

# Festec® Handy Hook



**When lifting floating heads,  
flat covers or  
pressure rings,  
let the Festec Handy Hook lift it safely.**

**Less damages, controlled lifting  
precise mounting increased safety.**

**The best Job is a safe Job!**

## **Festec® Handy Hook**

**for controlled and safe lifting**

# Festec® Handy Hook

selection table														
	pin length in mm		pin diameter in mm											
	required*	total	19	22	25	28	30	32	35	38	45	50	55	60
capacity in kg type order code	< 80	100	1.000 100019100 1-2100-19	1.500 150022100 1-2100-22	2.000 200025100 1-2100-25	3.000 300028100 1-2100-28	3.000 300030100 1-2100-30	3.000 300032100 1-2100-32	3.000 300035100 1-2100-35	3.000 300038100 1-2100-38	3.000 300045100 1-2100-45	3.000 300050100 1-2100-50	3.000 300055100 1-2100-55	3.000 300060100 1-2100-60
capacity in kg type order code	81 - 110	130	750 75019130 1-2130-19	1.150 115022130 1-2130-22	1.700 170025130 1-2130-25	2.400 240028130 1-2130-28	2.900 290030130 1-2130-30	3.000 300032130 1-2130-32	3.000 300035100 1-2130-35	3.000 300038100 1-2130-38	3.000 300045100 1-2130-45	3.000 300050130 1-2130-50	3.000 300055130 1-2130-55	3.000 300060130 1-2130-60
capacity in kg type order code	111 - 140	160	600 060019160 1-2160-19	900 090022160 1-2160-22	1.300 130022160 1-2160-25	1.850 185028160 1-2160-28	2.300 230030160 1-2160-30	2.800 280032160 1-2160-32	3.000 300035160 1-2160-35	3.000 300038160 1-2160-38	3.000 300045160 1-2160-45	3.000 300050160 1-2160-50	3.000 300055160 1-2160-55	3.000 300060160 1-2160-60
capacity in kg type order code	141 - 170	190	500 050019190 1-2190-19	750 075022190 1-2190-22	1.100 110025190 1-2190-25	1.550 155028190 1-2190-28	1.900 190030190 1-2190-30	2.300 230032190 1-2190-32	3.000 300035190 1-2190-35	3.000 300038190 1-2190-38	3.000 300045190 1-2190-45	3.000 300050190 1-2190-50	3.000 300055190 1-2190-55	3.000 300060190 1-2190-60
capacity in kg type order code	171 - 200	220	400 040019220 1-2220-19	600 060022220 1-2220-22	900 090025220 1-2220-25	1.300 130028220 1-2220-28	1.600 160030220 1-2220-30	1.950 195032220 1-2220-32	2.500 250035220 1-2220-35	3.000 300038220 1-2220-38	3.000 300045220 1-2220-45	3.000 300050220 1-2220-50	3.000 300055220 1-2220-55	3.000 300060220 1-2220-60
capacity in kg type order code	201 - 230	250	350 035019250 1-2250-19	550 055022250 1-2250-22	800 080025250 1-2250-25	1.150 115028250 1-2250-28	1.400 140030250 1-2250-30	1.700 170032250 1-2250-32	2.200 220035250 1-2250-35	2.800 280038250 1-2250-38	3.000 300045250 1-2250-45	3.000 300050250 1-2250-50	3.000 300055250 1-2250-55	3.000 300060250 1-2250-60
capacity in kg type order code	231 - 260	280	300 030019280 1-2280-19	500 050022280 1-2280-22	700 070025280 1-2280-25	1.000 100028280 1-2280-28	1.250 125030280 1-2280-30	1.500 150032280 1-2280-32	1.950 195035280 1-2280-35	2.500 250038280 1-2280-38	3.000 300045280 1-2280-45	3.000 300050280 1-2280-50	3.000 300055280 1-2280-55	3.000 300060280 1-2280-60
capacity in kg type order code	261 - 290	310	250 025019310 1-2310-19	450 045022310 1-2310-22	650 065025310 1-2310-25	900 090028310 1-2310-28	1.100 110030310 1-2310-30	1.350 135032310 1-2310-32	1.750 175035310 1-2310-35	2.200 220038310 1-2310-38	3.000 300045310 1-2310-45	3.000 300050310 1-2310-50	3.000 300055310 1-2310-55	3.000 300060310 1-2310-60

\*required pin length = length of bolthole / thickness of flange + 10 mm

Some heat-exchangers do have rather small bolt-hole diameters and therefore the S.W.L. of the corresponding Festec® Handy Hook might be insufficient.

In order to double the S.W.L. one has to order 2 equal Festec® Handy Hooks plus belonging spreader beam, which item is to be ordered separately.

For ordering a spreader beam one has to add "-HHE" to the order-code.

## ordering example:

weight channel cover = 1.018 kg

thickness flange = 113 mm + 10 mm = required pin length = 123 mm

bolt-hole diameter = 21 mm

possible Festec® Handy Hook according selection table

S.W.L. type 060019160

required minimum S.W.L. = 1.018 kg

S.W.L. 2 each Festec® Handy Hook type 060019160 = 2 x 600 kg = 1.200 kg

order-code:

= total pin length = 160 mm

= pin diameter = 19 mm

= type 060019160 / order-code 1-2160-19

= 600 kg

= double Festec® Handy Hook necessary!

= suitable!

**1-2160-19-HHE**



# Festec® Handy Hook

During maintenance and cleaning jobs on horizontal heat-exchangers floating heads, flat covers and pressure rings have to be lifted frequently. However, in most of the cases there is no hoisting ring fixed on those parts, nor can be mounted.

In common practice therefore 2 stud-bolts are placed into bolt-holes and the part is lifted with a sling, lowered on the ground or mounted on the heat-exchanger.

This most dangerous working method frequently leads to near misses, accidents or severe injuries, due to

- damaged lifting slings caused by incorrect use
- stud-bolts sliding out of the bolt-holes

Furthermore this method often results in

- damaged packing faces
- damaged packing items
- leakage after plant start-up, due to mounting damaged parts and
- loss of time, money and production

Therefore these very unsafe practices

should stop **NOW!**

From now on the **Festec® Handy Hook** should be used.

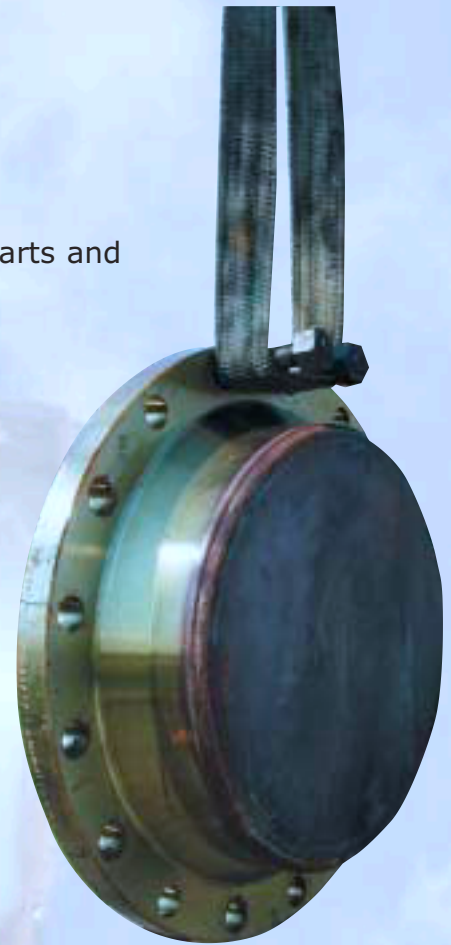
The **Festec® Handy Hook** has been developed to avoid these unsafe methods and

- is easy to use,
- requires no large investments,
- is safe to handle and
- enables top-quality maintenance jobs

In short, the **Festec® Handy Hook** replaces conventional unsafe working methods and is a must for mechanical plant maintenance technicians.

### **Compact and practical tool**

The **Festec® Handy Hook** is a lifting device made of Fram Alloy steel. It consists of a hoisting shackle fixed with a hinge bolt on a bridge with two hinged bent lifting arms. A lifting pin and a chain with a cotter pin are fitted on each arm.



**Festec®**  
**Handy Hook**  
**for controlled and safe lifting**



# Festec® Handy Hook

## Using the Festec® Handy Hook

The pins of the **Festec®** Handy Hook are placed as deep as possible through the bolt-holes in the top of the cover, ring or floating head to be lifted and always have to be secured with the cotter pins. The cotter pins are only to be removed after the lifted item has been lowered on the ground or mounted on the heat-exchanger with some stud-bolts.

Due to the angle of the lifting arms the lifted item is tilted backwards. Thus the technician has an excellent view on gasket and packing face when mounting the floating head, cover or ring, which helps to prevent damages to either of them.

For the right choice of size is referred to the **Festec®** Handy Hook selection table.

The **Festec®** Handy Hook is only suitable for horizontal heat-exchangers.

## Quality tool

The safety improving **Festec®** Handy Hook is developed in co-operation with maintenance engineers the field.

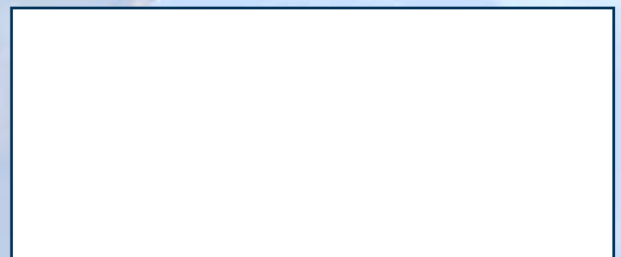
Each **Festec®** Handy Hook is tested individually on twice the safe working load and delivered inclusive lifting certificate.

## References:

The **Festec®** Handy Hook is used successfully by a wide range of customers such as refineries, (petro-)chemical industries, (nuclear) power-plants, off-shore industry etc. as well as their contractors.



or your local distributor



**Festec®**  
**Handy Hook**  
**for controlled and safe lifting**

# FESTEC TRADE B.V.

## Automotive & Industrial Supplies

### FESTEC HANDY HOOKS

#### Instructions of Use

Although the FESTEC Handy Hook is a simple piece of lifting equipment, the technicians have to be trained and experienced in lifting operations and the safe guidance of hoisted objects, preferably having followed a dedicated safe hoisting training (like e.g. the VVL in The Netherlands).

There are a few points to beware of, prior to use the FESTEC Handy Hook.

**NOTE:** The FESTEC Handy Hook can only be used on horizontal heat-exchangers!

The FESTEC Handy Hook is available in various sizes. Please review the selection table. The correct choice of the proper size is determined by:

1. the bolt-hole diameter,
2. the flange-thickness and
3. the weight of the object to be lifted (pressure ring, flat cover, floating head, blind plate).

Select the appropriate FESTEC Handy Hook in the selection table:

1. Determine the bolt-hole diameter of the object to be hoisted. Select the best fitting diameter of the lifting-pin to be used from the table. This lifting-pin diameter has to be as large as possible, but smaller than the bolt-hole diameter.
2. Determine the flange thickness of the object to be hoisted ("length of the bolt-hole") and add 10 mm for being able to install the belonging locking pins into the lifting-pins. This is the required working length of the lifting-pins. It is not allowed to use a shorter working length!
3. The range between the minimum and maximum working length per lifting-pin is 30 mm. The working length is to be chosen within this range. Look up the determined working length in the table.
4. The total pin length is the maximum working length of the pin + 20 mm. This total pin length is mentioned in the type specification as well as in the article code of the FESTEC Handy Hook to be used.
5. Determine the weight of the object to be hoisted. This is the minimum required lifting capacity. Check if the weight of the object does not exceed the lifting capacity of the FESTEC Handy Hook.
6. Now the correct size of FESTEC Handy Hook has been determined and the choice has been checked.
7. Each new FESTEC Handy Hook is delivered with a valid hoisting certificate. Check if:
  - The numbers on the FESTEC Handy Hook are the same as on the certificate.
  - On both legs and the shackle the same number is stamped.
  - The certificate is valid. The latest test date may not be more than one year ago, unless the date of first use of the relevant FESTEC Handy Hook was less than one year ago.
  - The owner's name and the date of first use are mentioned on the corresponding lifting certificate. A FESTEC Handy Hook with an overdue / non valid lifting certificate may not be used and first has to be tested by an authorized entity.
8. If the certificate is correct, then the Festec Handy Hook has to be checked on visual shortcomings:
  - Is the locking pin properly fixed?
  - Are the bolts and nuts in the bridge properly fixed?
  - Are the lifting-pins not bended?
  - Are the welds not cracked?
  - Is each leg fitted with a chain and with the original self-latching locking pin to it?
  - Are the locking pins not bended?In any case of deviation or doubt, the Festec Handy Hook may not be used prior to inspection by an authorized department.
9. The selected FESTEC Handy Hook may only be used according to the procedures, and only if it fulfills to all above mentioned requirements.

# FESTEC TRADE B.V.

## Automotive & Industrial Supplies

### Demounting Instruction:

10. Mount the FESTEC Handy Hook to the crane hook and make sure that the crane hook is in a vertical line above the object to be hoisted. **The FESTEC Handy Hook may never be used in a slant pulling direction.**
11. Slide the lifting-pins of the FESTEC Handy Hook until the heel into the upper bolt holes of the object to be hoisted. Make sure that the legs of the Handy Hook are as vertical as possible.
12. **Always** mount the locking pins into the lifting-pins and as close as possible against the object to be hoisted (maximum tolerance 10 mm).
13. Hoist the FESTEC Handy Hook slightly until the hoisted load is hanging in the crane hook only and does not rest on the bolts anymore. Remove the remaining bolts from the bolt holes.
14. Hoist the object according procedures by means of the crane and check if the object is tilted slightly backwards while hanging in the crane hook. The load must hang freely and vertical under the crane hook. **Never use the FESTEC Handy Hook to pry components of the heat-exchanger!**
15. Allow the crane driver to carefully lower the object until it is supported by the supporting wood.
16. Have the crane carefully lowering the object backwards on the underground and guide the object during this procedure. Make sure that the locking pins are on the top side of the object for easy removal.
17. Remove the crane hook from the FESTEC Handy Hook.
18. Remove the locking pins out of the lifting-pins of the FESTEC Handy Hook.
19. Remove the FESTEC Handy Hook out of the bolt holes of the object.

### Mounting Instruction:

20. Mount the lifting-pins of the FESTEC Handy Hook from the bottom side until the heel through 2 of the bolt holes of the object to be hoisted. Fix the FESTEC Handy Hook with the locking pins (tolerance max. 10mm). Make sure that the legs of the FESTEC Handy Hook are mounted as parallel as possible.
21. Hook the crane hook to the FESTEC Handy Hook.
22. Have the crane driver hoisting the object gently in vertical position and guide it during this operation.
23. Have the crane driver to hoist the object to the relevant heat-exchanger according procedure.
24. Guide the object to the place to be mounted and make sure, that no packing-face and / or gasket is damaged due to this action.
25. Position the object on its place to be mounted and install sufficient bolts to secure the object in place.
26. Allow the crane driver to slowly lower the object until the total weight is resting on the bolts.
27. Remove the locking pins out of the lifting-pins and afterwards remove the lifting-pins of the FESTEC Handy Hook out of the bolt holes.
28. Remove the FESTEC Handy Hook from the crane hook.

\*In case the required lifting capacity at the determined pin diameter and pin length is not listed in the selection table, than please contact your supplier. It is possible to obtain custom built special solutions, like 2 identical FESTEC Handy Hooks in combination with a spreader beam.

These Instructions of Use are based on use by skilled technicians, wearing the proper personal protection and having had the proper training, such as VCA en VVL. FESTEC Trade B.V. never can be hold responsible for wrong use or misuse of the FESTEC Handy Hook and / or any mistake or discrepancy in these Instructions of Use.

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