EXPERIMENT-7

AIM: To create Connecting Rod

SOFTWARE USED: Solidworks 2020

THEORY:

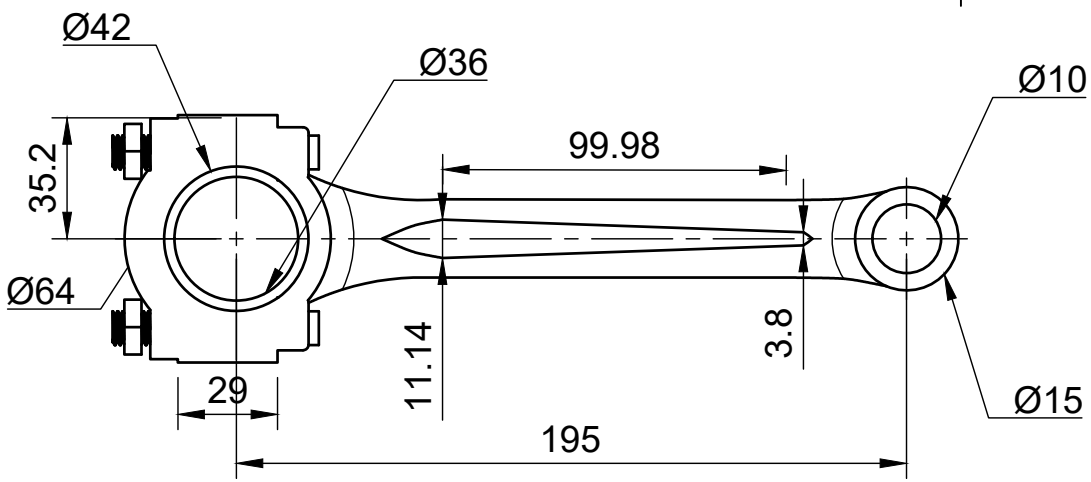
A connecting rod, also called a con rod, is the part of a piston engine which connects the piston to the crankshaft. Together with the crank, the connecting rod converts the reciprocating motion of the piston into the rotation of the crankshaft. The connecting rod is required to transmit the compressive and tensile forces from the piston, and rotate at both ends. The most common usage of connecting rods is in internal combustion engines or on steam engines.

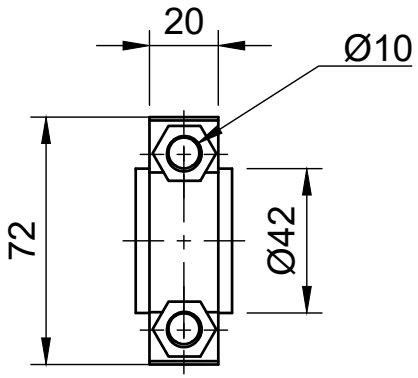
COMMANDS USED:

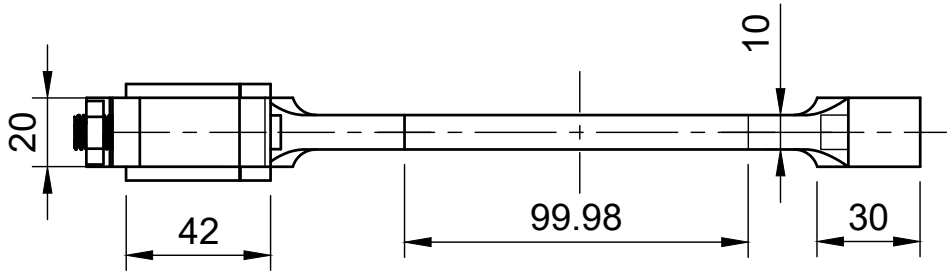
1. Sketch
2. Mirror
3. Boss extrude
4. Extrude cut
5. Mate
6. Fillet
7. Copy

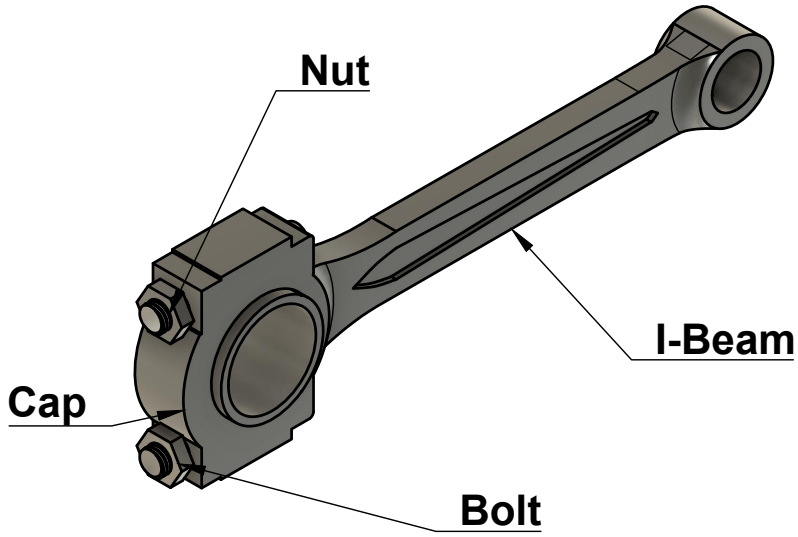
PROCEDURE:

1. First draw the top view of the given figure according to the dimensions.
2. Now draw two circles at distance of 99.98 mm according to given sketch.
3. Now design the beam by taking appropriate radius and curves.
4. Make circles then use boss cut extrude to form cap and both circles to be extruded.
5. Make the nut and bolt then use mate command to fix them on the cap accordingly
6. Finally draw fillet on the edges of extruded circles.
7. The Connecting Rod drawing is ready to be viewed.









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