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Единый адрес для всех регионов: crw@nt-rt.ru || www.cowell.nt-rt.ru

#### Manhole Cover



RGK-1



RKG-2



Manhole Flange

### Description

Manhole is installed on the top of the tank, built-in pressure& vaccum vent & emergency vent.

#### Characteristics

- Pressure & vaccum vent, while inside pressure higher than 6-8 Kpa or lower 2-3Kpa than the outside, will be open to balance the different pressure. While the difference pressure less than -2~6Kpa, the P/V vent will be closed to keep the product not volatilized.
- Automatic sealing of P/V vent in a roll over situation prevents dangerous and splliage.
- When th
   e inside pressure is higher 21-32kpa than the outside. The emergency
   vent will be open automatically to keep tank safe. The vent capacity is
   7000M3/h.
- Two-stage opening allows safe release of residual compartment pressure before fully opening the fill cap.
- Easy maintenance, convenience, safety.
- · Working pressure:0.6Mpa

Technical Specification		
Model	Material	Outer Diameter (mm)
RKG-1	Aluminum	560, 580
RKG-2	Aluminum	460
RKG-3	Carbon Steel	460, 500
RKG-4	Carbon Steel	460, 500
Manhole Flange	Mild Steel	460, 560, 580

**Vents for Manholes** 

RKG-3

#### **Bottom Valve**

Bottom Valve, namely, Emergency Valve, is installed on the bottom of the tank truck to transfer the liquids from bottom to tank with advantage of easy operation, safe, time-saving.

# Advantage

High Flow, reducing inner pressure

Shear groove, automatic cut-off and leakage proof under emergency.

Shear valve, using automatic right piston& durable spring. After emergency cutoff, it can still keep sealing as well.

While emergency, if there is no air source or open failure due to other reason, it also can be opened manually without demolition.

#### I. Aluminum Pneumatic Bottom Valve



II. Aluminum Manaual Bottom Valve 3"&4"

III. Aluminum Manaual & Pneumatic Bottom Valve 3"&4"



Vapor Recovery Adaptor, Valve

## Vapor Recovery Adaptor

Aluminium material

The piston ensures the flow rate, the inside pressure of the valve can be reduced to minimum.

With light and tight structure, good venting is fit for gas circulation.

Pnematic control is convenient to use.



Vapor Recovery Adaptor
A Type



Dust-proof Cap



Vapor Recovery Adaptor
B Type



100/80/65 Gravity Coupler

## Vapor Recovery Vent & Ventilating Valve

When filling the tank truck, the Vapor Recovery Vent opens, the rising liquid level pushes up the oil gas.

Through the vapor recovery system, all vapors come back into the tank truck.

Tight seeling ensures the safety of the transportation, and the reasonable design ensures the vapor recovery efficiently.



Vapor Recovery Vent A

Type



Vapor Recovery Vent B Type



Vapor Valve



Ventilating Valve

### **Anti-overflow Optical Sensor, Socket, Tester**

### Anti-overflow Optical Sensor & Socket

Optical sensor is installed on the manhole top of the tank for anti-overflow protection. It is monitoring the limit of warning line in the process of tank oil loading. While the oil rises to the warning line, the sensor occurs warning to prevent the leakage of oil or overfilled. It is the most security limit of communication systems. It is 5 wires.

The Overfill Prevention Sockets are designed for optimal tanktruck to rack system communications. The sockets conform to API standards.



Anti-overflow Optical Sensor & Socket

#### **Technical Data**

- 1. Body Material: Aluminum 5A02
- 2. Signal Line:5 wires cables, Pressure shock voltage 500VAC
- 3. Operating voltage 12VDC, Operating current < 50MA
- 3. Working temperture:-40°C~+60°C
- 4. Response time < 1S
- 5. Anti-explosion range:ExiaIIAT3
- 6. Sensor length: 180mm or 300mm

### Anti-overflow Optical Sensor Tester

This Tester designed for testing Anti-overflow Optical Sensor. It is compatible with international standard. It's safe to use 3V5 battery , and also can use 220V with the help of Electric device if necessary.



Tester

#### **Mechanical/ Pneumatic Control System**

## Mechanical Control System

SZJ03 Mechanical Operator use pulling line to control bottom valve open and close and has a fuse link. While outer temperature reaches to a certain condition, the fuse separates and the bottom valve is closed. As per the operational stick quantity, it has multitypes. It uses together with Handle to remote control



Mechanical Operator

# Pneumatic Control System

Air Interlock is fixed in the vapor recovery elbows to be the emergency vapor vent. Control System gathers all the pneumatic Units to a point for Tankers. Simplify the operation. Quantity controls units as per actual situation.



Air Interlock



Pneumatic Control System

### **Quick Discharge Coupler**



# **Quick Coupling**

To connect the pipe transporting oils, strong acid,alkali,or any other chemicals. It has the features of heat resistance & high pressure resistance.

Material: Aluminum All Types Size:1", 1.5", 2", 2.5", 3", 4",5", 6" Stainless Steel C& E Type; DC Type, FE Type Size: 2", 2.5", 3", 4"



# **Reducing Coupler**



Other Tank Truck Parts

# Three-way Strainer

Used to shunt the oil in the tank dopant at the same time. Size:2"

### Sieve Filter

car into two streams and filter the Used to filter oil products in transportation of the oil pumped solid particles and impurities. Usually installed in oil tanker and tanks.

& 3"





Technical Specification		
Size	2" & 3"	
Flow Range	600-1500L/Min	
Viscosity	5-50Cas	
Strainer	60M, 80M	
Body Material	Aluminum	
Strainer Material	Stainless Steel	

Three-way Strainer

Sieve Filter

### Volume Hole

It is installed on the manhole cover, can also equip the oil feet or level meter.



## Flanges for Bottom Valve

A type & B type Flanges connecting tank; C & D type connecting pipeline. Other Tank Truck Parts ...



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