



http://www.aiche.org/CCPS/Publications/Beacon/index.aspx

Messages for Manufacturing Personnel



## What is supporting your equipment?

February 2013

You will recognize **Picture 1** from the November 2012 and January 2013 issues of the *Beacon*. It is an obvious example of badly supported piping. But sometimes problems with inadequate support of piping and other equipment are not so easy to see.

**Picture 2**– The steel supporting the pipes has bent, possibly because the weight of the pipes is more than the steel can support. Perhaps this was a result of a change – was a second pipe added without considering the design of the supporting steel?

**Picture 3** – The pipe has moved horizontally and the pipe support stand has moved out of the support shoe.

**Picture 4** – Look closely – the steel supports are not touching the ground. They are hanging from the pipes rather than supporting them!

Picture 5 – Somebody has cut out a section of the structural steel to make room for a valve!

Pipes and equipment which are not properly supported will be subject to stress, vibration, or other problems. This can cause leaks, or even a complete collapse of piping or equipment.

As you work in your plant, look for problems with poorly supported equipment, excessive vibration, or other issues. A good general rule - if it doesn't look like it did on the day it was installed, there might be a problem! Report problems to your management, and follow up to make sure the problems are corrected.











## Support your pipes and equipment!

AIChE © 2013. All rights reserved. Reproduction for non-commercial, educational purposes is encouraged. However, reproduction for the purpose of resale by anyone other than CCPS is strictly prohibited. Contact us at ccps\_beacon@aiche.org or 646-495-1371.