

SECTION A: ERROR DETAILS

Bugzilla Error Number	BUG4560		
Description of Error: When a heat transfer grading factor larger than one (1) is specified for convection heat transfer, the component fluid exit temperature can exceed the wall temperature that heat is convected to or from.			
Comments: The convection heat transfer coefficient is constraint, to avoid the non-physical situation where the component fluid exit temperature exceeds the solid wall temperature, using the Stanton-number limit. The heat transfer grading factor was applied to the convection heat transfer coefficient after the adjustment to enforce the Stanton-number limit, thus situation could arise where the fluid temperature exceeds the wall temperature.			
First Incorrect Version:	8.0.11 rev 4573 March 2008	Corrected Version:	8.15.0.5062

SECTION B: WORKAROUND

Workaround Description: Limit heat transfer grading factors to 1, OR when using a value greater than 1 pay careful attention to the solver warning regarding the fluid temperature exceeding the wall temperature and adjust the grading factor accordingly. A resolution to the problem will be available in the next official release.
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SECTION C: SIGNOFF

Person Responsible for Fix:		
Eugene van Heerden		2023/07/10
Name	Signature	Date
Person Responsible for Review:		
Bennie du Toit		2023/07/11
Name	Signature	Date