

TROUBLE SHOOTING WHEN TAPPING

Problem	Cause	Remedy
Oversize	Incorrect tolerance	Choose a tap with lower thread tolerance
	Incorrect axial feed rate	Reduce feed rate by 5-10% or increase compression of tap holder
	Wrong type of tap for application	Use spiral point for through hole or spiral flute for blind hole. Use coated tool to prevent built up edge. Check Dormer Catalogue / Product Selector for correct tool alternative
	Tap not centered on the hole	Check tap holder and position tap centre on the hole
	Lack of lubrication	Use good lubrication in order to prevent built up edge
	Tap speed too slow	Follow recommendation in Dormer Catalogue/ Product Selector
Undersize	Wrong type of tap for application	Use spiral point for through hole or spiral flute for blind hole. Use coated tool to prevent built up edge. Use tap with higher rake angle. Check Dormer Catalogue / Product Selector for correct tool alternative
	Incorrect tolerance	Choose a tap with higher tolerance, especially on material with low oversize tendency, such as cast iron, stainless steel
	Incorrect or lack of lubricant	Use good lubrication in order to prevent chip blockage inside the hole
	Tap drill hole too small	Increase drill diameter to the maximum value
	Material closing in after tapping	See recommendation in Dormer Catalogue / Product Selector for correct tool alternative
Chipping	Wrong type of tap for application	Choose a tap with lower rake angle. Choose a tap with longer chamfer. Use spiral point taps for through hole and spiral flute for blind holes, in order to avoid chip blockage. Check Dormer Catalogue / Product Selector for correct tool alternative
	Incorrect or lack of lubricant	Use good lubrication in order to prevent built up edge
	Taps hit bottom of hole	Increase depth of drilling or decrease depth of tapping
	Work hardening surface	Reduce speed, use coated tool, use good lubrication
	Swarf trapping on reversal	Avoid sudden return of tap on reversal motion
	Chamfer hits hole entrance	Check axial position and reduce axial error of tap point on hole centre
	Tap drill hole too small	Increase drill diameter to maximum value

Threading with taps

Problem	Cause	Remedy
Breakage	Tap worn out	Use a new tap or regrind the old one
	Lack of lubricant	Use good lubrication in order to prevent built up edge and chip blockage.
	Taps hit bottom of hole	Increase depth of drilling or decrease depth of tapping
	Tap speed too high	Reduce cutting speed. Follow recommendation in Dormer Catalogue / Product Selector
	Work hardening surface	Reduce speed. Use coated tool Use good lubrication
	Tap drill hole too small	Increase drill diameter up to maximum value
	Too high torque	Use tapping attachment with torque adjustment clutch
	Material closing in after tapping	See recommendation in Dormer Catalogue / Product Selector for correct tool alternative
Rapid wear	Wrong type of tap for application	Use tap with lower rake angle and/or higher relief and/or longer chamfer. Use coated tool. Check Dormer Catalogue / Product Selector for correct tool alternative
	Lack of lubricant	Use good lubrication in order to prevent built up edge and thermal stress on cutting edge
	Tap speed too high	Reduce cutting speed. Follow recommendation in Dormer Catalogue / Product Selector
Built up edge	Wrong type of tap for application	Use tap with lower rake angle and/or higher relief. Check Dormer Catalogue / Product Selector for correct tool alternative
	Lack of lubricant	Use good lubrication in order to prevent built up edge
	Surface treatment not suitable	See section for surface treatment recommendations
	Tap speed too low	Follow recommendation in Dormer Catalogue / Product Selector