The April 2010 Beacon discussed the use of fireproofing to protect process piping components, specifically long bolt flangeless valves. Fireproofing is a fire resistant insulating material which is also often applied to the surface of structural steel to delay heating of that steel from fire exposure. The primary purpose is to improve the capability of structural steel to maintain its integrity until the fire is either extinguished or other active fire protection systems can provide adequate cooling protection. Without fireproofing, exposed structural steel, such as the pipe rack support columns in the photograph at left, or the support columns in the photograph on the right, can rapidly lose strength and fail, possibly within minutes. The failure of the piping and equipment supports can break pipes or cause vessels to fail, releasing more flammable material, and causing a larger fire.

Take care of fireproofed structural steel so it can take care of you!