

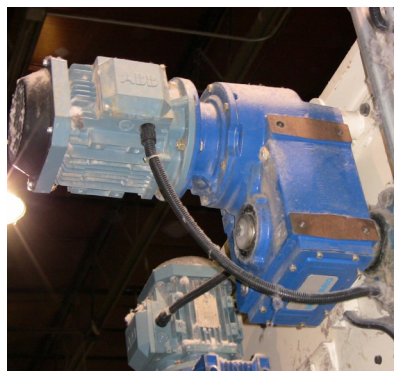
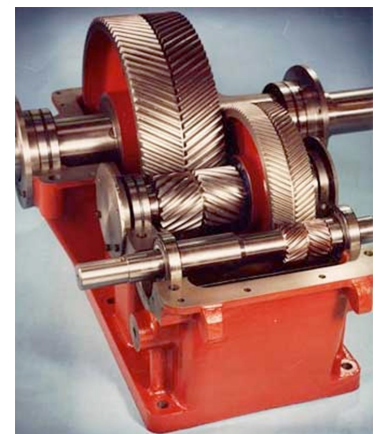
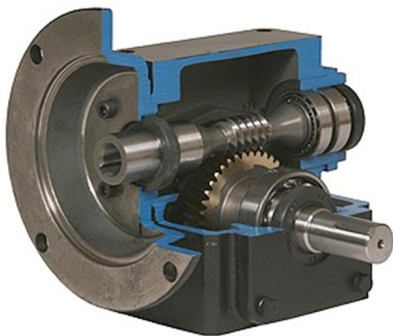


## NONWOVEN TERMS

For the informed employee

### Gearbox

A gearbox is a mechanical device usually located between an electric motor and the part of the machine that the motor turns. The purpose of the gearbox is to change the speed of the motor to a usable range. Most constant speed electric motors turn at 1100, 1750, or 3500 revolution per minute. If this speed is not what is needed, a gearbox can reduce the speed to say 175 rpm. If that gearbox was connected to a 1750 rpm motor, we would say that gearbox had a ratio of 10 to 1. In other words, the speed out of the gearbox would be one tenth of the motor speed, or 175 rpm. Gearboxes can be obtained in many different ratios. Gearboxes can be stacked together to produce very high ratios meaning the speed out of the gearbox would be very slow. There are even some gearbox-like devices that enable you to vary the ratio while they are in operation. Gearboxes are also used on variable speed motors.



“When one door closes another door opens; but we so often look so long and so regretfully upon the closed door, that we do not see the ones which open for us.”

Alexander Graham Bell

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