



VARDEX TM Test Report

TMSD CS35

TMSD is the right solution to machine larg threads and hard to machine materials

Reported by	William Jubran
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This automotive producer used to tap this large and deep thread by using special tap that goes down 6.1" while the thread length is only 2.1". In many cases the tap was broken due to; thread size 1.5"-6 TPI, hard to machine material, and due to the deep thread and the long overhang of the tap. TMSD tools were successfully tested and within couple of testing hours, the customer has been convinced and places an order for additional tools.

Thread	
Standard	American UNC 2B
External/Internal	Internal
Major Diameter	1.5"
Pitch	6 TPI
No. of starts	1
Thread length	4" Bore depth and 2.1" Thread length



Workpiece	
Identification Nr.	
Material	SAE 4340
Hardness	34 - 38 HRC

Machine	
Machine type	Toshiba
Controller	Fanuc
Coolant	Water soluble
Coolant : int/ext	External

Test Data	Vargus#1	Vargus#2	Competitor	Competitor
Tool/Insert	2UIDC60TM		Special tap	
Grade	VBX			
Tool Holder	TM4SC125W122-374-2U			
Vc - cutting speed[m/min]	117			
RPM	1200			
No. of passes (Radial)	2			
Infeed method	Climb milling			
Feed [mm/tooth]	0.22			

Results				
Failure - wear/breakage			Breakage	
Tool life per corner	Still running			
Cutting Time	3 Minutes 12 Seconds			
Surface Finish	Mirror finish		Rough	