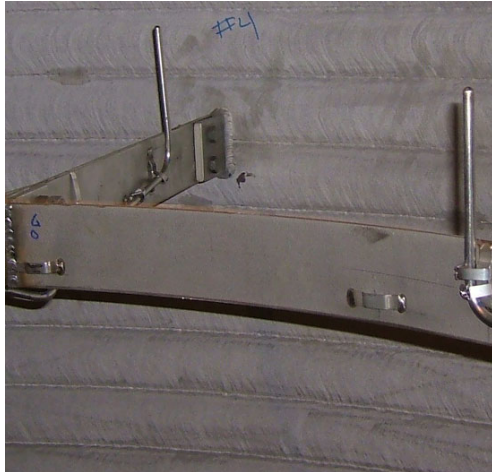


CatTracker[®] vs. Old Style

Withstanding catalyst dumps



Old style with unsupported tip



CatTracker[®]

In selecting a Radial Temperature Profiling System, one should consider the ability to withstand a catalyst dump. During the catalyst dump operation, a great deal of force is generated by tons of catalyst moving in one direction. The competitive design has the thermocouple tips sticking up into the catalyst without any support. This area is vulnerable to being bent from the forces generated during the catalyst dump.

A probe that has been in a high Hydrogen atmosphere, under high temperatures and pressures, is susceptible to cracking of the sheath due to Hydrogen Embrittlement.

Our competitor brags about the ability to repair failures from this phenomenon during turnarounds while the CatTracker[®] system avoid the problem by not having any long unsupported tips.

**Patent #6,550,963 &
6,599,011
Patent Pending in Europe and Canada**