

## Simulation Data Sheet

**Please note that this information will be held confidential.**

Company Name	_____
Contact Person	_____
e-mail address	_____
Phone Number	_____ Fax Number _____

Please fill in the following blanks regarding the simulations:

Simulation package used \_\_\_\_\_

Number of metal cells or metal elements used for the simulations \_\_\_\_\_

Units of the Niyama criterion in your simulation package \_\_\_\_\_

- In the following table, please fill in the values of the **liquidus temperature ( $T_L$ )** and the **temperature at which the alloy is 100% solid ( $T_S$ )** for each of the alloys simulated. In every case, please be sure to specify the units (i.e. °C or °F).

- In the table, please also
  - Enter the value of the temperature ( $T_{NY}$ ) at which the Niyama criterion is evaluated. Please be sure to specify the units (i.e. °C or °F).

**OR**

- Indicate where in the solidification range (which is defined as ( $T_L - T_S$ )) the Niyama criterion is evaluated. (For example, 10% of the solidification range above the temperature at which the metal is 100% solid).

Alloy	$T_L$	$T_S$	$T_{NY}$	Where in the solidification range
WCB				
CF-8M				
CN-7M				
M-30C				

Please return the data sheet and pictures to the following address:

**Kent Carlson, Research Engineer**  
**Solidification Laboratory**  
**Department of Mechanical & Industrial Engineering**  
**2430 SC**  
**The University of Iowa**  
**Iowa City, Iowa 52242**

e-mail: [kdcarls@engineering.uiowa.edu](mailto:kdcarls@engineering.uiowa.edu)