



Pump Users  
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# Technical Paper

## Pumping of special liquids

### Session 13-3

## New designed pumps for LPG! Technical solution advantages

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## Summary

The harmonisation of European law has resulted in changes to pump specifications with regard to safety and permitted leakage rates. With respect to explosion prevention (European Machine Directive 98/37/EC), the rules now cover not only electrical machines, but also mechanical items such as pumps. Given this modified legal position based on the German health structure law (GSG), manufacturers must now make greater effort than in the past to ensure extra safety and the prevention of personal injury. New international regulations on ambient air quality (European Directive 96/62/EC) are likewise designed to ensure that only leak-free sealing systems, or monitored systems with very low leakage rates, are allowed to remain in operation.

In the light of all these stricter requirements, and the specific physical characteristics of liquefied hydrocarbon gases, the pump industry is being obliged to update what were previously special solutions, and convert them into standard technical features.