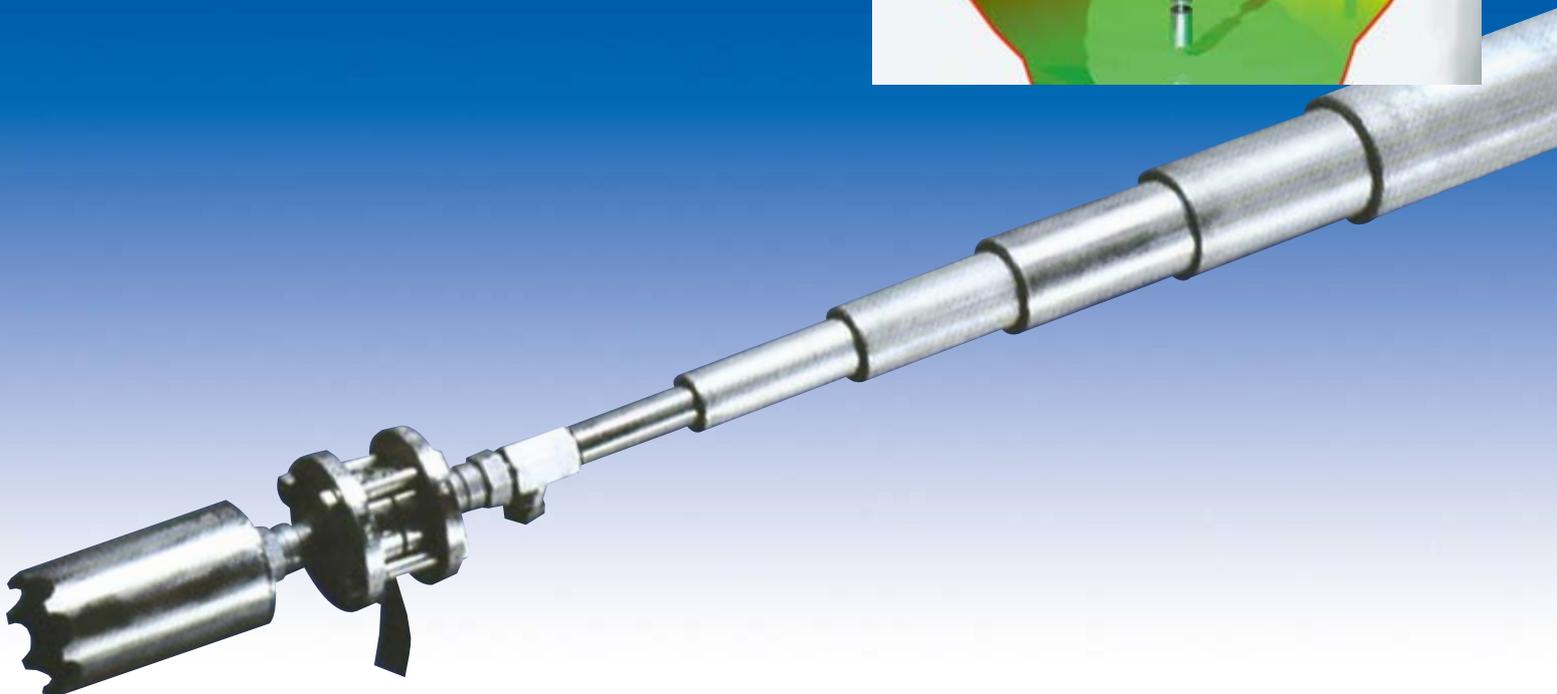
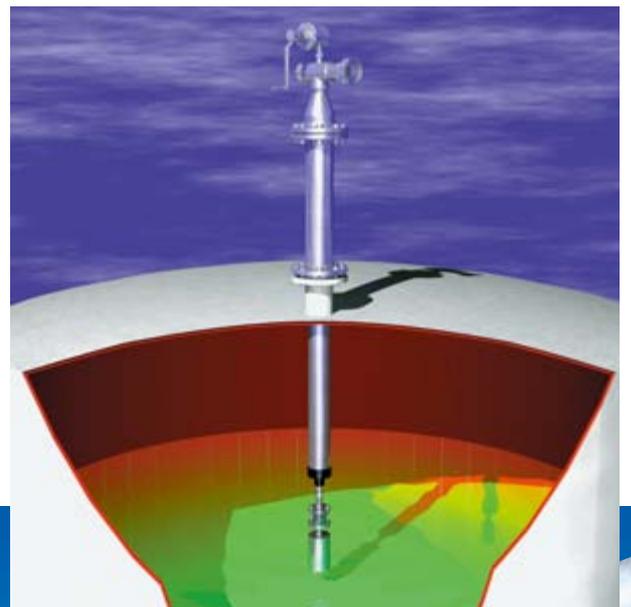


RS-RESTAB



Safety lance prevents uncontrolled polymeris



Chemistry can be like fire: a good servant but a bad master. When a fire runs out of control we reach for an extinguisher – for certain chemical processes there is now the RS RESTAB system.

Stopping the “ticking bomb”

Storage tanks in the chemical industry may contain harmless substances, or potentially risky ones which pose no threat when the process is running as intended but which can become hazardous when conditions fall outside the safe limits.

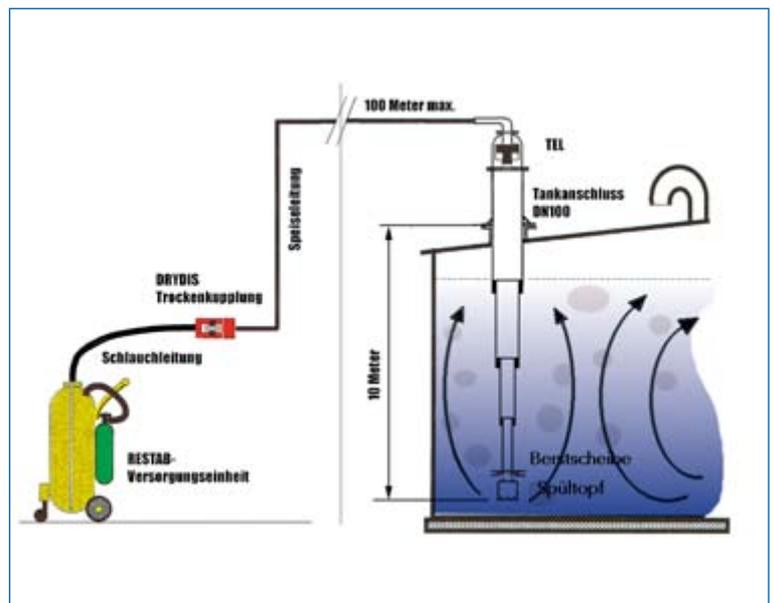
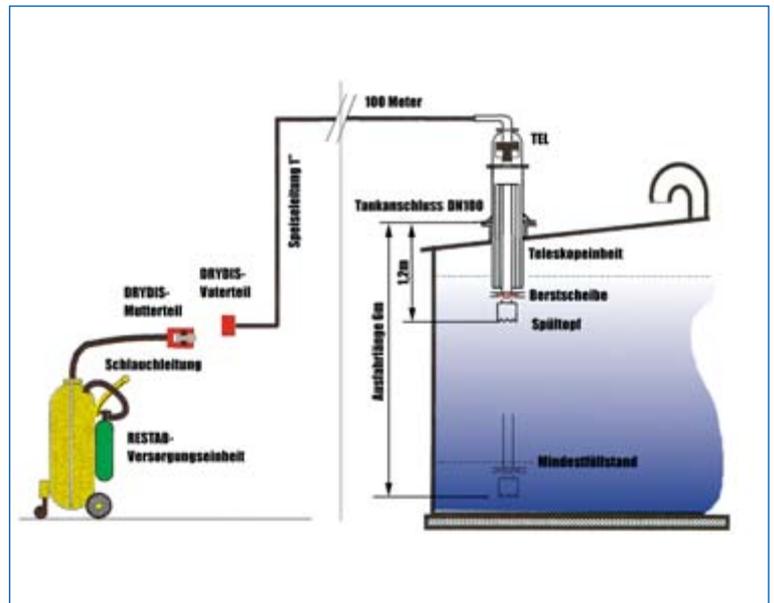
An example of a risky substance is acrylic acid. Its polymerization is exothermic, and if not stabilized this can lead to a runaway situation which might result in a tank bursting or exploding. Ultimately, such an occurrence could result in a chain reaction which could destroy a complete plant.

Engineers from the major chemical company BASF and from the RS research and development group have cooperated to produce the **RESTAB-System** for restabilising acrylic acid in storage tanks. The emergency system functions even in the event of power loss, whether this occurs accidentally or intentionally for safety reasons. The energy needed to drive the system is provided by a compressed gas cartridge.

ation. Process control for greater security

Injecting calm and safety

In the case of an emergency the operator uses a → **RS Dry Disconnect Coupling** to make a connection between the → **RESTAB Liquid** and the pipe leading to the tank containing the injection lance and opens the nitrogen supply. The pressure in the container rises to about 5 bar and moves a piston which frees a telescopic pipe. The pipe segments extend for up to 10 meters and then the pressure inside the system rises until it ruptures a burst disk. A diffuser at the end of the pipe then distributes the inhibitor over the bottom of the tank, stopping the polymerization.



An integrated concept

Advantages at a glance

- Effective emergency system
- Works without external power
- Protects the operator from injury
- Protects the environment from contamination
- Protects the plant from damage

When the installation is subsequently cleaned the extended lance is retracted with a cable to its original size so as to simplify its removal from the tank.



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More information is available for products and services marked with →. Call or email us for details.

Facts and figures

A **RESTAB** system comprises the following components:

- A **TEL** telescopic lance to inject the **RESTAB** liquid (phenothiazine in a patented carrier medium), permanently installed in the tank.
- A mobile container with **RESTAB** liquid.
- A **RS** dry disconnect coupling to quickly couple the container to the affected tank.
- A fireproof pipe or hose connection to the roof of the tank for Ex-zone protection to EEx ia IIC
- Nitrogen gas flasks. The compressed nitrogen provides the power to extend the telescopic lance.

RESTAB is a trademark of BASF, registered in Germany and in other countries

Subject to change without notice