

Assembly of Hercus Bevel Gears

To work correctly, bevel gears must be assembled so that the pitch cone points meet as at 'A'. To assist in achieving this, they are made so that this will occur when the back edges are flush as at 'B' (fig 1).

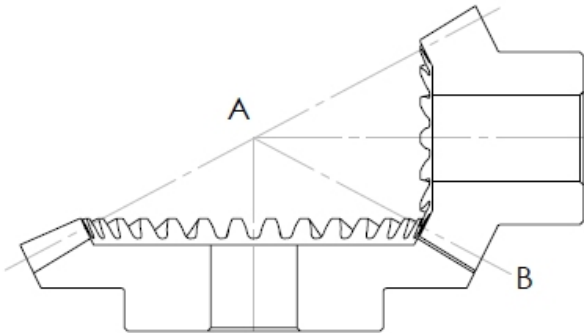


FIG 1

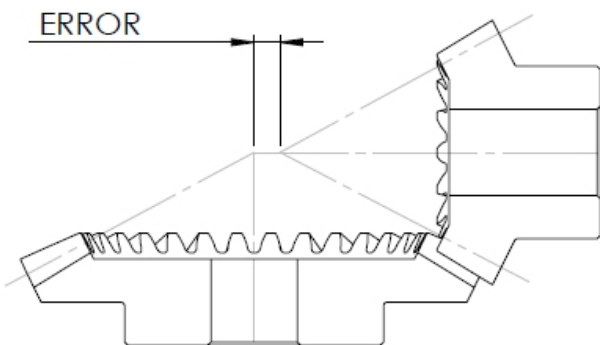


FIG 2

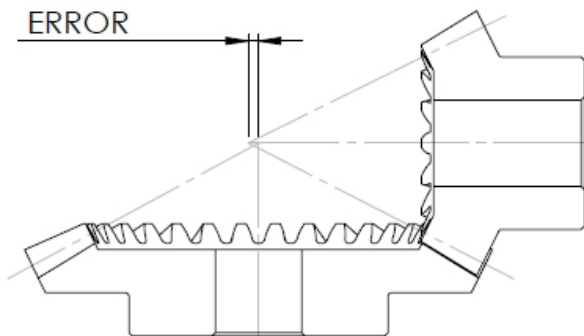


FIG 3

Backlash between the pair is controlled by moving both gear and pinion in or out in unison in inverse ratio to the number of teeth,

ie for '£' movement of pinion gear is moved $£ \times (t/T)$ when 't' and 'T' are number of teeth so that the back edges remain flush.