



FORMWORK
SCAFFOLDING
TUBES
ROLL-FORMING
FORGING



FORMWORK
SCAFFOLDING
SYSTEMS

Circular
Column

2024

SINCE '2000



FORMWORK
SCAFFOLDING
TUBES
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ABOUT US

WTD Industries is considered as one of the major manufacturers & suppliers of Scaffolding and Formwork in the Middle East, GCC countries and North Africa.

WTD is offering wide range of services such as formwork planning- including project analysis, detailed formwork study, initial cost estimation & computer-aided formwork planning with structural calculations-design, manufacturing, engineering services, sales, rental business & technical support after sales.

All WTD products adhere to international standards and undergo rigorous laboratory testing, including tests for safe working load requirements, deformation resistance, damage resistance, tensile strength, and stress tests.

In 2000, WTD Industries began its journey as a small steel factory in Tanta, Egypt, focusing on decorative steel frames under the name Nefertiti Forge. Over the following decade, our focus shifted towards scaffolding and formwork manufacturing, driven by collaboration with esteemed partners in the construction industry.

By 2010, WTD Industries had established itself as a prominent supplier of scaffolding and formwork in the GCC countries and North Africa. Our comprehensive production facility, spanning over 30,000 square meters in the Beni Sweif Industrial area of Egypt, was home to a workforce of over 150 engineers, technicians, and laborers.

In 2014, as part of our strategic growth plans, we inaugurated the WTD Misr factory in the Hamriya Free Zone of the UAE. This expansion aimed to bolster our sales network, meet market demand, and streamline material delivery across the Gulf region.

By 2017, furthering our capabilities, we established another factory in the 10th of Ramadan in Sharqia, Egypt, dedicated to scaffolding accessories. These strategic moves align with our ongoing mission to provide comprehensive scaffolding solutions to the global market.

In 2023, The road was paved to WTD Industries to flourish in Saudi Arabia, WTD Industries established شركة وتد حلول الانشاء المحدوده WTD Construction Solution LM. Company with two giant stores in Jeddah & Riya, then successes continued.

Such a success is the result of dedication and team spirit.

WTD FORMWORK & SCAFFOLDING SYSTEMS.

Over 20 Years of Trust, WTD remains offering the most economical formwork solutions for any types of construction project.

The values of our strong specialists & workforce are reliability, Accountability ,proficiency & highest commitment.

WTD perceives our team as an asset and a trustworthy success partner.

Customers satisfaction is our utmost goal.

As we measure our achievements against the success of our customers and their satisfaction by offering the most economical Formwork & scaffolding solutions.

Digitalization & Disruptive Innovation are WTD fundamental structures for sustainable success.

WTD organizational structure & consistent enthusiasm facilitate our local presence in many markets, our representatives are capable of providing the best services with excellence & maintain strong connections with our loyal customers.



M. Bastawesy

Eng. Mostafa Bastawesy
WTD President & CEO

WTD CORPORATION

EGYPT



UAE



KSA



INDIA



WTD Network

HEADQUARTER

El Sharqia Govern, Industrial Area- A5-10th of Ramadan city, Plot No.175.



PIPE, COLD-FORMING & SCAFFOLDING
FACTORIES



Beni Sweif Govern, Industrial Area, Metal Sector, Bayad Al-Arab,
Plot No. 26.

Circular Column



Description

Circular column steel formwork consists of two main components: a steel framework and a form lining. The steel framework provides the structural support needed to maintain the shape of the form, while the form lining, often made of steel or coated materials, ensures a smooth finish for the concrete surface. The formwork is designed to be reusable, which makes it an economical choice for large projects with repetitive column structures.

Applications

Circular column steel formwork is used in various construction applications, including:

1. **High-rise buildings:** For creating aesthetically pleasing, smooth, and strong circular columns that support the structure.
2. **Bridges and viaducts:** For forming piers and supports.
3. **Industrial structures:** Such as silos and chimneys.
4. **Architectural elements:** Where cylindrical shapes are required for design purposes.

Sizing

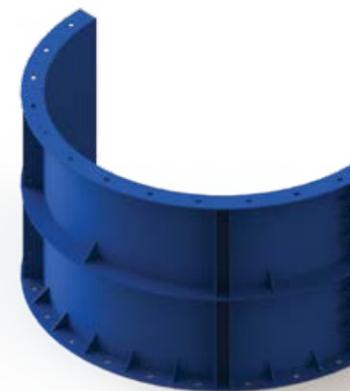
The sizing of circular column steel formwork can vary depending on the specific requirements of a project. Common sizes range from small diameters of 30 cm to large diameters exceeding 200 cm. The height of the formwork can also vary, typically in modular sections that can be stacked to achieve the desired column height. (Each step of the form work has a 100 cm height)

The thickness of the formwork sheets is typically 4mm while the horizontal rings holding the formwork have a thickness of 10 mm.

Assembly

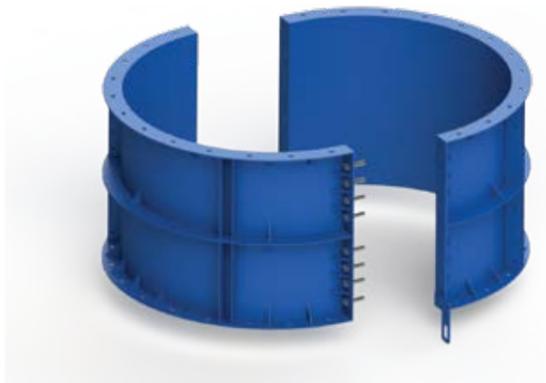
The assembly of circular column steel formwork involves several key steps:

1. **Positioning the Base:** The base plate or bottom frame is positioned and secured to ensure a stable foundation.



2. **Erecting the Formwork Panels:** Steel panels, which are curved to form the desired column diameter, are placed around the base. These panels are joined together using bolts, clamps, or other fasteners to create a continuous circular form.

3. **Securing the Formwork:** Additional braces and supports are used to stabilize the formwork and ensure it maintains the correct shape during concrete pouring.



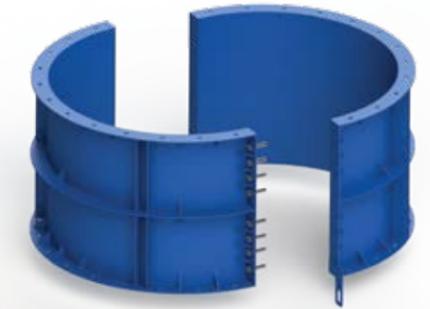
Components

The components of circular column steel formwork typically include:

1. **Steel Panels:** Curved sections made of steel, which form the body of the formwork.

Steel panel Sizing

Article	Description	Thickness (mm)	Weight (Kg)
00000	Ø 60cm X 100cm	4	94.50
00000	Ø 80cm X 100cm	4	112.62
00000	Ø 90cm X 100cm	4	121.68
00000	Ø 100cm X 100cm	4	130.73
00000	Ø 120cm X 100cm	4	148.85
00000	Ø 150cm X 100cm	4	176.03



4. **Aligning and Plumb Checking:** The formwork is aligned and checked for vertical accuracy (plumb) to ensure the column will be straight.

2. **Clamps & Bolts:** Used to join the steel panels together.

Article	Description	Weight (Kg)
00000	Clamp	1.5
00000	Bolt and Nut	0.18



5. **Pouring Concrete:** Once the formwork is securely in place, concrete is poured into the form. The formwork supports the concrete until it sets and reaches the required strength.

6. **Stripping the Formwork:** After the concrete has hardened, the formwork is removed. The panels can be cleaned and reused for other columns.

APPLICATIONS



Article No.	Diameter cm	Length cm	Weight Kg
000000	30	50	22.74
000000	30	100	40.7
000000	30	150	58.7
000000	30	300	112.6
000000	40	50	28.4
000000	40	100	51.8
000000	40	150	75.2
000000	40	300	145.5
000000	50	50	34.1
000000	50	100	63
000000	50	150	91.8
000000	50	300	178.4
000000	60	50	39.8
000000	60	100	74.1
000000	60	150	108.4
000000	60	300	211.2
000000	70	50	45.5
000000	70	100	85.2
000000	70	150	125
000000	70	300	244.1



Article No.	Diameter cm	Length cm	Weight Kg
000000	80	50	51.2
000000	80	100	96.3
000000	80	150	141.5
000000	80	300	277
000000	90	50	56.9
000000	90	100	107.5
000000	90	150	158.1
000000	90	300	309.9
000000	100	50	62.6
000000	100	100	118.6
000000	100	150	174.6
000000	100	300	342.7
000000	110	50	68.3
000000	110	100	130
000000	110	150	191.2
000000	110	300	375.6
000000	120	50	74
000000	120	100	141
000000	120	150	207.7
000000	120	300	408.5



WTD OFFICES WORLD WIDE



RELATED SYSTEMS

1. WTD Smart Beam
2. Waler System
3. Cuplock System
4. H-Frame System
5. Shore Load System
6. Steel Blank
7. ERW Steel Pipes & Tubes
8. Accessories
9. Column Clamp
10. Staking System
11. **Circular Column**



*A LEADING GLOBAL
CONSTRUCTION GROUP*

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