

Translation of Ineos Silicas Letter

GEM / SynTherm
Attn. Mr B. Van Nunen
P.O. Box 5
7600 AA Almelo
The Netherlands

Eijsden, 2 October 2007

Re.: Experience with GEM Venturi steam trap

Dear Mr Van Nunen,

Ineos Silicas is always looking out for ways to improve the efficiency of processes, to increase the availability of the plant and to decrease maintenance of the equipment.

One of the successful improvements of the past year concerns the GEM Venturi steam trap. In 2006 was decided to test a GEM Venturi steam trap on one of our dissolving tanks, in which we prepare batches of 30 tons each. In the past 15 years mechanical steam traps of the float type were used which had to be replaced approximately once a year because of leakages or other damages. Of great importance to us is the heating up time of the dissolving tanks and we wanted to compare the performance of a GEM Venturi steam trap with the conventional type of steam trap.

After installing the GEM Venturi steam trap the heating up time was reduced by 15% compared with the mechanical trap. This gain in time resulted in a payback time of less than one month because of production increase and energy savings. In the mean time we have equipped all dissolving tanks with GEM Venturi steam traps. Up till now (more than 1 ½ years after installation of the GEM trap) no maintenance has been required.

We then decided to replace de existing mechanical traps on our heat exchangers with GEM steam traps. This has recently been completed.

Ineos Silicas is very satisfied with the achieved results. We will, when we have to install steam traps in the future, check first to see if there is a GEM Venturi steam trap available for the required capacity, allowing us to save energy and increase the availability of the plant.

With kind regards

Roger Jansen
Senior Process Technologist Zeolites
Ineos Silicas Netherlands BV