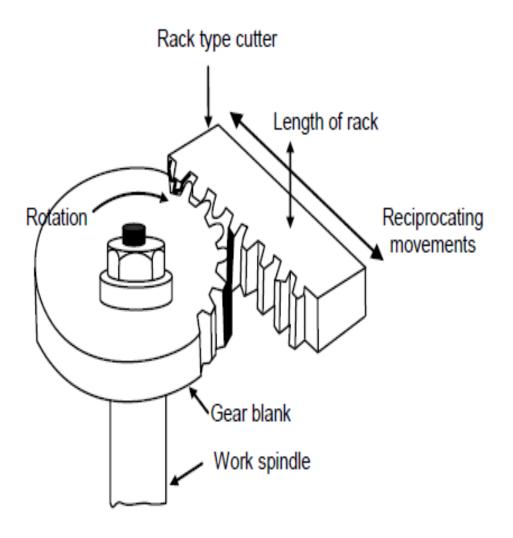
## **Gear Shaping Process**

The gear shaping process uses a modified external gear as a cutting tool which reciprocates up and down to cut the teeth in the workpiece. Simultaneously, the tool and workpiece are also rotating proportionally to their gear ratio which emulate the rolling of two gears.

1. Cutter is fed into full depth with cutter reciprocating and blank stationery .

2. Both cutter and blank slowly rotate about their axis at high speed.

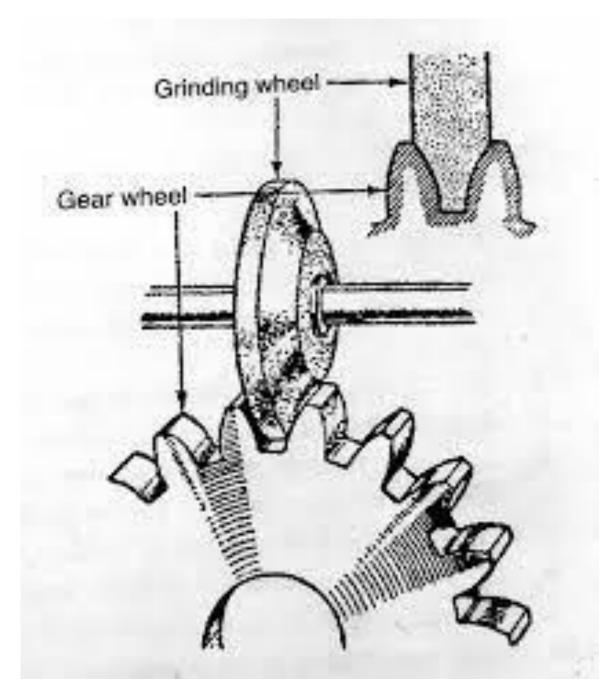
3. At same time cutter is feed to the workpiece.



**Gear Shaping Process** 

## **Gear Finishing Process**

Grinding, shaving, honing, and lapping are material removal-based finishing techniques, whereas rolling is a form-finishing technique. All these techniques are fundamentally used to obtain an adequate surface finish while shaping the teeth to the required geometry while also removing burrs and nicks.



**Gear Finishing Process**