

# Cutlery Allied Trades Research Association (CATRA)



CATRA Edge Retention Test: The Total Cards Cut (TCC) measures the number of silica impregnated cards that a knife can cut. The TCC is a measure of the WEAR RESISTANCE or EDGE RETENTION of the steel. Higher the number the better.

Powder Metal Grades	Rockwell C Hardness	TCC Edge Retention
Bohler <b>M390</b> MICROCLEAN (Stainless)	61+	958.6
Uddeholm <b>Elmax</b> (Stainless) Aisi M4 (HSS)	62 61	930.7 899.7
PM 14-2-4 CrMoV Uddeholm <b>Elmax</b> (Stainless) Uddeholm <b>Vanadis 4 Extra</b> (Tool Steel) PM 14-2-3 CrMoVN PM 7.5-1.3-2.75 CrMoV <b>Conventional Stainless &amp; Tool Steel Grades</b>	61 60+ 61 61 61	798.0 761.7 708.9 706.6 674.4
Bohler K110, Aisi <b>D2</b> Air Hardening (Tool Steel) Bohler <b>N690</b> (Stainless) 14-4 CrMo Aisi 440C (Stainless)	61 61+ 61+ 59	665.8 635.1 546.9 536.0
For Additional Info About CATRA – Website: <a href="http://www.catra.org">www.catra.org</a>		

