ÇELİKSAN
Formwork & Scaffold Industry
www.celiksan .com.tr

ABOUT ÇELİKSAN

- **Çeliksan** is one of the leading manufacturers of Scaffolding & Formwork systems.

- Our appliances have been since 1982 in Ostim-Ankara/Turkey industrial zone.

- We always provide high quality for low price.

Factory: 42.Sk. No: 17 Ostim-Ankara TÜRKİYE
Tel:+90 312 354 66 96 - Fax:+90312 354 06 58

ABOUT ÇELİKSAN

- **Çeliksan** is capable of the increasing its capacity according to costumer demands. We have manufactured and exported to many well-known companies for many years.

- Till today our company has produced countless formwork solutions for special projects such as bridge, culvert, building, etc.

ABOUT ÇELİKSAN

- We are experienced in our field.
- Our production principles are high quality, fast and safe production with our staff experienced in their branch.

Our Products

Çeliksan Production List:

- Formworks and Shoring
- Çeliksan Hand-Climbing Formwork System
- Çeliksan Falling (Dropping) Beam System
- Çeliksan Heavy-duty Tower Scaffold
- Work and Protection Scaffolds
- Telescopic Props
- Accessories

FORMWORKS AND SHORING

- Tunnel Formwork

-Wall Formwork

-Curved Formwork

-Single-sided Formwork

-Column Formwork

-Circular Column and Elliptical Column Formwork

-Slab Formwork

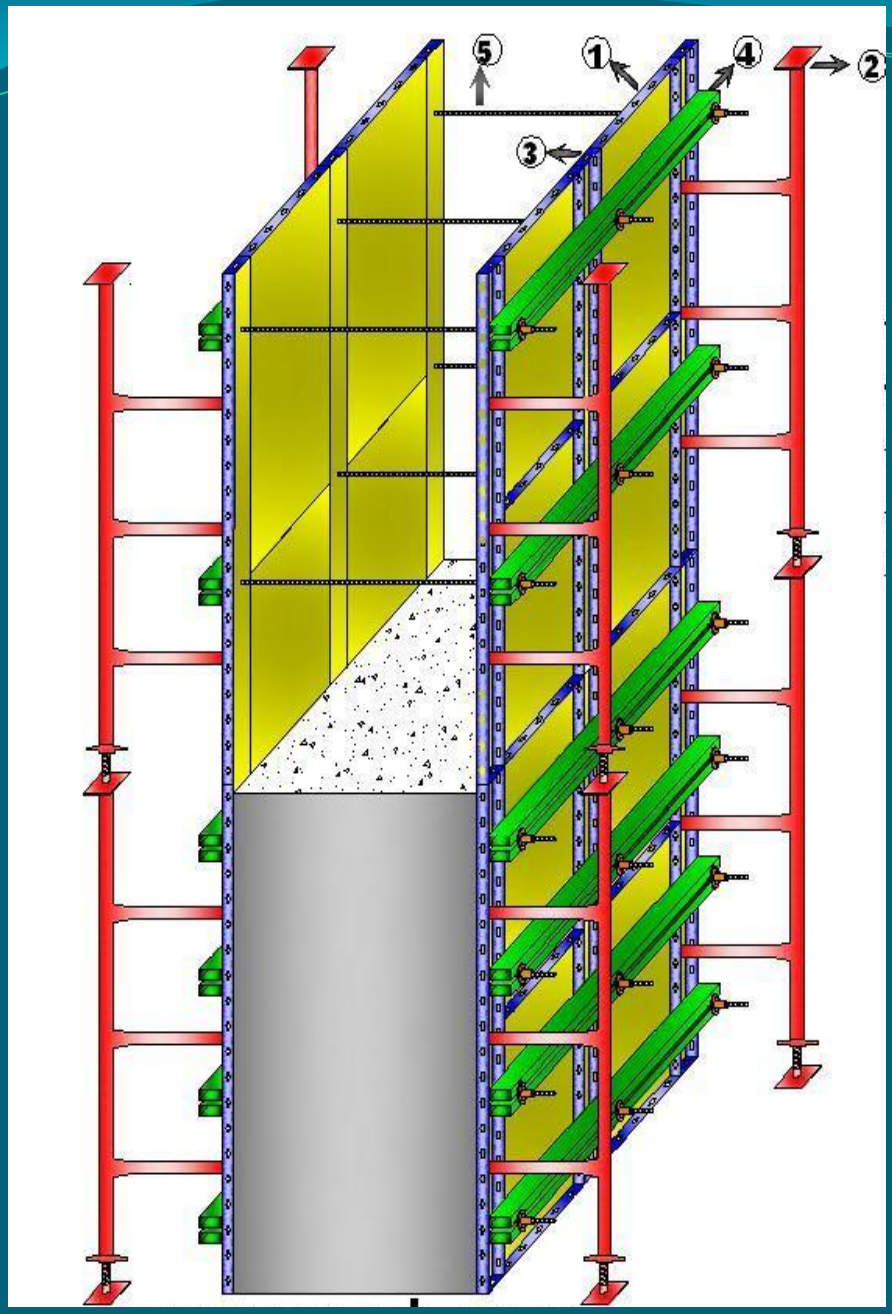
-Pre- Tensioned Bridge

-Open or Closed Tunnel Formwork

-Staircase Formwork

ÇELİKSAN HAND-CLIMBING FORMWORK

- It is a multi purpose system for all type of walls, straight or circular.
- You can use it on any wall easily by hand-climbing. This system needs less number of formworks. You can also use this formwork with cranes.
- This system itself has scaffolds inside, therefore you may use it without scaffolds during climbing.
- Çeliksan Hand-Climbing Formwork is cheaper than classical system wall formworks.



1. Formwork

2. Guide panel with Scaffold

3. Guide panel without Scaffold

4. Horizontal Double Support

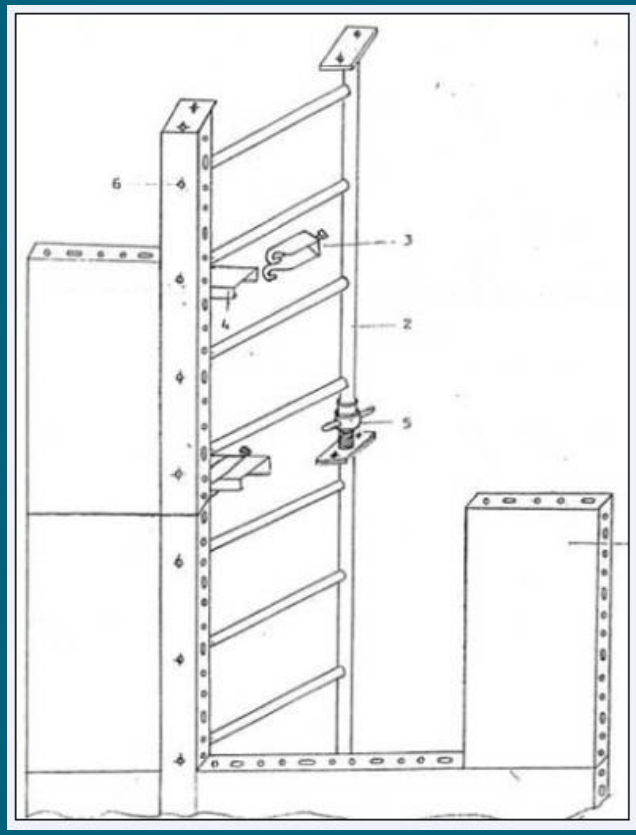
5. Tie-Rod

ÇELİKSAN HAND-CLIMBING FORMWORK

- You do not need a crane for climbing. By using only hammer, significant savings could be achieved in labor costs.
- This is a fast and cost reducing formwork system that is used in the construction of bridges, viaducts and dams.
- At the completion of work or when the formwork is worn out to a degree that they can not be further used, they still have financial value when they are sold.

Installation:

- The guide panel should be longer than the formwork for the first concrete pouring. In this way, part of the guide panels on both sides are fixed to each other via tie rods inside the concrete.
- For the second concrete pouring, all the panels and formworks except the uppermost guide panel can be dismounted and the system will preserve its rigidity.
- The same steps should be repeated until the top of the wall is reached. Therefore, the same guide panels and formworks can be re-used during each concrete pouring.



Installation:

- Generally, standard dimensions of formworks are 50 x100 cm and 50 x150cm. Width of the guide panel is 10 cm. One of two guide panels has adjustable stairs (scaffolds). Therefore any worker can use these stairs as a scaffold during mounting and dismounting of the formwork.

- In conclusion, in the same project it is possible to use one of set of formwork till the end of work. The guide panels provide the hand-climbing feature of this system with minimum number of formworks.

ÇELİKSAN FALLING (DROPPING) BEAM SYSTEM

- Çeliksan Falling Beam System is the fastest system after the tunnel formwork system.
- You can use our system only by labor force, however you can not use tunnel formwork without crane. The heaviest piece is 25 kg in our system. **Set up cost of this system is cheaper than the conventional formwork systems.**
- You can complete any deficiencies using wood, because of the fitness of wood to the system. Therefore, you do not need any special pieces for new projects.

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ÇELİKSAN FALLING (DROPPING) BEAM SYSTEM

- In this system, you can use standard props and standard steel panels (dimensions 50x100 cm.) or plywood. All constructors have these materials or can obtain easily. Therefore, this is also another advantage of Çeliksan Falling Beam System for constructor.
- We are giving only main beam and falling beam with the beam head and key in order to easy mount and dismount. All parts are made from steel. If you buy 50% additional main beam and prop (telescopic), you can have two set of formworks. In this system, you can use 0.7 props per m^2, whereas in the conventional system you must use one prop per m^2. So buying % 50 additional prop is equivalent to buying one set of props of the conventional system.

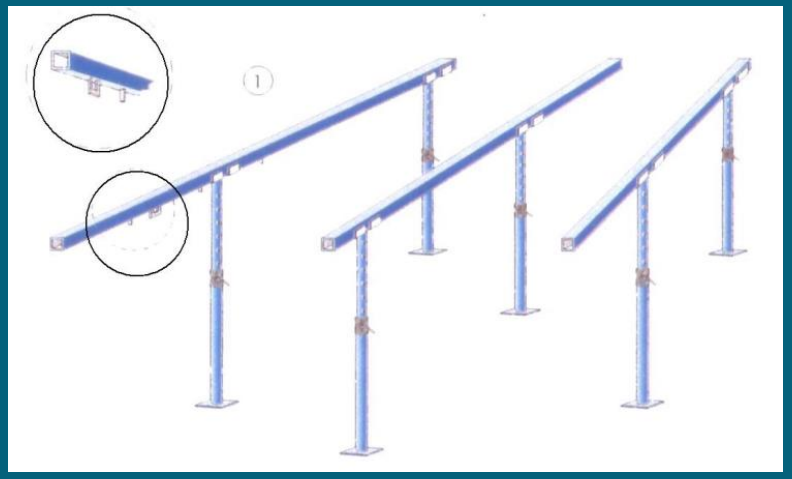
ÇELİKSAN FALLING (DROPPING) BEAM SYSTEM

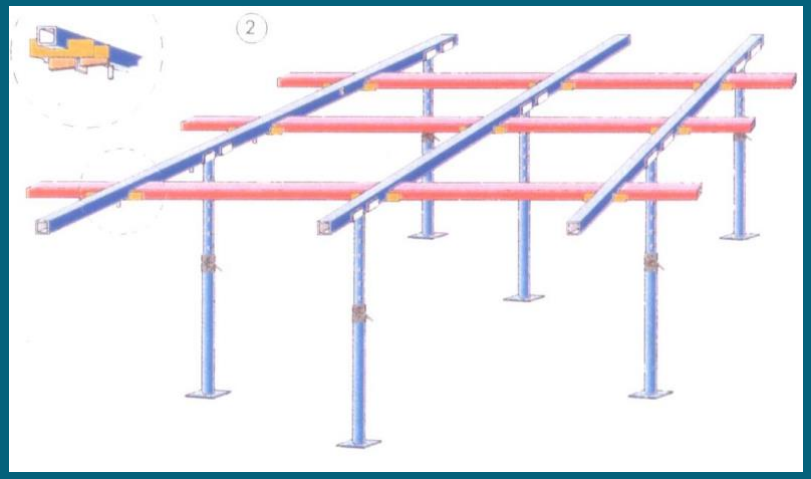
- At the completion of work, or when the formwork is worn out to a degree that they may not be used further, they still have financial value when they are sold. If you used wood, at the end of job you have nothing in hand because the wood is disposable. **Therefore, this is also another advantage of Çeliksan Falling Beam System.**

- This is a fast and cost reducing formwork system, used in the construction of the cork carpet and hollow tile floor.

Installation:

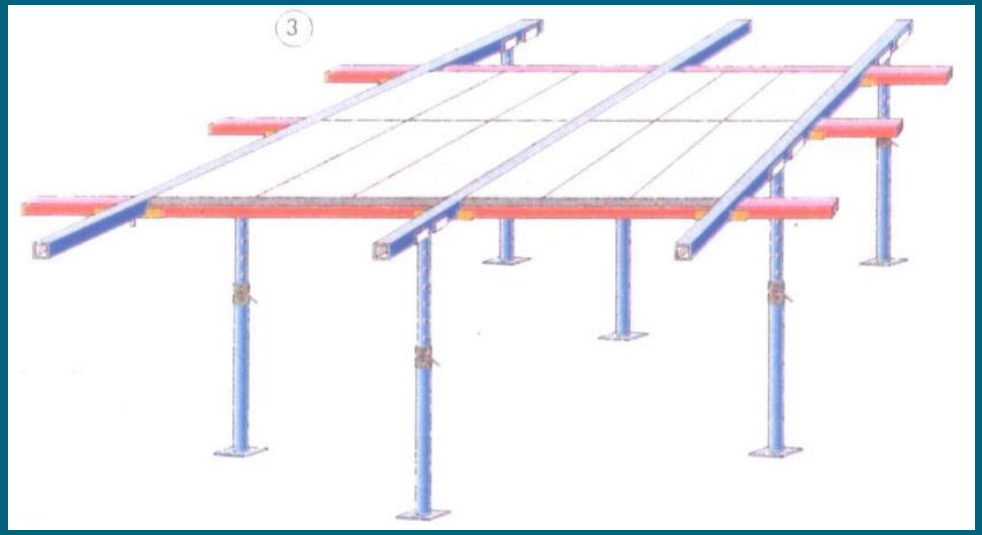
- First, put up standard props with tripod, adjusting the height for a faster installation. Then put the main beams on props. Mount the beam head and the key to the main beam on the ground. Falling beam between two main beams can be inserted inside the beam heads easily.





Installation:

- Last step for installation is putting the steel panel or plywood, whichever you have. The system is ready to put reinforcement. Only three workers can install 300m² floor in a (one) day.



Dismounting

- After pouring of concrete, you need only two days for dismounting. Main beams will stay but you can take the falling beams and the panels/plywood using only hammer to kick to the key of the beam head.

- In this system, we prefer pouring of the column concrete first. Hence, while pouring columns you can carry additional main beam and props. Afterwards, you can carry falling beam, formwork, beam head and keys to the next construction area. Then, start mounting at this new pouring area. When you mount half of the area, you can dismount half of the main beam that was at the previous area.

ÇELİKSAN HEAVY-DUTY TOWER SCAFFOLD

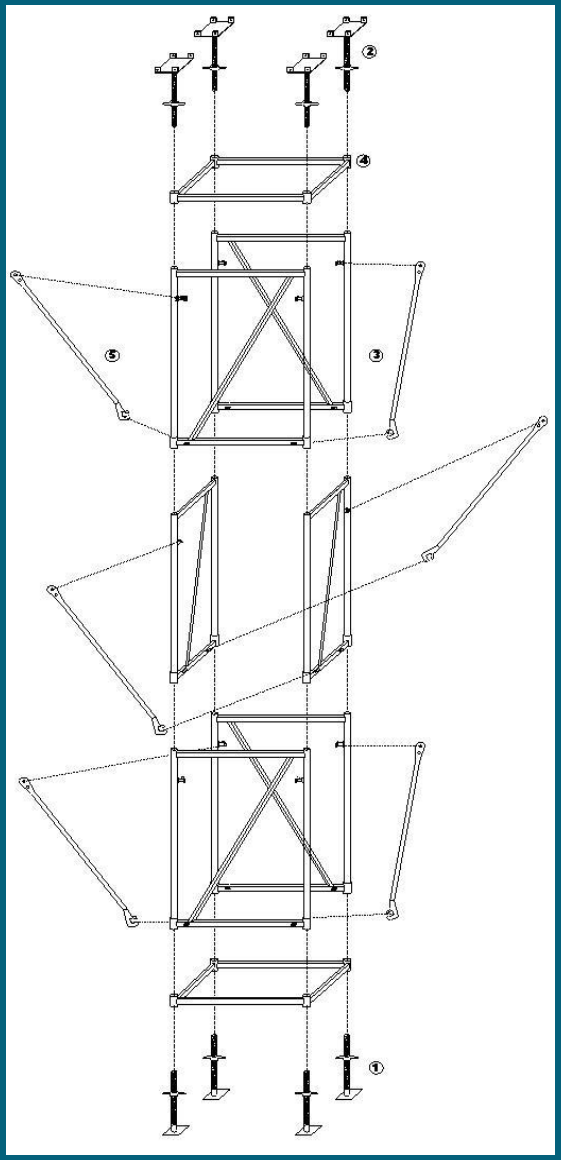
- Tower Scaffolding has the cheapest installation cost.
- A hammer is enough to mount and dismount.
- All parts are made of high quality materials and could be used safely for long years. Therefore this is the cheapest system to use.
- It is safely used at bridges, subways, dams etc.
- You can use this system as a table formwork and scaffold by changing the diagonal arm.

ÇELİKSAN HEAVY-DUTY TOWER SCAFFOLD

- It has five different elements.
- The height of main elements are 50cm, 100 cm, 133 cm.
- Scaffolds with intermediate heights can be adjusted via jacks.

ELEMENTS OF TOWER

1. Base Jack with joint
2. Upper jack with joint
3. Quick mounting side element
4. Rigidity and balance element
5. Diagonal arm



1) Base Jack with joint

- ✓ AK.38/50.
- ✓ When horizontal wind force is 0.6 kN/ m^2/foot, the vertical load is 50 kN/foot.
- ✓ The jack should be adjusted to max.20 cm.
- ✓ It can be inclined up to 6%.

Weight: 6.2 kg.

2) Upper jack with joint

- ✓ UR.38/50.
- ✓ It has the same properties with the base jack.
- ✓ Additionally, it has 4 way head.

Weight: 7.0 kg.

3) Quick mounting side element

- ✓ H.100/133
- ✓ Standard dimension are 100cm and 133cm.
- ✓ Mounting is easy . A hammer is enough to dismount.
- ✓ All the small parts of the element are mounted on the system such that they cannot be lost.
- ✓ It has locking items (seven different parts)

Weight: H.50:8.5 kg
H.100:15.0 kg
H.133:16.5 kg

4) Rigidity and balance element

- ✓ D.10.
- ✓ In order to get rigidity, it should be used to on the top and base of the tower, so that it distributes the force equally.

Weight: 12.5 kg

5) Diagonal arm

- ✓DK.100/133.
- ✓You can use the same arm for H.100 and H.133 side elements.
- ✓ It has a forged steel claw on one edge. Angle and radius of claw helps to ease the mounting and provides rigidity.

Weight: 2.5 kg

Work and Protection Scaffold

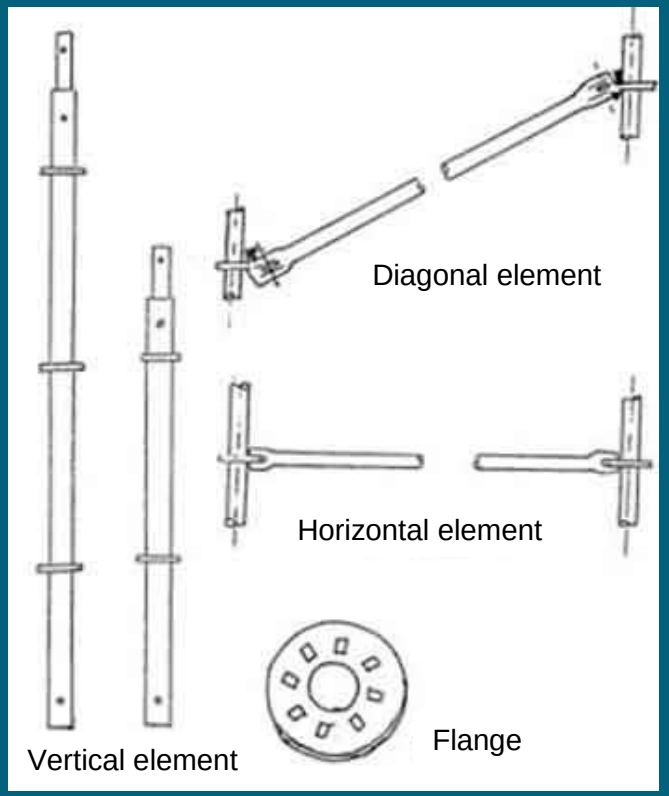
- **A) With Flange And Wedge**

  This type of scaffold has been used widely in domestic market and export for fifteen years.

- **B) Cup-Lock**

  Mostly, it is preferred for the building facades and also as carriage scaffolds under the slab formworks.

Work and Protection Scaffold



Standart Production Dimensions

- ☞ - Vertical Element 3.00 m
- ☞ - Horizontal Element 3.00 m
- ☞ - Horizontal Element 0.70 m
- ☞ - Wall Support

Complementary Production Dimensions

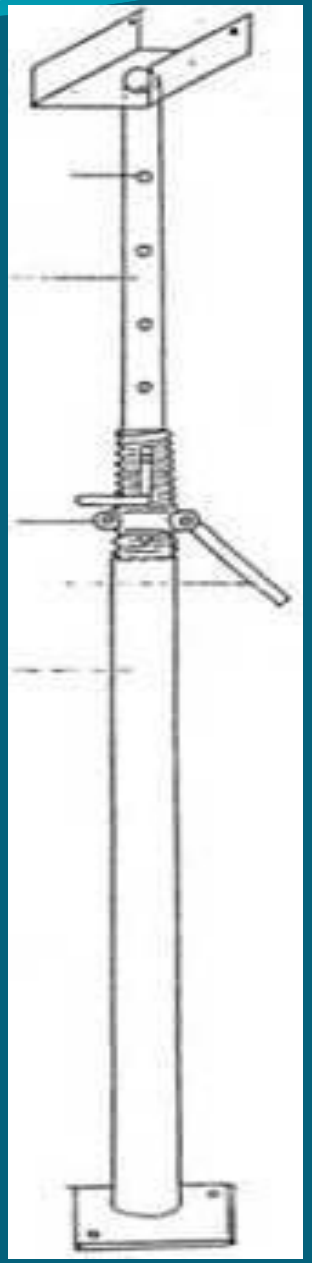
- ☞ - Vertical Element 2.50 mt - Vertical Element 2.00 mt.
- ☞ - Vertical Element 1.50 mt. -Vertical Element 1.00 mt.
- ☞ - Horizontal Element 2.50 mt. -Horizontal Element 2.00 mt.
- ☞ - Horizontal Element 1.50 mt. -Horizontal Element 1.00 mt
- ☞ - Jack
- ☞ - Metal Plank

TELESCOPIC PROP

- Props provide the ideal cost saving method to support for all kind of formworks, walls, slabs etc.
- They have a wide variety of applications, especially at building construction or repair work.

TELESCOPIC PROP

- The head of telescopic prop is 10 cm for slab.
- The head of telescopic prop is 30 cm under the concrete beam .
- We also produce costumised telescopic props.



TELESCOPIC PROP

Standart Production dimensions:

- Between 175-300 cm.
- Between 200-350 cm.
- Between 225-400 cm.

Standard Technical Specs:

- Exterior pipe (60x2,5 mm)
- Interior pipe (48x2,5 mm)
- Upper plate 3-3,5 mm
- Base plate 5 mm
- Handle 12 mm
- Mechanism has 7 twists
- Nodular Cast Nut (GGG 50)
- Anti-rust dyeing
- ISO, TSE certificated pipes

ACCESSORIES

Tie-Rod Nut

Tie-Rod

Panel Lock

We look forward to working with you on your projects.

Çeliksan is an ever-developing company producing high-quality products for you.

For more detail, please contact us!!

Whatever you need

Costumised Formworks & Scaffolds

We are here to find the best solutions for you!!