

# Elimination of suspending materials in bunkers and storage vessels using shock wave generators GFU-24/8



## They trusted us:

**PGNiG TERMIKA EP S.A. "Zofiówka"** - carbon storage vessel for the boiler OP-140

**KSC S.A. CUKROWNIA KLUCZEWO** - carbon storage vessel for the boiler OR-50

**PEC Gliwice Sp. z o.o.** - carbon storage vessel for the boiler WR-25

**WEPA PIECHOWICE S.A.** - carbon storage vessel for the boiler OR-16

**SEC Myślubórz** - carbon storage vessel for the boiler WR-5

**KSC S.A. CUKROWNIA KLUCZEWO** - beet hooper



# Elimination of suspending bulk materials in bunkers and storage vessels.

In numerous technological installations there is a severe problem with provision of regular supplies of various materials and component. Therefore, bunkers and storage tanks are crucial components in the technological lines. Keeping them clean and unobstructed can minimise shutdowns in production and assures high quality of the final product. As concerns the boilers, continous fuel supply and ash removal have to be provided. Varying coal or biomass parameters result in fuel suspensions in bunkers and storage tanks. In particular, the biomass fired boiler users (straw, wooden chips, pellets) face this serious problem of providing continous fuel supplies. When producing a shock wave, the shock wave generators GFU-24/8 shake up the material in the the storage tanks and eliminate the suspension phenomenon. The installations heve been proven in numerous bunkers and storage vessels in which various bulk material is stored. The main features which characterise the cleaning system based on the shock wave generators GFU-24/8 in comparision with other commonly applied solutions are as follows:

- ❑ high efficiency in removal of material overhangs and crusts,
- ❑ no mechanical damage to the storage tank metal components,
- ❑ increased usable volume of the storage tanks,
- ❑ reduction of the vessel filling frequency,
- ❑ capability to design bunkers having various inert gases,
- ❑ minimum phenomena or recoil and pressure increase in storage tanks,
- ❑ ability to use various inert gases,
- ❑ low operational costs,
- ❑ low consumption of compressed air,
- ❑ the commonly applied compressed air pressure up to 8 atm,
- ❑ the installation does not require large air buffer tanks,
- ❑ mounting of the generators without any need for modification of bunker or additional platforms,
- ❑ mounting of the generators in bunkers lined with ceramic.

