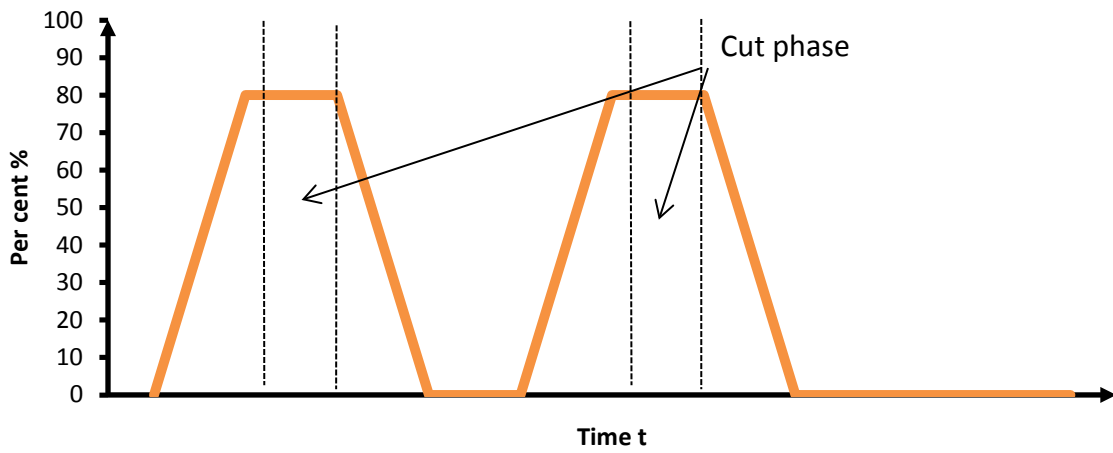
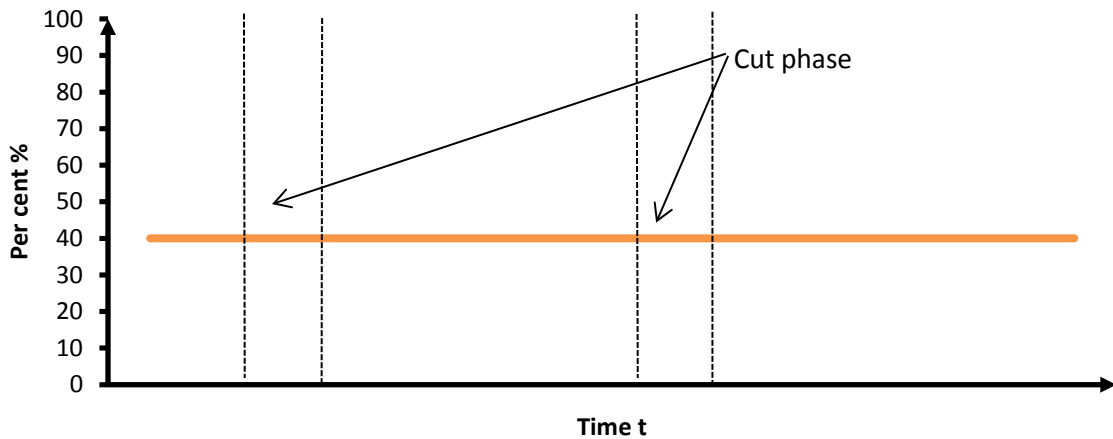




1. Start/stop operation

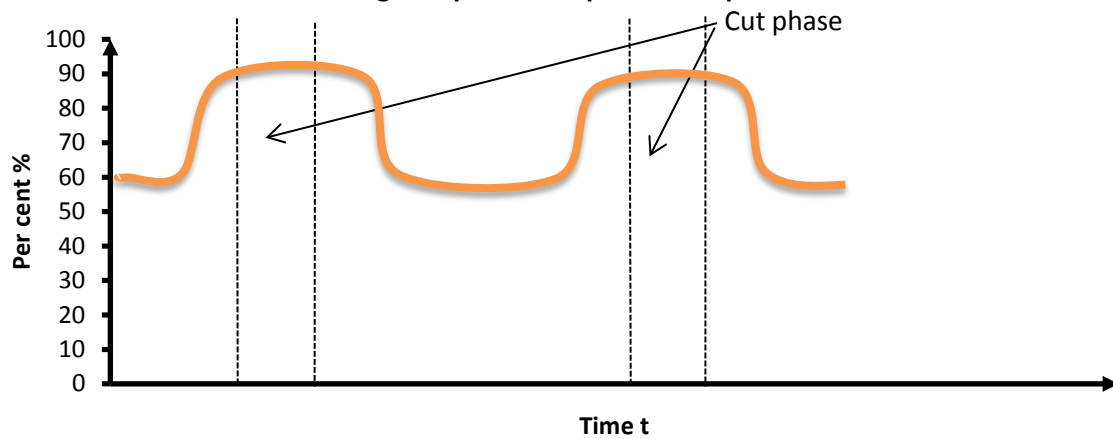


2. Continuous operation



3. Cam controlled operation

Operation with digital motion controller and intelligent operational profile computation.





NEW DEVELOPMENT IN ROTATION CUTTING TECHNOLOGY – RS MULTICUT

To 1.: Function in start/stop operation:

The knife drive holds the blade in a parking position in standstill. After product feeding by the desired length a cut signal is generated, and the knife drive performs a 360° revolution with a trapezoidal operational profile, in order to hold the blade again in the parking position.

Advantage	Disadvantage
+ It is possible to select high cutting speeds independently from the feeding speed and set length.	- Disturbance values occurring during the cutting process lead to length failures. - Performance limitation by feeding speed and cut length due to high dynamic.

To 2.: Function in continuous operation:

The knife drive rotates the blade continuously at a computed electronical gear ratio which generates the desired set length.

Advantage	Disadvantage
+ Highest cut frequencies can be reached as the rotation is performed with nearly constant revolutions. + Disturbance values are adjusted because there is at any time a link-up between product feeding and blade revolution (electric wave).	- Not applicable for big set lengths and at low feeding speeds because the blade speed cannot be selected independently.

To 3.: Function in cam controlled operation:

On basis of the feeding speed, the selected blade speed and the set length the digital motion controller computes an optimal operational profile. This allows a combination of the advantages of the other operation modes without the stated disadvantages.

Advantage
+ Optimal utilisation of the drive performance. + Optimal length precision