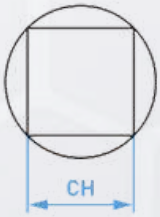
INTERNAL BROACHING PART PREPARATION GUIDE

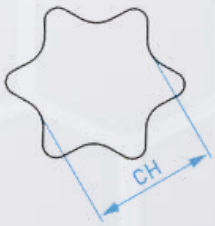
PRE-DRILL HOLE DIAMETER

A pre-broaching drill hole is required for internal rotary broaching.
It is strongly recommended to make hole diameter larger than the minor diameter of the form being broached. See below the formulas for recommended pre-broach drill hole diameters for hex, square and torx forms. When broaching forms with serrations or splines, it is recommended to pre-drill a hole 2-3% larger than the minor diameter of the form. These percentages may be reduced for free cutting material and increased in materials with tou- gher machinability.

HEXAGON	SQUARE	TORX
Pre-drill Hole Ø=CH x 1.03	Pre-drill Hole Ø=CH x 1.10	Pre-drill Hole Ø=CH x 1.10







PRE-DRILL HOLE DEPT

The depth of the pre-drill hole must be greater than the broaching depth to allow for swarf to accumulate and avoid excess build up.
It is recommended to have a pre-drill depth of 1.3-1.7 times the depth of broached area.
If swarf must be removed after broaching, it can be done by drilling out. If possible, an undercut at the bottom of the pre-broach drill hole will allow the swarf to break cleanly. The undercut diameter should be larger than the major diameter of the broach.

