



BECO | GRABS



Grabs

The Beco program

**BECO grabs, technology that
grabs you!**

Smart. Solid.



**BE COmplete,
opt for Beco**

**For every job
the right
grab.**

**Beco can
make the grab
you need.**

We are specialized in developing and manufacturing grabs for:

- dredging and dipping purposes
- material handling, recycling/waste handling

For every type of grab we are your partner from design to commissioning. We offer custom-built solutions, including CE-marking if required, to meet your requirements.

BECOmplete: opt for Beco

A Complete range of standard grabs. Customize your grabs with options or custom engineered solutions.

For many years we have been developing and manufacturing a wide range of grabs to enable more efficient dredging and digging, material handling and recycling/waste handling.

The combination of our client-oriented approach, experienced in-house engineers and own production facilities in Europe always enables us to provide the grab your operation needs.

Beco Grabs is part of the Beco Group; a solid firm with a broad expertise in construction, mechanics and hydraulics.

Beco Grabs is a reliable partner for:

- Sound advise to choose your Beco grab.
- A complete range of standard grabs at competitive prices.
- Customized grab solutions with a good price-quality ratio.
- In-house engineers and service engineers.



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Our delivery program of clamshell buckets

Standard version: open shells
 Environmental version: closed shells
 Mechanical grabs are available as:
 1 rope hand tripped (manually)
 1 rope touch down (automatically)
 1 rope remote control
 2 rope
 4 rope

Use: Dredging and digging



Use: Material handling, Recycling/waste handling



Hydraulic grabs	Use: Dredging and digging		Use: Material handling, Recycling/waste handling	
	standard	environmental	standard	environmental
Round nose grab	●	●		
Ground bucket	●	●		
Level cut clamshell bucket	●	●		
Rock handling grab	●			
Block clamp	●			
Clamshell bucket	●	●	●	●
Orange peel grab	●		●	

Mechanical grabs	standard			environmental			standard			environmental					
	ropes >>			1	2	4	1	2	4	1	2	4	1	2	4
Round nose grab	●	●	●	●	●	●									
Ground bucket	●	●	●	●	●	●									
Level cut clamshell bucket						●									
Rock handling grab	●	●	●												
Block clamp	●	●	●												
Grapple		●													
Clamshell bucket	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Orange peel grab	●	●	●							●	●	●			

Electro hydraulic grabs	standard	environmental	standard	environmental
Clamshell bucket			●	●
Orange peel grab			●	

Specials	standard	environmental	standard	environmental
Deck towers			●	●
Customer specific one rope clamps			●	
Bonus bucket for wheel loaders			●	
Visor buckers		●		
Excavator buckets (DBG)	●			

Various options of grabs

Light, standard, heavy and extra heavy.

All grabs can be supplied as a light, standard, heavy or extra heavy duty version, depending on the customer's requirements. We always have a varying stock of new and used grabs.

An independent inspection of the factory and products by an inspectorate assigned by the customer is permitted.

Environmental versions.

All grabs are available in varying capacity. Clamshell buckets and ground buckets can be made in a so-called "environmental" version (closed shells).

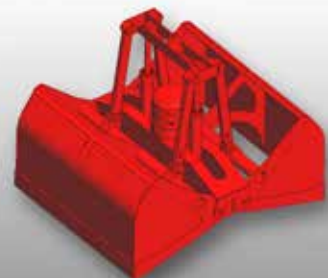
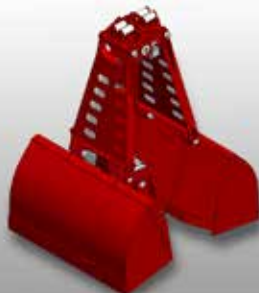
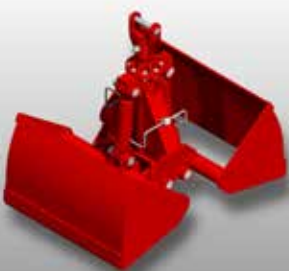
Mechanical grabs can also be supplied as a one rope, two rope or four rope version, executed in one of the following systems for one rope executions:

- hand tripped (manually)
- touch down (automatically)
- remote control

Hydraulic grabs

Mechanical grabs

Electro hydraulic grabs



HYDRAULIC GRABS**Hydraulic grabs**

- Suitable for handling bulk materials
- Equipped with cylinders
- Execution shells open or closed, standard is open.
- Clamshell bucket can be provided with a hydraulic rotor (360°) or a mechanical turning head (200°)
- Shells are manufactured of wear resistant material, hardness HB400
- Options:
 - Overlap of (side and/or bottom) knives
 - Cylinders can be protected
 - Closed shells
 - Environmental execution
 - Round shaped closed shells
 - Height compensator
 - Connection piece





Round nose grabs (HRN)



« This round nose grab is especially designed for under water digging/dredging purposes at a depth of 650 m and is to be connected to a ROV. The grab is equipped with exchangeable teeth.



SPECIFICATIONS

frame	S355
shafts	42CrMo4
shells/knives	Wear resistant material hardness HB400
cylinder rods	Stainless steel
hydraulic system	Closed



Ground buckets (HGB)



« Hydraulic ground bucket for digging/dredging activities. This bucket can be equipped with:

- hydraulic rotor
- bolt-on teeth
- ejector
- extension pipes
- connection piece



SPECIFICATIONS

frame	S355
shafts	42CrMo4
shells/knives	Wear resistant material hardness HB400
cylinder rods	Stainless steel
hydraulic system	Closed
teeth:	Integrated



Level cut clamshell buckets (HVG)



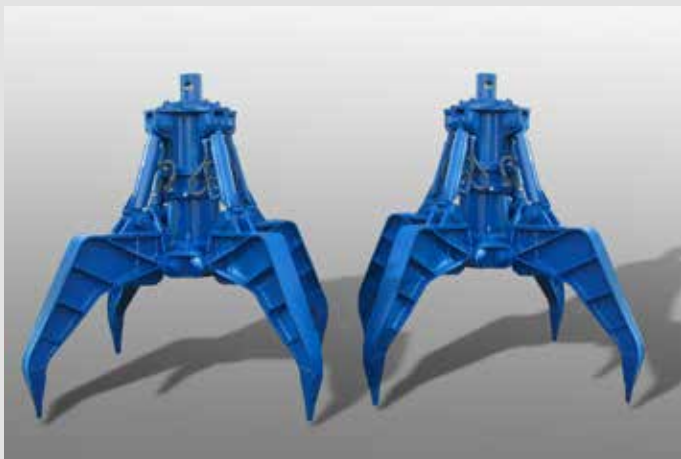
Hydraulic level cut clamshell bucket for dredging activities with level cut profile (horizontal). The level cut clamshell bucket is equipped with hydraulic rotor and connection piece. The shells are in closed execution with dewatering valves. The level cut clamshell buckets are used to remove a layer of contaminated soil with a fixed layer thickness.

SPECIFICATIONS

frame	S355
shafts	42CrMo4
shells/knives	Wear resistant material hardness HB400
cylinder rods	Stainless steel
hydraulic system	Closed



Hydraulic rock handling grabs (HST)



Hydraulic rock handling grabs for handling rocks. These rock handling grabs can be equipped with a mechanical turning head and exchangeable teeth. The rock handling grab can also be in a three-shell execution.

STANDARD SPECIFICATIONS

frame	S355
shafts	42CrMo4
shells	Wear resistant material hardness HB400
cylinder rods	Stainless steel
hydraulic system	Closed





Block clamps (HBCL)



« An hydraulic block clamp is used for handling concrete blocks, in particular antifer blocks. Equipped with hydraulic rotator. This version has a 140° rotator.

SPECIFICATIONS

frame	S355
shafts	42CrMo4
shells	Wear resistant material hardness HB400
cylinder rods	Stainless steel
hydraulic system	Closed



Grapples



« Grapple for handling rocks up to 8 tons. Including teeth and mechanically adjustable for various sizes of rocks.

SPECIFICATIONS

frame	S355
shafts	42CrMo4
shells	Wear resistant material hardness HB400
cylinder rods	Stainless steel



Hydraulic Clamshell Buckets (HB)



« Hydraulic clamshell bucket for handling bulk materials, can be executed in:

- HBL - light
- HBN - normal
- HBH - heavy

Can also be equipped with an hydraulic rotator.

SPECIFICATIONS

frame	S355
shafts	42CrMo4
knives	Wear resistant material hardness HB400
cylinder rods	Stainless steel
hydraulic system	Closed



Orange peel grabs (HP)



« Hydraulic orange peel grab in protected execution for handling waste and scrap. Can be with an hydraulic rotor or a mechanical turning head. The orange peel grab can be in a 4, 5, 6 or 7 shells execution and they can be open, half closed or closed.

SPECIFICATIONS

frame	S355
shafts	42CrMo4
shells	Wear resistant material hardness HB400
cylinder rods	Stainless steel
hydraulic system	Closed



MECHANICAL GRABS



Mechanical grabs

- Suitable for handling bulk materials
- Execution: one rope (hand tripped/touch down or remote control), two rope or four rope
- Execution shells open or closed
- Shells are manufactured of wear resistant material, hardness HB400
- Options: Overlap of (side and/or bottom) knives
Shells closed round shaped
Environmental execution



Round nose grabs (MRN)



« Mechanical two rope round nose grab, heavy duty execution with exchangeable teeth. Shells are round shaped for more strength and more impact into very hard ground/soil.

SPECIFICATIONS

frame	S355
shafts	42CrMo4
shells/knives	Wear resistant material hardness HB400
teeth	Exchangeable



Ground buckets (MGB)



« Mechanical one rope ground bucket. The ground bucket is equipped with one cylinder and eleven bolt-on teeth. The ground buckets can be equipped with integrated, bolt-on or exchangeable teeth and can be in a one rope, two rope or four rope execution.

SPECIFICATIONS

frame	S355
shafts	42CrMo4
shells/knives	Wear resistant material hardness HB400
teeth	Exchangeable





Level cut clamshell buckets (MVG)



« Mechanical level cut clamshell bucket with various capacity. Executed with closed shells with dewatering valves. Used to remove a layer of contaminated soil with a fixed layer thickness.

SPECIFICATIONS

frame	S355
shafts	42CrMo4
shells/knives	Wear resistant material hardness HB400



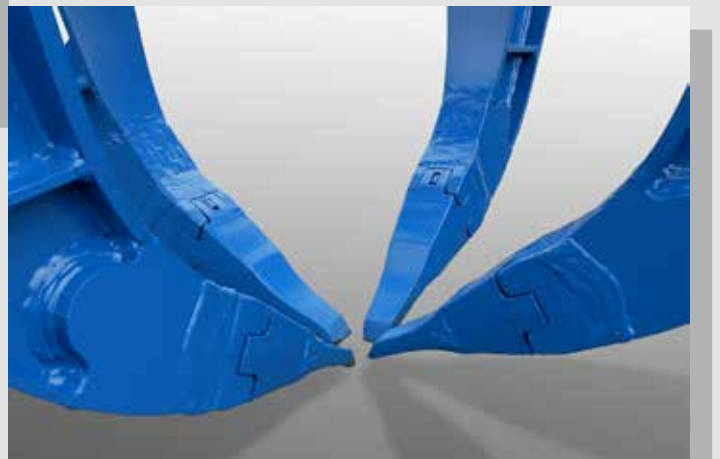
Rock handling grabs (MTST)



« Mechanical rock handling grabs for rocks of various size equipped with exchangeable teeth. This type of grab can also be in a 3-shell execution.

SPECIFICATIONS

frame	S355
shafts	42CrMo4
shells	Wear resistant material hardness HB400
teeth	Exchangeable





Block clamps (MBCL)



« Mechanical block clamps for handling concrete blocks. This block clamp can handle blocks of 13 up to 24 tons.

SPECIFICATIONS

frame	S355
shafts	42CrMo4
shells	Wear resistant material hardness HB400



Clamshell buckets (MB)



« Mechanical clamshell bucket for handling bulk materials. Clamshell equipped with ladder and in dust proof execution (bearings, bushes, etc.) Mechanical clamshell buckets can be in a one rope, two rope or four rope execution.

SPECIFICATIONS

frame	S355
shafts	42CrMo4
shells/knives	Wear resistant material hardness HB400

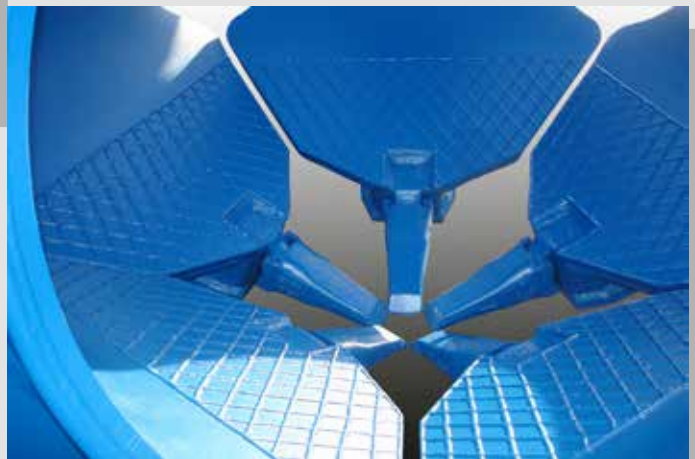




Orange peel grabs (MP)



« These orange peel grabs can be in a two rope (one holding and one closing rope) or a four rope (two holding and two closing ropes) execution.
 The orange peel grabs can have four, five, six or seven shells and the shells can be in open, half closed or closed execution.
 The teeth can be integrated or exchangeable.



SPECIFICATIONS

frame	S355
shafts	42CrMo4
shells	Wear resistant material hardness HB400
teeth	Exchangeable



Grabs under construction

Mechanical one rope clamshell bucket in Hand Tipped (HT) execution for handling bulk material, under construction at our factory in Vianen - The Netherlands.



ELECTRO HYDRAULIC GRABS**Electro hydraulic grabs****Deck towers**

- Suitable for handling bulk materials
- Equipped with cylinders, pump and motor
- Execution shells open or closed
- Shells are manufactured of wear resistant material, hardness HB400
- Options:
 - Overlap of (side and/or bottom) knives
 - Round shaped and closed shells
 - Environmental execution
 - Power supply by means of BECO deck tower
 - Spill plates
- For every electro hydraulic grab



Electric clamshell buckets (EHB)



SPECIFICATIONS

frame	S355
shafts	42CrMo4
shells/knives	Wear resistant material hardness HB400



« Electro hydraulic clamshell bucket for handling bulk materials. Mainly used on ships with one-rope cranes. For those clamshell buckets spill plates can be an option in order to reduce the capacity.



Electric orange peel grabs (EHP)



SPECIFICATIONS

frame	S355
shafts	42CrMo4
shells	Wear resistant material hardness HB400



« Electro hydraulic orange peel grabs can be used for the handling of scrap and waste. The grab can be equipped with open, half closed or closed shells.



SPECIALS: Deck towers

Deck tower for operating the electro hydraulic clamshell buckets used on ships' cranes.

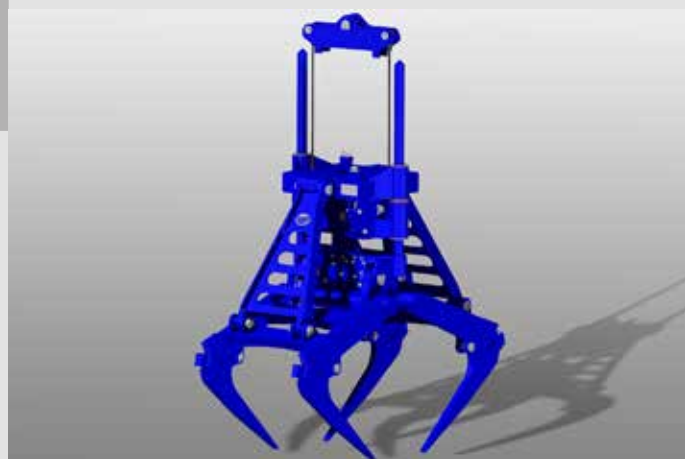
The deck tower is equipped with tubes for transport of the deck tower by fork lift trucks. To position and to lock the deck tower four magnets are used.

**SPECIALS: Customer specific one rope clamps**

This is an especially designed one rope touch down grab for handling casted manganese blocks.

SPECIFICATIONS

The shells are entirely made of HB450 resisting wear and heat.





SPECIALS: Klein buckets from 10 tons

One of the latest developments (2015) within the BECO Group is the co-operation with C. Klein BV (CK), which concerns the manufacturing of heavy duty attachments in port equipment and industry.

One of CK brand's innovations is the so called Bonus bucket, which has proved its success in heavy material handling.

This product, established in close collaboration with Dutch bulk terminals in coal and ore, has several advantages.

In the first place, the unique model of the buckets ensures a fast and steady load process. The bucket is designed to 'fill itself'.

Next to this, the weight of the load is brought closer to the machine than conventional buckets, enabling the operator to lift over 15% extra volume each cycle. So the use of these buckets leads to much lower handling cost per ton using the same machine.

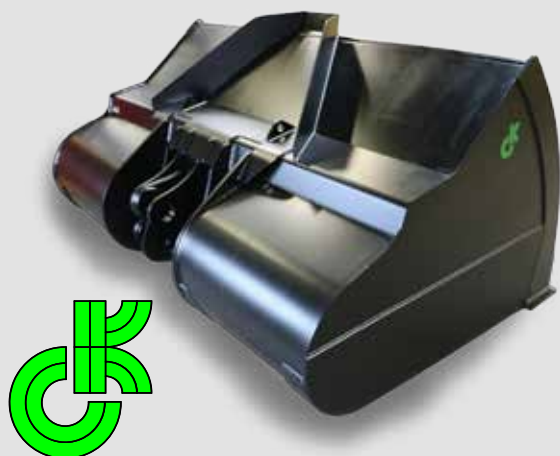
Like every BECO product, these buckets are made of high quality wear resistant material, improving uptime and ensuring a long and reliable lifetime. Values that are highly appreciated in port activities.



➤ Machining of the pin holes.



➤ Transport of two 17 m³ bonus buckets for CAT988K.



➤ Bonus bucket for handling coal.

SPECIALS: Visor buckets



« BECO supplies visor buckets for several purposes in dredging. These buckets are designed to dig up contaminated soil. Once the bucket is filled, it can be closed with a visor.

SPECIFICATIONS

shells	S355
cutting edges	Wear resistant material hardness HB400
hydraulic system	Hydraulically operated visor by cylinders
connector	Quick coupler or direct fit



SPECIALS: Excavator buckets (DBG)



« Excavator bucket for a Liebherr 984C with a capacity of 8 m³. This bucket is entirely made of wear resistant material HB400. The own weight of the bucket is 8 tons.

Excavator bucket for a Liebherr 995P with a capacity of 22,4 m³ struck and own weight of 20 tons.



Our quality standards

- Custom-built design to meet your requirements
- ISO 9001 certified Quality Control system
- Quality based on in-house knowledge and long term experience



« 1 - Welding

- High quality preparation of the welds
- Welding by highly qualified welders
- Workmanship

2 – Precision »

- Precise machining for connecting components with minimal play e.g. quick coupler.



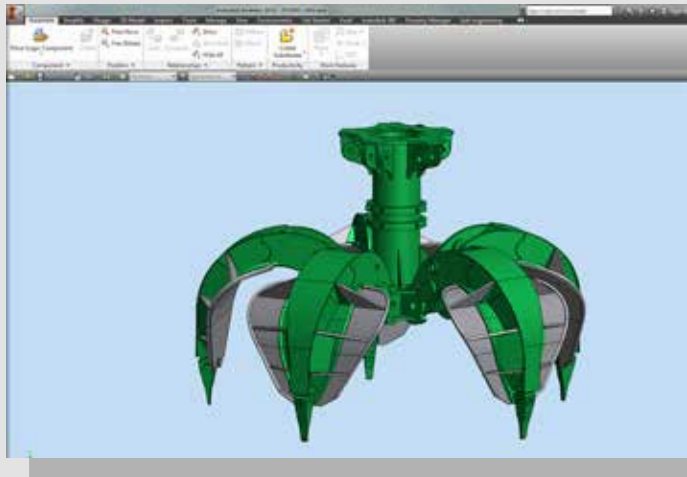
« 3 – Conservation

- All construction parts will be shot blasted
- Painting of all parts/components in disassembled position
- High quality 2 component painting
- Custom specific painting systems available



Our design method

- 3D design by Inventor
- Stress and displacement analysis by FEMAP (Finite Element Method)
- 100% custom built design

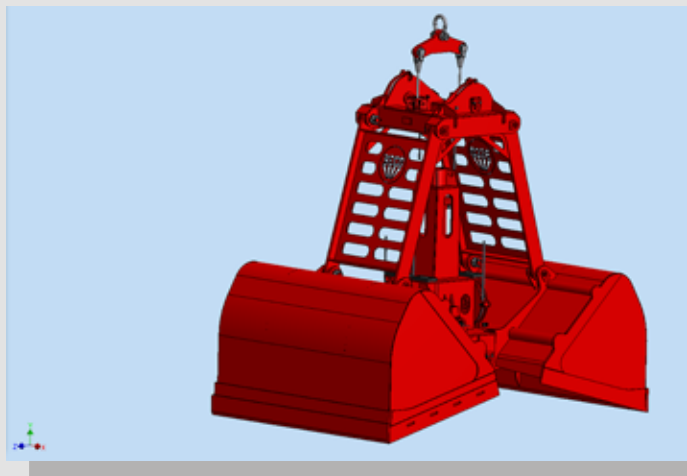
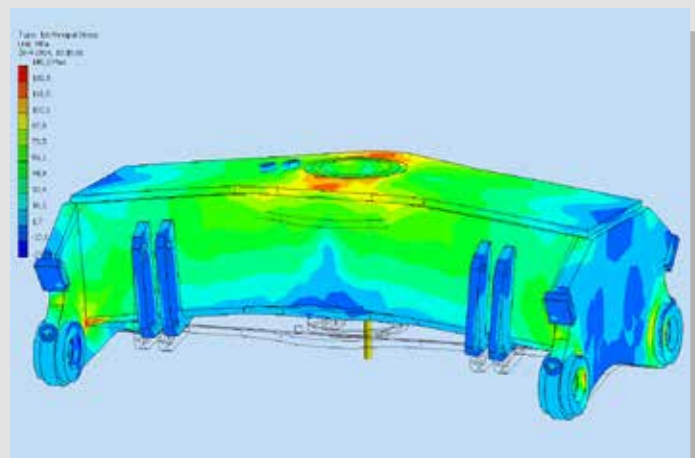


« 1 – 3D design

- 3D design by Inventor
- For every application the optimal design
- All movements/positions can be simulated during design process

2 – Stress and displacement analysis

- Stress and displacement analysis by FEMAP
- Optimal balance between type of material, strength and own weight of the construction.



« 3 – CE marking

- All the products fulfill the requirements of the machine directive 2006/42/EC resulting in a CE marking





BE Complete,
opt for **B**eco

**The exact work
tools for your
equipment.**

**Beco has them.
Guaranteed.**

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A complete standard product range. Customization if required.

For more than 40 years already, we have been developing and manufacturing a wide range of equipment and work tools, to enable more efficient use of your construction-, earthmoving- and mining equipment. The mix of our client-oriented approach, experienced in-house engineers and our own production facilities always enables us to provide what your operation needs.

Beco is a reliable and pleasant partner for:

- Sound advice
- A complete range of standard equipment and attachments at competitive prices
- Client-specific customized solutions with a good price-quality ratio
- Quality

BE Complete: opt for **B**eco





Smart. Solid.

BECO | TRANSPORT

Tipper trailers and hooklift carriers for agricultural, earthmoving, landscaping and industry.

BECO | ATTACHMENTS

Equipment and attachments for excavators, wheel loaders and cranes.

BECO | MODIFICATIONS

Modifications and components for excavators, wheel loaders, dump trailers and construction machines.

BECO | GRABS

Grabs for material handling, contractor, waste processing, dredging, recycling and industry.

BECO | STEEL STRUCTURES

Customized steel structures for onshore, offshore and industry.

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