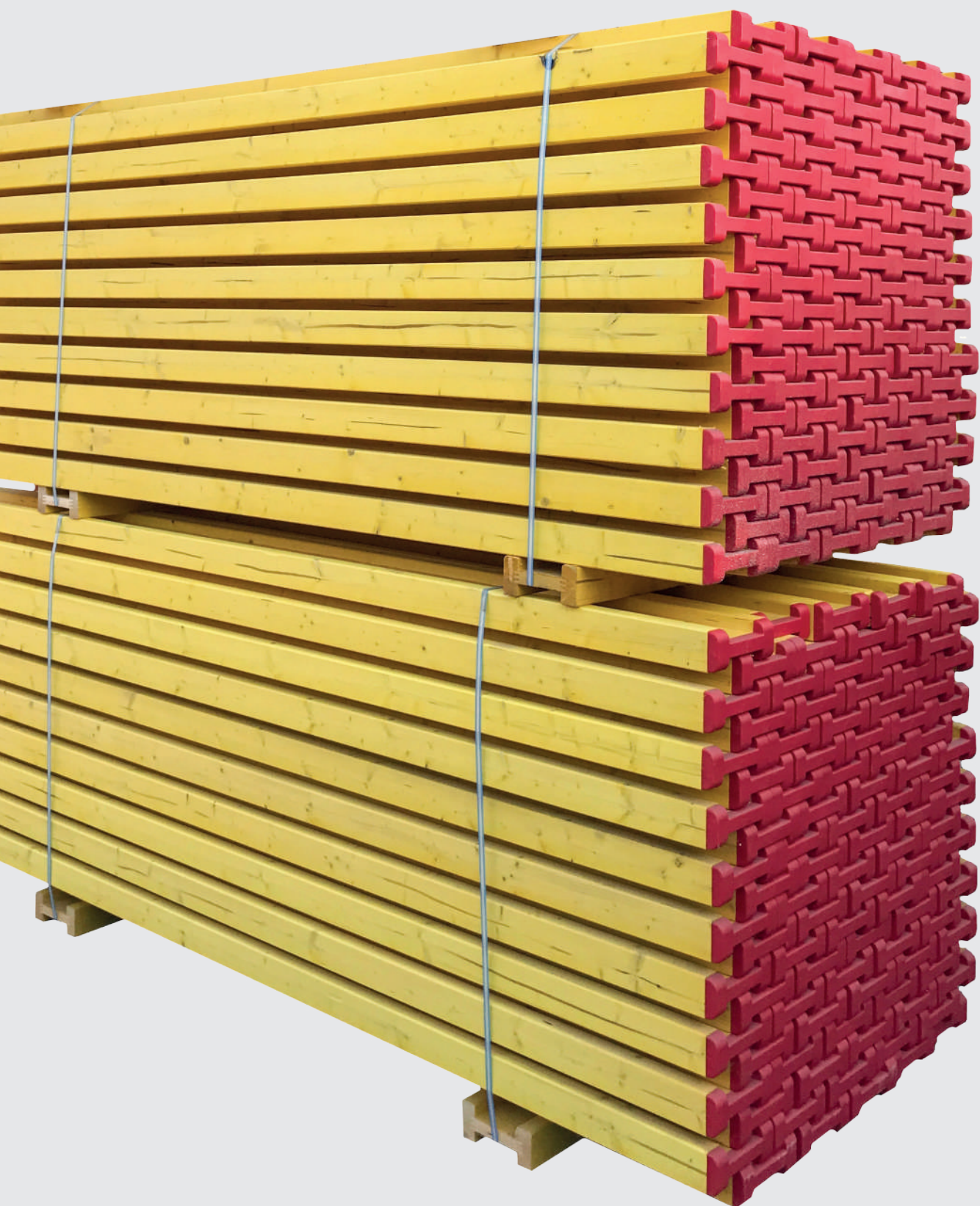


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# *H20 beams and 3ply panels for formworks*







# ***H20 beams and 3ply panels for formworks***



## General features



RESISTANCE



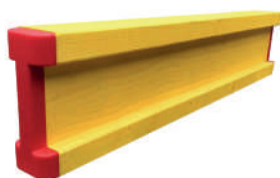
LONG DURATION



SAFETY

**At GBM you will find beams and panels designed to meet any needs of the construction industry.**

**GBM H20 and GBM H20+ slab beams are currently the most resistant in the market.** They come in various sizes. They are made with the outer parts made of selected quality solid fir, comb-like coupled using the finger-joint technology, and with a three-layer core. They may come in plastic protections so as to reduce the risk of chipping the outer parts of the beams.



**GBM H20 and GBM H20+ slab beams.**

**GBM formwork sheets are built with 3 layers of wood** obtained from fir and spruce trees grown in sustainable forests. The panels are coated with highly resistant melamine resin. They are often used in the construction industry and stand out for their quality and durability above all.



**GBM formwork sheets.**









# H20 slab beams.



UNI EN 13377

**GBM H20 and GBM H20+ slab beams are currently the most resistant in the market.**

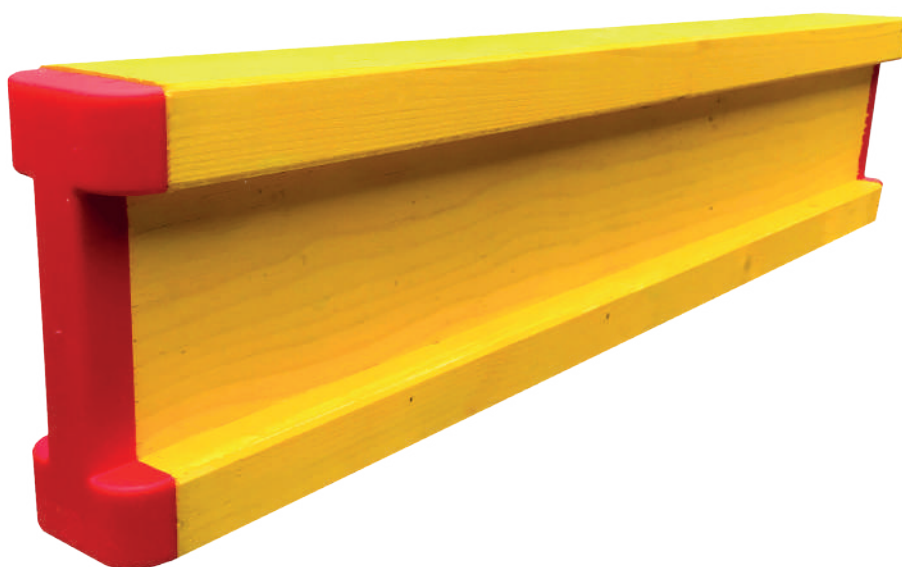
Available in various sizes, the outer parts are made of selected quality solid fir, comb-like coupled using the finger-joint technology, and with a three-layer core.

Upon request, they may come in plastic protections so as to reduce the risk of scratching the outer parts of the beams.

**Below are the features of GBM's slab wooden H20 beams:**

- » **Type of wood:** fir
- » **Weight:** 4.5 kg/m
- » **Gluing:** melamine resin-based glue, type EN 30, approved for fixing wooden structural components
- » **External:** made of selected solid fir and coupled with 80 x 40 mm section - milled and perfectly calibrated for an optimal assembly with core
- » **Core:** three layers of solid fir
- » **Surface:** treatment with water repellent paint
- » **Standard length:** 1.95 / 2.45 / 2.65 / 2.90 / 3.30 / 3.60 / 3.90 / 4.50 / 4.90 / 5.90 / max. 6 m
- » **Standard packaging:** 50/100 pcs per package

Thanks to their perfect assembly, GBM H20 and GBM H20+ beams can be cut and used at any length.





Floor thickness (cm)	Total load (kN/m2)	Distance between crossbeams (m)				Selected distance between the main beams (m)									
		0,5	0,625	0,667	0,75	1	1,25	1,5	1,75	2	2,25	2,5	3	3,5	
10	4,38	3,7	3,43	3,35	3,22	2,93	2,72	2,5	2,31	2,16	2,04	1,93	1,7	1,45	
12	4,91	3,5	3,24	3,17	3,05	2,77	2,57	2,36	2,19	2,05	1,92	1,82	1,52	1,3	
14	5,43	3,32	3,09	3,02	2,91	2,64	2,45	2,24	2,08	1,94	1,82	1,64	1,37	1,18	
16	5,95	3,19	2,96	2,9	2,79	2,54	2,35	2,14	1,98	1,85	1,66	1,5	1,25	1,07	
18	6,48	3,07	2,85	2,79	2,69	2,44	2,25	2,06	1,9	1,72	1,53	1,38	1,15	0,99	
20	7	2,97	2,76	2,7	2,6	2,36	2,17	1,97	1,82	1,59	1,42	1,28	1,07	0,91	
22	7,53	2,88	2,68	2,62	2,52	2,29	2,09	1,9	1,69	1,48	1,32	1,19	0,99	0,85	
24	8,05	2,81	2,61	2,55	2,45	2,23	2,02	1,84	1,58	1,39	1,23	1,11	0,93	0,8	
26	8,57	2,74	2,54	2,49	2,39	2,18	1,95	1,73	1,49	1,3	1,16	1,04	0,87	0,75	
28	9,1	2,67	2,48	2,43	2,34	2,12	1,89	1,63	1,4	1,23	1,09	0,98	0,82	0,71	
30	9,68	2,61	2,43	2,38	2,29	2,06	1,83	1,54	1,32	1,15	1,03	0,93	0,77	0,65	
35	11,25	2,49	2,31	2,26	2,18	1,9	1,59	1,32	1,14	0,99	0,89	0,8	0,66	0,56	
40	12,83	2,38	2,21	2,17	2,07	1,74	1,39	1,16	1	0,87	0,78	0,7	0,58	0,49	
45	14,4	2,29	2,13	2,07	1,94	1,55	1,24	1,04	0,89	0,78	0,69	0,62	0,51	0,44	
50	15,97	2,22	2,03	1,96	1,84	1,4	1,12	0,94	0,8	0,7	0,62	0,56	0,46	0,4	
55	17,54	2,15	1,93	1,87	1,69	1,27	1,02	0,85	0,73	0,63	0,56	0,51	0,42	0,36	
60	19,11	2,07	1,85	1,75	1,56	1,17	0,94	0,78	0,66	0,58	0,52	0,46	0,39	0,33	
65	20,68	1,98	1,72	1,62	1,44	1,08	0,87	0,72	0,61	0,54	0,48	0,43	0,36	0,31	
70	22,26	1,91	1,6	1,5	1,34	1,01	0,81	0,66	0,57	0,5	0,44	0,4	0,33	0,28	
75	23,83	1,85	1,5	1,41	1,25	0,94	0,75	0,62	0,53	0,47	0,41	0,37	0,31	0,27	
80	25,4	1,76	1,41	1,32	1,17	0,88	0,71	0,58	0,5	0,44	0,39	0,35	0,29	0,25	
85	26,97	1,65	1,32	1,24	1,11	0,83	0,66	0,55	0,47	0,41	0,37	0,33	0,27	0,23	
90	28,54	1,56	1,25	1,17	1,05	0,79	0,62	0,52	0,44	0,39	0,35	0,31	0,26	0,22	
95	30,11	1,48	1,19	1,11	0,99	0,75	0,59	0,49	0,42	0,37	0,33	0,29	0,25	0,21	
100	31,69	1,41	1,13	1,06	0,94	0,71	0,56	0,47	0,4	0,35	0,31	0,28	0,23	0,2	

Assembly diagram for positioning beams and props: distance between the props (C), distance between the main beams (B), distance between the secondary beams (A).

## An example of calculation:

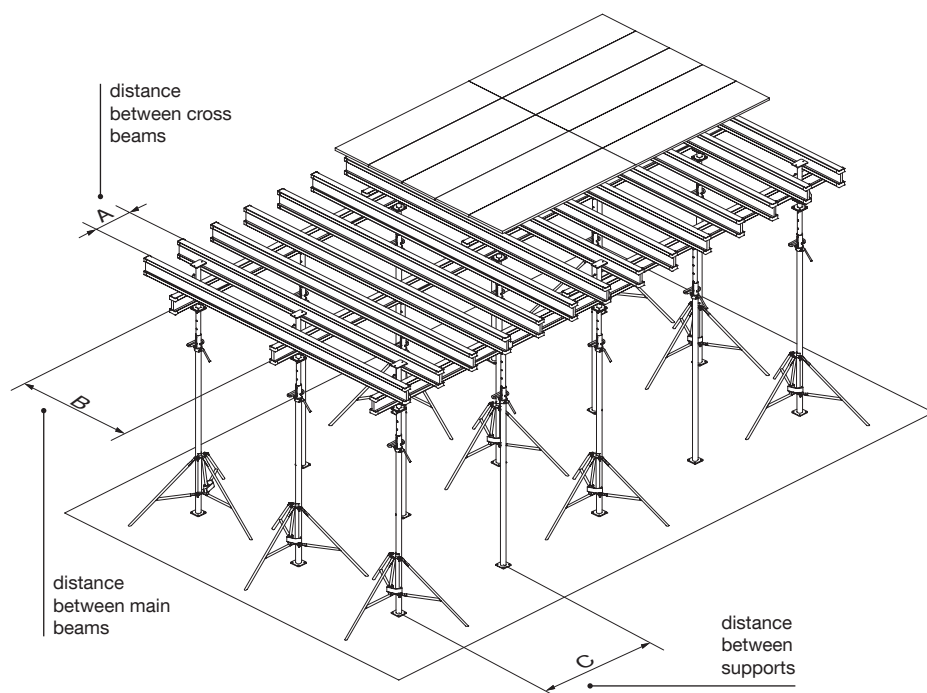
Floor thickness: 20 cm, distance between crossbeams: 0.75 m; we are looking for the distance between the main beams and the supports.

The permissible distance between the main beams according to the table 1 = 2.60 m.

The identical or the closest distance between the main beams in the table 2 = 2.5 m.

Look for the permissible distance between supports in the table 2, read vertically down the column "2.50 m" and horizontally in the row "20 cm" of the column "floor thickness", the result is 1.28 m.

**Caution:** Examine the supports to ensure the corresponding carrying force.





# Formwork panels.

**GBM formwork 3ply panels are built with three layers of wood obtained from fir and spruce trees grown in sustainable forests.**

The melamine resin they are coated with confers resistance and uniformity to the surface of the panels thus making them suitable for use in any construction site.

Often used in the construction industry, they stand out for quality and durability.

**Below are the features of GBM shuttering panels:**

- » **Wood type:** spruce and red fir
- » **Wood humidity:** 12% +/-2%
- » **Thickness:** 21mm; 27mm; 30mm

» **Weight:**

21 mm = 10 kg/m<sup>2</sup>;

27 mm = 12,3 kg/m<sup>2</sup>;

30 mm = 13,8 kg/m<sup>2</sup>;

- » **Protection surface:** highly resistant melamine resin coating

» **Standard packaging:**

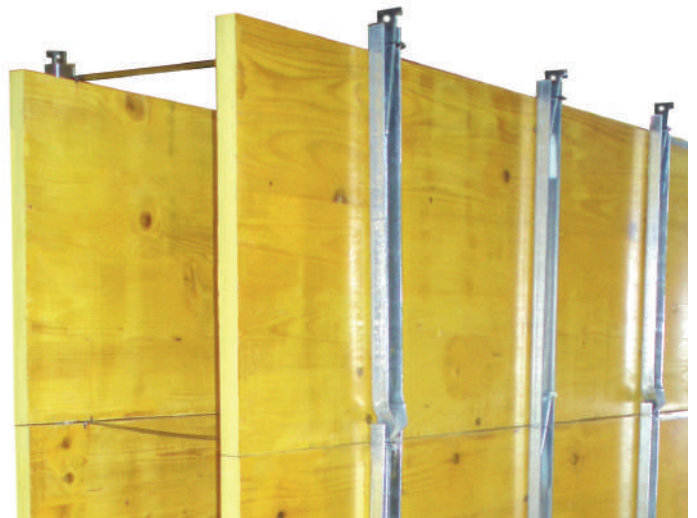
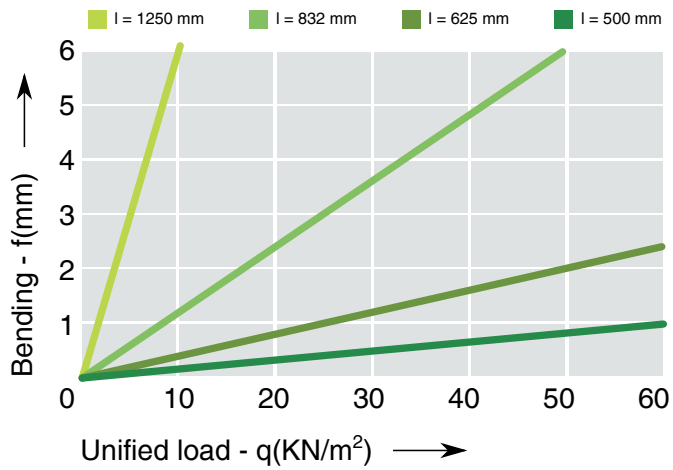
21 mm: 100 pcs per package

27 mm: 80 pcs per package

30 mm: 70 pcs per package







# Tie rods, formwork clamps, tie-brackets and ties for pillar casting, nuts and cones. Find the solution you need. Or discover new ones.



**Formwork clamp**  
600-800mm weight 7,20kg

CODE  
**CA02**



**Iron spacers for wooden panels**  
100-1200mm R 70kg/mm2

CODE  
**CA03**



**Helicoidal stanchion**  
500mm weight 0,90kg

CODE  
**CA08**



**Stanchion pressed hook**  
500mm weight 0,85kg  
1000mm weight 1,60kg  
1500mm weight 2,40kg

CODE  
**CA09**



**Pre-galvanised U-shaped element**  
630mm weight 1,00kg n°2 holes  
1130mm weight 1,80kg n°3 holes

CODE  
**CA10**



**Tie-brackets for pillar**  
150-450mm 500-950mm  
weight 2,35kg

CODE  
**CA06**



**Ties for pillar**  
200-400mm weight 9,30kg  
250-500mm weight 10,40kg  
250-600mm weight 11,90kg  
400-800mm weight 16,50kg  
600-1000mm weight 28,50kg

CODE  
**CA07**



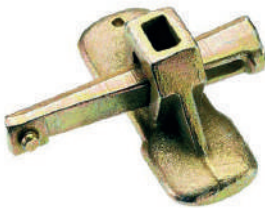
**Galvanised wedge**  
weight 0,115kg

CODE  
**CA11**



**Wedge for ties**  
weight 0,40kg

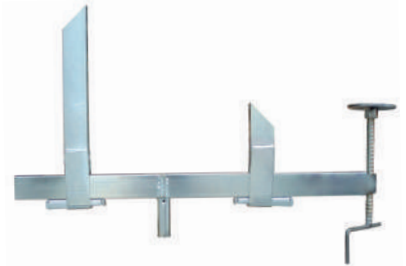
CODE  
**CA12**



**Wedge clamp for formwork** CODE  
for  $\varnothing 6-10\text{mm}$  weight 0,48kg **CA15**



**Tensioner for wedge clamp** CODE  
for  $\varnothing 8-10\text{mm}$  weight 1,40kg **CA20**



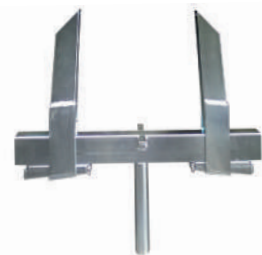
**Clamp for edge drop beam** CODE  
**CA44**  
**Model A:**  
Base  $15 \div 40\text{ cm}$   
Internal height  $15 \div 20\text{ cm}$   
External height  $50\text{ cm}$   
**Model B:**  
Base  $15 \div 40\text{ cm}$   
Internal height  $15 \div 40\text{ cm}$   
External height  $50\text{ cm}$



**Flange nut for formwork** CODE  
for  $\varnothing 17\text{mm}$  bar  $\varnothing 110\text{mm}$  weight 0,80kg **CA33**



**Plate nut for formwork** CODE  
for  $\varnothing 17\text{mm}$  bar  $\varnothing 100\text{mm}$  weight 1,45kg **CA34**



**Clamp for inside drop beam** CODE  
**CA45**  
**Model A1:**  
Base  $15 \div 30\text{ cm}$   
Internal height  $15 \div 20\text{ cm}$   
**Model A2:**  
Base  $15 \div 30\text{ cm}$   
Internal height  $25 \div 35\text{ cm}$   
**Model A3:**  
Base  $15 \div 30\text{ cm}$   
Internal height  $40 \div 50\text{ cm}$   
**Model B1:**  
Base  $30 \div 45\text{ cm}$   
Internal height  $15 \div 20\text{ cm}$   
**Model B2:**  
Base  $30 \div 45\text{ cm}$   
Internal height  $25 \div 35\text{ cm}$   
**Model B3:**  
Base  $30 \div 45\text{ cm}$   
Internal height  $40 \div 50\text{ cm}$

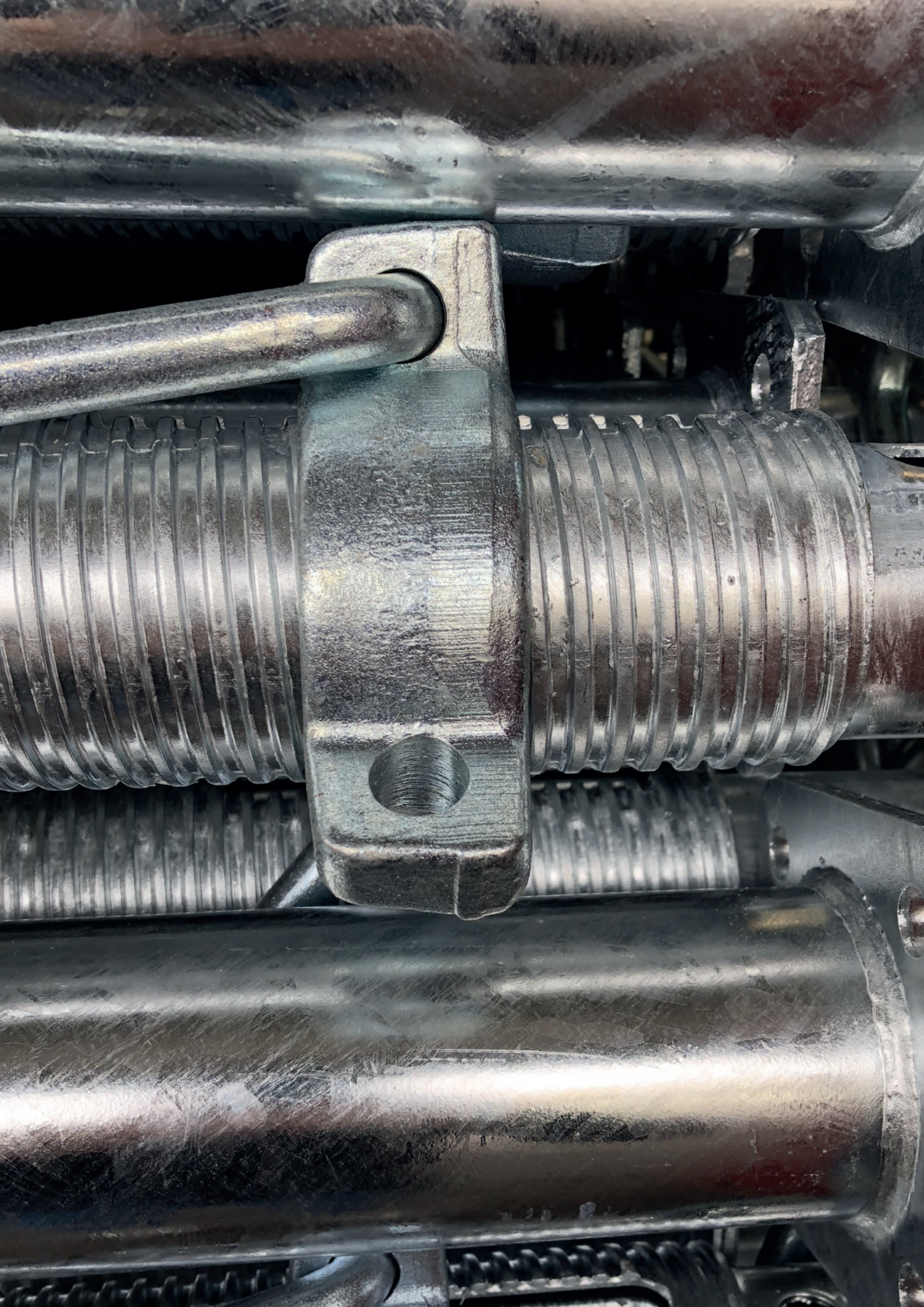


**Tie Rod C45** CODE  
500-6000mm R 100kN/mm<sup>2</sup> weight 1,47kg/mt **CA01**



**Dome nut plate for formwork** CODE  
for  $\varnothing 17\text{mm}$  bar  $120 \times 120\text{mm}$  weight 1,30kg **CA35**









# *Other accessories*

## We - at GBM - manufacture a number of accessories capable of covering any event of use in a worksite.

More than 120 specific accessories for props and scaffolding, here some samples of them.



### Hopper support

Height 65 cm  
Length 97cm  
Width 72cm  
Weight 16,0 kg

CODE  
**P023**



### Hopper

Loading mouth 64x42 cm  
Exhaust mouth 39cm  
Height 85 cm - Length 98cm  
Width 74cm - Weight 8,5 kg

CODE  
**P024**



### Scaffolding caster wheel

200 x 40 mm, with brake

CODE  
**P026**



### Convoyer

Upper outer ø 59 cm  
Upper inner ø 50 cm  
Lower ø 38 cm  
Height 106 cm - Weight 9,0 kg

CODE  
**P025**



### Screw parapet

Full opening 80 cm upright  
height 100 cm Weight 5,6kg

CODE  
**AC11**



### Adjustable steel clamp for formwork

max opening 480mm weight 5,30kg

CODE  
**CA13**



### Adjustable cast iron clamp for formwork

max opening 280mm weight 2,85kg

CODE  
**CA14**



### Steel builder trestle

L 1m H 1-1,8m weight 13 kg

CODE  
**AC09**





## Steel pin for prop

ø11 mm weight 0.40 kg  
ø14 mm weight 0.50 kg  
ø16 mm weight 0.88 kg

CODE  
**PU05**



## Pin for prop with steel spring

ø16mm l75mm weight 0,12kg

CODE  
**PU07**



## Nut for prop light type in cast iron

for ø60mm h40mm weight 0,85kg

CODE  
**PU10**



## Nut for prop with 3 fins in forged steel

for ø60mm h35mm 1,00kg  
for ø76mm h40mm 1,35kg  
for ø89mm h40mm 1,40kg

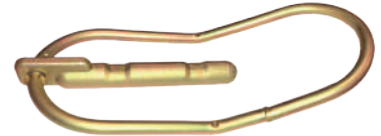
CODE  
**PU14**



## Quick release for steel prop

ø int. 63,5mm weight 0,55kg  
ø int. 79,5mm weight 1,10kg

CODE  
**PU15**



## Hook for prop with release

ø 16 mm weight 0,48kg

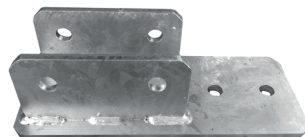
CODE  
**PU21**



## Plate for push-pull prop

weight 0,9kg

CODE  
**AC05**



## Double plate for push-pull prop

weight 4,4kg

CODE  
**AC08**



## Bracing clamp

weight 1,45kg

CODE  
**AC09**



[www.gbmitaly.com](http://www.gbmitaly.com)

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