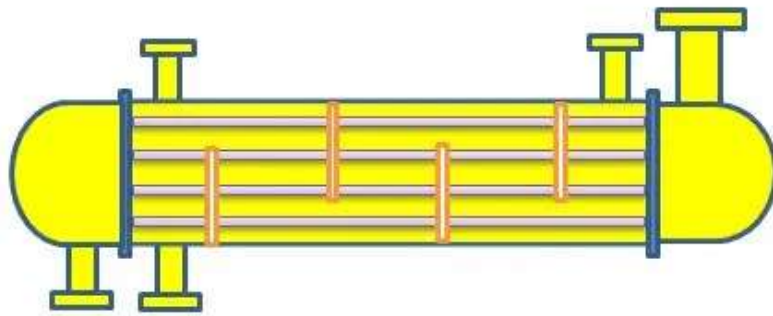
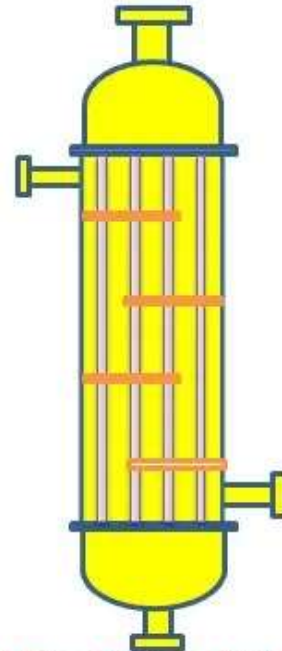


**Difference Between Vertical and Horizontal Condenser** is very important being a process engineer. A process engineer needs to know the criteria for selection of horizontal condenser versus vertical condenser. In case of both requirement condensation and sub-cooling, shell and tube condenser is use.



**Horizontal Condenser**



**Vertical Product cooler/heater**

**differece between vertical and horizontal condenser**

difference between vertical and horizontal condenser

*Shell and tube condenser* is commonly used in chemical industry as well as pharmaceutical industry.

Horizontal condenser	vertical condenser
use for condensation	use for cooling
use for multi-phase change applications	use for operation with no phase change
we can use when filmwise condensation is our requirement	we can vertical condenser but it gives low condensation
Resistance time is high in case of horizontal condensation for	resistance time is low in case of condensation
it is good for latent heat removal	it is good for sensible heat removal

**Vertical Condenser**

In these types of condensers, condenser placed vertically. Mostly in use of product cooling we can use this type of condenser.

### Horizontal condenser

Horizontal condenser is largest used condenser. We we know that what is *filmwise condensation*. When there is [filmwise condensation](#) only then we can use horizontal types of condenser. If our requirement is filmwise condensation only then we can use vertical condenser to get better heat transfer coefficient.

in these types of condensers *chemistry* condenser is placed horizontally.

### Conclusion

Above article it clearly says that we can use horizontal condenser if there is condensation is prime aim of our process. We can use [vertical condenser](#) if cooling is our main goal