

Macro para o Cálculo de Temperatura

	B	C	D
1	Variante	1	
2	Produtividade	500	kg/h
3	Temp fin do metal	1100	°C
4	Temp inic do metal	30	°C
5	Calor esp do metal	0.68	kJ/kgK
6	Temp gas escap	680	°C
7	Temp exterior	25	°C
8	Tcomb	150	°C
9	Ro comb	1	Kg/m³
10	Cp Combustível	1.4	KJ/kg·K
11	Cp ar	1.305832	KJ/m³K
12	Temp ar	220	°C
13	Coef Excesso de ar	1.4	
14	Massa	Trabalho	Seca
15	Carbono	52.92	54
16	Hidrogénio	9.8	10
17	Nitrogénio	4.9	5
16	Oxigénio	11.76	12
19	Enxofre	6.86	7
20	Cinzas	11.76	12
21	Humidade	2	
22	Total	100	100
23	Poder C Inferior	27458.01	KJ/kg
24	Poder C superior	29727.79	KJ/kg
25	V ar	7.367	m³/kg
26	V nitro	5.859	m³/kg
27	V agua	1.237	m³/kg
28	V RO2	1.036	m³/kg
29	V nitro (real)	8.188	m³/kg
30	V agua (real)	1.285	m³/kg
31	V RO2 (real)	1.036	m³/kg
32	VO2	0.619	m³/kg
33	Vgases de comb	11.127	m³/kg

=D16*(100-SC\$21)/100

=D18*(100-SC\$21)/100

=D20*(100-SC\$21)/100

=C23+25.1639*(C21+9*C16)

=0.79*C25+0.008*C17

=1.867*(C15+0.375*C19)/100

=C27+(C13-1)*0.0161*C25

=(C13-1)*C25*0.21

=D15*(100-SC\$21)/100

=D17*(100-SC\$21)/100

=D19*(100-SC\$21)/100

=4.187*(81*C15+300*C16-26*(C18-C19)-6*(C21+9*C16))

=0.0889*(C15+0.75*C19)+0.265*C16-0.0333*C18

=0.1116*C16+0.0124*C21+0.0161*C25

=C26+(C13-1)*C25*0.79

=C28

=SUM(C29:C32)


```
Sub Cálculo_Tc()  
,  
' Cálculo_Tc Macro  
' Macro recorded 30-09-2006 by Jorge Olivio Penicela Nhambiu  
,  
' Keyboard Shortcut: Ctrl+Shift+C  
Dim x, Dim y, Dim z  
x = Range("C42").Value  
z = 1000  
y = Range("C48").Value  
Do  
z = z + 0.01  
Range("C43").Value = z  
y = Range("C48").Value  
Loop Until Abs(x - y) < 0.1  
MsgBox " convergiu!"  
End Sub
```