	Fillet	Chamfer
Machining cost	More expensive than the chamfer	Cheaper
Machining time	Curved edges aren't very easy to make and require more patience. Therefore, Fillet engineering takes more time compared to chamfer.	It is faster than fillet
Cutting tools	You need special cutting tools to make fillets. This is because it has a different radius. Hence, the kind of radius you want to make determines the cutting tools you have to use.	You can use one cutting tool to make different chamfer sizes. Therefore, you don't need multiple tools for your chamfer design.
Stress concentration	It shares the stress on a larger radius, protecting the part from deforming. It is best for the exterior part.	Stress is concentrated on <i>a</i> part and can cause the material to deform easily.
Safety	It makes the material handling safer	The sharp edges can cause injury.