

# PRODUCT BROCHURE

## Steel Design Artistry

Experience is a truer guide than  
the words of other  
L.DA Vinci 1507



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**DEMA FORMWORK SYSTEMS & ENGINEERING** was established in Ankara in 2011.

A group of highly experienced and talented employees, all engineers, designers and fabricators with more than 25 years of experience were suddenly faced with the pending prospect of unemployment due to the unexpected closing of their previously very successful company. This cooperative of talent and experience, passionate about steel fabrication and formworks, got together and formed DEMA FORMWORK.

DEMA FORMWORK, from humble beginnings starting in a small design and manufacturing workshop have expanded to their present-day manufacturing capacities due simply to their focus on customer care and retention and high quality, cost effective range of manufacturing. This attention to its core principles has ensured repeat and new business and the company's growth has been exponentially increasing year on year since its establishment. Now today DEMA FORMWORKS has an enviable list of references and repeat customers stretching from Jamaica through to Mongolia to date. DEMA FORMWORK currently exports to more than 40+ countries on five continents, and is quickly becoming a truly global specialist formwork systems, precast moulds, steel design projects and outsource/contract manufacturing company.

DEMA FORMWORK is located in Ankara, Türkiye in a 12,000 m<sup>2</sup> production facility and project design centre built specifically for purpose. The 120 meter long factory building includes two production halls with a total area of 5000 m<sup>2</sup>, a finishing and painting area of 1000 m<sup>2</sup>, a 900 m<sup>2</sup> administration and management office area and additionally, there is a warehouse and storage area totalling 6000m<sup>2</sup>.

#### **Our Vision;**

To manufacture exceeding expectation. To ensure the satisfaction of our customers, suppliers and employees with whom we work at home and abroad at the highest level to foster loyalty and trust. To create new products through R&D. To create job opportunities providing long term employment to its respected staff. To contribute to the country's economy and its reputation as a manufacturing hub worldwide

#### **Our Mission;**

As DEMA FORMWORK ; We handle every project with a professional management approach; Our aim is to complete each new Project in a timely manner, exceeding expectations, in accordance with all quality standards, and to offer products and services to our customers at the most affordable cost point possible in order to ensure repeat business and new business recommendations.



## PRODUCTS BY TYPE

### Infrastructure

- NATM/Cut and Cover
- Segment Tunneling
- Railway Tunnelling
- Slabtrack
- Sleepers
- Pedestrian Tunnelling
- Metro Tunnelling
- Highway Tunnelling
- Dam Tunnelling
- Box Culverts
- Trench Shoring/Lining
- Gallery Formwork
- Siphon Formwork
- Energy & Water Tunnelling
- Invert Formwork
- Blacksmiths Cart
- Membrane Laying Trolley Vehicle

### In Situ

- Residential Tunnel Formwork
- Columns- all types
- Shaft Core Wall Moulds
- Beam Formwork
- Lintel Formwork
- Foundations Formwork
- Piling Formworks
- Table Formwork
- Climbing Formwork
- Hydraulic Climbing Formwork
- Balanced Cantilever Girder
- Handset Wall Formwork
- Wall Formwork
- Retaining Walls

### Steel Projects & Design

- All Types of Steel Buildings, Commercial, Industrial, Factories, Residential, Shopping Centres, Sports Facilities etc.
- Steel Pedestrian Bridges
- Platforms
- Special Steel Projects
- Factory Transport Systems
- Agricultural Steel Projects
- Dam & Hydroelectric Steel Projects

### Precast

- Girder Formwork
- Pier Formwork
- Manhole Formwork
- Prestressing Systems
- Prefabricated Homes Formwork
- Column Mould
- Beam Mould
- Piling Mould

- I, H, L, T, TT Beam Mould
- Transformer Substation Moulds
- Transformer Substation Roof Moulds
- Telecommunications Logar Moulds
- Telecommunications Posts Moulds
- Slabtrack formwork Moulds
- Sleeper Moulds
- Segment Tunnelling Moulds
- Telecommunications Tower
- Water Channel Moulds
- Guttering Moulds
- Retaining Wall Block Moulds
- Motorway Barrier Moulds
- Foundation Formwork
- Prestressed Flatbed Moulds
- Prestressed Beam Formwork
- Purlin Mould for Roofing
- Roof Truss Formwork
- Garden Wall Formwork
- Stair Formwork
- Jersey Barrier Formwork
- Parapet & Drains Mould
- Crane Beam Formwork
- Stadium L,U,T,type Seat moulds
- Verticle Multi Battery Formwork
- Single Double /Twin wall moulds
- Single Double /Twin wall carousel
- Various Slab Moulds
- Horizontal Flatbed Table Formwork
- Tilting Table Formwork
- Verticle Multi Battery Formwork
- Turnkey Precast Carousel Systems
- Fence/Perimeter Formwork
- Security Wall Formwork
- Carousel Precast Systems

### Special

- Modular Home Moulds
- Prefabricated Homes Moulds
- CDS- Concrete Distribution System
- Hydraulic Concrete Feeder Bucket
- Portal Crane System
- Transformer Cabin
- Prestressing Roll Steel Feeder
- Vacuum Room
- Trench Shoring
- Slag Handling Trailers
- Bomb Resistant Wall Formwork
- Gantry Cranes
- Mobile Gantry Cranes
- Façade Elements Moulds
- Military Aircraft Hangars & Depots
- Pre Stressing Feeder Machine
- Rebar / Mesh Bending Machines
- Crushing & Screening Systems
- High Volume Concrete Bucket
- All Types of Outsource Manufacturing



## PRODUCTS BY SECTOR

### Industrial Building

- Complete Industrial Units
- Steel Construction Factories
- Concrete construction factories
- Industrial Fans
- Turnkey Precast Factories

### Residential

- Tunnel Form Systems
- Prefabricated Villa Systems
- Column & Beam Systems
- Facade Panels
- Retaining Walls
- Solid and Twin Wall Moulds
- Omnia Slab Moulds
- Low-Cost Housing Systems
- Modular Housing Systems

### Sports Facilities

- Stadiums Concrete and/or Steel
- Stadium Precast Seating
- Industrial Fans

### Education

- Facade Panels
- Tunnel Form Systems
- Retaining Walls
- Garden Walls
- Steel Construction Buildings
- Concrete Construction Buildings
- Industrial Fans

### Hotels

- Tunnel Form Systems
- Facade Panels
- Retaining Walls
- Steel Construction Buildings
- Concrete Construction Buildings
- Industrial Fans Commercial /Shopping Centres
- Tunnel Form Systems
- Wall Formwork
- Beam Formwork
- Column Formwork
- Climbing Systems
- Piling Formworks
- Foundation Formwork
- Steel Buildings

### Agriculture

- Silos
- Grain Storage
- Steel and/or Concrete Farm Buildings
- Industrial Fans

### Sewer / Sewage Treatments / Drainage

- Box Culverts
- Trench Lining

### Roads

- Infrastructure Tunnelling

- Jersey Barrier Mould
- Pedestrian Bridges
- Retaining Walls
- Sound Barriers
- Industrial Fans

### Rail / Metro

- Infrastructure tunnelling
- Railway Sleepers
- Slab Track
- Segment Formwork
- NATM/Cut and Cover tunnels
- Box Culverts
- Sleeper Transportation Vehicles
- Slabtrack
- Industrial Fans

### Power / Hydroelectric

- Infrastructure tunnelling
- Underwater turbines casings
- Transformer Substations

### Military / Security

- Security walls
- Prison cells
- Military Housing
- Aircraft Hangars
- Storage Hangars
- Steel Buildings
- Concrete Buildings
- Military grade container buildings

### Bridges

- Footing formwork
- Bridge support column formwork
- Pedestrian Bridges
- Balanced Cantilever Girder Form

### Sea Defence

- Sea Retaining walls
- Undersea Pipe Protection Systems
- Tetrapods
- Underwater Turbines Casings

### Mining

- Infrastructure Tunnelling
- Box Culverts
- Trench Shoring/Lining

### Containers & Temporary Facilities

- Military Grade Container Buildings
- Lightweight Container Buildings

### Production / Transportation Systems

- CDS- Concrete Distribution System
- Hydraulic Concrete Feeder Bucket
- Carousel Formwork Mould Lines





**The fast track cost effective construction method for residential projects worldwide.**

A building system that has been around for sixty years... The only construction system that is often specified by astute developers before an Architect is selected. A building system that is used worldwide from Venezuela through to Mongolia for building social / economic housing.

A system that is used to construct student dormitories, hospitals, prisons and military barracks by governments. A building system that is used to construct luxury villas, 40+ floor high rise apartment buildings, condominiums, mass social housing projects and hotels by the private sector.

A building system adored by astute developers for its speed, quality, systemization, low labour costs and planneable early completion dates.

A system that is still simply unique in the construction world in that it achieves an earthquake safe, in situ wall and slab completed in one day.

A building system that gives you **1 floor in 1 day, everyday!**



Gaziantep / TÜRKİYE



Ankara / TÜRKİYE



Baghdad / IRAQ





It is now universally accepted that residential projects implemented with tunnel formwork cost 35-40% less than projects constructed with traditional formwork systems. Pouring more concrete with less labour and specifically being able to pour concrete every day is the real benefit of the tunnel formwork system. Of course, to achieve this daily casting performance goal can only be achieved with an experienced management team, a good organizational structure, smart planning and ultimately the right workforce. At this point, DEMA FORMWORK will be with you.

Thanks to the consultancy service we provide to our customers who have used our systems in Djibouti, India, Qatar, Saudi Arabia, Mongolia and Iraq, we have helped our customers to complete their projects with greatly reduced time frames and at much reduced project total cost. We are with you from concept until completion of your project, starting from the initial project concept and design phase of your through to preparing the strategic planning and logistics on how daily casting success will be achieved on site, to forming the engineering management and crew teams to bring the project to reality and completion. We look forward to sharing our experience to help you guarantee success.



Doha / QATAR  
6.780 Apartment



Al - Najaf - Al Ameraat / IRAQ  
3.000 Double Storey Villas



Baghdad Bodour / IRAQ  
1.000 Double Storey Villas





Precast design can only be described as an “ocean” of diverse possibilities. There is almost no limit in terms of design possibilities. From simple wall panels to concrete electrical transformer cabins, to the most complex concrete distribution systems and precast mass production lines, DEMA FORMWORK can assist you in shaping your reinforced concrete to whatever end product you require. DEMA FORMWORK has the knowledge to offer ultimately cost-effective solutions that give you reliable, consistently repeatable results in your castings time after time.

DEMA FORMWORK, is now a major player in many countries in the design of precast moulds and formwork systems and with our continued R&D, specialist welding certifications and growing product range and design capabilities and the continued client trust and support, we have a growing reputation worldwide with a presence on 5 continents. DEMA FORMWORK invites you, our valued customers, to discuss any precast moulds, precast systems and precast automation and/or formwork ideas and requirements such as.

- Bridge beams (girder)
- Industrial buildings
- Transformer stations (cabins)
- Sub-stations
- Vacuum chambers
- Rail sleepers
- Jersey barriers
- Sea defences
- Stadiums
- Culverts
- Slabs
- Retaining walls
- Block moulds
- Tilting table







Dohuk / IRAQ  
Vertical Wall Mould  
(8 Batteries)



Süleymaniye/ IRAQ  
Girder Mould



Tashkent / OZBEKSTAN  
Tilt - Up Table  
Wall Mould



Denizli / TÜRKİYE  
Column Mould



Tashkent / OZBEKSTAN  
Perlin Mould



Uşak / TÜRKİYE  
Roof Truss Mould



Krasnodar / RUSSIA  
Stadium Stairs



Tunis / TUNISIA  
U Channel Mould



Al Anbar Stadium / IRAQ  
Retaining Wall





DEMA FORMWORKS; With our expert design team supported by the latest 2D and 3D calculation and drawing computer programs provides specialist services in engineering calculations, project design solutions and manufacturing and assembly of steel construction structure worldwide. Call us with your steel project requirements today.

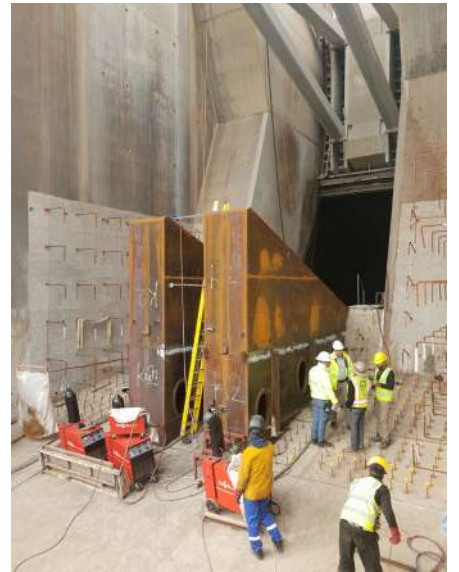
- Industrial Facilities,
- Multi-Storey Steel Structures,
- Steel Warehouses, Silos and Hangars,
- Sports facilities & Gyms,
- Agricultural Buildings
- Steel Towers,
- Art structures,
- Steel Bridges,
- Dam Structures,
- Jib, Ceiling and Gantry Cranes,



Mosul Badush Bridge / IRAQ



Ankara / TÜRKİYE



Mosul Dam / IRAQ





DEMA FORMWORK designs and manufactures in - situ casting moulds and formworks to any complexity and are able to shape your concrete as required. DEMA FORMWORK whatever the design challenge, welcomes the opportunity to become your trusted solution partner in all your on-site casting projects.



Riyadh / SAUDI ARABIA



Erbil / IRAQ



Ankara / TÜRKİYE





### Comprehensive tunnelling solutions.

With decades of combined technical expertise DEMA FORMWORK has for the past 14 years been producing innovative and specially designed infrastructure tunnel formwork system solutions. NATM drilling Tunnel Formwork systems (travelling shutters) are fast and economical solution for dams, mining, hydroelectric power plants, irrigation canals, railway, subway, metros and highway construction.

DEMA FORMWORK has the production capacity and project experience to meet your most stringent project requirements for the highest quality, efficient and economical infrastructure tunnel formwork and auxiliary equipment solutions.



Erbil / IRAQ



Mosul / IRAQ



Mosul / IRAQ





DEMA is trusted by a selection of manufacturers and in Europe and further afield as preferred solution partner for their outsource manufacturing. Working in unison to required NDA and quality standards, DEMMA is your reliable contract manufacturer. If you need a constant in your product manufacture or need to reduce your costs or margin for loss or error or upscale then consider DEMMA as your manufacturing solution partner.



Madrid / SPAIN



Ashgabat / TURKMENISTAN



Black Sea / TÜRKİYE



## 09 RAIL, METRO & HST- SLEEPER & SLAB TRACK MOULDS



Dema has a long history on many continents of manufacturing various types of rail, metro and HST sleepers to the required technical tolerances and specifications. Dema Formworks also produces specialized slabtrack sleeper moulds manufactured to very precise tolerances for new lines and retrofit applications offering solutions to servicing the rail traffic requirements of trains systems around the world that deliver people and goods safely day in day out.

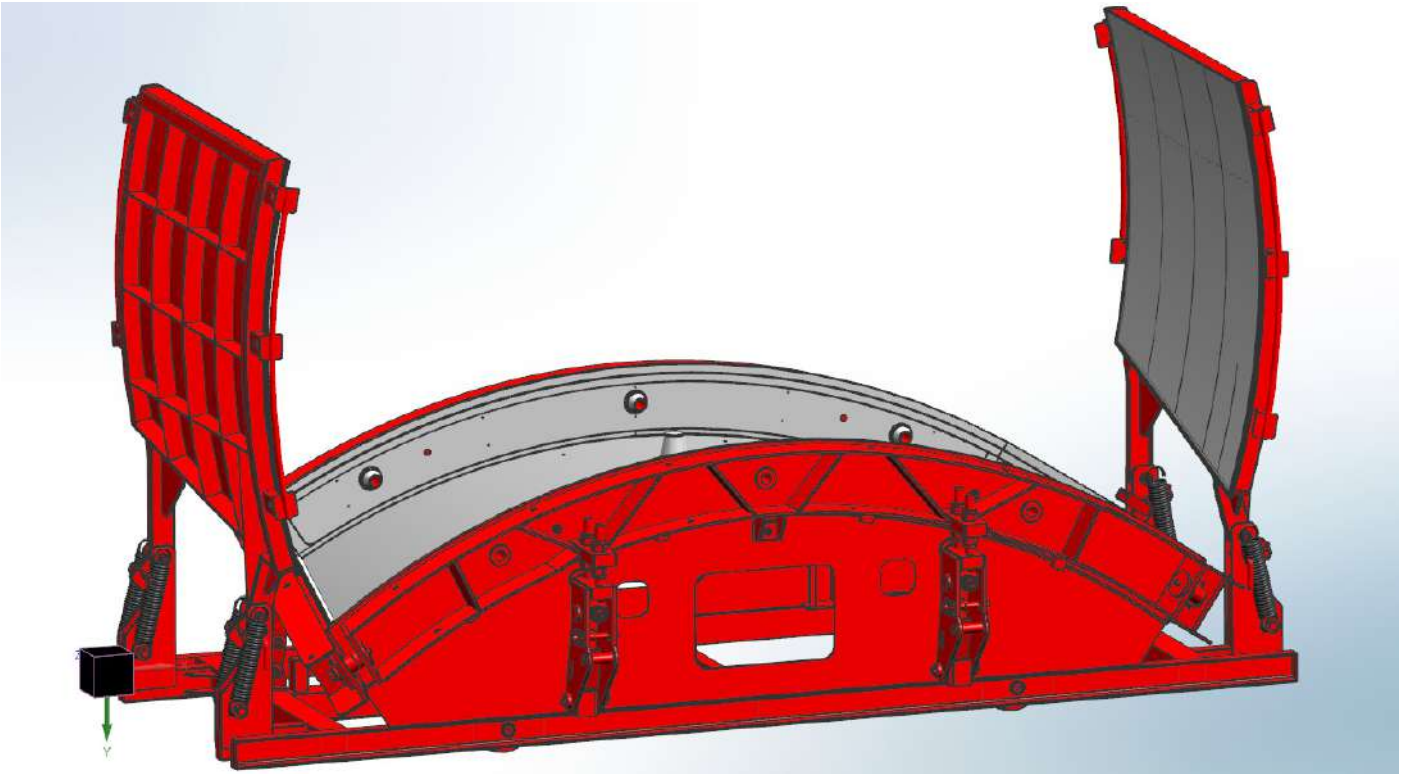


Ankara / TÜRKİYE



Ankara / TÜRKİYE





As well as achieving great heights (and depths) in design and manufacturing experience in a multitude of NATM tunnelling formwork projects, Dema is proud to offer precision made segment moulds for the modern TBM method of tunnel production.

In TBM tunnelling the segments, depending on the ground/soil specifications and project specifics. Are designed with differing types. The TBM tunnelling shape, generally a circle, is formed by segment pieces being precisely attached together in what is termed a 'ring'. Rings are used in different thicknesses and diameters in TBM tunnel projects. All segment patterns that make up a ring are expressed as "1 set". The segmental parts to the tunnel when connected sequentially enable the TBM to move in different directions within the tunnel. These diameter changes change the number and geometry of the precast concrete segments that make up the ring. The keystone segment is the last piece placed to complete the ring and ensures that the segment ring is stabilized. The alignment is vitally important in terms of up-down, right-left movements of the tunnel and accordingly each segment is coded for correct sequence.

The excavations for underground tunnels for Dams, Metro, Wastewater, Reservoirs, Hydroelectric projects and Irrigation projects, utilize specialized high grade concrete to provide the tunnel with strength, safety and to reduce project durations and therefore costs considerably. The TBM excavates the tunnel on the one hand, whilst behind the excavations and soil removal the individual precast concrete segments produced from the precast segment moulds are installed consecutively and are placed in the form of rings. It is due to the segments arranged by these TBM's that no additional support or work is required.

DEMA Formwork guarantees the durability and dimensional consistency of our segment moulds produced from our bespoke segment formwork systems. Dema Segment Moulds, the choice for dimensionally accurate precision engineered and ultimately durable moulds for your trouble free production of concrete interlocking segment tunnel pieces. Contact DEMA , we are ready to be your solution partner providing manufacturing and design excellence and technical support on your TBM project anywhere in the world!



# Steel Design Artistry



**5 Continents 40+ Countries**



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