

TECHNICAL DATA

- **Table standard width:** 2.5 & 3m [Can be tailored according to bridge design].
- **Standard shoring:** Shore-brace frames & WORCA Z-frames.
- **Alternative shoring types:** Ringlock and soldier HD towers.



MAIN COMPONENTS

Supplied by **WORCA**

1- H20 timber beam / WORCA beam
2- Main soldier
3- Adjustable push-pull
4- Safety handrail
5- Upper curved splice
6- Lower curved splice
7- Bracing tubes
8- WORCA board [upon request]

SPECIAL FEATURES

Lowering device

For table lowering after concrete maturity

Transportation wheel-jack unit

For shoring towers movement & reallocation

Adjustable pivot splice

For side shutter adjustment [Retraction & Rotation] - in case of variable depth bridges

Tailored curved splice

For curved soffit - web & top slab - web connections

SITE REQUIREMENTS

Supplied by Contractor

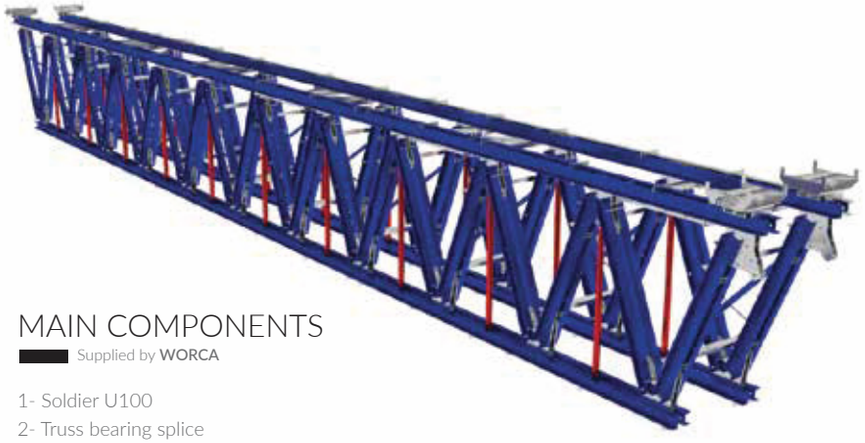
PLASTIC TUBES · TIMBER BEAMS · CRANE · NAILS · SKILLED CARPENTER · PLYWOOD

HEAVY DUTY TRUSS

WORCA HEAVY-DUTY TRUSS SYSTEM is a gantry system that is specifically designed to transfer loads across large spans. It is made of standard WORCA elements, this gives it the advantage of being able to be used in a variety of projects and applications, as the standard elements can be easily adapted to different requirements.

APPLICATIONS

- Gantries [Constructing a bridge over existing one / road / underpass / tunnel].
- Cast in-situ bridges.
- Pre-cast bridges.
- Pedestrian bridges.
- Load transfer beams [Long cantilevers, culverts and obstacles avoidance].
- Horizontal struts.



MAIN COMPONENTS

Supplied by **WORCA**

1- Soldier U100
2- Truss bearing splice
3- Truss upper splice
4- Truss lower splice
5- Bracing unit
6- Adjustable push - pulls
7- Skidding unit

TECHNICAL DATA

- Span: Up to 50 m.
- Dimension: Various load capacities can be obtained by different lengths of horizontal & diagonal soldiers.

SPECIAL FEATURES

Skidding unit

For truss longitudinal movement

Bracing unit

For truss bracing

Truss bearing splice

For moment release [simulating hinged support]

SITE REQUIREMENTS

Supplied by Contractor

TUNNEL FORM

HEAVY DUTY | SPECIAL DESIGN | TIME SAVER | HIGHLY WORKABLE | MOVABLE | PRE-ASSEMBLED

WORCA TUNNEL FORM SYSTEM is designed for the construction of cut and cover tunnels, whereas the shoring towers, soffit form and inner/outer tunnel forms are combined together. Different shoring systems could be used according to the project requirements, this gives the system high versatility and load bearing capacity, while ensuring fast progressive pouring cycles , easy and safe shuttering, striking and movement processes during all phases of construction.

APPLICATIONS

- Cut & Cover Tunnels
- Underpasses
- Service Tunnels under various facilities

MAIN COMPONENTS

Supplied by **WORCA**

1- Decking panels for walls & slabs
2- Shoring system
3- Hanging, lowering & retracting system (manual or hydraulic)
4- Moving / transportation accessories (manual or hydraulic)

FEATURES

- Walls & slabs are concreted in one cast.
- Tunnel thickness up to 1.5m, and height up to 15m.
- Full safety & full access (including platforms, ladders, handrails, etc.) is granted.
- Adequate spaces for movement of trucks or other equipment inside the tunnel during work can be granted upon request.
- Curves, inclinations and geometry variations can be solved by special designs.
- Manual or hydraulic lowering & retracting mechanisms.
- Manual or hydraulic transportation mechanism can be applied upon request.
- Rails can be used to overcome rough grounds.
- Steel reusable corners & fillers are used to avoid damaging the traditional timber corners & fillers at each stage during striking.

COMPATIBILITY

- H20 / S12 WORCA Beam girders for decking, with straight or curved soldiers. Tech-Form or Eco-Form panels can be used as well in certain cases.
/ Ringlock / Cuplock / Shorebrace Frames / Heavy Duty Shoring Towers can be used for shoring. Special steel frames or HD Trusses can be used for special shapes as well.

SITE REQUIREMENTS

Supplied by Contractor

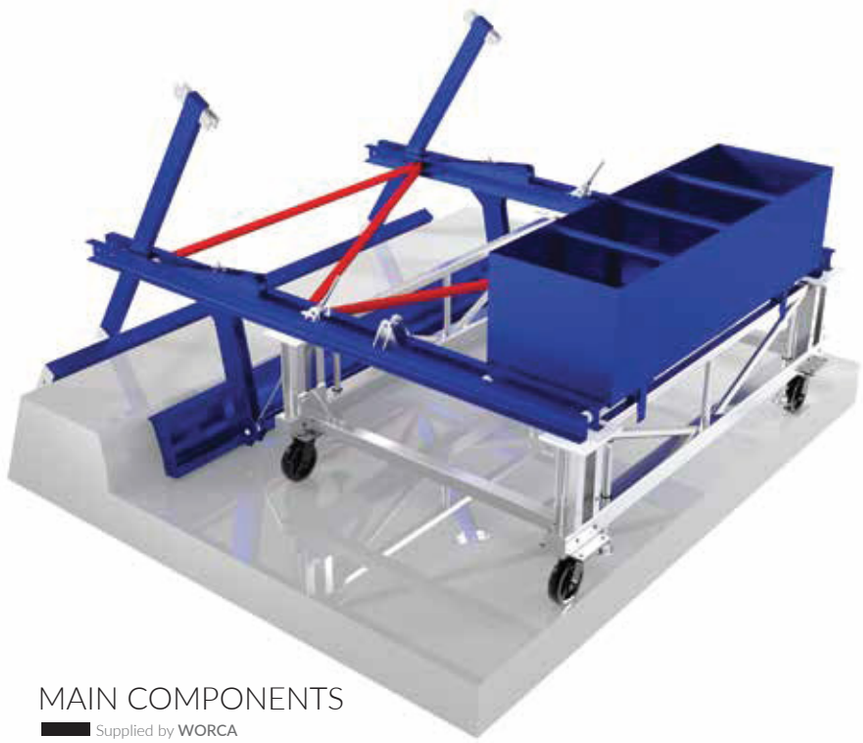
PLASTIC TUBES | TIMBER BEAMS | NAILS | SKILLED CARPENTER | PLYWOOD

PARAPET FORMWORK CARRIAGE

MOVABLE

SPECIAL DESIGN

WORCA PARAPET Formwork CARRIAGE is flexible formwork carriage which is mostly used for the construction of bridges safety parapets.



MAIN COMPONENTS

Supplied by **WORCA**

1- Big steel panels
2- Hanging frames (Truss)
3- Bracing tubes
4- Moving equipment

TECHNICAL DATA

- Standard carriage unit length is 6.00 m each.

FEATURES

- High resistance to wind and lateral loads.
- Movable system allows smooth movement and levelling of the formwork set assembly.

APPLICATIONS

- Parapets

SITE REQUIREMENTS

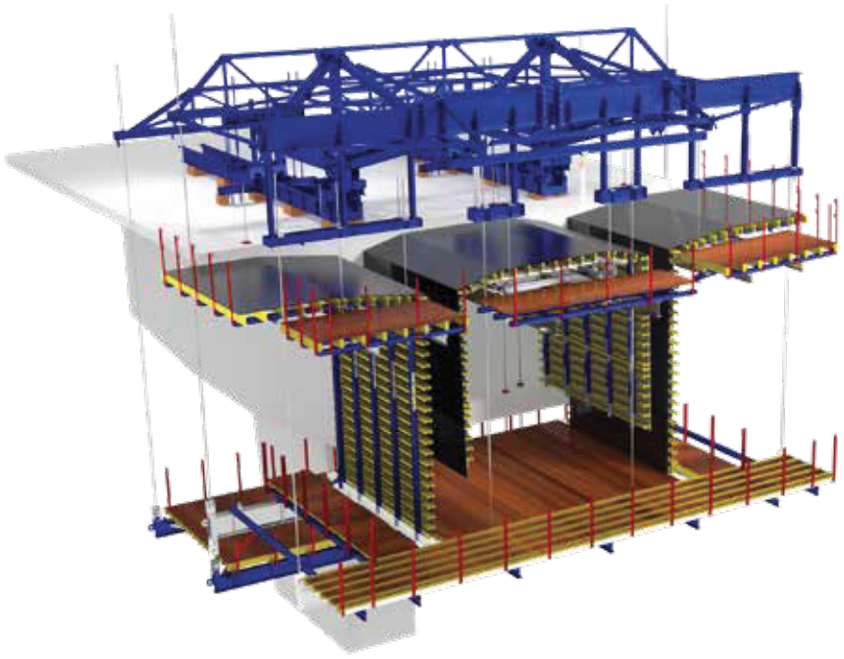
Supplied by Contractor

CONCRETE BLOCKS

BALANCED NEW CANTILEVER CARRIAGE

SPECIAL DESIGN | TIME SAVER | HIGHLY WORKABLE | MOVABLE | HYDRAULIC

THE WORCA BALANCED CANTILEVER CARRIAGE SYSTEM is a construction method for bridges when there are constrains to install shoring systems under the bridge deck. The completion of the bridge deck is done sequentially joining the segments to form a span by balancing them left and right from each pier, then moving the system automatically using hydraulic mechanism to the next position.



MAIN COMPONENTS

Supplied by **WORCA**

1- Upper Structure
2- Rear Truss
3- Finishing Truss
4- Front Beam
5- Bottom Slab Assembly

FEATURES

- The system is typically modular, making it easy to assemble and disassemble.
- Equipped with integrated hydraulic mechanism for easy and fast operation.
- Compatible with other formwork and scaffolding systems, providing a complete solution for bridge construction.
- Improves the quality of the finished structure by providing a stable platform for concrete casting and curing.

ADVANTAGES

- Minimized construction cycle reduces overall construction time.
- Can be used to construct a wide variety of bridge types and geometries.
- Cost reduction by eliminating the need for shoring.
- Minimal disruption to traffic and navigation below.
- Adaptable to a variety of site conditions, including congested areas and areas with difficult access.
- Very efficient, as it requires minimal labor and equipment.

SITE REQUIREMENTS

Supplied by Contractor

TIMBER BEAMS | SKILLED LABORS | CRANE | NAILS | PLYWOOD

02 CLIMBING

CRANE CLIMBING (WCCS 240 & WCCS 160)

TIME SAVER COMPATIBLE SPECIAL DESIGN DURABLE

WORCA CRANE CLIMBING is an ideal climbing system for high rise buildings construction, lift-shafts, stairwells, perimeter façade walls and large section piers in bridge construction. In addition, the WCCS is used as a suitable platform for formwork operation as well as the concrete curing process.

APPLICATIONS

- Lift shafts, cores & stairwells.
- Perimeter or facade walls.
- Silos, Tanks (elevated), chimneys & shafts of elevated tanks.
- Large section piers in bridges.
- Pylons.

MAIN COMPONENTS

Supplied by **WORCA**

1- WCC brackets & accessories
2- Finishing platform
3- Strong-back & carriage
4- Anchorage system
5- Bracing (tubes)
6- H20 girders / WORCA beam S12
7- Upper scaffolding (for Rft. works)

FEATURES

- Formwork panel & platform can be lifted as one unit to accelerate the work, reduce labor & crane costs and save working area.
- ACCS 240 is retractable which permits 60cm to allow cleaning of formwork Rft. works and fixation of anchor.
- WCCS 160 is fixed with adapter unit to be able to tilt the shutter to move it to the next stage.
- Highly resistant to wind load.
- Suitable for straight and curved walls.
- Has 3 access levels.
- Lower access platform C/W access ladder.
- Provide adequate workspace and access.
- Compatible with H20 and soldiers system, Tech Form, Eco Form, Big Steel Panels or other formwork systems as well.

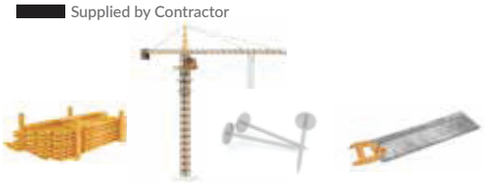
COMPATIBILITY

- H20 & soldier system
- WORCA beam S12 & soldier
- Tech-form panels
- Eco-form panels
- Big steel panels

Platform			WCC 240
			Working
Working	Wall side	P1	5.0 kN/m²
	Carriage side	P2	3.0 kN/m²
Pouring		P3	1.5 kN/m²
Finishing 1		P4	1.5 kN/m²
Finishing 2		P5	1.5 kN/m²

SITE REQUIREMENTS

Supplied by Contractor



TIMBER BEAMS CRANE NAILS SKILLED CARPENTER

(WOSB 190) ONE-SIDED CLIMBING BRACKETS 190

TIME SAVER | COMPATIBLE | LIMITED ITEMS | HIGHLY WORKABLE

WORCA ONE-SIDED CLIMBING BRACKETS is an ideal system, where there are one-sided walls with significant heights that can't be casted in one shot. It is also used for mass concrete structures where it isn't normally in feasible to place tie-rods through to the Opposite formwork. WOSB 190 system ensures the fresh concrete pressure is transferred safely and reliably to the previous concrete cast.

MAIN COMPONENTS

Supplied by **WORCA**

1- WOSB 190 brackets & accessories
2- Finishing platform
3- Strong back
4- HD spindle
5- Anchorage system
6- Bracing tubes
7- H20 / WORCA beam S12 decking girders
8- Connectors with wall panels

FEATURES

- Formwork panel & platform are lifted as one unit to accelerate the work and reduce labor and crane cost, and save working area by not lifting down the formwork.
- Formwork is tiltable to allow cleaning of formwork & fixation of anchors.
- Provides adequate workspace & access.
- Suitable for straight and curved walls. Also for forward & backward-inclined walls.
- Has a finishing platform to allow treating of concrete and removing of anchors.
- Allows one-sided casts with height up to 3.4m.

APPLICATIONS

- One-sided walls with significant heights
- Mass concrete structures (Dams, barrages, ...etc.)
- Underground structures (Metro stations, treatment plants, ...etc.)
- Lining of existing high rise buildings (Silos, elevated tanks, ...etc.)

SITE REQUIREMENTS

Supplied by Contractor

TIMBER BEAMS | CRANE | NAILS | SKILLED CARPENTER

WORCA SELF CLIMBTRAC

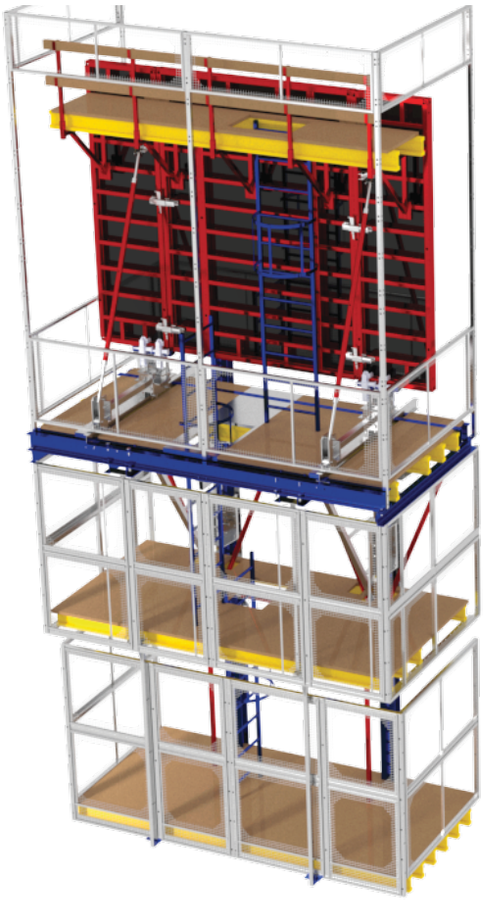
TIME SAVER | COMPATIBLE | PRE ASSEMLED | HIGHLY WORKABLE | MULTI PURPOSE

HIGH STRENGTH | HYDRAULIC

WORCA CLIMBTRAC SYSTEM is a hydraulic vertical track based system. It enables the entire core/wall formwork to be elevated to the next pour height/floor level in one unit without the need of a crane. Work decks are built into the system to allow safe and efficient working access to the core /wall formwork.

APPLICATIONS

- Multiple casts walls in high-rise buildings.
- Main core walls in skyscrapers.
- Large section piers in bridges.
- Pylons.
- External perimeter walls.



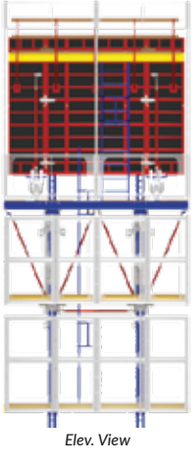
MAIN COMPONENTS

Supplied by **WORCA**

1- Walls formwork
2- Main platform
3- Working platform (-1)
4- Working platform (-2)
5- Tilting and tying items.
6- Protection screen
7- Hydraulic mechanism

TECHNICAL DATA

- Inclined structures: up to 15°.
- Allows platforms to be lifted together with wall forms, whilst remaining captive on the concrete structure during climbing operations.
- Flexible system with a carriage separated from the triangular frame allowing to reduce the number frames and cast difficult geometries.
- Platforms are up to 12m length with the ability to carry multiple panels [with separate multiple carriages].
- Tailor-made solutions can be provided for shafts & narrow areas.
- Cones & removal tools are made of chrome.



Elev. View

SPECIAL FEATURES

- Retraction mechanism overcomes backlash.
- Retracting carriage is separated from the A-Frame.
- The system is fully braced in order to improve system rigidity.
- Protection screen provides high-level of safety & wind resistance.

SITE REQUIREMENTS

Supplied by Contractor

TIMBER BEAMS

NAILS

SKILLED CARPENTER

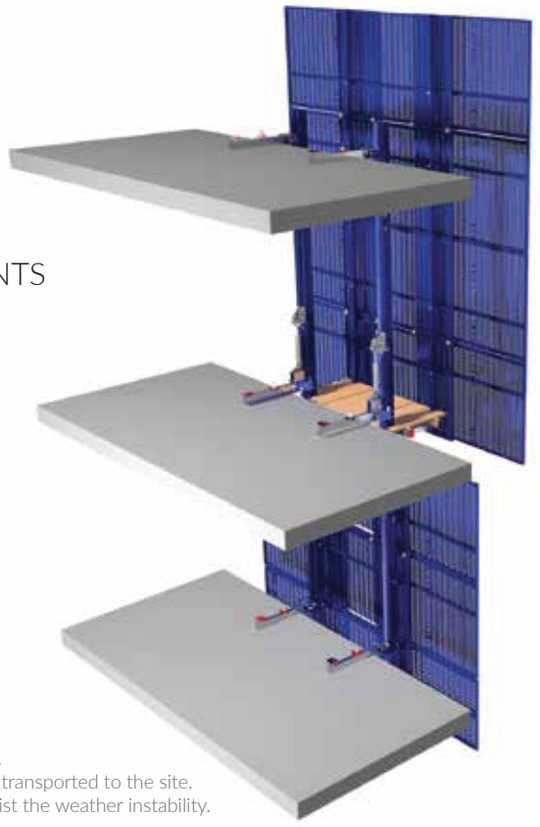
PROTECTION SCREEN [WPS]

DURABLE HYDRAULIC HIGHLY WORKABLE INCLINATION

WORCA PROTECTION SCREEN is one of the most flexible systems used in multistorey buildings construction to protect workers and pedestrians from falling objects and harsh weather conditions during construction. The protection screen system consists of corrugated screen sheets that ensure safety across three working levels.

APPLICATIONS

- Protection screens c/w. working platforms [around multi-storey buildings].



MAIN COMPONENTS

Supplied by **WORCA**

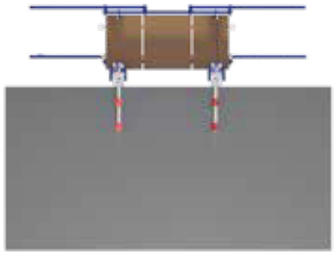
1- Modular screen
2- Upper platform bracket
3- Rail
4- Hydraulic piston
5- Needle shoe
6- Lower platform bracket

TECHNICAL DATA

- Inclined structures: up to 15°.
- Easy to assemble off-site and transported to the site.
- The system is designed to resist the weather instability.
- Floor height: up to 5m.
- Compatible with crane and hydraulic jacking system.
- Upper & lower platforms [1m width] allow adequate working space during post-tensioning work.

SPECIAL FEATURES

- No lost items
- Telescopic modular screen allows adjustable widths
- Light-weight perforated sheets for the screen
- Can be crane or hydraulic lifted



SITE REQUIREMENTS

Supplied by Contractor

TIMBER BEAMS CRANE ANCHOR BOLTS

TELESCOPIC & REGULAR SHAFT PLATFORMS

TIME SAVER | COMPATIBLE | LIMITED ITEMS | HIGHLY WORKABLE

INNER SHAFT PLATFORMS provide support for formwork inside shafts, cores, stairwells and other similar applications. It also provides adequate and safe workspace at all heights. This system makes sure the loads are transferred safely and reliably to the previous concrete cast. WORCA inner shaft platforms provide quick and easy repositioning in just one crane cycle, which makes it a cost-saving system.

APPLICATIONS

- Lift shafts – cores – stairwells in buildings.
- High-rise tanks, chimneys, etc.

SPECIAL FEATURES

- Possible to lift all formwork panels with the platform as one unit
- Availability of telescopic sizes to allow unlimited uses with various projects
- Special shapes of shafts can be covered with customized tailor-made solutions

MAIN COMPONENTS

Supplied by **WORCA**

1- Telescopic (or Regular) Platform Beams & Accessories
2- Horizontal Push-Pull Props working as struts
3- Boxout & fixation bolts
4- H20 timber beams or WORCA beam S12 girders
5- Suspended Platform (if required)

TECHNICAL DATA

- Allows spans of platform beams up to 5.70m, and can cover a projected area of shaft up to 30 sqm.
- Four main types of telescopic platform beams, with variable (telescopic) length to allow unlimited uses for various projects and any shaft plan.
- Can carry any formwork height, mostly up to 6.0m.
- Allowable load per support (pivot hanging shoe) is 2.5 tons.
- It is possible to lift the formwork panels with the shaft platform as one unit to accelerate the work and reduce labor and crane cost, and save working area by not lifting down the formwork. This is done by adding strong-backs connected to the panels.
- In case of adding strong-backs, the formwork is retractable to allow cleaning of formwork
- Horizontal Push-Pull props are used for adjusting the verticality of panels, and for retraction of panels in case of using strong-backs. It can also be used as an inner concreting platform by supporting timber planks above.
- Suitable for regular shape shafts (rectangular), but can also be fabricated as special frames to work with irregular or circular shaft shapes.
- Has the possibility of adding a suspended platform, to allow finishing of concrete.

SITE REQUIREMENTS

Supplied by Contractor

TIMBER BEAMS | CRANE | LADDER | PLYWOOD

SAFETY NET

TIME SAVER COMPATIBLE LIMITED ITEMS HIGHLY WORKABLE

WORCA SAFETY NETS are used at high-rise building construction sites for preventing accidental fall of objects in the site. Safety nets are the safest and the most cost-effective fall prevention system. They are flexible plastic nets made from HDPE or High-density polyethylene raw materials.

APPLICATIONS

- High-rise buildings

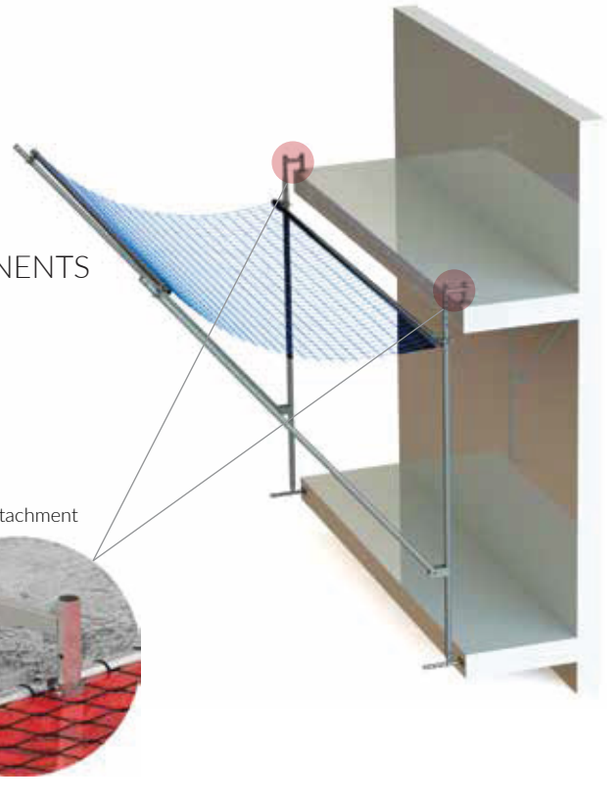
ADVANTAGES

- The one unit can cover a good area of 12.8 m2, the standard dimensions of one unit are 4.00m x 3.20m.
- The system is suitable for any case of surrounding protection, it can be attached to the soffit or the top of the slab or either vertically to the marginal concrete or brick walls.

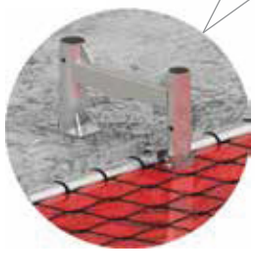
MAIN COMPONENTS

Supplied by **WORCA**

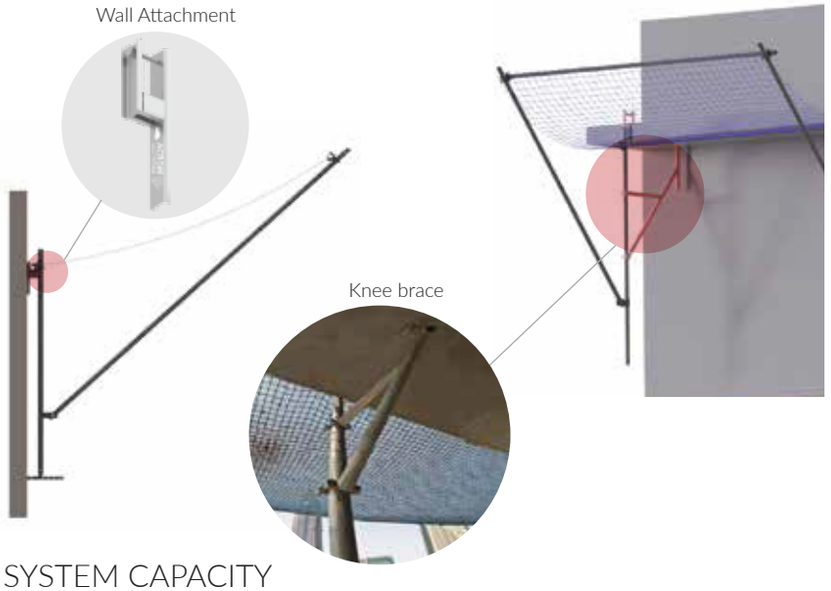
1- Slab attachment
2- Wall attachment
3- Knee Brace
4- Flexi attachment
5- Scaffold attachment



Slab Attachment



Wall Attachment



Knee brace

SYSTEM CAPACITY

- The Safety Net can hold an object weighing 100kg falling from a distance of up to 7 meters.

SITE REQUIREMENTS

Supplied by Contractor

ANCHOR BOLTS

03 COLUMNS

ECO-FORM PANELS

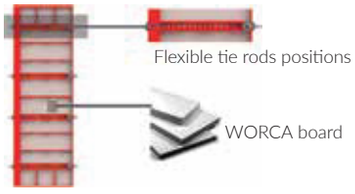
TIME SAVER | COMPATIBLE | MEDIUM DUTY | MAN HANDLE | SIMPLE ASSEMBLY | SUPERIOR CONCRETE FINISH

WORCA ECO-FORM is a medium duty panel system, it is one of the most preferable formwork systems for columns and walls when fast and high repetition pouring cycle is essential. Eco form panels also can be man-handled according to site conditions.
The all-new Eco Multi Panels can work as column or wall. This gives the panel great advantage over the regular panel in many situations. Also, the presented design keeps the advantage of using the panel along with any regular panel using same accessories.

APPLICATIONS

- Foundation.
- Columns.
- Beams side.
- Pile caps.

SPECIAL FEATURES



MAIN COMPONENTS

Supplied by WORCA

1- Panels C/W. WORCA board
2- Connecting Parts (Couplers & compensation walers)
3- Tie rods
4- Tilting items
5- Access brackets

Height [m]

Width [m]	0.60	1.20	1.80	2.40	3.00
0.30	● ▲	● ▲	● ▲	● ▲	● ▲
0.45	● ▲	● ▲	● ▲	● ▲	● ▲
0.60	● ▲ ■	● ▲ ■	● ▲	● ▲	● ▲ ■
0.75	● ▲ ■	● ▲ ■	● ▲	● ▲	● ▲ ■
0.90	● ▲ ■	● ▲ ■	● ▲	● ▲	● ▲ ■
1.05	● ▲	● ▲	● ▲	● ▲	● ▲

■ *COLUMN PANELS* ● *WALL PANELS* ▲ *MULTI PANELS*

TECHNICAL DATA

- **Permissible fresh concrete pressure:** 60 kN/m²
- **Clamp range:** Coupler, conti-lock [Filler 0 - 100 mm] & Compensation waler [Filler 100 - 300 mm].
- **Assembly:** With crane assistance or man handling. Panels are aligned, connected together ensuring tight and flush connections using Eco couplers & Conti-lock.
- **Concrete finishing:** Fair-faced concrete quality finishing is obtained by using premium WORCA board.
- **Painting:** Superb powder coating allows easy and fast cleaning.

SITE REQUIREMENTS

Supplied by Contractor

TIMBER BEAMS | ANCHOR BOLTS | PLASTIC TUBES | LADDER

TECH-FORM PANELS

TIME SAVER · COMPATIBLE · HEAVY DUTY · SIMPLE ASSEMBLY · SUPERIOR CONCRETE FINISH

WORCA TECH-FORM PANELS is considered a heavy duty panels system. It is one of the fastest panel systems, thanks to the easy assembly process, with high engineered steel profiles and superb powder coating the system can endure high concrete pressure, provides high protection level and longer life.

MAIN COMPONENTS

Supplied by WORCA

1- Panels C/W. WORCA board
2- Connecting Parts (Couplers) & Compensation walers
3- Tilting Items.
4- Access brackets
5- Tie Rods

TECHNICAL DATA

- **Permissible fresh concrete pressure:** 100 kN/m²
- **Panel range :** Height [600, 1200, 3300 mm], width [600, 900, 1200 mm].
- **Assembly:** With crane assistance, panels are adjusted and aligned, connected together tight using Tech-form conti-lock which allows timber filler compensation up to 10 cm.
- **Concrete finishing:** Fair-faced concrete finishing is obtained by using premium WORCA board.
- **Painting:** Superb powder coating allows easy and fast cleaning.

APPLICATIONS

- Columns.
- Bridge piers.

SITE REQUIREMENTS

Supplied by Contractor

TIMBER BEAMS · ANCHOR BOLTS · PLASTIC TUBES · LADDER · CRANE

H20 & SOLDIER

SPECIAL DESIGN | MULTI PURPOSE | COST EFFECTIVE | HIGHLY WORKABLE | PRE ASSEMBLED

WORCA H20 & SOLDIER SYSTEM is one of the most flexible and versatile systems in WORCA. It is a multi-purpose system, where it can be used in different applications. Elements are easily and quickly assembled by connecting H2O timber girders to the soldiers using H2O connections, then fixing plywood sheets to the H20 girders. Elements dismantling is done as easily as system erection. For columns formwork, the high permissible fresh concrete pressure makes it easy to pour any column height in one shot. This system is not only suitable for rectangular columns, but for circular columns and other more complicated columns shapes as well.

MAIN COMPONENTS

Supplied by WORCA

1- H20 Timber Beams
2- Soldiers
3- Connecting Parts
4- Tilting items
5- Access brackets
6- Tie rods

TECHNICAL DATA

- Concrete pressure: depending on the required rate of pour, panel's configuration can be adjusted by changing the arrangement between the timber beams and the soldiers to meet the requirements.
- Panel range: panels can be assembled with the required height and width depending on structure geometry. (panel size up to 50m2)
- Assembly: Pre-assembly is required and should be carried out by skilled carpenter based on WORCA drawings and instructions.
- Concrete finishing: Fair-faced concrete finishing can be obtained by using premium WORCA board (upon request).

APPLICATIONS

- Foundation.
- Columns.
- Pile caps.

SITE REQUIREMENTS

Supplied by Contractor

TIMBER BEAMS | ANCHOR BOLTS | PLASTIC TUBES | LADDER | CRANE

V.M.C SYSTEM

TIME SAVER | MULTI PURPOSE | COST EFFECTIVE | HIGHLY WORKABLE | SIMPLE ASSEMBLY | LIMITED ITEMS | MAN HANDLE

WORCA V.M.C SYSTEM is a light-duty panels system. It is a man-handling column system which has proved to be suitable when there are no available cranes. The column cross-section flexibility (in 5 cm increment) makes it easier for re-adjustment without the need for reassembly. VMC panels can also be used for regular shape foundations, small walls and other applications.

APPLICATIONS

- Foundations
- Columns
- Small walls

MAIN COMPONENTS

Supplied by WORCA

1- Panels C/W. WORCA board
2- Connecting parts, (bolts)
3- Concreting platform
4- Tilting items
5- Tie rods
6- Tubes for alignment

TECHNICAL DATA

- **Concrete pressure:** Maximum permissible fresh concrete pressure 70 kN/m^2 .
- **Size:** Column cross sections varies from 10 x 10 cm to 70 x 70 cm; with 5 cm increments, bigger sections are solved with connecting two panels together.
- **Panel Range:** Height (500, 1000 , 3000 mm), width (400, 600, 800 mm).

FEATURES

- **Assembly:** With man handling, panels are adjusted and aligned, connected together using captive connecting tie bolts and wing nuts.
- **Panel** can be horizontally aligned using scaffolding tubes.
- **Concrete finishing:** Fair-faced concrete finishing is obtained by using Worca boards.

SITE REQUIREMENTS

Supplied by Contractor

TIMBER BEAMS | ANCHOR BOLTS | PLASTIC TUBE | LADDER

CURVED STEEL PANEL

TIME SAVER | HEAVY DUTY | COST EFFECTIVE | SIMPLE ASSEMBLY | LIMITED ITEMS | SUPERIOR CONCRETE FINISH

WORCA CURVED STEEL PANELS is specially designed for circular columns. The system is composed of two halves of circular metal panels that form a circular mould when connected together by WORCA bolts & nuts.

APPLICATIONS

- Circular Columns.
- Bridge Piers.
- Circular stop-ends in walls & piers

MAIN COMPONENTS

Supplied by WORCA

1- Steel half circular panel
2- Safety access platform
3- Bolts & nuts
4- Adjustable push-pull
5- Safety ladder with cage [upon request]
6- Double base plate

TECHNICAL DATA

- **Permissible fresh Concrete pressure:** Up to 100 KN/m2 [pour height up to 6 m - one shot].
- **Size:** For any column diameter & height [up to 15.00 m].
- **Panel range:** Standard heights [500, 1000, 3000 mm], diameters [300 to 2000 mm] with 50 mm increments, special sizes could be produced upon request.
- **Sheeting:** Steel sheeting [3- 4 mm] according to column diameter.

SPECIAL FEATURES

All-around safety access

Supports thermal insulation

Supports external vibrator

SITE REQUIREMENTS

Supplied by Contractor

TIMBER BEAMS

ANCHOR BOLTS

PLASTIC TUBE

LADDER

04 WALLS

ECO-FORM PANELS

TIME SAVER | COMPATIBLE | MEDIUM DUTY | MAN HANDLE | SIMPLE ASSEMBLY | SUPERIOR CONCRETE FINISH

WORCA ECO-FORM is a medium duty panel system, it is one of the most preferable formwork systems for columns and walls when fast and high repetition pouring cycle is essential. Eco form panels also can be man-handled or crane-handled according to site conditions.
ECO Multi-Panel takes the good of both, it can work as column or wall. This gives the panel great advantage over the regular panel in many situations. Also, the presented design keeps the advantage of using the panel along with any regular panel using same accessories.

APPLICATIONS

- Pile caps.
- Walls.
- Foundations
- Culverts.
- Beams sides
- Cores, tanks.

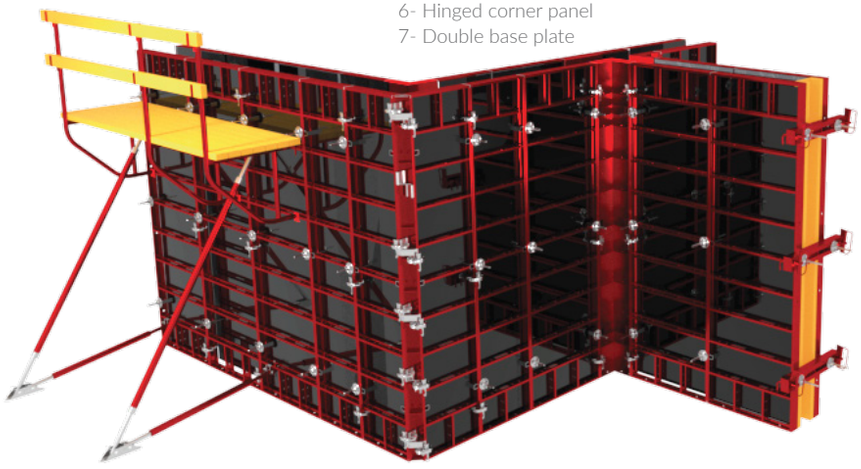
TECHNICAL DATA

Permissible fresh concrete pressure: 45 kN/m² for walls .
Clamp range: Coupler, conti-lock [Filler 0 - 100 mm] & **Compensation waler** [Filler 100 - 300 mm].
Assembly: With crane assistance or man handling. Panels are aligned, connected together ensuring tight and flush connections using Eco couplers / Conti-lock.
Concrete finishing: Fair-faced concrete finishing is obtained by using premium WORCA board
Painting: Superb powder coating allows easy and fast cleaning.
Corner: Fixed [90] / hinged [55°- 180°].

MAIN COMPONENTS

Supplied by WORCA

1- ECO-Form panel c/w WORCA board
2- Safety access brackets
3- Eco crane hook
4- Adjustable push-pull
5- Eco form coupler
6- Hinged corner panel
7- Double base plate



Height

Width	0.60	1.20	1.80	2.40	3.00
0.30	● ▲	● ▲	● ▲	● ▲	● ▲
0.45	● ▲	● ▲	● ▲	● ▲	● ▲
0.60	● ▲ ■	● ▲ ■	● ▲	● ▲	● ▲ ■
0.75	● ▲ ■	● ▲ ■	● ▲	● ▲	● ▲ ■
0.90	● ▲ ■	● ▲ ■	● ▲	● ▲	● ▲ ■
1.05	● ▲	● ▲	● ▲	● ▲	● ▲

■ *COLUMN PANELS* ● *WALL PANELS* ▲ *MULTI PANELS*

SPECIAL FEATURES

Clamp Range


Eco Couple [No filler]


Conti-Lock [Filler 0 - 100 mm]


Compensation waler [Filler 100 - 300 mm]

T- Assembly

Plastic chamfer

Hinged corner panel

Variable corner angles [55°- 180°]

SITE REQUIREMENTS

Supplied by Contractor


TIMBER BEAMS


ANCHOR BOLTS


PLASTIC TUBES


LADDER

TECH-FORM PANELS

TIME SAVER | COMPATIBLE | HEAVY DUTY | SIMPLE ASSEMBLY | SUPERIOR CONCRETE FINISH | DURABLE

TECH-FORM is a heavy duty panels system, it's considered to be one of the fastest panels system thanks to the easy assembly process, with high engineered steel profiles and superb powder coating the system can endure high concrete pressure, provides high protection level and longer life.

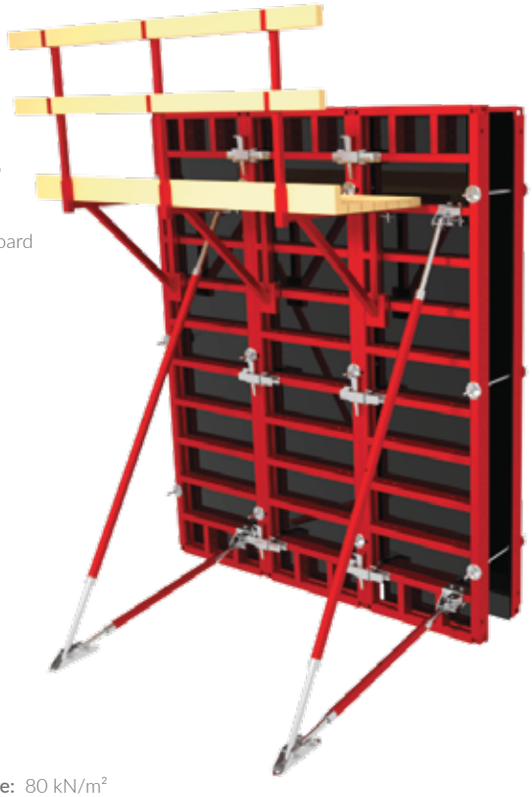
APPLICATIONS

- Walls.
- Abutments.
- Retaining walls.
- One-sided walls.
- Cores & Tanks.
- High-rise walls.
- Used with crane & self-climbing systems.

MAIN COMPONENTS

Supplied by WORCA

1- Tech-Form panel c/w WORCA board
2- Eco-form couplers
3- Conti-Lock
4- Safety access brackets
5- Adjustable push-pull
6- Tie rod, nut & washer
7- Double base plate



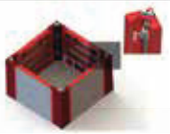
TECHNICAL DATA

- **Permissible fresh concrete pressure:** 80 kN/m²
- **Panel range [walls]:** Height [600, 900, 1200, 2400, 3300 mm], width [300, 600, 900, 1200 mm] & panel size 3300 X 2400 mm.
- **Assembly:** With crane assistance, panels are adjusted and aligned, connected together tight using Tech-form conti-lock which allows timber filler compensation up to 10 cm.
- **Concrete finishing:** Fair-faced concrete finishing can be obtained by using premium WORCA board.

SPECIAL FEATURES

Stripping corner

Allows 7 cm formwork retracting before lifting



Clamp range

Conti-Lock

Compensation waler
[Filler100-300 mm]

SITE REQUIREMENTS

Supplied by Contractor

TIMBER BEAMS

ANCHOR BOLTS

PLASTIC TUBES

LADDER

CRANE

H20 & SOLDIER

SPECIAL DESIGN | MULTI PURPOSE | COST EFFECTIVE | HIGHLY WORKABLE | PRE ASSEMBLED

WORCA H2O & SOLDIER SYSTEM is one of the most flexible and versatile systems in WORCA. It is a multi-purpose system, where it can be used in different applications. Elements are easily and quickly assembled by connecting H2O timber girders to the soldiers using H2O connections, then fixing plywood sheets to the H20 girders. Elements dismantling is done as easily as system erection. This system proved to be one of the most economical alternatives compared with steel frame formwork panel system when it comes to complicated designs and numerous non-typical applications. One of its main advantages is its reusability. After being used with special projects, it can still be used with standard applications afterwards.

APPLICATIONS

- Walls
- Abutments
- Retaining walls
- Architectural design
- Used with crane climbing & self climbing
- Piers
- Foundations
- One-sided walls
- Curved structures
- Infrastructures (culverts, tunnels, ... etc.)

MAIN COMPONENTS

Supplied by WORCA

1- H20 timber beams
2- Soldiers
3- Connecting Parts
4- Tilting items
5- Access brackets
6- Tie rods

TECHNICAL DATA

- **Concrete pressure:** depending on the required rate of pour, panel's configuration can be adjusted by changing the arrangement between the timber beams and the soldiers to meet the requirements.
- **Panel range:** panels can be assembled with the required height and width depending on structure geometry.
- **Assembly:** Pre-assembly is required and should be carried out by skilled foreman based on WORCA drawings and instructions.
- **Concrete finishing:** fair-faced concrete finishing can be obtained by using WORCA-Boards [Upon Request].

SITE REQUIREMENTS

Supplied by Contractor

TIMBER BEAMS | ANCHOR BOLTS | PLASTIC TUBES | LADDER | CRANE

NAILS | SKILLED CARPENTER | PLYWOOD

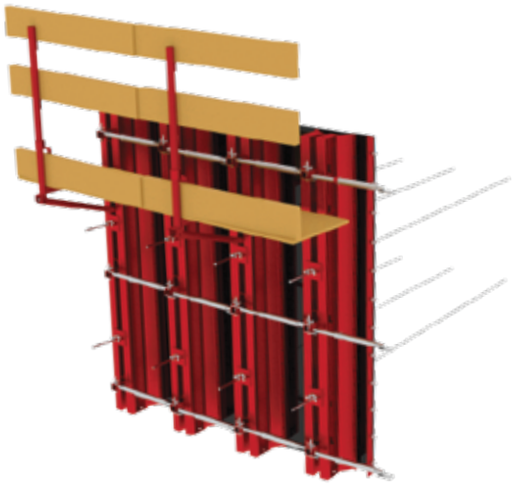
VARI FORM

WORCA VARI-FORM SYSTEM is your best solution for curved and rounded walls, it could be easily adjusted by turn-buckles to allow formation of complex curves and shapes.

MAIN COMPONENTS

Supplied by WORCA

1- Trough Section
2- Open Web Soldiers
3- Turn Buckles
4- Connecting Parts & Tying Items.
5- Access Brackets
6- Edge angles
7- Tilting Items



TECHNICAL DATA

- **Concrete pressure:** Maximum permissible fresh concrete pressure 60 kN/m².
- **Size:** Circular structures with diameters (> 3.50 m) & pour height up to 6.00 m.
- **Panel range:** A wide range of panels for all circumferences and heights. Height up to 6 m, width up to 2.50 m, with turnbuckles for adjusting the diameter every 1.8 m, panels can be used horizontally for closed circle or as a part of a curve.
- **Assembly:** Pre-assembly is required and should be carried out by skilled carpenter based on WORCA drawings and instructions.
- **Concrete finishing:** Fair-faced concrete quality finishing can be obtained by using WORCA-Board [Upon Request].

APPLICATIONS

-Circular tanks
- Large diameter columns
- Curved walls
- Silos
- Conical structures

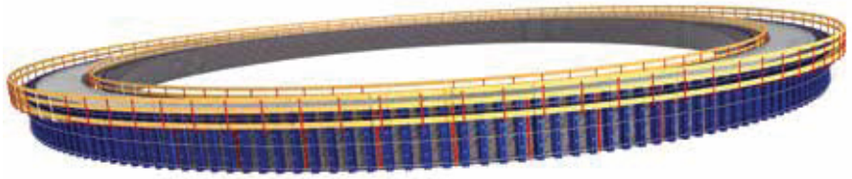
SITE REQUIREMENTS

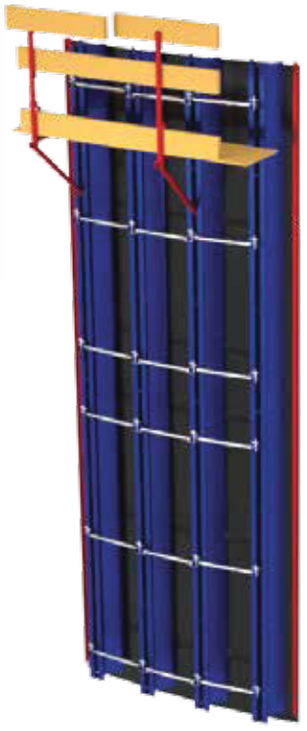
Supplied by Contractor

VARI FORM ADVANCE NEW

CURVED STRUCTURE | HIGHLY WORKABLE | PRE ASSEMBLED | SIMPLE ASSEMBLY

VARI FORM ADVANCE is a panel wall system used for curved and rounded walls. It is designed for curves with minimum diameter of 3m. It's easily adjusted by Turn Buckles to allow the formation of complex curves and shapes. Only three levels of Turn Buckles are used for 3.30m wall height. It has proven to be a very flexible curved wall formwork system. The vari form advance is optimized to have enhanced engineered design with improved characteristic.





MAIN COMPONENTS

Supplied by WORCA

1- New Trough Section
2- Edge Angle
3- Turn Buckles
4- Access Bracket [for Vertical Soldier]
5- Tilting Items

TECHNICAL DATA

- Needs only two Turn Buckles for 3.6m height.

Item	Main soldier	Splice
A (cm2)	23.3	11.52 (single)
Wt/m	20.7 (approx.)	4.98 (single)
Mr (m.t.)	1.90	1.14
Q all (ton	5.69	6.216

APPLICATIONS

- Circular tanks
- Large diameter columns
- Curved walls
- Silos
- Conical structure

SITE REQUIREMENTS

Supplied by Contractor


TIMBER BEAMS


ANCHOR BOLTS


PLASTIC TUBES


LADDER


CRANE


NAILS


SKILLED CARPENTER


PLYWOOD

VARI FORM FLEX NEW

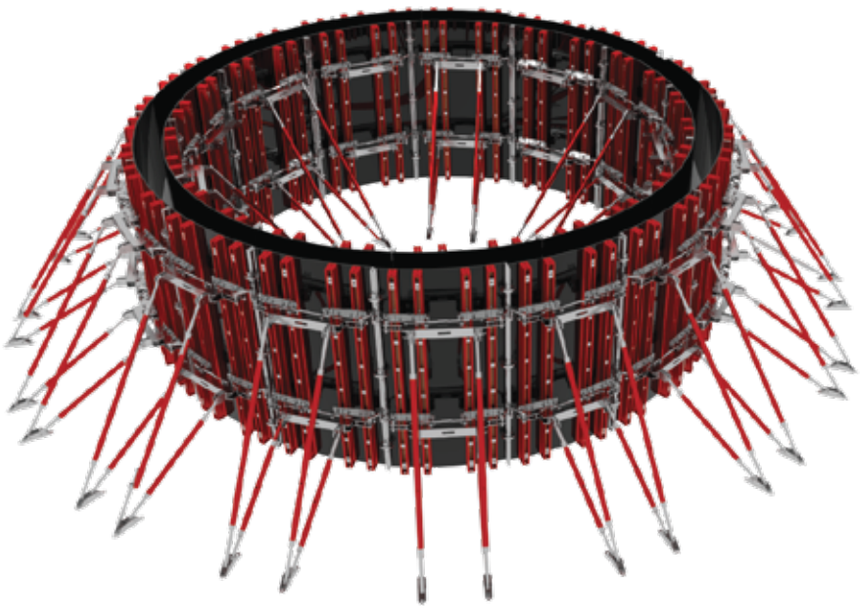
THE VARI-FORM FLEX is a transformation of straight walls system to create curved walls. It is a simple and easy-to-use system that uses standard WORCA beams and soldiers, with the addition of highly engineered elements that are designed to make the process of creating curved walls quick and simple. The Vari-Form Flex system is a versatile and easy-to-use system that can be used to create a variety of curved walls. It is a good choice for applications where quick and simple workability is required.

APPLICATIONS

- Circular tanks
- Large diameter columns
- Curved walls
- Silos
- Conical structure

FEATURES

- The system is made up of modular components that can be easily assembled and disassembled, making it ideal for a wide range of projects, regardless of size or complexity.
- Compatible with other formwork and scaffolding systems, providing a complete solution for bridge construction.
- The system's modular design and flexibility can help to reduce waste by allowing contractors to reuse panels and other components on multiple projects. the quality of the finished structure by providing a stable platform for concrete casting and curing



MAIN COMPONENTS

Supplied by WORCA

1- WORCA Beam S12,L=3.50m
2- Flex Vari-Form S12 Connection
3- Flex Vari-Form Distribution Waler
4- Flex Vari-Form Edge Angle,L=3.60m
5- Flex Vari-Form Tensioner 510mm
6- Flex Vari-Form Tensioner 210mm
7- Tensioner Nut Left Hand Thread

ADVANTAGES

- WORCA vari form flex formwork system is very adaptable. It can be easily modified to fit specific project requirements. This makes it a very cost-effective solution, as it can be used for multiple projects without the need to purchase new formwork.
- It can be assembled and disassembled quickly and easily, without the need for specialized tools or skills. This makes it a very efficient system to use, which can save time and money on construction projects.
- WORCA vari form flex formwork system is a reusable system, which can help to reduce the environmental impact of construction projects.

SITE REQUIREMENTS

Supplied by Contractor

05

SLABS & SCAFFOLDING

SHOREBRACE FRAME

MEDIUM DUTY | COMPATIBLE | HIGHLY WORKABLE | LIMITED ITEMS | DURABLE

WORCA SHOREBRACE is a medium-duty painted or galvanized shoring system. It is one of the most commercially successful systems in WORCA, characterized by the use of one basic size of Shorebrace frame combined with cross braces in order to obtain economic spacing of frames. At the top, a telescopic frame is used to obtain various height adjustments.

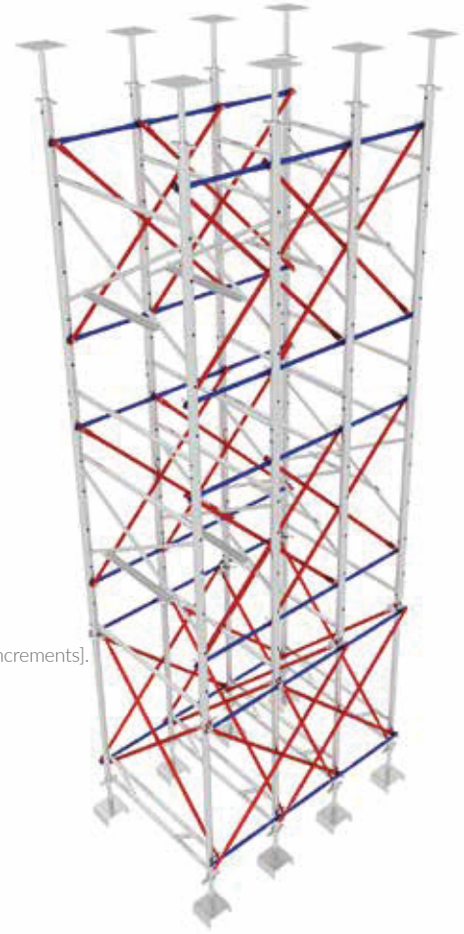
APPLICATIONS

- Traditional / Tower-based shoring.
- Table-form shoring.
- Bridge & tunnel shoring.
- Back-propping [large heights].
- Gantries.
- Working platforms.

MAIN COMPONENTS

Supplied by WORCA

1- Shore-Brace frame [1.8 X 1.2m]
2- U-Head Jack
3- Telescopic frame [1.65 X 1.2m]
4- Half coupler with pin
5- Cross brace
6- Frame connector, rivet pin & spring clip
7- Post head jack



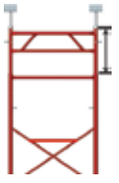
TECHNICAL DATA

- **Working load:** Up to 110 kN per frame.
- **Frame size:** 180 X 120 cm.
- **Telescopic frame size:** 165 X 120 cm.
- **Cross brace sizes:** 90 - 300 cm [with 30 cm increments].
- **Jack adjustment range:** Up to 40 cm.

SPECIAL FEATURES

Telescopic frame

Opening range [50 - 150 cm]



SITE REQUIREMENTS

Supplied by Contractor

TIMBER BEAMS

PLYWOOD

Z FRAME

MEDIUM DUTY | COMPATIBLE | HIGHLY WORKABLE | LIMITED ITEMS | DURABLE

WORCA Z-FRAME is a medium-duty galvanized shoring system, characterized by the use of one basic size of Z-frame combined with cross braces in order to obtain economic spacing of frames. At the top, a telescopic frame is used to obtain various height adjustments.

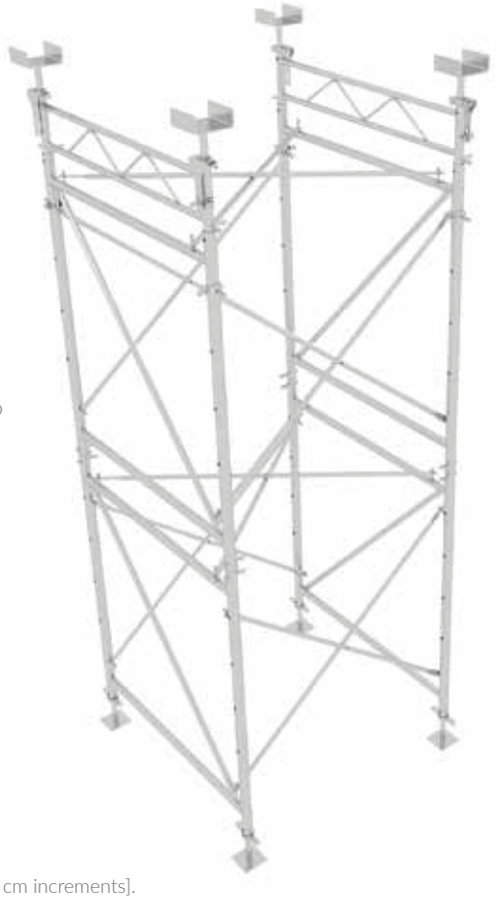
APPLICATIONS

- Traditional / Tower-based shoring.
- Table-Form shoring.
- Bridge & tunnel shoring.

MAIN COMPONENTS

Supplied by WORCA

1- Z-Frame [1.8 X 1.5m]
2- U-Head Jack
3- Telescopic frame [1.65 X 1.5m]
4- Cross brace
5- Frame connector, rivet pin & spring clip
6- Plain brace
7- Post head jack



TECHNICAL DATA

- **Working load:** Up to 140 kN per frame.
- **Frame size:** 180 X 150 cm.
- **Telescopic frame:** 165 X 150 cm.
- **Cross brace sizes:** 90 - 300 cm [with 30 cm increments].
- **Jack adjustment range:** Up to 40 cm

SPECIAL FEATURES

Telescopic frame

Opening range [50 - 150 cm]

SITE REQUIREMENTS

Supplied by Contractor

TIMBER BEAMS

PLYWOOD

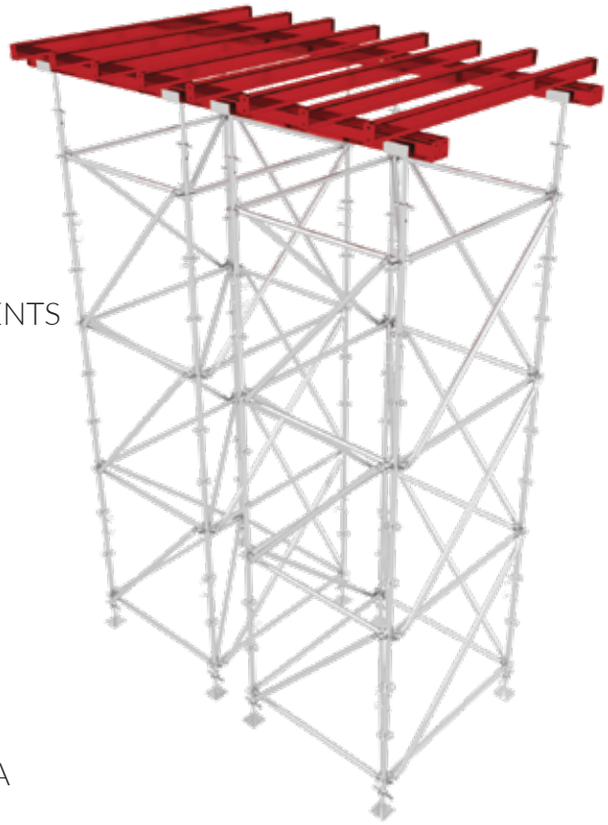
RING LOCK

MEDIUM DUTY | COMPATIBLE | HIGHLY WORKABLE | DURABLE | MOVABLE | MULTI PURPOSE

WORCA RINGLOCK is a medium-duty galvanized modular steel shoring system, and one of the most popular and widely used systems in newly constructed projects. It is a complete system that provides access scaffolding and formwork shoring. no need for tubes and couplers in the system is what makes it easier and faster in erection (diagonals & plain braces are standard items).

APPLICATIONS

- Staircase.
- Mobile shoring towers.
- Bridge & tunnel shoring.
- Heavy slabs.
- Slab shoring (large heights).
- Façade scaffolding.
- Multi use scaffolding towers, platforms stage, stands, etc.



MAIN COMPONENTS

Supplied by WORCA

1- Verticals (Standards)
2- Horizontals (ledgers)
3- Diagonals, plain braces
4- Upper & Lower jacks
5- Scaffolding accessories

TECHNICAL DATA

- **Max Working load:** From 28 kN Up to 100 kN, according to braced length & restrained directions.
- **Vertical standard range:** From 0.5 to 3 m, with 0.5m increment, 48.3 / 60.3 mm diameter standards with high grade steel standards St.52.
- **Ledger range:** From 0.6 to 3 m, with 0.3 m increment.
- **Diagonal range:** From (0.6 X 1 m) to (3 X 2 m).
- **Adjustment range:** Post head jacks up to 40 cm.

COMPATIBILITY

- H20 timber beams main and secondary
- H20 & Soldiers
- WORCA S-beam, Alu-beam
- WORCA staircase tower
- Table-form
- Gantry systems

SITE REQUIREMENTS

Supplied by Contractor

TIMBER BEAMS

PLYWOOD

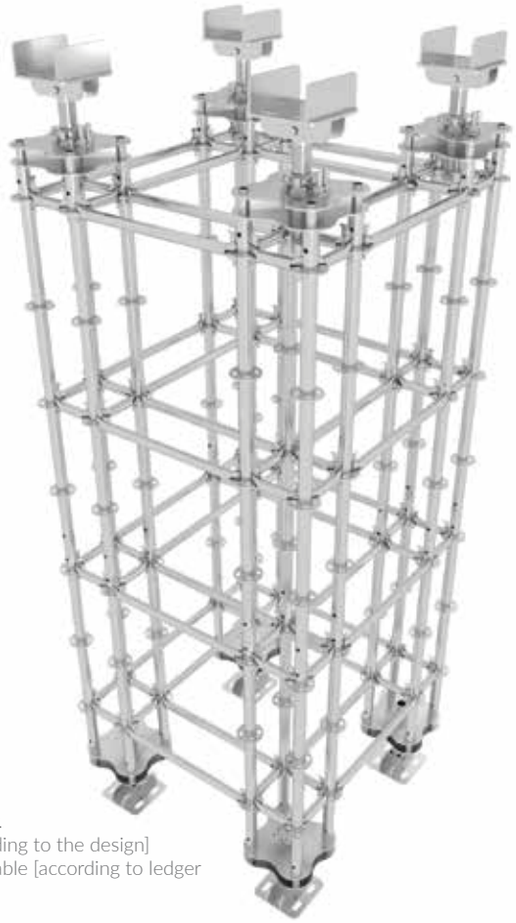
RING LOCK
HEAVY DUTY NEW

HEAVY DUTY | COMPATIBLE | HIGHLY WORKABLE | DURABLE

WORCA RINGLOCK HEAVY-DUTY is a shoring system, composed of standard Ring-lock elements. It is ideally designed for heavy duty applications.

APPLICATIONS

- Heavy lifting.
- Re-propping.
- Heavy slabs.
- Deep beams
- Maintenance and repair for bridges and other structures



MAIN COMPONENTS

Supplied by WORCA

1- Ringlock vertical
2- Ringlock HD upper jack
3- Spigot, rivet pin & spring clip
4- Ringlock ledger
5- Ringlock diagonal brace
6- Ringlock plain brace
7- Ringlock HD lower jack

TECHNICAL DATA

- **Working load:** Up to 260 kN per post.
- **Tower height:** Variable heights [according to the design]
- **Tower configuration [plan view]:** Variable [according to ledger sizes, with 30 cm increments].

SPECIAL FEATURES

- Pivot jack allows angle of inclination [0 - 15º]

SITE REQUIREMENTS

Supplied by Contractor

CRANE

ANCHOR BOLTS

CUP LOCK

HIGHLY WORKABLE | DURABLE | MULTI PURPOSE | TIME SAVER | MAN HANDLE | COST EFFECTIVE | SIMPLE ASSEMBLY

WORCA CUPLOCK is a painted modular steel shoring system, and one of the most popular and widely used systems in construction field. It is a complete system that provides access scaffolding and formwork slab support which can be used for light and medium slabs construction.

APPLICATIONS

- Staircase
- Slab shoring
- Façade scaffolding
- Movable scaffolding
- Working platforms

MAIN COMPONENTS

Supplied by WORCA

1- Verticals (Standards)
2- Horizontals (ledgers)
3- Upper & Lower jacks
4- Scaffolding accessories
Steel planks, LVL, ladders, transoms, toe boards

TECHNICAL DATA

- **Max Working load:** Up to 70 kN, according to braced length & restrained directions.
- **Vertical standard range:** From 0.5 to 3 m, with 0.5 m increment , 48.3mm diameter standards with high grade steel standards St.52, which is equivalent to grade S355 in Euro and British standards.
- **Ledger range:** From 0.6 to 3.0 m, with 0.3 m increment
- **Adjustment range:** Post head jacks up to 40 cm

COMPATIBILITY

- H20 timber beams main and secondary
- H20 & Soldiers
- WORCA S-beam, Alu-beam

SITE REQUIREMENTS

Supplied by Contractor

TIMBER BEAMS

PLYWOOD

SOLDIER HEAVY DUTY SHORING

HIGHLY WORKABLE | DURABLE | MULTI PURPOSE | TIME SAVER | MAN HANDLE | COST EFFECTIVE | SIMPLE ASSEMBLY

WORCA SOLDIER HEAVY-DUTY is a shoring system with high load-bearing capacity, designed especially for projects that require heavy loads transfer. It is normally pre-assembled as separated towers then delivered to jobsite. It can be used for a wide range of applications from heavy lifting, gantries to repairing and re-propping.

APPLICATIONS

- Bridge & Tunnel formwork.
- Heavy duty shoring for cast in-situ bridges.
- Gantries.
- Horizontal HD struts.
- Temporary shoring for pre-cast bridges.
- Re-propping.
- Maintenance and repair for bridges

MAIN COMPONENTS

Supplied by WORCA

1- Vertical soldiers
2- Horizontals
3- Diagonals, plain braces
4- Upper & Lower jacks
5- End plates
6- Multiple heavy connections

TECHNICAL DATA

- **Working load:** Up to 350 kN per post.
- **Tower height:** Variable heights [according to the design].
- **Tower configuration [plan view]:** Variable sizes [according to the design].
- Instead of using fixed-length horizontal and diagonal pipe braces, they can be replaced by adjustable standard push-pulls in some special cases to improve system useability.
- Hydraulic jacks can be used to release heavy loads.
- Instead of using single soldier per each leg, different arrangements of double or quadruple soldiers can be used to achieve even bigger allowable loads.

SPECIAL FEATURES

2-Soldier
Up to 600 kN/post

4-Soldier
Up to 1000 kN/post

SITE REQUIREMENTS

Supplied by Contractor

CRANE

WORCA FRAME

MOVABLE | MULTI PURPOSE | TIME SAVER | MAN HANDLE | COST EFFECTIVE | SIMPLE ASSEMBLY | LIMITED ITEMS

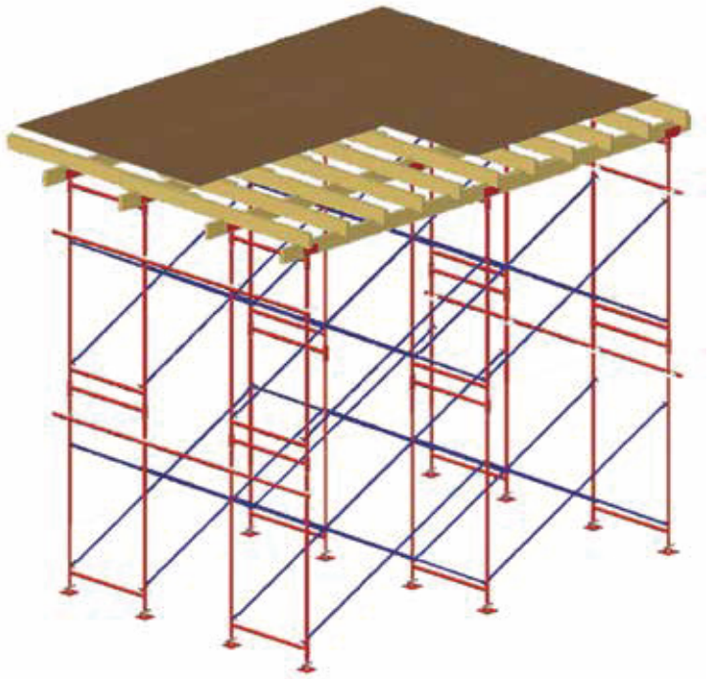
WORCA FRAME is one of the most popular and commercial light-duty shoring & scaffolding systems. It can be used as a shoring system for light slabs or as a scaffolding system for façade scaffoldings, mobile scaffoldings, access towers, grandstands, or other applications. It has been specially designed for easy and fast assembly by unskilled operatives with the minimum of supervision. The basic system utilizes a small number of components that are simply and easily fitted together to give a rigid structure.

APPLICATIONS

- Façade scaffolding
- Grandstand
- Mobile access towers
- Housing slab shoring (light slabs)

COMPATIBILITY

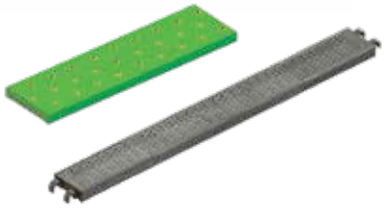
- Single/double H20 timber beams
- WORCA beams S12
- Alu-beams



MAIN COMPONENTS

Supplied by WORCA

1- WORCA Frames
2- Scaffolding tubes
3- Post and head jacks
4- Cross Braces
5- Scaffolding accessories (Steel Planks, LVL, Ladders, Transoms, Toe boards) upon request



COMPATIBILITY

- Steel Planks
- LVL Boards
- Timber Boards
- Compatible with different decking systems (Single/double H20 beams, soldiers, S-beams, Alu-beam and T bridge deck).

TECHNICAL DATA

- **Max Working load for frame:** up to 45 kN.
- **Frame size: Frame 1.5":** 200X100 cm, 150X100 cm,100X100 cm & 50X100 cm.
- **Adjustment range:** 40 cm for jacks.
- **Cross-brace range:** 60 - 300 cm, with 30 cm increments.

SITE REQUIREMENTS

Supplied by Contractor

TIMBER BEAMS

PLYWOOD

HOUSING HALF TUNNEL FORM

WORCA HOUSING HALF-TUNNEL FORM is a modular steel formwork system used in the housing industry for repetitive modules. It significantly improves the speed of construction by casting all concrete main elements (walls & slabs) in the same stage using simple and repetitive operations. It doesn't require skillful workers. It reduces time & labor costs and provides a very consistent construction schedule, concrete dimensions & concrete finish.

APPLICATIONS

- Repetitive housing or building projects with bearing walls
- High-rise towers with modular design, also with bearing walls.

MAIN COMPONENTS

Supplied by WORCA

1- Half-Tunnel Steel Forms
2- Kicker Forms
3- Supporting props / struts / bracing
4- Jacks & wheel units
5- Connecting accessories
6- Tie-Rods
7- Fillers & Keys
8- Supporting brackets / platforms
9- Stop-Ends
10- Steel Wall Boxouts
11- Access platforms & safety accessories

FEATURES

- Walls & slabs are concreted in one cast or one stage.
- Walls & slabs boxouts (doors, windows, openings, etc.) are handled without the need for any extra works.
- No need for masonry, plastering, timber fillers, nails, etc.
- Full safety & full access (including platforms, ladders, handrails, etc.) is granted.
- Lowering & retracting mechanisms.
- Transportation wheels to move the Half-Tunnel Form to reach crane accessibility over provided platform.

TECHNICAL DATA

-Standard length of panels: 2.50, 1.25 & 0.625 m
- Height of formwork: up to 3.0 m. Extra heights can be achieved with jacks & additional panels.
- Length of formwork: up to 12.50 m in one left using spreader beams.
- Maximum span between walls up to 5.70 m. Larger spans can be achieved with extra table-forms between the 2 half-tunnel forms.

SITE REQUIREMENTS

Supplied by Contractor


PLASTIC TUBES


CRANE

WORCA MOTOSCAFF NEW

MOVABLE DURABLE MOTORIZED

THE WORCA MOTOSCAFF SYSTEM is a movable motorized scaffolding system embraced with safety durable mechanism with high safety standards. This innovative design ensures practicality and high productivity. Its ease of use makes it the perfect tool for creating suspended marginal access platforms with optimum adjustability.

APPLICATIONS

- Marginal suspended scaffolding.

MAIN COMPONENTS

Supplied by WORCA

1- Motorized trolly
2- Working basket
3- Counterweight basket

TECHNICAL SPECIFICATIONS

1- Customizable to fit different site conditions.
2- Easy to use.
3- Working platform with up to 3 persons.
4- Adjustable telescopic platform up to 165cm.

SITE REQUIREMENTS

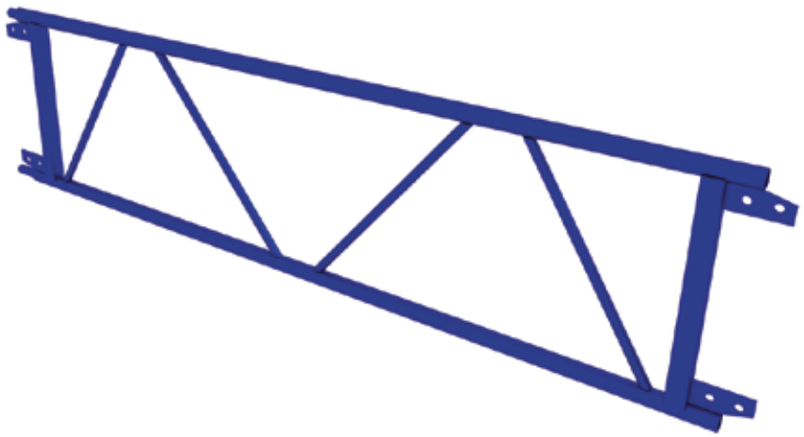
Supplied by Contractor

CONCRETE BLOCKS

ELECTRICAL WIRE

UNIT BEAM

MAN HANDLE | COST EFFECTIVE | HIGHLY WORKABLE | LIMITED ITEMS



WORCA UNIT BEAM is a light suspended scaffolding system used for various range of projects, from oil & gas services to finishing of ceilings of mega commercial and industrial buildings.

APPLICATIONS

- Suspended scaffoldings
- Pipe Racks of oil & gas projects
- Finishing of ceilings of mega projects (factories, malls, museums, conference halls, indoor sports halls, etc.)
- Finishing of exterior façades
- Used with movable carriage for finishing of flying bridges sides

MAIN COMPONENTS

Supplied by WORCA

1- Unit Beams and connections
2- Fittings (Couplers)
3- Scaffolding Tubes (as secondary, bracing & handrails)
4- Timber Planks
5- Supporting system (hanging or shoring

FEATURES

- **Loads:** Up to 300 kg/m².
- **Size:** 2 types; 2.40 & 3.60m. Several unit beams are connected together for large spans.
- Can cover up to 12m free spans.
- Can work as suspended scaffolding from ceilings, or supported by several shoring systems (WORCA Frame, Cuplock, Ringlock or Shorebrace Frames), or within a movable carriage system.

SITE REQUIREMENTS

Supplied by Contractor

TIMBER BEAMS | CRANE | SKILLED CARPENTER

WORCA H73

TIME SAVER | MAN HANDLE | SIMPLE ASSEMBLY | HIGHLY WORKABLE

WORCA H73 frame system describes a façade scaffold designed according to the requirements set down in EN 12810 and EN 12811.The basic scaffold system is primarily comprised of the H73 frames which are supplied with rings at the joints of the vertical standards with the transoms, working platforms every 2m height, horizontal ledgers to join the H73 frames, vertical diagonal braces joined to the frames via the rings, base jacks with vertical adjustable means are used to transfer the loads to the ground and tubes and couplers are used for anchoring the scaffold to the façade. The working platforms incorporate safety measures for the user including safety guardrails and toe boards that make it possible for the scaffolder to erect the next level up in the scaffolding from the current working level.

FEATURES

- Standard configuration according to EN 12810.
- **System width:** 73 cm.
- **Load classes:** 1-3 according to EN 12811-1 (0.75 – 2.00 kN/m²).
- **Bay lengths:** from 120 to 300 cm in 30 cm increments.
- Supplementary components can be fitted to the scaffold system; Internal brackets, external brackets, pedestrian gantries, bridging girders.
- The system can be combined with the modular Ringlock system by the mean of the ring connected at the joints of the H-73 frame.

MAIN COMPONENTS

Supplied by WORCA

1- H-73 Frames
2- Jacks & Connections
3- Ledgers, Diagonal Braces & Transoms
4- Steel Planks & Access Steel Planks
5- Console Brackets & Cantilever Braces
6- Pedestrian Gantries & Bridging Girders
7- Guardrails
8- Toe Boards

APPLICATIONS

- Façade scaffolding
- Scaffolding small gantries / Pedestrian passages

SITE REQUIREMENTS

Supplied by Contractor

TIMBER BEAMS

ALU-DECK

TIME SAVER | LIMITED ITEMS | MAN HANDLE | SIMPLE ASSEMBLY | SUPERIOR CONCRETE FINISH | EARLY STRIKING

WORCA ALU-DECK system is a modern modular Aluminum formwork system that provides early striking, and thus cut significant portions of the waiting times for dismantling, saving time and money. It is a man-handling system with light-weight panels and few components, designed to reduce assembly & dismantling times and the mistakes in handling with high safety standards. It is optimally suited for large areas with uniform layouts and several pouring cycles and can also be used for repetitive housing projects and especially for high-rise towers.

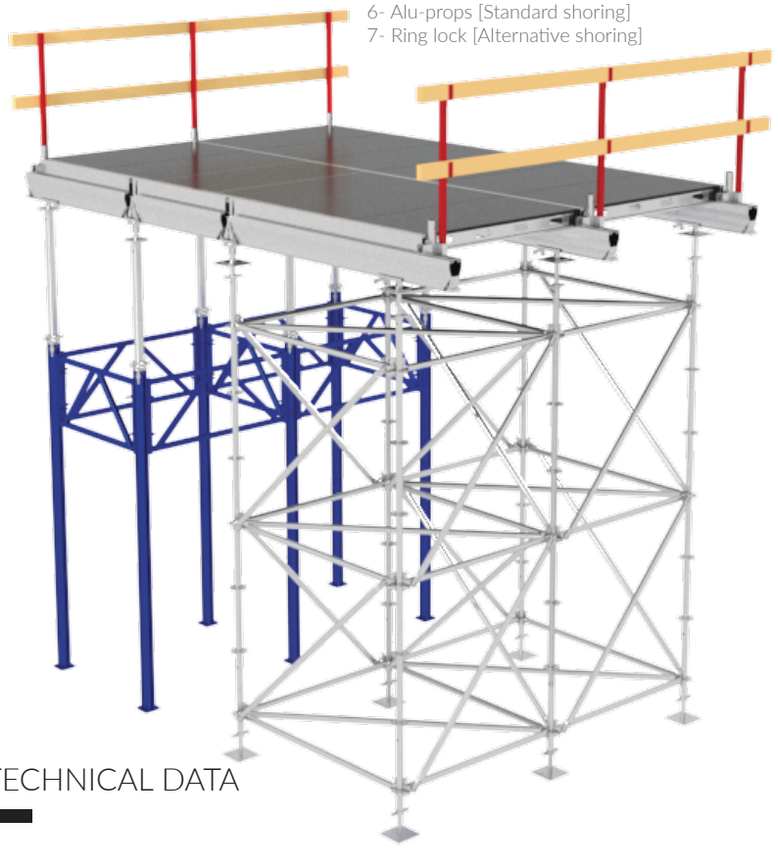
APPLICATIONS

- Multi - storey buildings.
- Large scale projects [malls, ministries & universities, ... etc].
- Repetitive residential projects.

MAIN COMPONENTS

Supplied by WORCA

1-Aluminum panel c/w. WORCA board
2- AD filler
3- Safety handrail
4- AD main beam
5- AD drop head
6- Alu-props [Standard shoring]
7- Ring lock [Alternative shoring]



TECHNICAL DATA

- **Slab thickness:** Up to 50 cm [depending on grid size]
- **Panel widths:** 40 | 60 | 75 cm.
- **Panel lengths:** 75 | 90 | 150 | 180 cm.
- **Main beam lengths:** 90 | 120 | 150 | 180 | 210 | 240 | 330 cm.
- **Painting:** Electrostatic powder-coating for panels and beams & Hot dip galvanized heads.
- **Standard panel covering:** WORCA board [12 mm].
- **Standard shoring:** Alu prop [With working load up to 80 kN] & Euro prop AEP [With working load up to 30 KN].
- **Alternative shoring :** Ringlock.

SPECIAL FEATURES

Early striking

Befor striking

After striking

Panels movement

Panels can be moved freely over the main beams

SITE REQUIREMENTS

Supplied by Contractor

TIMBER BEAMS

NAILS

WORCA FLEX

COST EFFECTIVE | HIGHLY WORKABLE | LIMITED ITEMS | MAN HANDLE

WORCA FLEX SYSTEM is a simple slab formwork system that could be adapted to any floor plan. It consists mainly of H20 wooden beams that work as main and secondary girders and supported by props. It is a man-handling system and one of the most common slabs formwork systems around the globe.

MAIN COMPONENTS

Supplied by WORCA

1- H20 girders (Main & secondary)
2- Cross head, prop hanger
3- Props (Euro props / Eco props / light props)
4- Prop leg (assembly tool)

TECHNICAL DATA

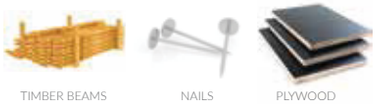
- **Floor height:** Up to 5m [With props]
- Standard main & secondary decking: H20 timber beams & WORCA beam S12
- **Standard props:** AEP props [20-30 kN] & Eco props [20 kN] / Light props [10 kN]
- **Assembly:** Man-handle assembly a few components. Only H20 girders, props, heads & prop legs

APPLICATIONS

- Slabs

SITE REQUIREMENTS

Supplied by Contractor



TIMBER BEAMS | NAILS | PLYWOOD

SHOREBRACE TABLE FORM

PRE ASSEMBLED | TIME SAVER | HIGHLY WORKABLE | MOVABLE

SHOREBRACE TABLE FORM is designed especially for the construction of slabs with large areas or repetitive layouts. Pre-assembled tables arrive to jobsite ready for use. It can be re-positioned horizontally by Transportation Unit and vertically by table lifting system (C-Fork or elevators). It enables the contractor to achieve fast pace of work and high safety levels, leading to the highest productivity rates. It is one of the most used systems worldwide especially in multi-storey buildings with regular layouts.

APPLICATIONS

- High-rise building slabs
- Underpasses & Tunnels
- Heavy slabs
- Large scale horizontal projects with big heights (>5.5m)

TECHNICAL DATA

- Working load: 110 kN per frame.
- Table range: Variable sizes
- Slab thickness: 60 cm with only 4 frames, for thicker slabs (Thk. > 1m) additional supports will be added.
- Slab height: clear heights up to 8m, with telescopic range from 53.0 cm up to 143.0 cm

MAIN COMPONENTS

Supplied by WORCA

1- Shorebrace frames
2- Decking System
3- Table stirrup head & connections
4- Cross braces
5- Post head jacks
6- Transportation jack unit (shifting)
7- C-Fork (Lifting)

FEATURES

- Assembly: pre-assembled and arrive at the jobsite ready for use, comfortable transportation with table lift and transportation wheel can be attached to the shoring.
- Shorebrace Table can be used with Prop extension for huge verticality adjustment, to give a very smart & flexible solution that can work with most slabs layouts and can overcome big sizes of beams, which is usually a big obstacle in the use of table form solution.

SPECIAL FEATURES

Transportation wheel

SITE REQUIREMENTS

Supplied by Contractor


CRANE


SKILLED CARPENTER


NAILS


PLYWOOD

PLYWOOD

PROP TABLE FORM

PRE ASSEMBLED | TIME SAVER | HIGHLY WORKABLE | EARLY STRIKING | MOVABLE

WORCA PROP TABLE-FORM SYSTEM is designed especially for the construction of slabs with large areas or repetitive layouts. It can be re-positioned horizontally by shifting trolley and vertically by table lifting system (C-Fork or elevators). It enables the contractor to achieve fast pace of work and high safety levels, leading to the highest productivity rates. It is one of the most used systems worldwide especially in multi-storey buildings with regular layouts.

APPLICATIONS

- High-rise building slabs
- Repetitive housing projects
- Large scale horizontal projects (malls, universities, administration buildings, ...etc.) with regular heights

MAIN COMPONENTS

Supplied by WORCA

1- H20 Beams
2- Table head & connections
3- Euro/Eco props
4- Shifting trolley (shifting)
5- C-Fork (lifting)

TECHNICAL DATA

- **Shoring system:** hot dip galvanized AEP props or Eco props
- **Working load:** AEP prop 20 or 30 kN (in accordance with EN 1065 – Class D/E).
- **Table range:** Table lengths of 4.00 m or 5.00 m and widths of 2.15 m, 2.5 m, 2.65 m & 2.9 m
- **Slab thickness:** 40 cm with only 4 props, thicker slabs with additional supports
- **Slab height:** Up to 4.5m
- **Movement:** lifted with crane to jobsite after assembly and moved horizontally with trolley inside slabs and vertically with C-Fork from level to another.

SPECIAL FEATURES

C-Fork

Shifting trolly

SITE REQUIREMENTS

Supplied by Contractor


CRANE


SKILLED CARPENTER


NAILS


PLYWOOD

FLYING DECK NEW

HEAVY DUTY | COST EFFECTIVE | MOVABLE | PRE- ASSEMBLED | NO ROAD DIVERSION | TIME SAVER | EARLY STRIKING | HYDRAULIC

WORCA Flying-Deck system is a new smart application developed to be used for large surface slabs. The Flying-Deck system consists of sliding tables moved on skidding devices carried on heavy-duty shoring towers or mounted on suspended corbels on walls or columns. It was used for the first time in the Middle East in the Central Bus Station of the New Administrative Capital of Egypt, which considered one of the largest transportation hubs in the world.

APPLICATIONS

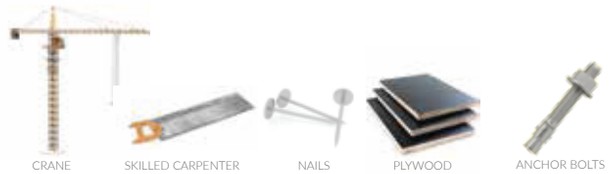
- Garages
- Bus stations and airports
- Tunnels

SPECIAL FEATURES

- The largest table can reach 1000 sq.m. and weight 150 tons.
- One of the most important features of this system is the speed of execution, release and movement rates, as the time required to release the table and move it to the next area does not take more than 3 to 4 hours approximately (1 hr. to release the mechanical supporting jacks of the table and 2 to 3 hrs. for pulling it to the next segment).

SITE REQUIREMENTS

Supplied by Contractor



CRANE | SKILLED CARPENTER | NAILS | PLYWOOD | ANCHOR BOLTS

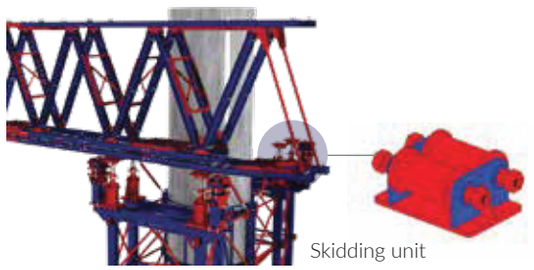
MAIN COMPONENTS

Supplied by WORCA

- This system consists of more than 80% of standard products, allowing it to be redesigned and reused multiple times in other projects.

SPECIAL FEATURES

HD Unit



Skidding unit

06 SINGLE SIDED WALLS

LIGHT FRAME
[VERTICAL SOLDIER BRACE]

COST EFFECTIVE PRE ASSEMBLED

WORCA LIGHT FRAMES for one-sided shutter guarantees the transfer of concrete pressure to the ground safely through the embedded diagonal anchors whereas it is not possible to use tie rods.

APPLICATIONS

- Retaining walls
- Underground stations
- Single sided walls
- Neighbor walls

MAIN COMPONENTS

Supplied by WORCA

1- Standard soldiers
2- Connecting parts
3- Anchoring system
4- Push – pull props

TECHNICAL DATA

- **Pour height:** Up to 4m.
- **Assembly:** It's likely assembled in sets of 4m or 6m using standard soldiers and fitting tubes bracing.

COMPATIBILITY

- H20 and Soldier
- Eco- Form panels

SITE REQUIREMENTS

Supplied by Contractor


CRANE


SKILLED CARPENTER


PLYWOOD


ANCHOR BOLTS

BRACE FRAME

HIGHLY WORKABLE | DURABLE | HEAVY DUTY | MOVABLE

WORCA BRACE FRAMES for one-sided shutter guarantees the transfer of concrete pressure to the ground safely through the embedded diagonal anchors whereas it is not possible to use tie rods. The 3 different sizes of Brace Frames can work individually or combined together to suit any height of walls up to 11m in one cast. They are connected together quickly and easily using few simple components.

APPLICATIONS

- Retaining walls > 4.50m
- Tunnels, dams & underpasses

MAIN COMPONENTS

Supplied by WORCA

1- Brace frames A, B,C
2- Connecting parts & Jacks
3- Fitting tubes (bracing)
4- Anchoring system

COMPATIBILITY

- H20 / WORCA beam & Soldiers
- Tech-form

FEATURES

- **Transportation:** Brace frames A, B,C dimensions are designed to fit into lorry and sized containers
- Can be fitted with wheels and move it along walls between casts without using cranes each time

TECHNICAL DATA

- **Pour height:** Up to 11m in one cast
- **Assembly:** It is composed of three units A, B, C brace frames, the units could be configured vertically in various configurations to fit into different wall heights without any additional parts, and braced together by means of fitting tubes.
- High allowable concrete pressure according to frames spacing and arrangement of anchors

SITE REQUIREMENTS

Supplied by Contractor

CRANE SKILLED CARPENTER

HD TRUSS SUPPORTING FRAME

HIGHLY WORKABLE | HEAVY DUTY | PRE-ASSEMBLED | MULTI PURPOSE | MOVABLE

WORCA HD TRUSS SUPPORTING FRAME guarantees the transfer of concrete pressure to the ground safely through the embedded diagonal anchors whereas it is not possible to use tie rods. The HD Truss is assembled from standard WORCA soldiers with any height up to 12m, which suits a wide variety of projects. After dismantling the trusses, the standard soldiers can be used with various other parts of the project, which gives the system a great flexibility.

APPLICATIONS

- All single - sided shuttering applications [retaining walls, underpasses & tunnels, ... etc.].
- Double-sided shuttering applications [when tie rods are not allowed].

MAIN COMPONENTS

Supplied by WORCA

1- Truss splices
2- Standard soldier
3- Bracing unit
4- Tie rod, wing nut & steel washer
5- Longitudinal soldier
6- Anchoring splice
7- Truss inner jack
8- Truss outer jack

COMPATIBILITY

Anchoring system

For ground anchoring

TECHNICAL DATA

- **Pour height:** Up to 12 m in one cast.
- **Frame width:** Variable according to design [With standard soldier length increments].
- **Anchor diameter:** Variable according to design.

SITE REQUIREMENTS

Supplied by Contractor

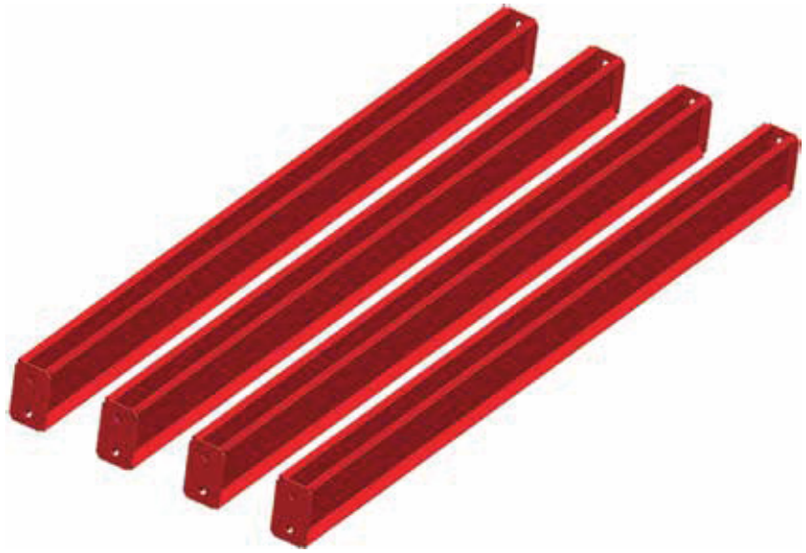
CRANE | SKILLED CARPENTER

07

DECKING AND SHEETS

WORCA BEAM S12

DURABLE HEAVY DUTY MULTI PURPOSE COST EFFECTIVE



WORCA BEAM S12 is a powerful substitute for standard H20 timber beams. It is used for both walls & slabs formwork. It has a higher load capacity [especially in shear resistance], which saves money in slab formwork [shoring] and wall formwork. It is also more durable than H20 timber beams, and thus has longer lifespan.

SPECIAL FEATURES

- High-load capacity for walls & slabs.
- Bended and welded edges to increase life and prevent twists and distortions.
- End plates to prevent deformations at ends, and to allow connecting two beams together.
- Size: Comes in different sizes starting from [2m to 4m] with 0.5m increments.
- Built-in timber that allows fixation of plywood and WORCA boards in case of wall and slab formwork.
- Standard accessories to allow full functionality with different systems.
- Available safety accessories.

APPLICATIONS

- All standard columns, double & single sided walls, slabs, table form & tunnel form applications & climbing systems.

Technical specifications:

material	S355
Weight	8 kg/m’
Allowable moment	0.5 m.t
Allowable shear	4.5 t

SITE REQUIREMENTS

Supplied by Contractor

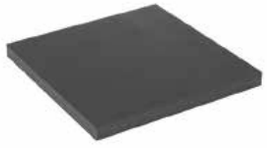
CRANE SKILLED CARPENTER

WORCA BOARD

WATER RESISTANT
FIRE RESISTANT
INSECT RESISTANT
EASY TO INSTALL
DURABLE
CIRCULAR ECONOMY
EASY TO CLEAN
COST EFFECTIVE

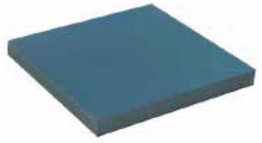
TECHNICAL PROPERTIES

WORCA board consists of a family of 3 brands each developed with unique characteristics for different lines of work within the construction industry



A-board

- Used in heavy designed construction members
- Recommended for use in wall and column



Flexa-board

- Low in cost
- Recommended for use in slabs

Curvy-board

- A unique curved boards used in any wall or column curvature

SPECIAL CLIENT BENEFITS

Formwork striping
WORCA-BOARD is a non-stick formwork material that can be easily stripped from concrete without the need for a release agent. This leaves a clean and smooth surface.
Physical Performance
Can withstand high impact, bending, moisture, and fire.
Site Requirement
No special tools or equipment needed when working with the WORKA-BOARD. Traditional timber tools, nails, saw hammer...etc. are used.

08 TAILORED

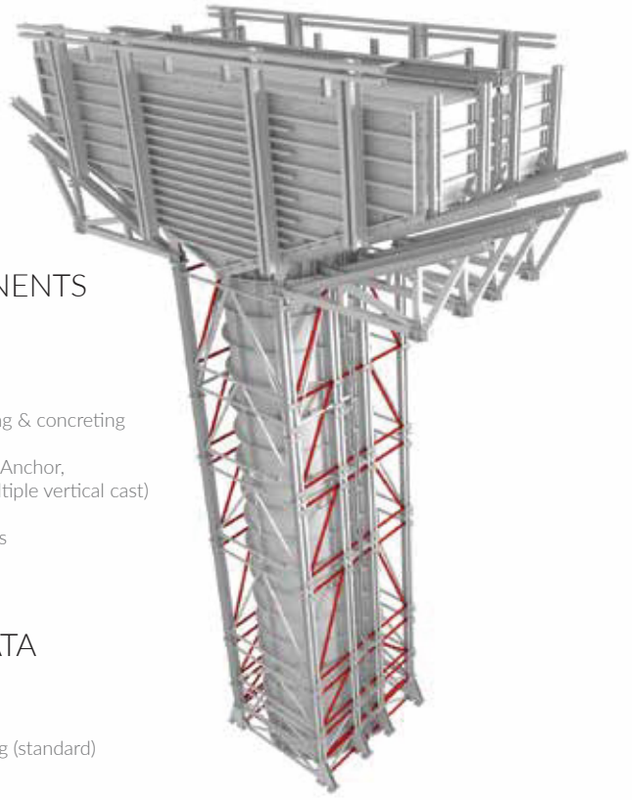
BIG STEEL PANEL

DURABLE HEAVY DUTY SPECIAL DESIGN TIME SAVER

WORCA BIG STEEL PANELS SYSTEM is a tailor-made steel form, that can be designed for any concrete shape and dimension, ensuring a high quality concrete surface finish, simple and fast assembly on site with minimum labor requirements. It is mainly used for infrastructure like bridge pier, flairs, cross heads & cross beams and also tunnels, culverts, viaducts and many other applications. It is also used for any special shape structure in buildings and can also be used for standard shape structures. It is one of most economic systems for special applications, mainly the ones with large number of repetitions. It provides a complete solution for these special shape structures without the need for any fillings or boxouts. It is easy to erect, adjust and dismantle. All these factors lead to saving in manpower & materials cost. It is made by high manufacturing techniques. It provides high standard concrete finish specially in architectural finish structures.

APPLICATIONS

- Bridges, piers, pier heads (flairs) & cross beams
- Tunnel form walls & slabs
- Special shapes columns & walls (architectural)
- Conical structures



MAIN COMPONENTS

Supplied by WORCA

1- Tailored Steel Panels
2- Connecting parts
3- Tilting items
4 Access brackets (working & concreting platforms)
5- Heavy duty brackets & Anchor, steel cones (in case of multiple vertical cast)
6- Ladders & safety cages
7- Tying items with ladders

TECHNICAL DATA

- **Pour rate:** Up to 3m/hr.
- 4mm steel sheet cladding (standard)

FEATURES

- Pouring height up to 12m
- Artilon patterns can be attached with steel panels in order to fulfill different architectural purposes.
- Curved panels can be formed using high manufacturing techniques.
- WORCA hi-skaf brackets can be also provided in case of multiple casts, in addition to WORCA special steel cage for pier head which facilitate and accelerate steel reinforcement work.
- Tie-less solutions can be provided upon request.

SAFETY EQUIPMENT

- Top access platform (standard)
- Multi level access platform (upon request)
- Access platform with steel sheeting (upon request)
- Steel cage (upon request)
- Steel ladder

SITE REQUIREMENTS

Supplied by Contractor

TIMBER BEAMS CRANE ANCHOR BOLTS CONCRETE BLOCKS EXTERNAL VIBRATORS (OPTIONAL)

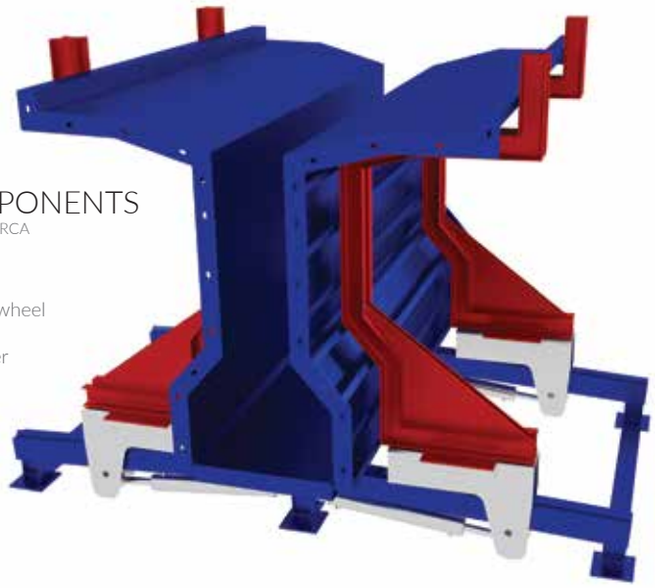
HYDRAULIC PRECAST STEEL MOULDS

DURABLE · HEAVY DUTY · SPECIAL DESIGN · TIME SAVER · COST EFFECTIVE · HYDRAULIC

WORCA PRECAST STEEL MOULD is a tailor-made steel form, that can be designed for any concrete shape and dimension, ensuring a high quality concrete surface finish, simple and fast assembly on site with minimum labor requirements.

APPLICATIONS

- Pre-cast blocks.
- Girders & beams.
- New Jersey barriers.
- Trenches.
- Parapets



MAIN COMPONENTS

Supplied by WORCA

1- Girder side panel
2- Hydraulic girder wheel
3- Base panel
4- Hydraulic cylinder

TECHNICAL DATA

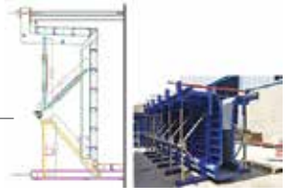
- Tailored [according to design and site requirements].
- One-shot casting.

SPECIAL FEATURES

K- Shape

[In case of manual retraction]

K-shape eases manual retracting and one time adjustment

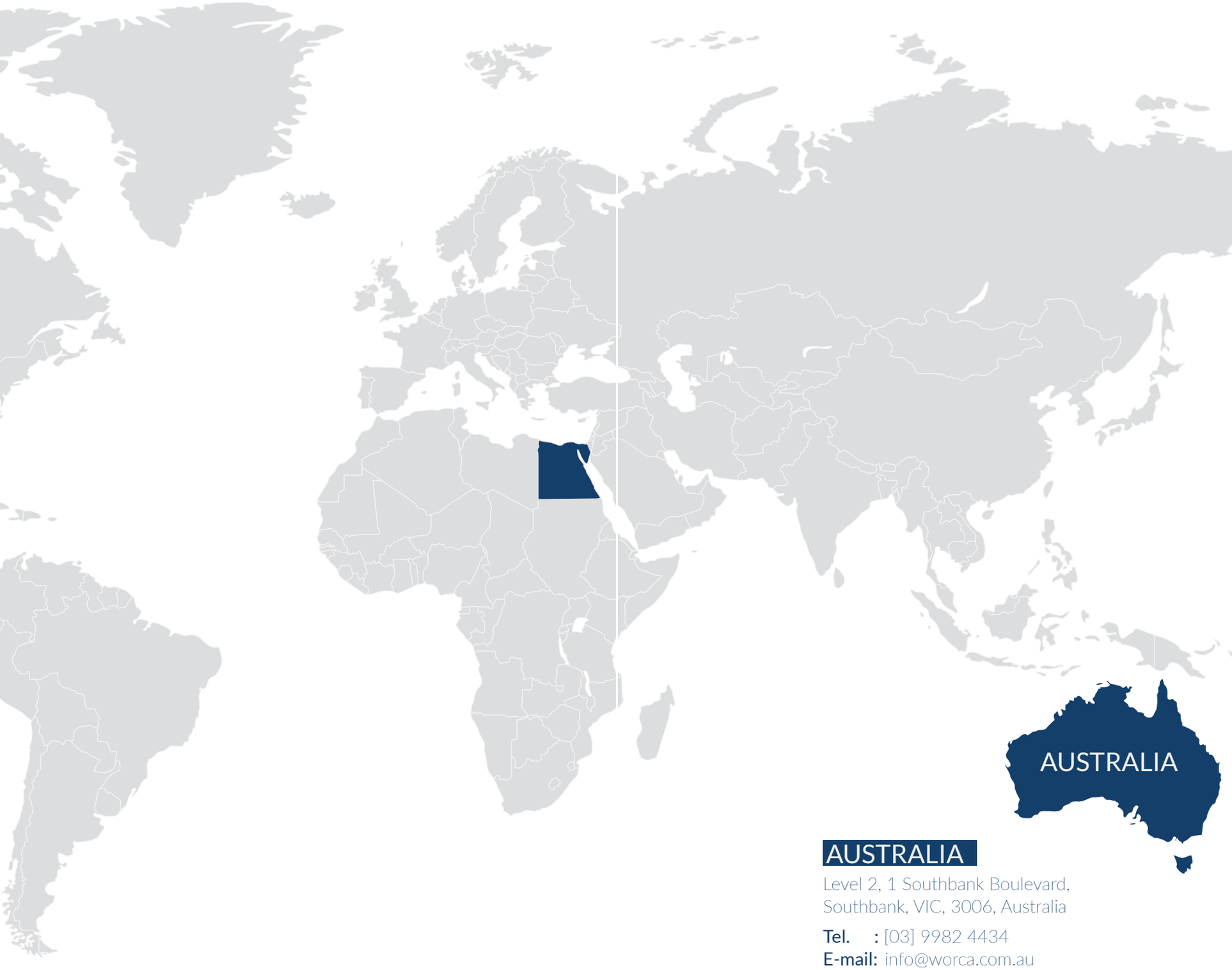


Hydraulic release mechanism

SITE REQUIREMENTS

Supplied by Contractor

CRANE · ANCHOR BOLTS



AUSTRALIA

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