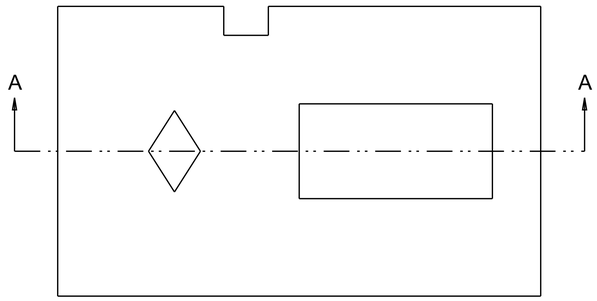
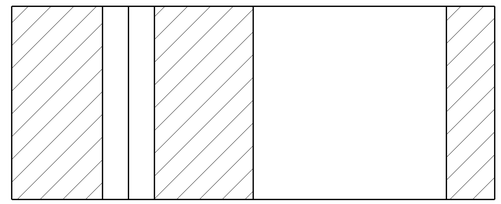
SECTION VIEWS

TYPES OF SECTION VIEWS
1. FULL
2. HALF
3. OFFSET
4. REVOLVED
5. ALIGNED
6. REMOVED
7. BROKEN

FULL SECTION

LINEAR CUT THRU THE PART

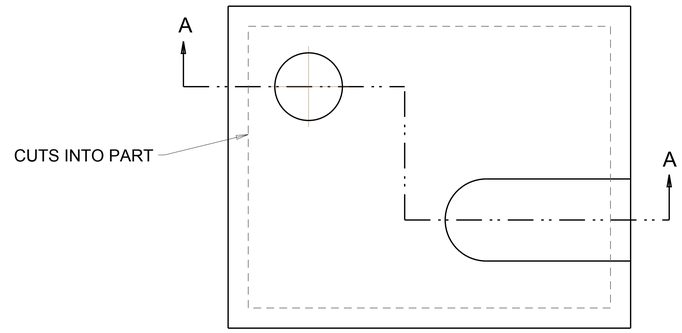


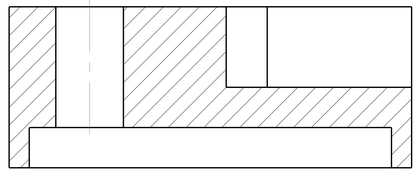


SECTION A-A

OFFSET SECTION

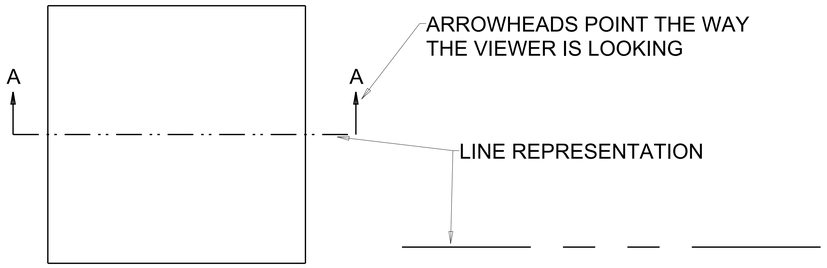
ALIGNS FEATURES THAT ARE NOT ON THE SAME PLANE
LIKE THE FULL SECTION



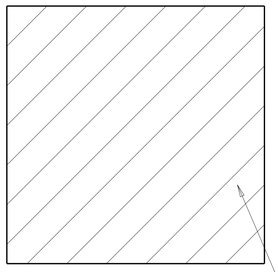


SECTION A-A

CUTTING PLANE LINE
SHOWS WHERE THE IMAGINERY KNIFE CUTS THRU THE PART
LINE IS ALWAYS PARALLEL TO A LINE OF ROTATION



CROSSHATCHING
SHOWS WHERE CUTTING PLANE LINE INTERSECTIONS MATERIAL
EACH MATERIAL HAS ITS OWN CROSSHATCHING



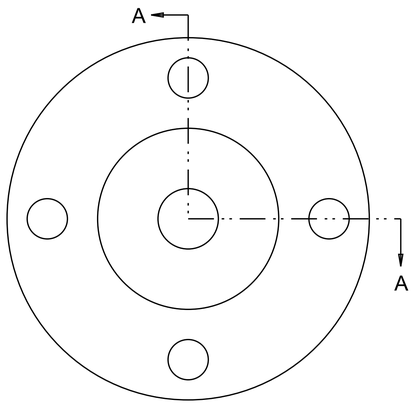
SECTION A-A

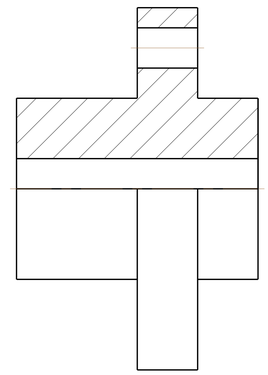
GENERAL CROSSHATCHING: 1/8" SPACING X 45°

SHOWS WHICH CUTTING PLANE LINE
GOES TO THE SECTION

HALF SECTION

CUTS 1/2 OF THE OVERALL PART. TYPICALLY CREATED ON SYMETRICAL PARTS

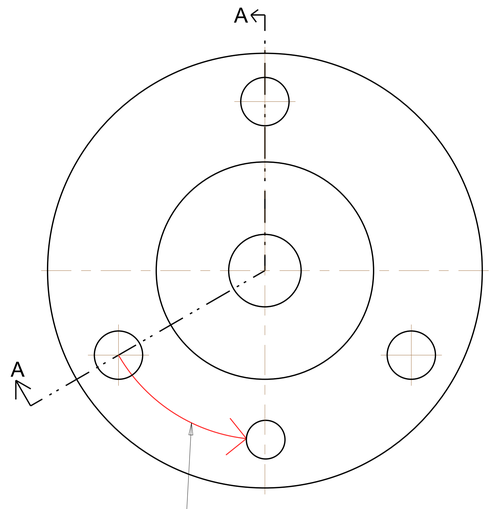




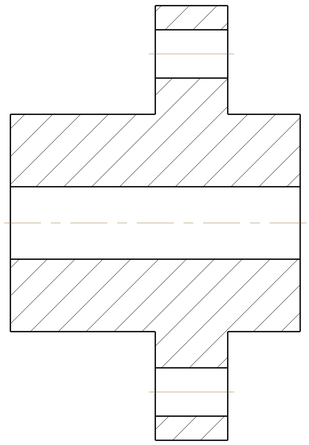
SECTION A-A

ALIGNED SECTION

WHEN FEATURES DO NOT LINE UP AND CREATE FORSHORTEND FEATURES
DESIGNERS CAN MOVE THE FEATURE TO MAKE IT TRUE SIZE.
THIS PROVIDES A MORE ACCURATE REPRESENTATION OF THE MODEL



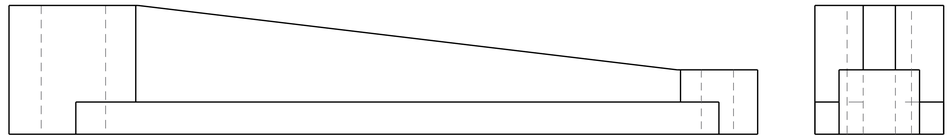
MOVE THE FEATURE IN LINE
TO MAKE IT TRUE SIZE IN
THE NEXT VIEW



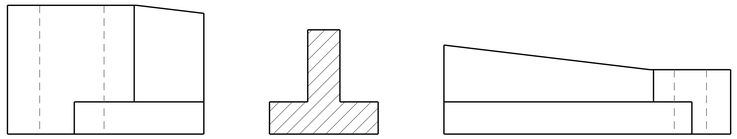
SECTION A-A

REVOLVED PART

SECTION IS REVOLVED 90° IN THE VIEW WHERE THE
CUTTING PLANE IS CREATED. THIS SAVES SPACE ON THE DRAWING AND
GIVES AND ACCURATE VIEW OF THE SECTION.



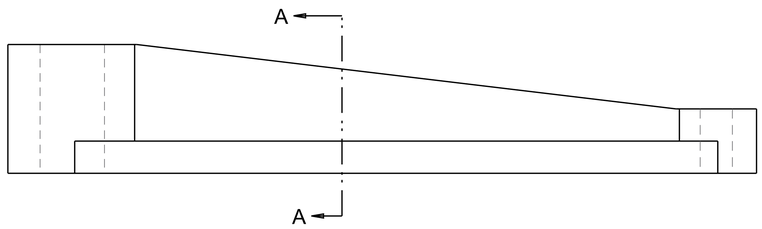
NORMAL PART LAYOUT

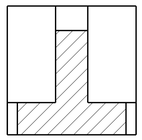


REVOLVED PART LAYOUT

REMOVED SECTION

SECTION VIEW IS NOT IN ORTHOGRAPHIC PROJECTION OF ANY OTHER VIEW
DESIGNERS USE THIS WHEN SPACE IS LIMITED ON THE LAYOUT SHEET





SECTION A-A

THINGS NOT TO CROSSHATCH

FOLLOWING FEATURES ARE NOT CROSSHATCHED EVEN
IF THE CUTTING PLANE LINE GOES THRU THEM BECAUSE
THE VIEWER DOES NOT KNOW HOW THE FEATURE WAS
ATTACHED TO THE PART (IE CASTED, WELDED, THREADED, ETC)

1. RIBS
2. SPOKES
3. WEBS
4. LUGS