F0512 F0337 F0338 F0355 F0339 MANHOLE COVER SAFETY FEATURES

Detailed on this page are some of the important safety features that are exceptional or unique to all Emco Wheaton's manhole covers. We have manufactured manhole covers for petroleum tankers for over 50 years and these features have evolved through our experience and consultation with international oil companies, nearly all of who use the Emco Wheaton manhole cover.

EMERGENCY VENTING



1 Emergency Venting at a massive 7000m³/hr via the pressure actuated fill cap safeguards against tank explosion in the event of a fire.

BLIND BOLT HOLES AND WEBS CAST



- All bolt holes are blind i.e. they do not break through to the underside of the manhole cover. This is to ensure that no liquid cargo can leak through.
- Webs cast on underside of the base plate and fill cap increases the structural integrity.

SPRING EMERGENCY VENTING



Four visible, corrosion proof, plated spring emergency venting. The springs are not shrouded in a rubber sleeve, which was the cause of a major failure on another manufacturer's manhole cover due to rainwater ingress that could not dry out and consequently corroded the single spring. The corrosion was not evident, as the spring was not visible. The UK Health & Safety Commission identified this as a cause of failure in an official report.

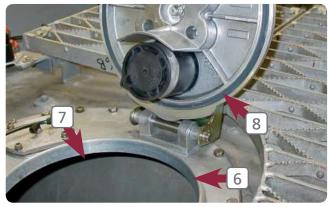
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BLIND BOLT HOLES AND WEBS CAST



CAP AND OPENING



PRESSURE AND VACUUM VENT VALVE



2 STAGE OPENING



- Recessed centre bolt ensures that emergency venting via the spring loaded fill cap is effective even if the tanker has rolled upside down. Many competitive designs do not include this which means that the tanker could explode if on fire and overturned.
- Raised seal face prevents water dripping into 6 tank compartment.
- The fill opening is 10" (254mm) diameter to 7 | allow easy insertion of the loading arm drop pipe.
- The fill cap includes a water drainage lip to prevent either rain or wash water dripping into the compartment and contaminating the product when the lid is opened for loading etc.
- 2" High Flow Pressure and Vacuum Vent Valve allows for a massive 7000 ft³/hr (198 m³/hr) of exhaust, and 3500 cubic feet of vacuum, ensuring that the tanker has adequate breathing in extreme climatic conditions. This vent is also designed to seal off to prevent product loss and consequent environmental
- A shield protects the PV vent from damage by 9 loading arm drop pipe.

damage in the event of a tanker overturning.

2 stage opening protects the operator against [10] dangerous 'kick-back' that can be experienced due to build up of residual pressure.





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