## Four-axle, Romanian made, pressure discharge railway wagon for carrying bulk powder materials

## Discharge system: two side discharge at the bottom and equipped with supporting air

- Tow the wagon to the place of discharge.
- Fix the wagon by turning the handbrake (9) to the point of impact or by placing shoes under the wheels of the wagon from both directions to prevent displacement.
- Check if the top cover screws (4) are properly tightened. In case they are not sufficiently tight, close the tank manually or with a spanner pressure-resistantly.
- Close the air-release valve. (2)
- Check the safety disk of the tank (10) and the gaskets of the couplings (5,6). Replace if faulty or missing.
- If there is no butterfly valve on the truck's or the on the discharge place's pipe, it is recommended to install a butterfly valve when discharging the tank (in the case of certain types of material).
- Fit the coupling of the butterfly valve to the coupling of the tank's discharging pipe (6) and tighten it with a ¼ turn clockwise to the point of impact. Then fit the pipe's coupling to the butterfly valve's coupling and fix it as explained above. (It is recommended to fix the couplings with a safety ring.)
- If there is no butterfly valve, fit the pipe's coupling directly to the discharging pipe (6) according to the above.
- Fix and tighten the diameter 110 mm cap with a ¼ turn to the end of the discharging pipe (6) on the other side of the pipe.
- Join the coupling of the diameter 52 mm compressed-air pipe of the receiving place to the coupling (5) of the pipe of discharging air supply of the tank.
- Fix and tighten the diameter 52 mm cap with a ¼ turn to the end of the pipe of discharging air supply (5) on the other side of the pipe.
- Charge the air-pressure in the tank to a maximum of 3 bars with tap of discharging air open and the butterfly valve, the tap of supporting air (13,blue). The material starts to flow as soon as the pressure in the tank reaches 1 bar.
- During the discharge constant air supply is needed, with the tap of supporting air (13) opened and an inner pressure of maximum 3 bars maintained. The discharge of the tank takes approximately 20-30 minutes. The end of the discharge will be indicated by sudden fall of air-pressure. The pipe will stop shaking. Bang the conic plate of the tank with a rubber hammer. By the deepness of the sound the quantity of the rest material can be checked.
- After emptying the tank stop the air charge from the compressor by closing the valve of the air pipe or switching off the compressor.
- Release the overpressure in the tank by opening the air-release valve (2). When the overpressure has gone, remove both the air charging pipe (5) and the material discharging pipe (6).
- Open the top cover (3) of the depressurised tank to check if the tank is empty. After checking the tank fix the top cover (3) with screws (4), reinstall the caps of the couplings (5,6) and close the air-release valve (2).
- Complete the discharge of all four tanks in the same way. After the discharge of the last tank Any stains originating from the discharge have to be cleaned off the wagons. Hereby is the discharge over, and the wagon is ready to be recharged.
- Should any disorder occur during the discharge, inform the operator of the wagons by fax, telephone or e-mail. (PULTRANS KFT. Tel: (36) 1- 368-9614; Fax: (36) 1- 250-6897; E-mail: ecm@pultrans.hu)