



# ACE

technical reference

## Regrinding Drill Points

To Reproduce a perfect drill point after use, the following features must be observed:

- A. Correct point angle
- B. Correct chisel edge angle
- C. Correct initial clearance
- D. Sufficient total clearance
- E. Concentricity

### STANDARD 118° POINT ANGLE

Standard twist drills are ground with an included point angle of 118°, established as the most suitable for general purpose work.

If the correct initial clearance is produced and increased gradually towards the center to produce a chisel edge angle of approximately 130° the correct clearance will be achieved along the whole of the cutting lip. The two cutting lip lengths should be equal and at a similar angle to the drill axis, to provide correct balance and concentricity.

<u>Drill Size</u>	<u>Initial Clearance Angle At Periphery</u>
Up to 3/64" inc.	24° to 30°
Over 3/64" to 5/64" inc.	20° to 26°
Over 5/64" to 3.2mm inc.	16° to 22°
Over 3.2mm to 4.8mm inc.	12° to 17°
Over 4.8mm to under 1/4"	10° to 15°
1/4" to 3/8" inc.	10° to 14°
Over 3/8" to under 9/16"	9° to 13°
Over 9/16"	6° to 10°

