# Operating Instructions & Safety Manual



## Crane Fork Manual

Rated Capacities
1 through to 5 tonnes

Note: Operator must read and fully understand the operating instructions before using this product.

### **Safety Information**

#### **GENERAL INFORMATION**

This manual contains important information for the correct installation, operation and maintenance of the equipment described herein. All persons involved in such installation, operation and maintenance should be thoroughly familiar with the contents of this manual. To safeguard against the possibility of property damage or personal injury follow the recommendations and instructions of this manual and keep it for further reference.

Two types of crane forks are produced as follows:

- A. Crane forks with manual weight balancer, adjustable height. These crane forks are equipped with adjustable tines and height adjustability. The balancing system engages when the shackle is manually hooked into the appropriate notch.
- B. Crane forks with automatic weight balancer, adjustable height. These crane forks are equipped with adjustable tines, height adjustability and an automatic balancing system.

Crane forks with automatic balancing tend to point their teines upward when being transported. This prevents the load from unintentionally slipping off the tines.

The automatic balancing system requires a minimum load of 20% of the crane forks working load limit. The shackle is movable and runs on a track depending on the load. The automatic balancing engages by a pressurized gas spring once the forks are loaded.

The load will always be in the centre of gravity of the forks, ensuring a safe transport. All crane forks comply to the safety specifications from the German trade association, and have been manufactured in accordance with the Machinery Directive 98/37/EEC. They are type-tested 4 times against breakage. Each unit is proof-tested 1.5 times the rated load.

They have the following features:

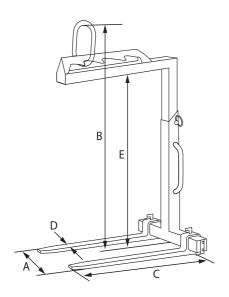
- 1. Maintenance free.
- 2. Highly visible safety colour.
- For the transport of rings or coils, the fork tines are simply pushed together.
- Easily adjustable tines for all pallet sizes.
- 5. Complete with chain for load securing.

#### **A** WARNING

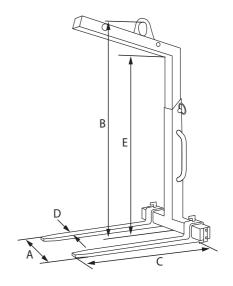
#### To avoid damage and/or personal injury:

- Do not exceed maximum load of the crane fork.
- 2. Do not use the crane fork to lift or transport people.
- 3. Do not use damaged crane fork or crane fork that is not working properly.
- Do not lift or transport loads over people and make sure all personnel remain clear of supported load.
- 5. Do not apply the load to the tips of the tines.
- Do not leave load supported by the crane fork unattended unless specific precaution has been taken.
- 7. Do not lift loads that are not balance, and the holding action is not secure.

# **Specifications & Safety Information**



Manual weight balancer adjustable height



Automatic weight balancer adjustable height

Part No.	Capacity kgs	Weight kgs	Adjustable Fork Width A mm	Effective Height B mm	Fork Length C mm	Fork Cross	Hook Height E mm
CK10	1,000	128	350-900	1100-1600	1000	100X30	1390-1890
CK15	1,500	151	350-900	1300-2000	1000	100X40	1600-2300
CK20	2,000	198	400-900	1300-2000	1000	120X40	1640-2340
CK30	3,000	246	450-900	1300-2000	1000	120X50	1670-2370
CK50	5,000	372	500-1000	1300-2000	1000	150X60	1700-2400
CY10	1,000	138	350-900	1100-1600	1000	100X30	1420-1920
CY15	1,500	166	350-900	1300-2000	1000	100X40	1650-2350
CY20	2,000	218	400-900	1300-2000	1000	120X40	1655-2355
CY30	3,000	278	450-900	1300-2000	1000	120X50	1720-2420
CY50	5,000	382	500-1000	1300-2000	1000	150X60	1710-2410

### **Safety Information**

#### INSTALLATION

Estimate the weight of the load that is to be lifted or transported and make sure it does not exceed the rated load of the crane fork.

Make sure the crane or sling to which the shackle or lifting ring is attached is strong enough to hold several times the weight of the load to be lifted or moved.

Adjust the height and the tines to suit the size of the pallet or palletized box.

#### **OPERATION**

The crane fork has been constructed to lift and transport pallets/skeleton boxes, containers or similar. The load should be positioned equally on both fork tines and load center should be around the center of the tines.

The load is to be positioned so that there is no danger of it's overturning.

#### **MAXIMUM LIFTING CAPACITY**

The crane fork was designed to lift and transport loads up to the rated capacity. The capacity indicated on the crane fork is the maximum safe working load which must not be exceeded.

#### DANGER ZONES

- Do not lift or transport loads while personnel are in the danger zone.
- Do not stand or place hands or feed under the raised forks.
- Raised loads are not to be left unattended for long periods of time.
- The operator may only start to move the load when they are sure the load will not overturn and that all personnel have left the danger zone.

Do move the big shaft (see part item 3) to the front hole when the crane fork is operated and the load is not balanced this means that the shaft is moved to position B.

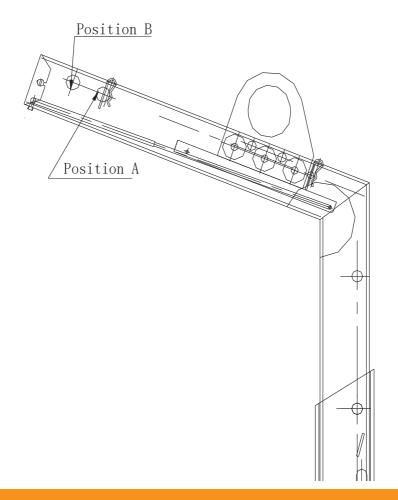
### **Safety Information**

#### **POSITION A**

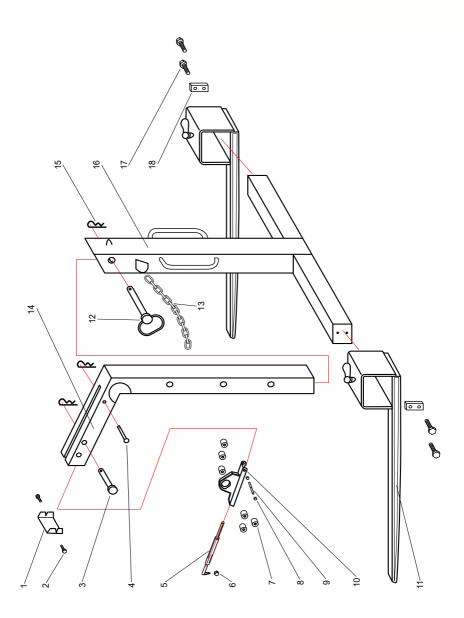
At the rated capacity (exceed the rated capacity 20%), the big shaft (item 3) should be put in position A when the center of gravity of the load is inside about 450mm distance between the front and back forks.

#### **POSITION B**

The big shaft (item 3) should be put in position B when the center of gravity of the load is not balanced or at about 450-600mm distance between the front and back forks.



## **Spare Parts Diagram**



## **Spare Parts List**

Fig. No.	Description	Qty
1.	Sealing Plate	1
2.	Screw M6	2
3.	Big Shaft	1
4.	Small Shaft	1
5.	Gas Spring	1
6.	Nut	1
7.	Nylon Roller	6
8.	Retaining Ring	2
9.	Shaft (for air spring)	1
10.	Balancing Shackle Assembly	1
11.	Tine Assembly	2
12.	Adjustable Shaft	1
13.	Chain for Load Securing	1
14.	Top Frame Assembly	1
15.	Securing Spring	3
16.	Body Assembly	1
17.	Screw M12	4
18.	Retaining Plate	2

