

LIFTING CLAMPS FOR CONCRETE MATERIAL



Lifting clamps for concrete material (cam type, pad type)
P.141 ►



Lifting clamps for concrete material (manual, machine type)
P.142 ►



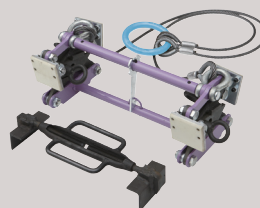
Lifting clamps for concrete material (adjustable clamp range type)
P.143 ►



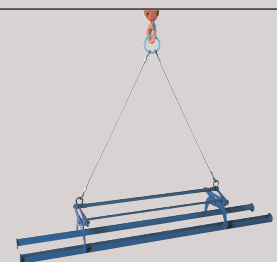
Balances
P.143 ►



Lifting clamps for concrete material (adjustable clamp range type)
P.144 ►



Internal expanding lifting clamps for U shaped gutter
P.145 ►



Batch lifting clamps for bank block
P.147 ►

APPLICABLE CONCRETE MATERIALS AND CLAMPS CHART

● Compliant item
 ▲ Item that can be used

Lifting clamps for concrete material		CGC	CGC-N	SKC (SKC-M) (SKC-W)	SKC-D	BUC-N BUC-A	UGC-M	AMC-N	KBC (KBC-WH) (KBC-WA)
Concrete materials									
U shaped gutter		●	●	●	●	●	▲	●	
Single side thick U shaped gutter									
Drop-lid type U shaped gutter		●			●	●			
Single side thick drop-lid type U shaped gutter		1000							
U flume		●	●	●	●			▲	
Long U shaped gutter					●	●			
Single side thick long U shaped gutter									
U shaped gutter (large drainage ditch)					●	●			
Special U shaped gutter		▲	▲	▲	●	●		▲	
Single side thick special U shaped gutter									
Flume (aqueduct)					●	●			
Retaining gutter block		▲	▲	▲	●			▲	
L shaped panel		●	●	●	●			●	
Boundary block							●	●	
L shaped concrete block							●	●	
Concrete board		●	●	●	●		●	●	
		vertical lifting	vertical lifting	vertical lifting	vertical lifting				
Bank block									●
									batch lifting
U shaped ditch lid							●		
Concrete pipe for well (assembly sewage manhole)		●		●	●				
Catch basin								▲	
Block							●	●	

Note : Even for same item name, it can be compliant or not with the concrete material depending on the item size. Always check with the operation manual.

CGC

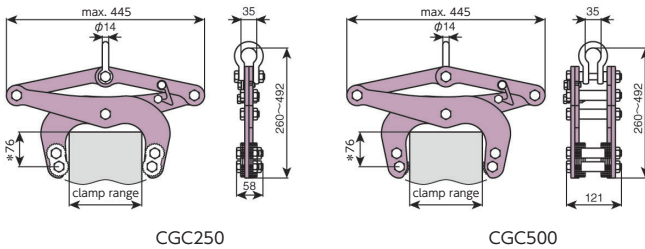
LIFTING CLAMP FOR CONCRETE MATERIAL (Cam Type)

Features

- Ideal for various kinds of concrete materials like U shaped gutters, U flumes, L shaped panels, boards.
- New cam design with 4 adjustable positions, allowing outstanding durability.
- The releasing lock can be easily set and released by a single action with the hook plate.

Example of use

- ⚠ Always lift a load at 2 or more points for safety.



CGC250

CGC500

CGC1000

* : dimensions with concrete material at max. thickness.

Item No.	Rated capacity(kg)	Clamp range(mm)	N.W.(kg)
CGC250	250	30~160	6
CGC500	500	30~160	12
CGC1000	1000	30~180	26

CGC-N

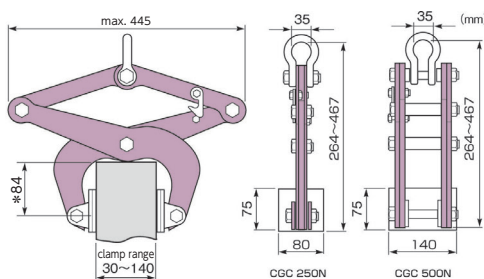
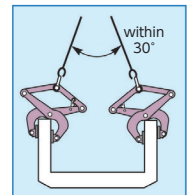
LIFTING CLAMP FOR CONCRETE MATERIAL (Pad Type)

Features

- Ideal for various kinds of concrete materials like U shaped gutters, U flumes, L shaped panels, boards.
- The spike design of the special rubber pads allows to grip firmly the load (can also be used as non-marring type).
- The releasing lock can be easily set and released by a single action with the hook plate.

Example of use

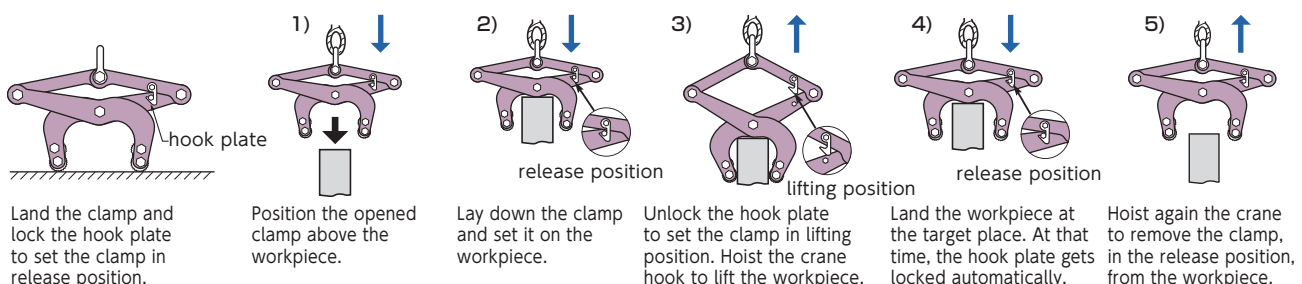
- ⚠ Always lift a load at 2 or more points for safety.



* : dimensions with concrete material at max. thickness.

RELEASE & LOCK MECHANISM OPERATION

With CGC and CGC-N clamps, when you lock the hook plate, the releasing lock mechanism allows easy set or remove of the workpiece.



SKC150(M) • SKC250(W) • SKC1250D

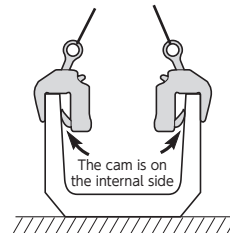
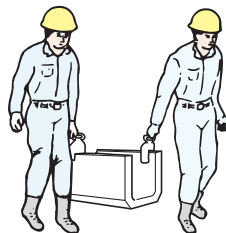
LIFTING CLAMP FOR CONCRETE MATERIAL (Manual / Machine Type)

Features

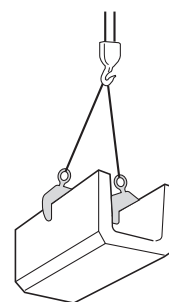
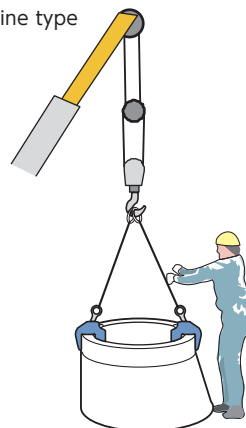
- Ideal for lifting and handling concrete materials like reinforced concrete U shaped gutters, single side thick U shaped gutters, U flumes.
- Compact, light-weight and easy to handle.
- Including a mechanism making that the clamping force increases in proportion to the load weight.
- One touch open/close mechanism for easy operation.

▶ Example of use ⚠ Always lift a load at 2 or more points for safety.

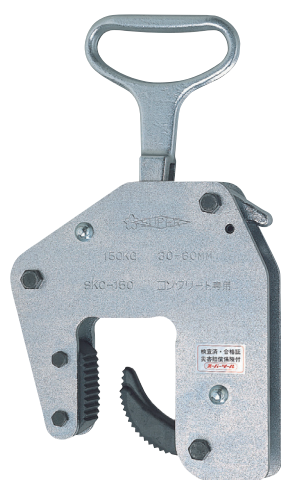
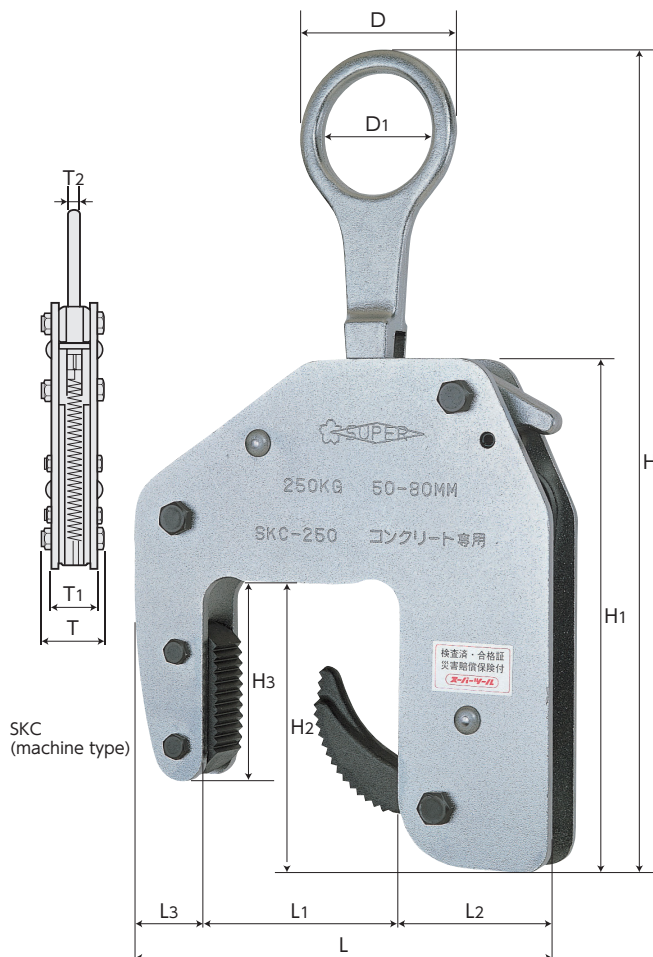
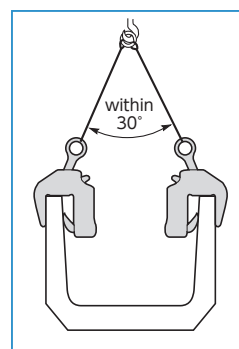
Manual type



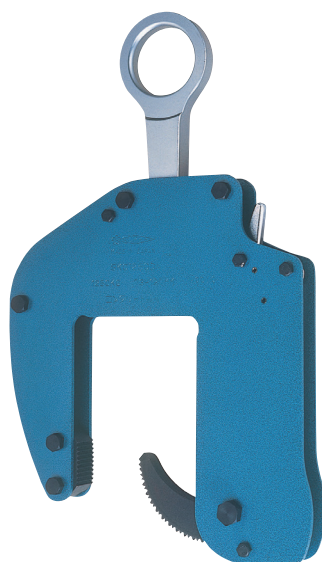
Machine type



* SKC1250D (deep wide type) shows its great power especially for lifting assembly sewage manhole.



SKC (manual type)



SKC-D (deep wide type)

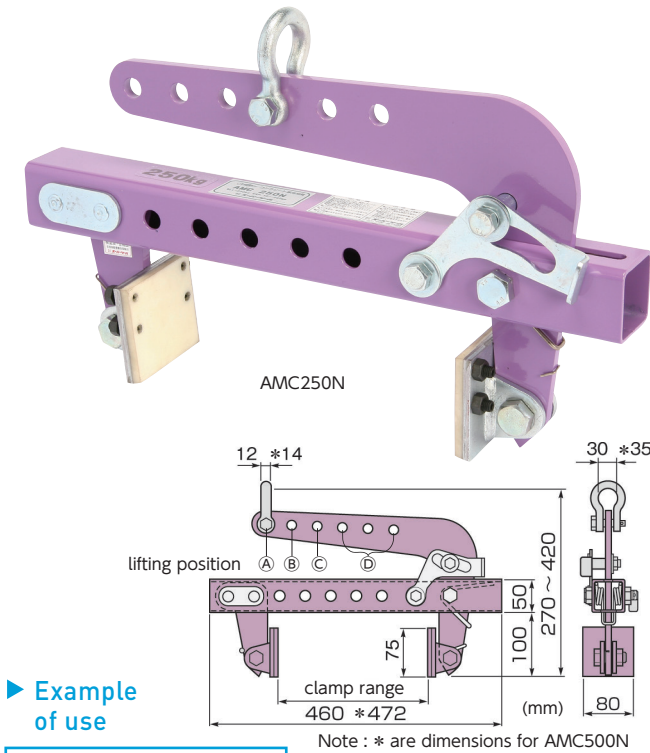
Item No.	Item type	Rated capacity (kg)	Clamp range (mm)	Size (mm)													N.W. (kg)
				L	L1	L2	L3	H	H1	H2	H3	D	D1	T	T1	T2	
SKC150	Manual type	150	30~60	185	65	65	55	258~312	200	108	83	112	—	44.5	31	16	3
SKC150M	Machine type	150	30~60	185	65	65	55	274~328	200	108	83	70	50	44.5	31	10	3
SKC250	Machine type	250	50~80	190	85	66	39	278~332	205	112	85	70	50	44.5	32	10	3
SKC250W	Machine type	250	70~100	210	105	66	39	278~332	205	112	85	70	50	44.5	32	10	3.5
SKC1250D	Deep wide type	1250	73~137	355	145	125	80	477~558	385	242.5	192.5	100	70	60.5	37	18	10

AMC-N • AMB-N

UNIVERSAL LIFTING CLAMP FOR CONCRETE MATERIAL Adjustable Clamp Range Type (Pad Type)

Features

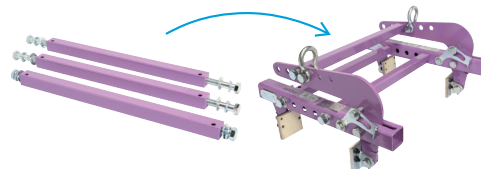
- Universal Clamp for lifting all kinds of concrete materials.
- Especially ideal for pedestrian road boundary blocks and small L shaped panels.
- By changing the pad position, you can adjust the clamp range to wide workpiece.
- By adjusting the shackle above the center of gravity of the workpiece, you can keep the balance of the workpiece.
- The spike design of the special rubber pads allows to grip firmly the load (can also be used as non-marring type).
- The open lock can be locked manually for smooth remove of the lifting piece.
- With the optional parts (sold separately), you can connect two clamps.
- * Do not use with drop-lid type U shaped gutters. The rated capacity (kg) changes with the shackle position.



Example of use



Optional parts (sold separately)



* The rated capacity of the connected clamps is equal to the sum of each clamp rated capacity.

Optional parts item No.

AMB250N

AMB500N

Item No.	Rated capacity (kg) by lifting position				Clamp range (mm)	N.W. (kg)
	A	B	C	D		
AMC250N	140	165	200	250	10~240	5.5
AMC500N	280	330	400	500	10~240	7.5

LSB2H

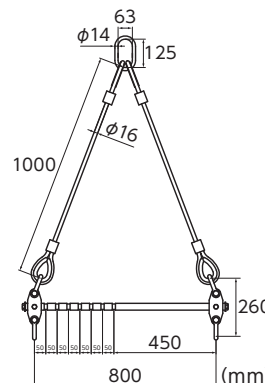
BALANCE (Adjustable Span Type, with Upper Wire Rope and Ring)

Features

- Ideal for safe, well balanced lifting operations.
- When lifting or holding balance of a long workpiece, this balance can be used safely with lifting clamps.
- Adjustable span type with 8 steps from 450 to 800mm, adapted to long or large workpieces.



Example of use



Item No.	Rated capacity (kg)	Adjustable span steps (mm)	N.W. (kg)
LSB2H	2000	450-500-550-600-650-700-750-800	20

UGC-M

UNIVERSAL LIFTING CLAMP FOR CONCRETE MATERIAL (Adjustable Clamp Range Type)

► Features

- Ideal for handling and laying U shaped gutters, lids, edge stones, blocks.
- With clamp claw thickness of 9mm, the clearance between the materials can be easily set.
- By changing the toggle pins locations, the clamp range can be easily adjusted.
- The clamp claw teeth provide a firm grip that prevents slipping.
- The design of the clamp claws has been improved to prevent material corner from getting nicked during lifting.

► Example of use

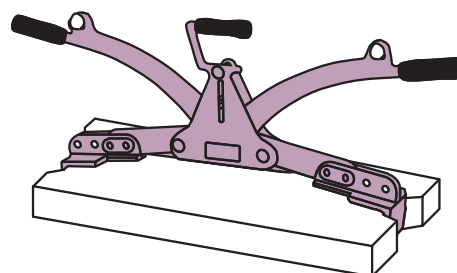


Lifting with a crane
(UGC150M)



U shaped gutters can be clamped at both ends for easy handling and laying.

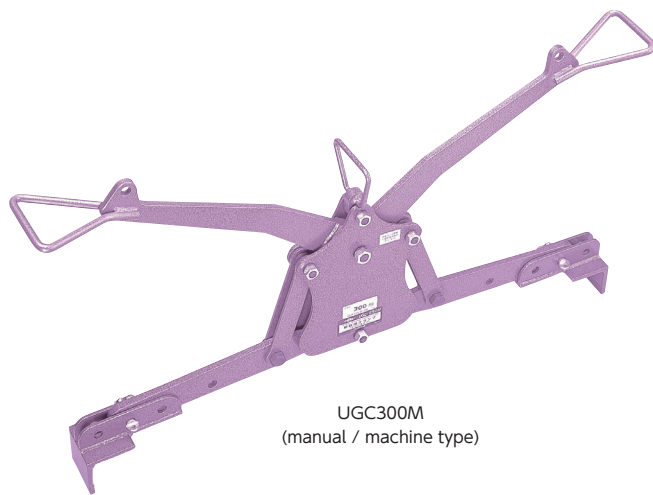
As the U shaped gutter is clamped from inside, the clamp doesn't interfere with the alignment levelling strings.



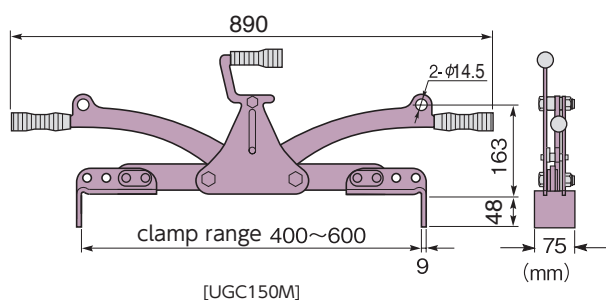
Ideal for lifting gutter lid.



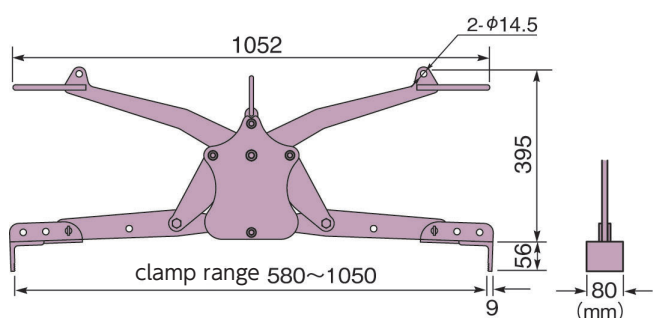
UGC150M
(manual / machine type)



UGC300M
(manual / machine type)

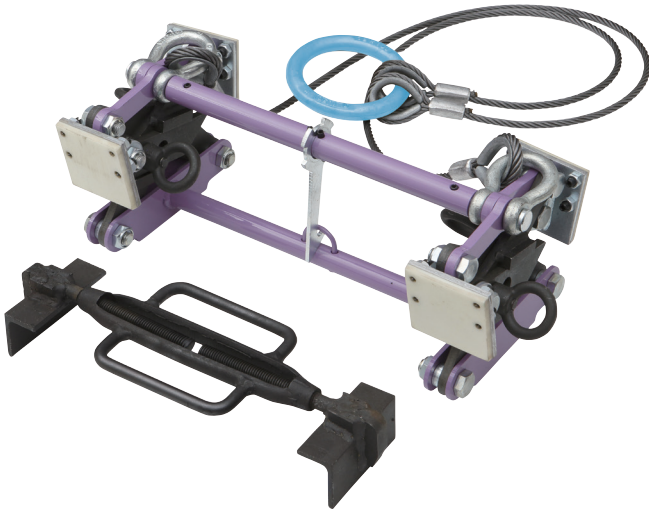


[UGC150M]



[UGC300M]

Item No.	Rated capacity(kg)	Clamp range(mm)	N.W.(kg)
UGC150M	150	400~ 600	9
UGC300M	300	580~1050	17

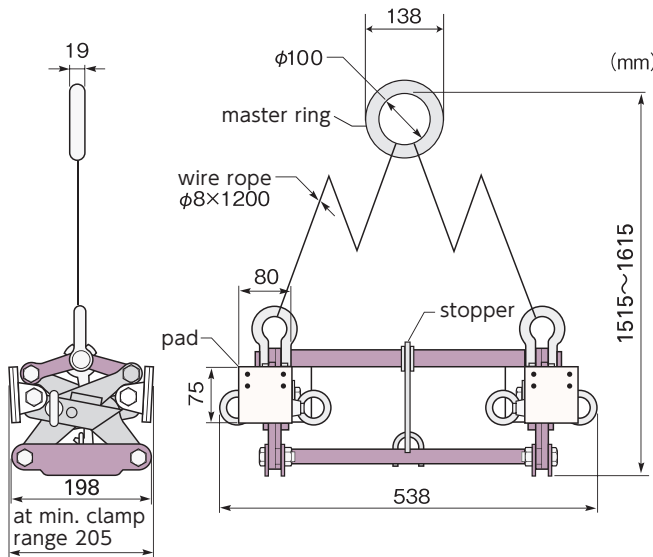


BUC240N

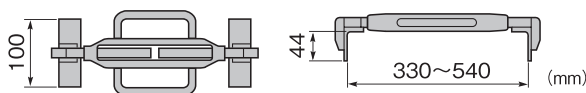
INTERNAL EXPANDING LIFTING CLAMP FOR U SHAPED GUTTER (Pad Type with Wire Rope and Ring)

Features

- For JIS reinforced concrete U shaped gutters and JIS drop-lid type U shaped gutters (only 250 / 300A).
- Dedicated for lifting concrete U shaped underground cable box (adjustable clamp range type).
- Including a holder for preventing the cracking of U shaped gutter.
- The inside clamping avoids touching the alignment levelling strings, and makes unnecessary to leave a clearance space outside the workpiece.
- The spike design of the special rubber pads allows to grip firmly the load (can also be used as non-marring type).
- Applicable type of workpieces : JIS U shaped gutter 240, 300A/B/C and JIS drop-lid type 250, 300A, up to 2m length.

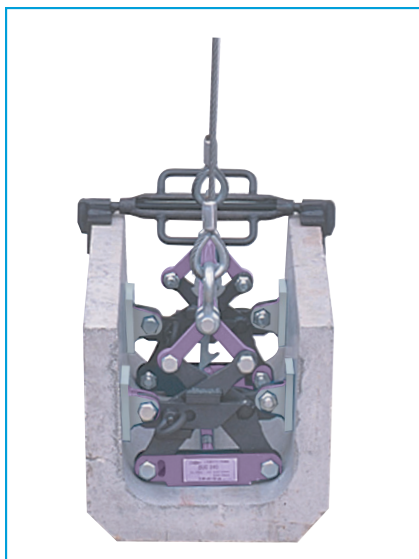


Cracking prevention holder



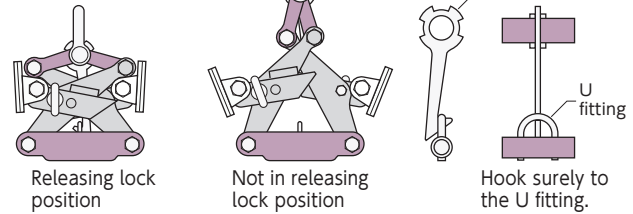
Example of use

⚠ For long gutters, always use a balance and lift at 2 or more points for safety.



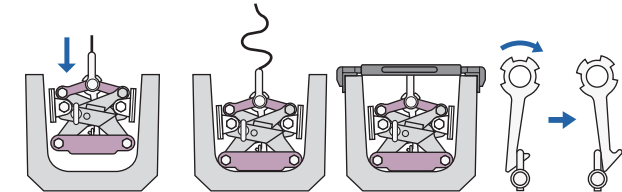
How to use

1)Preparation for lifting



Lift the clamp to check if the clamp is in releasing lock position as shown in the drawing above.
If not, hook the stopper to the main body U fitting and lift again so that the clamp gets in releasing lock position.

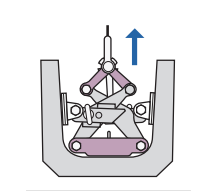
2)Setting to the U shaped gutter



Slowly lower the clamp in releasing lock position until the bottom of the gutter.
The wire rope is completely loosened.
Set the cracking prevention holder.
Remove the stopper from the U fitting.

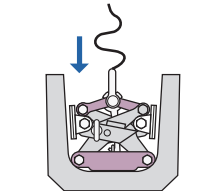
Position the clamp in releasing lock position above the U shaped gutter and land it to the bottom of the gutter until the wire is completely loosened.
Next, set the cracking prevention holder just beside the clamp. Here, rotate the knob of the holder to make the arm firmly hold the U shaped gutter.
Next, remove the stopper from the U fitting, and then the load can be lifted.

3)Lifting



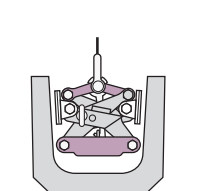
When the load is lifted, the clamp gets automatically into tightening position.
When you hoist the crane, the U shaped gutter is firmly gripped and lifted.

4)Moving and landing



After moving the U shaped gutter to the target place and confirming that it is stable, hoist down until the wire rope is completely loosened.

5)Clamp removing



Hook the stopper to the U fitting and lift again to set the clamp in releasing lock position and then you can move the clamp alone to the next load to be operated.

Item No.	Rated capacity (kg)	Clamp range (mm)	N.W. (kg)
BUC240N	500	Level 1 220~240 Level 2 260~290	12



BUC1000A • BUM1000A • BUF1000A

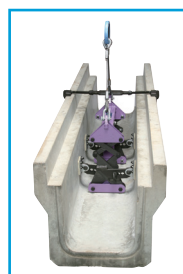
AUTOMATIC INTERNAL EXPANDING LIFTING CLAMP FOR U SHAPED GUTTER (Pad Type with Wire Rope and Ring)

Features

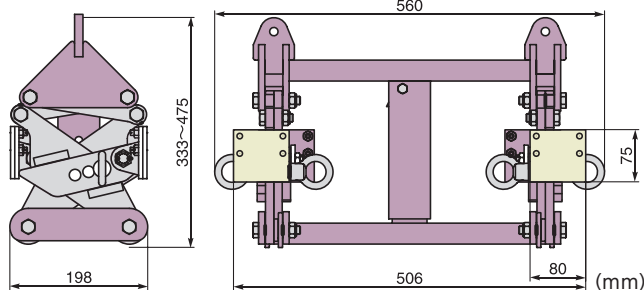
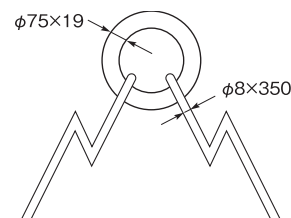
- Dedicated for lifting all kinds of concrete U shaped gutters (automatic setting and removing type).
- Including a holder for preventing the cracking of U shaped gutter (always use together with the main body).
- With the fully automated setting / removing mechanism, the repeated handling operations gets faster and easier, bringing higher productivity.
- The spike design of the special rubber pads allows to grip firmly the load (can also be used as non-marring type).
- The inside clamping avoids touching the alignment levelling strings, and makes unnecessary to leave a clearance space outside the workpiece.

Example of use

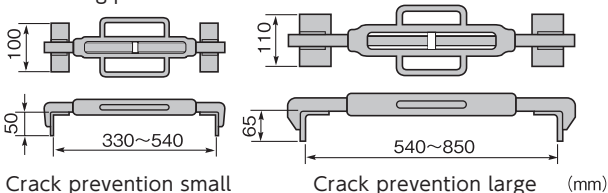
⚠ For long gutters, always use a balance and lift at 2 or more points for safety.



■ Master ring, wire rope



Cracking prevention holder

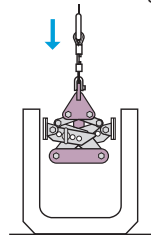


Crack prevention small

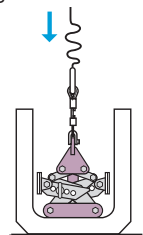
Crack prevention large (mm)

Item No.	Rated capacity (kg)	Clamp range (mm)	U shaped gutter size name	N.W. (kg)
BUC1000A	1000	①210~250	240·250	26
		②250~290	300	
		③290~330	—	

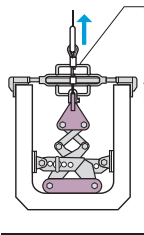
Automatic setting / removing mechanism



1) Land slowly the clamp in releasing lock position until the bottom of the gutter.

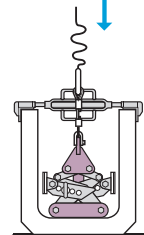


2) Hoist down until the wire rope is completely loosened.

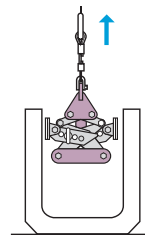


3) When the load is lifted, the clamp gets automatically into tightening position.

cracking prevention holder
Always set the holder before lifting.



4) Hoist down until the wire rope is completely loosened.



5) When the clamp is lifted again, it gets automatically into releasing lock position and the clamp alone is lifted.

BUM1000A middle parts set (sold separately) (middle plate with pad, crack prevention large holder)



BUF1000A full parts set (sold separately) (middle plate with pad, long plate with pad, crack prevention large holder, joint bar)



Item No.	Middle plate			Long plate		
	Clamp range (mm)	U shaped gutter size name	N.W. (kg)	Clamp range (mm)	U shaped gutter size name	N.W. (kg)
BUM1000A	①320~360	350·360	28	—	—	—
	②360~400	400		—	—	
	③400~440	450		—	—	
	④440~480	500		—	—	
BUF1000A	①320~360	350·360	28	①480~520	500	31
	②360~400	400		②520~560	600	
	③400~440	450		③560~600	—	
	④440~480	500		—	—	

* The clamp range ①~④ can be changed by adjusting the position of the adjustment plate holes.

KBC500WH

BATCH LIFTING CLAMP FOR BANK BLOCK (with Wire Rope and Ring)

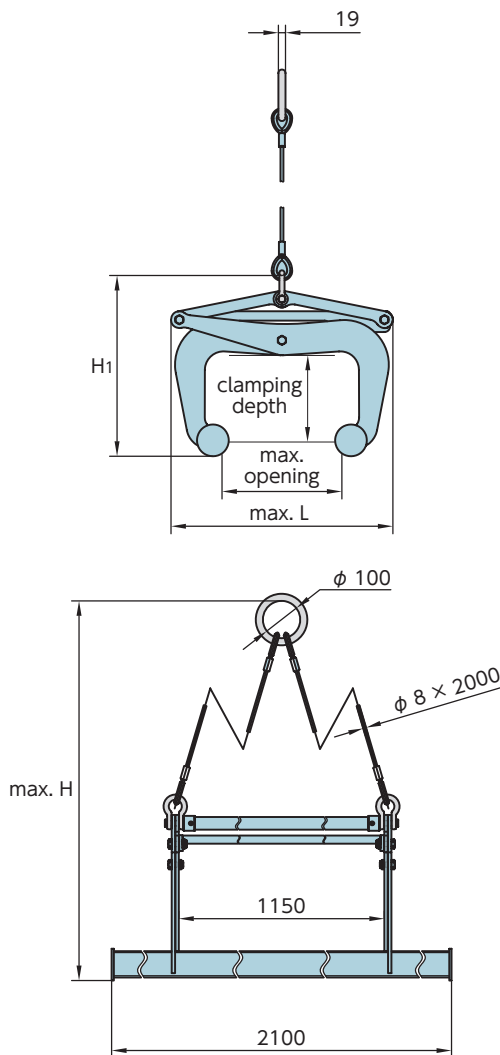
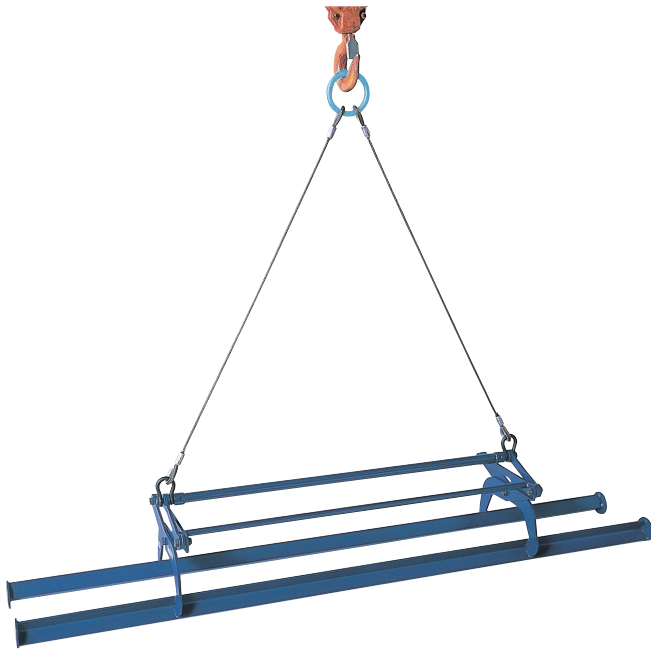
Features

- Dedicated for lifting bank blocks with necks.
- Can lift together in one batch up to 7 bank blocks. Ideal for handling, loading and unloading operations.
- The automatic opening mechanism allows easy clamp removing operation.

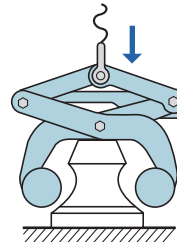
Example of use



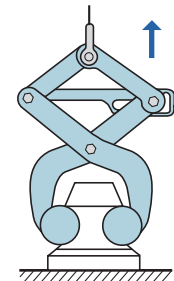
Shape of applicable blocks
Bank blocks with necks.
Max. 7 pieces.



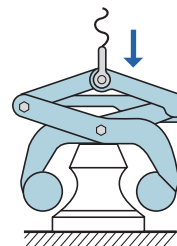
Automatic releasing mechanism



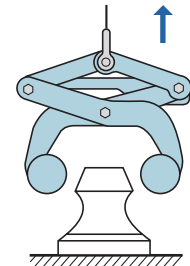
1) Set the stopper in release position, lower the clamp so that the legs of the tongs properly fit into the bank block neck.



2) When the legs are fully set, remove the stopper and lift the clamp so that the legs close and the bank block gets lifted.

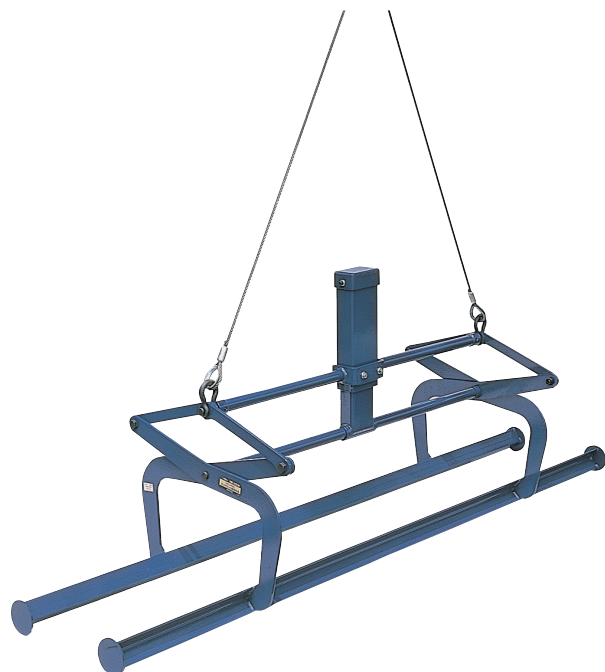


3) Move the load to the target place and land it until the wire rope is completely loosened.



4) The stopper gets locked automatically into the release position and then you can lift the clamp alone.

Item No.	Rated capacity(kg)	Clamp range (mm)	Size(mm)					N.W. (kg)
			(max. opening)	(clamping depth)	L (MAX)	H (MAX)	H1	
KBC500WH	500	60~270	300	230	600	2780	484~760	48



KBC500WA

AUTOMATIC BATCH LIFTING CLAMP FOR BANK BLOCK (with Wire Rope and Ring)

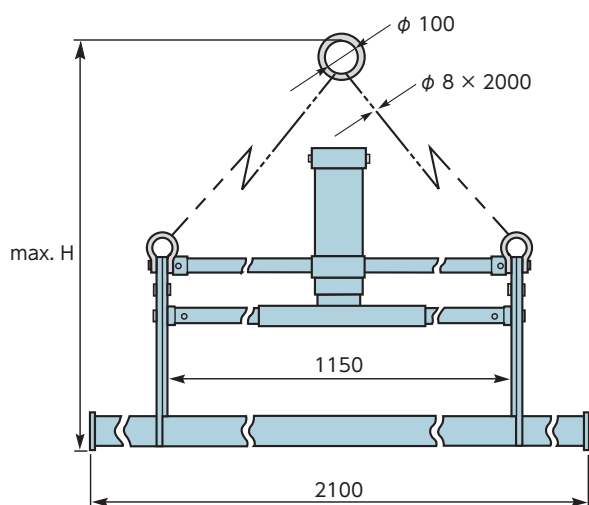
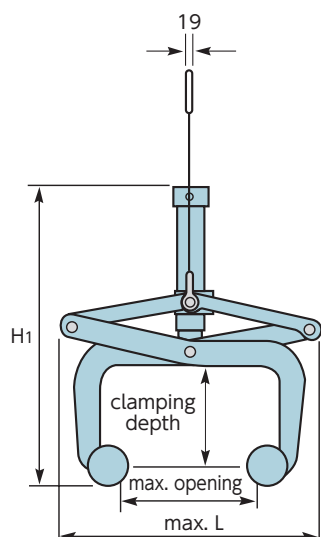
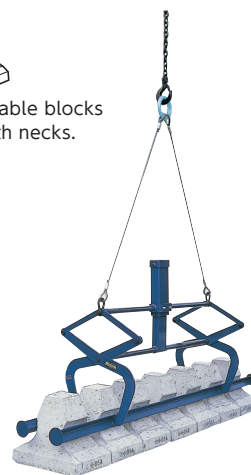
Features

- Dedicated for lifting bank blocks with necks.
- Can lift together in one batch up to 7 bank blocks. Ideal for handling, loading and unloading operations.
- The automatic setting / removing mechanism allows operations with one operator. The workability is greatly improved compared to conventional manual clamp types.

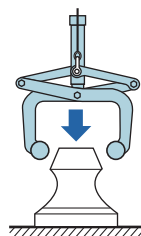
Example of use



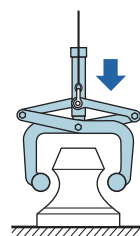
Shape of applicable blocks
Bank blocks with necks.
Max. 7 pieces.



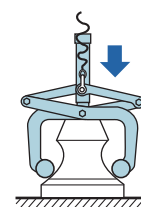
Automatic setting / removing mechanism



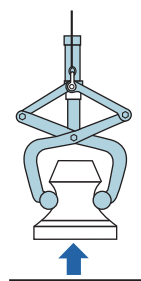
1) As a preparation before lifting, lift the clamp in release position.



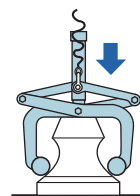
2) Lower the clamp slowly so that it stay aligned with the center of the block until the clamp main body and the guide pipes touch the block and keep lowering until the wire rope is completely loosened.



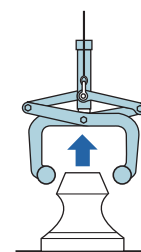
3) Stabilize the clamp horizontally on the block.



4) When the load is lifted, the clamp gets locked automatically into tightening position and grips firmly the bank block.



5) Move the load to the target place and land it until the wire rope is completely loosened.



6) When the clamp is lifted, it gets locked automatically into release position so that you can move the clamp alone and switch smoothly to the next operation.

By repeating procedures 1)~5), transportation of bank blocks batches can be quickly operated just by moving laterally and hoisting up and down the crane.

Item No.	Rated capacity(kg)	Clamp range(mm)	Size(mm)					N.W.(kg)
			(max. opening)	(clamping depth)	L(MAX)	H(MAX)	H1	
KBC500WA	500	60~270	300	230	600	2810	700~1010	56