Flame-Cut Bolt Holes/Residual Stress

Are there any provisions for flame-cutting holes into steel members regarding residual stresses?

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Limited testing by Iwankiw and Schlafly demonstrated that for static loading, connection strength and performance was not affected by flame-cutting bolt holes. Refer to AISC FAQ 5.1.3 at www.aisc.org/faq for additional information. Note that the 2005

Short Anchor Rods

I have a column (gravity loads only) where the projected length of the anchor rod is too short. At best, the top of the nut is level with the top of the bolt. However, on some, the nut is 1/8" above the top of the rod. Is there a way to determine the capacity with a partially threaded nut?

There are no code or specification provisions of which I am aware that cover the subject of partially engaged nuts on anchor rods. This becomes an engineering judgment on the part of the EOR. There was an excellent article in the May 2004 issue of M de S eel C c i titled "An Ounce of Prevention" by Jim Fisher and Larry Kloiber, which gives their opinion of using straight line