



Comparison of some functionality in TCW4 and TCCR

		Thermo-Calc	
Functionality		Classic version R	Windows version 4
Calculation of:	Multicomponent phase diagrams e.g. isothermal and isoplethal sections	X	X
	Equilibrium phase fractions and compositions as a function of temperature for multicomponent materials	X	X
	Thermodynamic properties, activities, enthalpies, chemical potentials	X	X
	User defined functions of thermodynamic state variables and plotting of these functions e.g. PRE-numbers for stainless steel.	X	X
	Microsegregation during solidification with the Scheil module	X	X
	Pourbaix diagrams for aqueous solutions	X	
Possibility to:	Export property diagrams to a text-file or to Microsoft Excel .xls format	X	X
	Compare with other diagram or experimental data	X	X
	Optimize thermodynamic parameters, creating own databases (PARROT)	X	
	Open multiple graph windows		X
	Select predefined alloys from file and calculate different type of diagrams		X
Calculation technical functions	Global minimization procedure applied for calculations of single equilibria, stepping and mapping	X	X
	Amending composition sets for miscibility gaps	X	X
	Setting start values for phase compositions	X	X
	Changing reference state for a component	X	X
	Redefining components (e.g. using MgO,SiO ₂ and O instead of Mg,Si,O)	X	X
	Using user defined start points in phase diagram calculations(ADD_INITIAL_EQUILBRIUM)	X	
	Combining thermodynamic databases(APPEND_DATABASE)	X	X
	Point and click labeling of phase fields in plotted diagrams		X
	Calculating equilibria under paraequilibrium conditions	X	
	Complex user defined macros	X	