



ViscoTec – Newsletter 04 / 2010
Application report: Dampener filling



Application report: Dampener filling (automotive application):

Description:

In a car the movement of the running motor and the transmission to the crank shaft are causing a lot of vibrations. In order to avoid these vibrations, dampeners are needed between the motor block and the crank shaft. These dampeners are metal parts which are filled with a special silicone. These parts are used as carriers to get an equal movement to the axis.

ViscoTec-solution:

ViscoTec-systems fit perfectly for this kind of application. It is a complete system consisting of barrel-emptying-system (with suction lance for low viscosity silicones or an emptying system ViscoMT-L for high viscosity silicones), a degassing tank, a buffering unit (ViscoTreat-H) the dispenser (3 RD8 with ViscoPro) and filling valves. The silicones are pumped out of the barrel, then are fed to the degassing tank. As the degassing is done batch wise, a buffering-unit guarantees the continuous process. The filling valve firstly evacuates the dampener and then fill up the dampener with the silicone.

Potential / customers:

For example: METALDYNE (USA / China / Korea / India), Geislinger
Automotive supplier companies

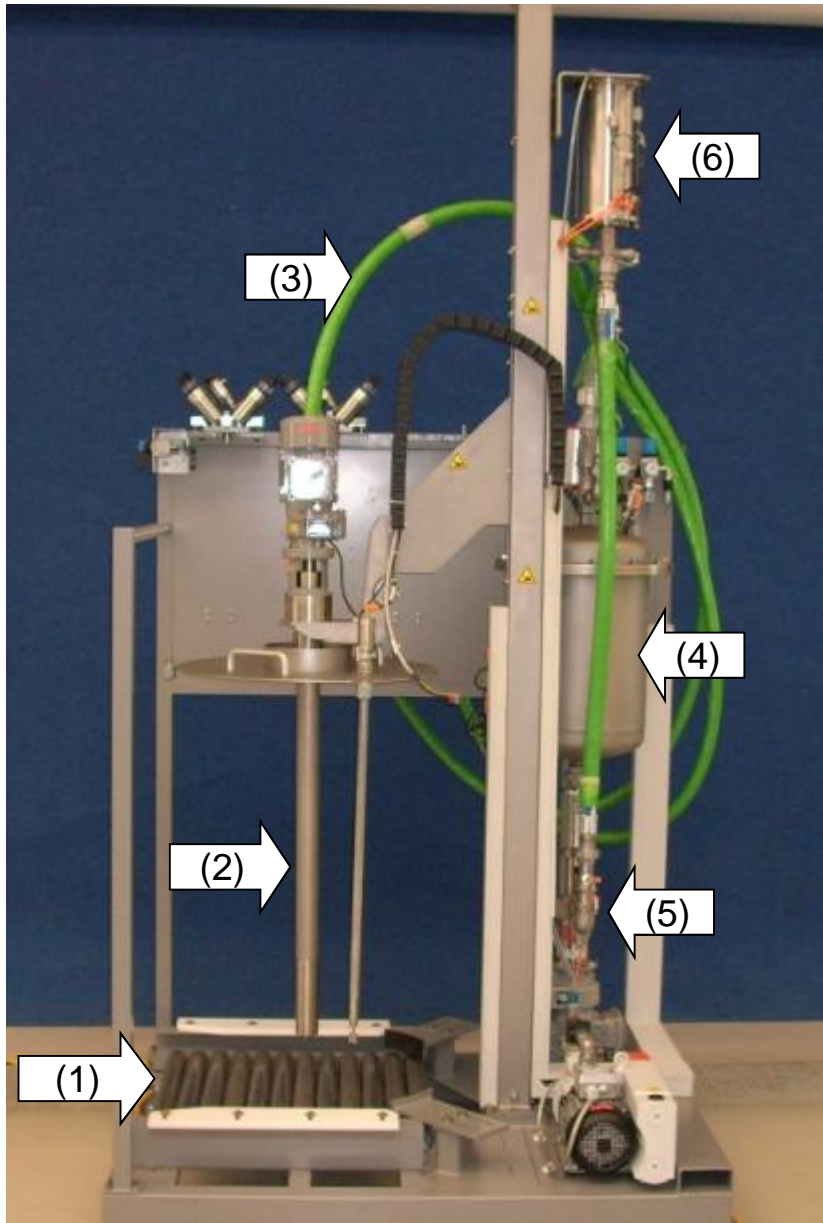
Advantages and benefits of ViscoTec –System:

- (1) Smooth filling process with high accuracy and repeatability
- (2) Buffering system => continuous production process
- (3) Simple control (pressure sensor)
- (4) Compact automated unit
- (5) All in one system (product supply – filling nozzle)
- (6) Higher production capability => early return on investment

In general ViscoTec-technology fulfil the requirements of the customer in a perfect way.

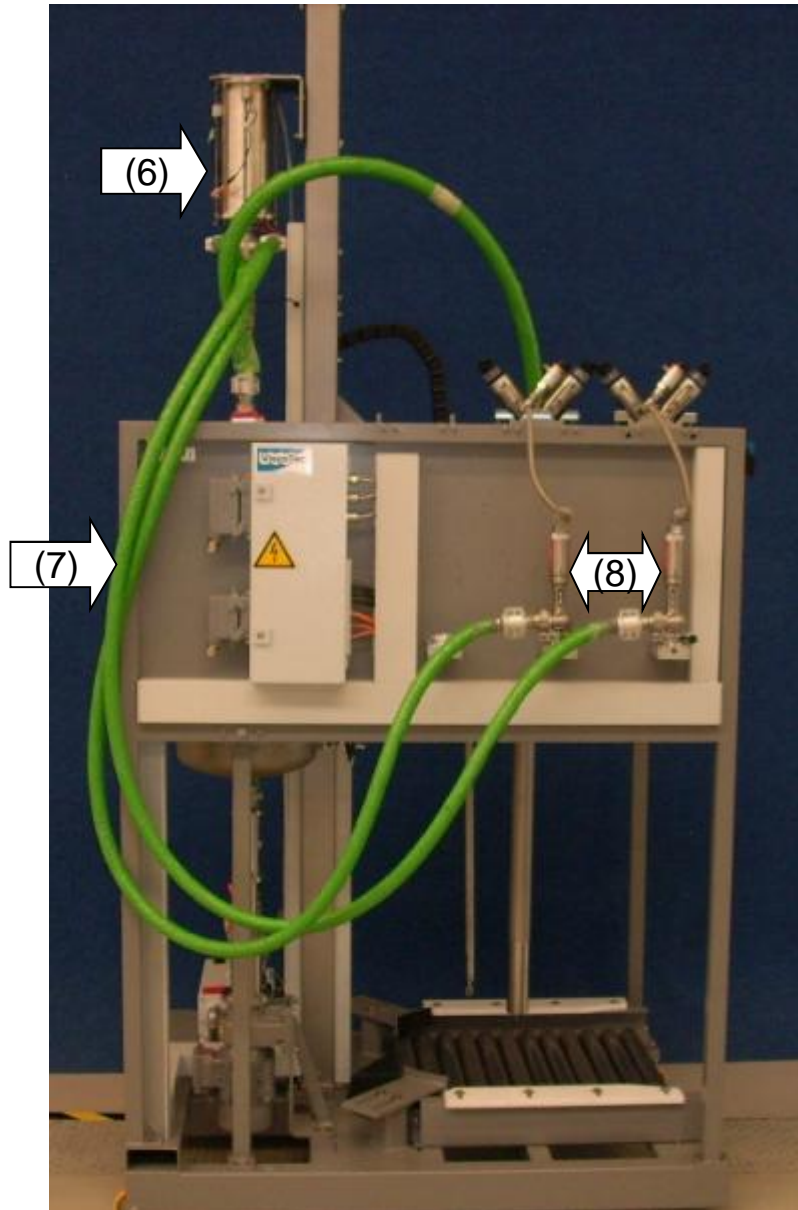
The processes of emptying, degassing, metering, buffering and dosing combines all types of ViscoTec- systems and create one solution for the whole process.

Dampener Filling



- (1) Easy roll in of up to 200 l barrels of medium; adjustable centering of barrel
- (2) Suction pump or, if higher viscosity: ViscoMT-XL
- (3) Pumping of silicon toward material conditioning
- (4) Inline batch degassing
- (5) Material flow to hydro storage (6)
- (6) Buffering system: buffer and reservoir for dispenser

Dampener Filling

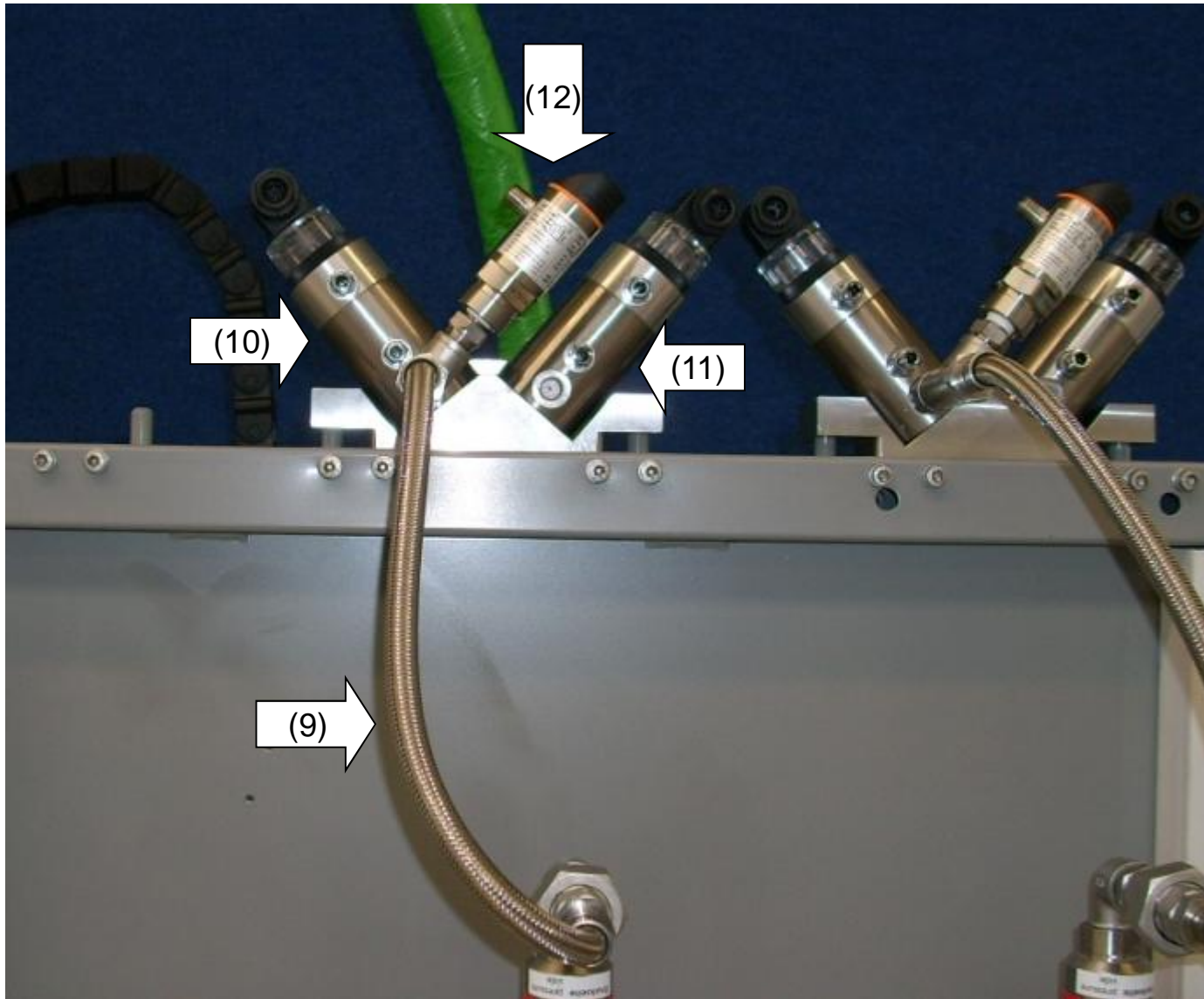


Material flow:

(6) hydro storage

(7) feeding to dispenser (8)

Dampener Filling



(9) Feeding to filling valve (10)

(10) Filling valve

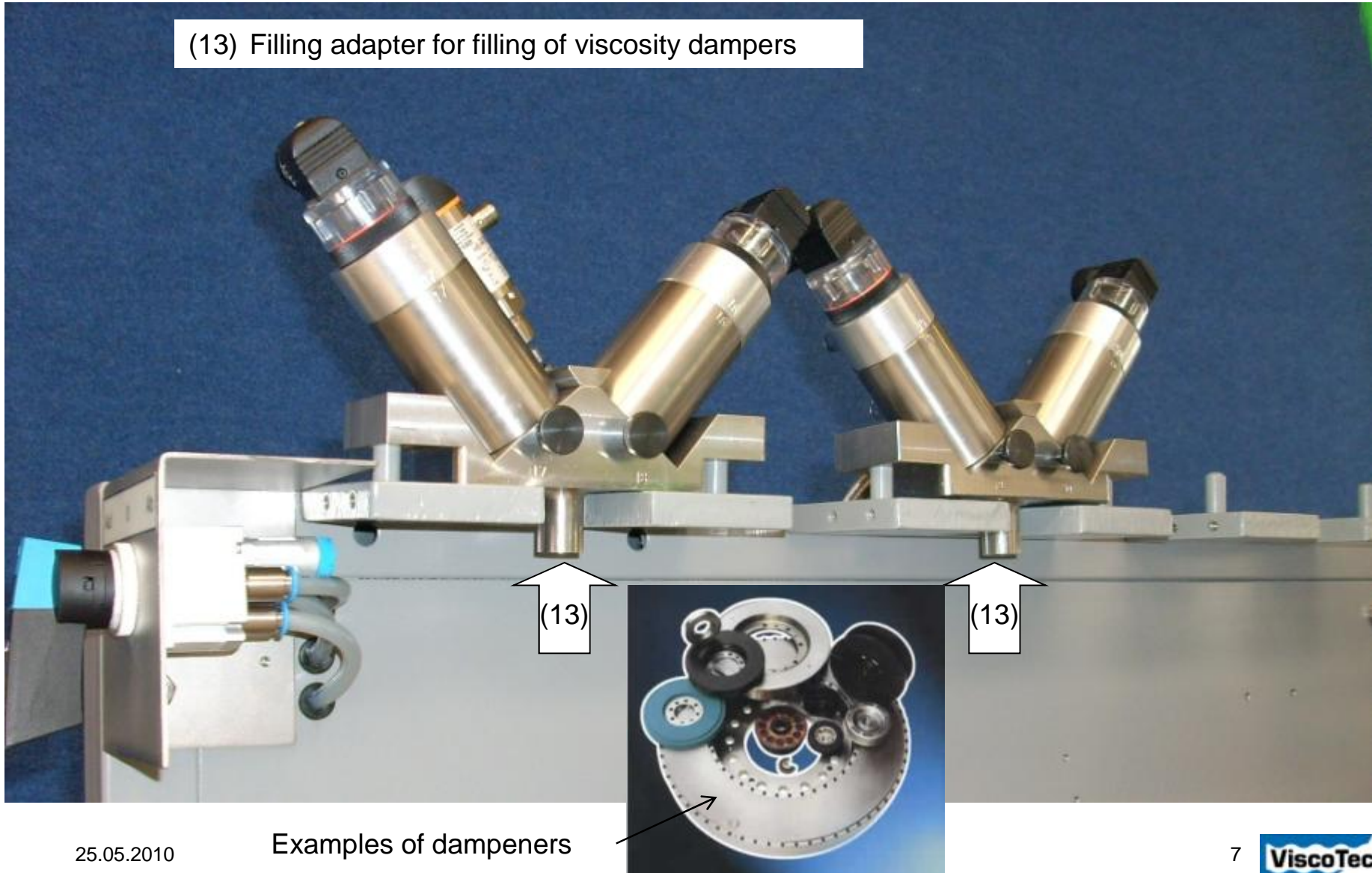
(11) Evacuation of damper by vacuum valve

(12) Pressure controlled filling of damper (pressure controller)



Dampener Filling

(13) Filling adapter for filling of viscosity dampers



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Examples of dampeners