

Model engine assembly workflow guide

The model engine assembly project series is designed to be modular, with each project focused on a single part that offers a CAD challenge, a CAM challenge, and machining best practices to support machining the part on a CNC mill. The chart below outlines the most efficient workflow when completing both the CAD/CAM challenges. Each challenge takes approximately 90-120 minutes to complete.

If you are completing CAD only or CAM only project challenges, you can work through the projects in the numbered order, Projects 1-11 CAD or Projects 1-11 CAM.

CAD/CAM workflow guide

Challenge 1	CAD Project 1: Cylinder
Challenge 2	CAM Project 1: Cylinder
Challenge 3	CAD Project 3: Rod soft jaw
Challenge 4	CAD Project 2: Rod
Challenge 5	CAM Project 2 :Rod
Challenge 6	CAM Project 3: Rod soft jaw
Challenge 7	CAD Project 5: Crank
Challenge 8	CAD: Project 4: Crank soft jaw
Challenge 9	CAM Project 4: Crank soft jaw
Challenge 10	CAM Project 5: Crank
Challenge 11	CAD: Project 6: Piston
Challenge 12	CAM Project 6: Piston
Challenge 13	CAD Project 7: Engine case LH
Challenge 14	CAM Project 7: Engine case LH
Challenge 15	CAD Project 8: Cylinder head
Challenge 16	CAM Project 8: Cylinder head

Challenge 17	CAD: Project 10: Cylinder flange
Challenge 18	CAD Project 9: Cylinder flange soft jaw
Challenge 19	CAM Project 9: Cylinder flange soft jaw
Challenge 20	CAM Project 10: Cylinder flange
Challenge 21	CAD Project 11: Engine case RH
Challenge 22	CAM Project 11: Engine case RH