

Simple adaptation to existing production equipment – mounting sockets

If existing production equipment is to be retrofitted with level sensors, it is sometimes difficult to find a suitable location for the sensors, because the existing mounting sockets are already utilized. With previous radar technology, especially on long mounting sockets, strong interfering reflections are generated at the end of the socket because of the wider beam angle of these older sensors. Since these really long mounting sockets generate multiple echoes, and ringing into the measurement range, their reliability is significantly limited in the area of these reflections. Especially with media such as hydrocarbon based products, which reflect radar signals very poorly. This effect normally imposes a significant unmeasurable zone at the top of the vessel. Sometimes, through the use of special antenna extensions, this influence could be slightly reduced. But nevertheless, installation of previous radar technologies on high mounting sockets often brought problems, extra costs and limitations that simply had to be accepted.

The solution

Thanks to the excellent signal focusing of **VEGAPULS 64**, hardly any interfering or multiple reflections are caused by the socket end and nozzle. In addition, any reflections in the close range are significantly reduced by a distance-dependent signal amplification. The result is reliable measurement right up close to the container top and much easier retrofitting on existing equipment.

The benefits

- Easy to install on existing systems without costly replacement of the tank mounting sockets
- Utilization of the entire tank volume even with long mounting sockets
- Safer operation of the tank levels and sensor accessibility on long nozzles

Expert tip:

Although high mounting sockets cause significantly less interference with the new VEGAPULS 64 sensor generation, it is still of course a good idea to use the shortest possible sockets for mounting radar sensors. When planning new production facilities, special attention should be given to the design of sensor mountings in accordance with the operating manuals.