

# **EHEDG Worldcongress 2022-** **Hygienic Design – Impact on automation solutions**

Speaker: Dr. Michael Kornely

**CIP/SIP suitable**

**food-grade materials**

**no health hazard**

**fast and effective  
sanitizing**

requirements have to meet by a Hygienic Design component

**easy to clean**

**no habitat for bacteria**

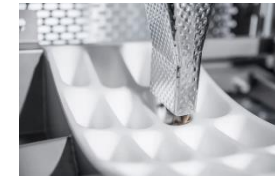
**operating under wet  
conditions**

**resistance to cleaning  
agents**





gear motors



FLOWave, Bürkert Werke

CG5-2977, SMC

DMSU22SA, WIKA

indicator and actors

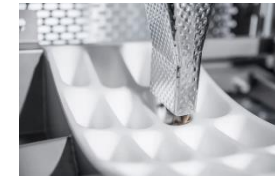
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indicator and actors

avoiding contamination before it occur?



Solution:  
intelligent motion  
controlled by special  
software modules





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Target application:

Food&Beverage

Fill- and Seal machinery e.g. filling of dairy in cups or glasses

Pharma

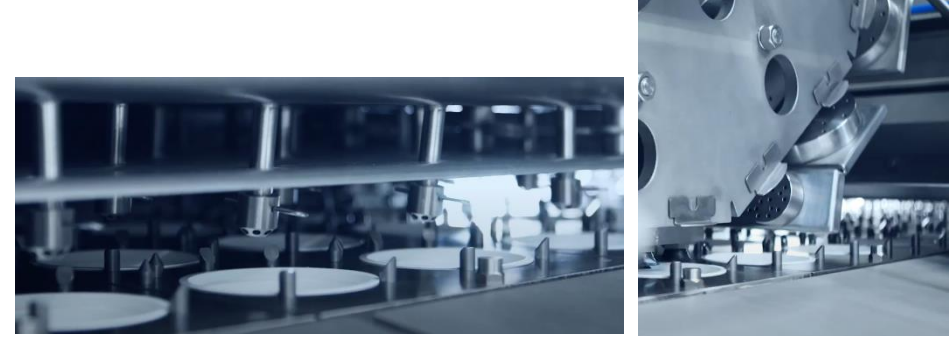
Filling of liquid pharmaceutical into ampule



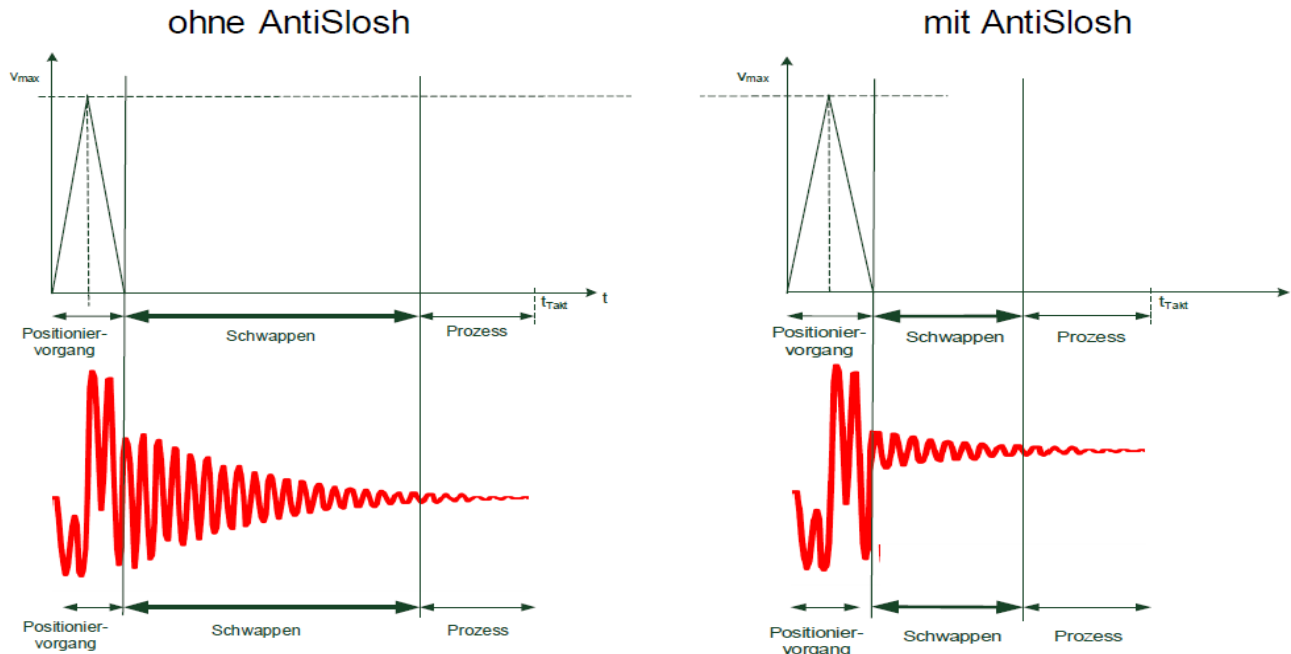
stop-start Application:  
slow acceleration/deceleration to avoid spill over  
→ increased cycle time, lower productivity



Solution:  
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software modules



Softwaremodul Anti-Slosh: Fast reduction of swinging liquid/fluid to a minimum by a special control of motion



analyzing of liquids and container  
shape by determining

- inherent frequency
- rate of damping

avoiding spillover

- reduced contamination and  
cleaning effort

shorten cycle time

- increasing machine output



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Softwaremodul Anti-Slosh: Fast reduction of swinging liquid/fluid to a minimum by a special control of motion

.....Video.....

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