

<b>Health and Safety Executive Safety Alert</b>	
<b>Author:</b> Safety Unit	<b>Series Number:</b> STSU TPED
<b>Issue Date:</b> 28/11/2007	<b>Review Date:</b> 11/2012
<b>Distribution:</b> All HSE Divisions and UK Stakeholder Associations	

## **Failure of Residual Pressure Valves (RPV) manufactured by Ceodeux Indutec for Transportable Gas Cylinders – Clarification regarding 14mm plugs**

1 **This alert does not cover valves manufactured since 2005.** This alert clarifies the situation set out in the safety alert issued on 28 June 2007, which is relevant to fillers and testers in the UK. It is concerned with cylinders which are or have been used for mixed gases and fitted with Residual Pressure Valves (RPV) manufactured between 2000 and 2004 by Ceodeux Indutec (part of the Rotarex Group) with 14mm Hexagon Plugs.

### **Background**

2 The previous Safety Alert dealt with RPVs fitted with triangular and 17mm Hexagon plugs which had found to be suffering from Stress Corrosion Cracking (SCC) resulting in the plug being ejected when being filled.

Ceodeux has since carried out more testing on the later 14mm version and this has indicated that the design changes incorporated in this version reduces the possibility of failure due to SCC. There have also been no reported incidents where the plug has been ejected during filling or use.

### **Action required**

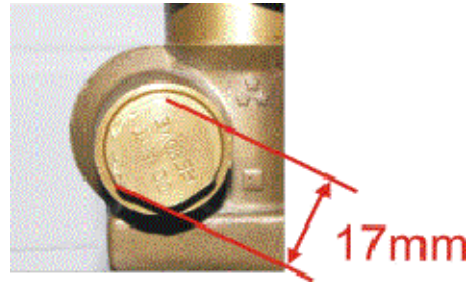
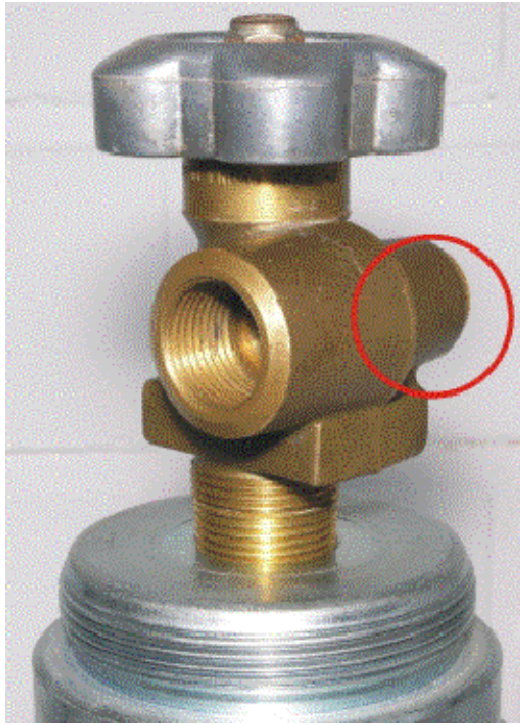
3 **All fillers and Testers** of Gas cylinders should take action to check the type of plugs fitted to the cylinders

- **Return to service** all cylinders fitted with 14mm Hexagon Plug
- **Remove from service or suitably modify** all cylinders fitted with valves with triangular or 17mm plugs manufactured, between 1997 and 2001. As outlined in the first alert.

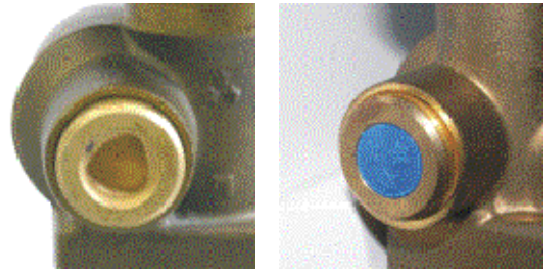
**Any failure of valves with 14mm hexagon plugs, that is not due to tampering or misuse, should be reported to the HSE site inspector for investigation and directly to Ceodeux.**

# Annex 1

## Identifying marks



17 MM Hex RPV plug



Triangular recess type plug (with and without plastic cap)



3 Stars and markings on valve with plug removed



Markings can be obscured by valve handle

**The key marks are the series number 984502 and C510..... and RPV 212**

**Valves with the following markings SHOULD BE REMOVED from service or SUITABLY MODIFIED**

1999 – 984502 – BS341-3-BS341-25T RPV 212 Plug has triangular recess normally covered by blue plastic plug embossed with 3 Ceodeux stars

2000 - 984502 – BS341-3-BS341-25T RPV 212 Plug has triangular recess normally covered by blue plastic plug embossed with 3 Ceodeux stars

Up to 07/ 2001 - 984502 – BS341-3-BS341-25T RPV 212 Plug has triangular recess normally covered by blue plastic plug embossed with 3 Ceodeux stars

After 08/2001 - 984502 – BS341-3-BS341-25T RPV 212 Plug has **17mm** hexagonal brass head stamped **DO NOT REMOVE**

**Valves with the following markings should NOT BE REMOVED from service:-**

12/2001, stamped C51000056-RPV212- **(Pi mark / CE29)** -BS341-3-BS341-25T EN849 25E. With a **14mm** brass hexagonal head stamped '**DO NOT REMOVE**'. Body embossed with the 3 Ceodeux stars.

2002 – C51000056 - BS341-3-BS341-25E- EN849 - RPV 212 – (Pi mark + 29) Plug has **14mm** hexagonal brass head stamped ,'**DO NOT REMOVE BP**'. Valve body now embossed with the 3 stars.

10 / 2002 – C51000056 - BS3-25E- EN849 - (Pi mark + 29) Plug has **14mm** hexagonal brass head stamped ,'**DO NOT REMOVE**'. The stamping is on a slightly raised circle on the head of the plug. Valve body embossed with the 3 stars.

2004 – C51000056 - BS3-25E- EN849 - (Pi mark + 29) Plug has 14mm hexagonal brass head stamped ,'**DO NOT REMOVE 03/04**'. The stamping is on a slightly raised circle on the head of the plug. Valve body embossed with the 3 stars.