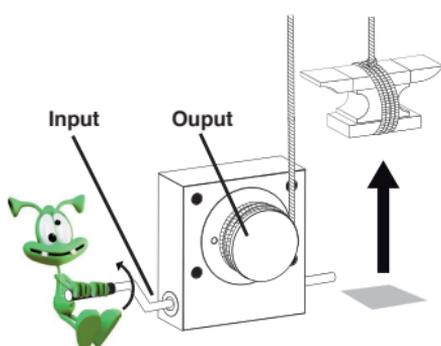


# What is self-locking?

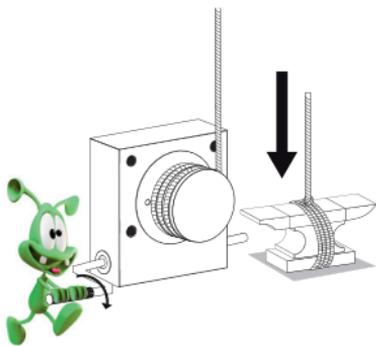
## Technical information

The inputs of all of our gear reducers can turn in both directions whether they are reversible or not reversible. But what is self-locking?

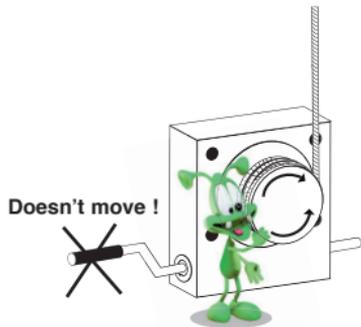
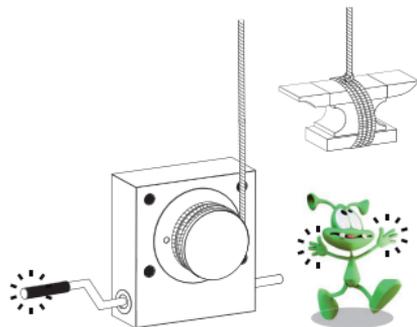
The input of a self locking gearbox can turn in both directions. In this example a self locking gearbox can be used to raise or lower a load by turning a handle.



...However, if the handle is released, the load will not move...



...If you try to turn the output of an anti-back drive gear reducer, the input shaft will not move.

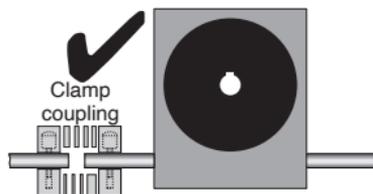
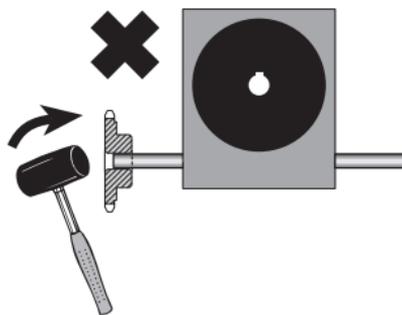


The self locking drive property is sometimes referred to as **anti back drive**

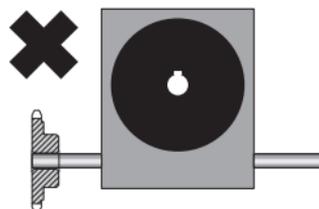
**i** Very occasionally, the reverse efficiency of a self locking gearbox is insufficient to guarantee anti back drive and a light brake will be required on the input shaft to ensure safety.

# All types of gear gearboxes

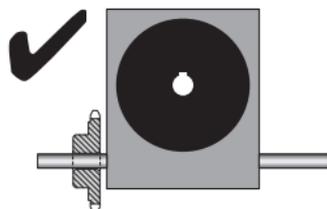
## Assembly advice



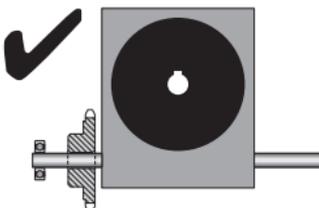
Clamp coupling avoids damage to shaft and absorbs misalignments.



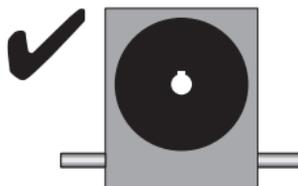
Gears mounted at the outer extremity of the input shaft can cause bending and eventual failure of the shaft.



Mounting a gear as near to the housing as possible allows the torque produced by the overhung load to be reduced, and protects the shaft from premature wear.



The addition of a bearing at the end of the shaft acts as a counter-weights to the overhung load, thus avoiding damage to the shaft.



Please contact us about any modifications you may require to be made to a shaft. In that way they can be done before assembly, thus avoiding any possible damage to the gear reducer due to later re-machining.



**Note:** Gear reducers can be mounted in any position.  
Any modifications made by the customer will void the guarantee.