Manual Handling of Calor Gas Cylinders
Compliance with the Manual Handling Operations Regulations 1992

Be aware that Regulations are in force which aims to reduce the number of injuries at work, particularly those occurring from the Manual Handling of loads and articles such as LPG Cylinders.

**What Employers Should Do**

Carry out a Risk Assessment of the methods your employees use when handling cylinders. You must advise them of the best ways to lift and move cylinders and reduce unnecessary handling by providing equipment or rearranging methods of working.

**What Employees Should Do**

You must follow the instructions of your employer and use equipment provided. If a hazardous situation arises during work, you must take care to protect both yourself and others who may be at risk.

Ensure customers collecting cylinders are aware of the weights of cylinders and provide the cylinder to the customer in a safe manner.

**CALOR GAS STANDARD CYLINDER WEIGHTS ARE:**

<table>
<thead>
<tr>
<th>NOMINAL CYLINDER SIZE</th>
<th>TARE WEIGHT (Empty Cylinder Weight)</th>
<th>GROSS WEIGHT (Total Weight Cylinder and Gas)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.9 / 4.5 Kg</td>
<td>5 kg - 6 kg</td>
<td>9 kg - 10.5 kg</td>
</tr>
<tr>
<td>6 / 7 Kg</td>
<td>9 kg - 10 kg</td>
<td>15 kg - 17 kg</td>
</tr>
<tr>
<td>12 / 13 / 15 Kg</td>
<td>13 kg - 20 kg</td>
<td>25 kg - 35 kg</td>
</tr>
<tr>
<td>18 / 19 Kg</td>
<td>20 kg - 29 kg</td>
<td>38 kg - 48 kg</td>
</tr>
<tr>
<td>47 Kg</td>
<td>40 kg - 50 kg*</td>
<td>87 kg - 97 kg*</td>
</tr>
</tbody>
</table>

*Some older types of cylinder are heavier, + 10 kg.

**Hazards and Advise when Handling Cylinders**

**Hazard** - Cylinders may be wet, dirty and slippery
**Advice** - Use gloves; ensure firm grasp on handhold shroud and base ring if lifting. Wear protective footwear

**Hazard** - ‘Empty Cylinders’ may contain an unknown quantity of gas
**Advice** - Test by ‘rocking’ cylinder to feel liquid movement and take account of additional weight

**Hazard** - Cylinders contain liquid which moves when handled
**Advice** - Maintain grip on cylinder until liquid movement reduces, particularly on taller cylinders

**Hazard** - Cylinders are heavy
**Advice** - Be aware of your personal limits, taking account of the weights listed above
Hazard - Cylinders have projections and are stored in tightly packed stacking arrangements
Advice - Maintain an alert attitude when staking cylinders. Watch fingers, elbows, shins and ankles

Methods of Handling Cylinders

- Whenever possible, use mechanical lifting or moving aids for handling cylinders
- On occasions, the only practical methods of moving cylinders will be by handling manually
- If you are manually handling cylinders regularly, you must be instructed in the best handling techniques by suitably trained and experienced Instructors

3.9 / 4.5 / 6 / 7Kg Cylinders

May be carried 2 at a time, one in each hand, arms straight to sides. Keep back and neck straight and use a hooked grip on cylinder handle. When lifting above elbow height, handle and position cylinders singly. Cylinder stacks above 2 cylinders high are unstable unless supported by side rails or other means.

12 / 13 / 15Kg Cylinders

Nominally empty cylinders may be carried 2 at a time, one in each hand, arms straight to sides. Nominally empty, part full or full cylinders should only be handled one at time when lifting, using both hands. Keep back and neck straight, maintain a grip on the 'hand hold' of the shroud and base ring. Avoid twisting movements of the upper body, move feet and whole body to turn. Do not overreach when placing cylinders on a stack arrangement and release one hand at a time to prevent trapping fingers

18 / 19Kg Cylinders

Move nominally empty, part full and full cylinders by 'churning' (i.e., tilting cylinder from the vertical and rolling on the base ring edge whilst maintaining control with the shroud) rather than lifting, carrying or dragging. Try to avoid the need to manually lift full cylinders. If lifting aids or handling equipment are not available, seek assistance for lifting or lowering any cylinder that has to be placed in an awkward position. If space permits, store cylinders singly in uniform stacks on even, horizontal ground rather than stack 2 high.

47Kg Cylinders

Move nominally empty, part full and full cylinders by 'churning'. If cylinders have to be loaded or unloaded to or from vehicles, it is advisable to have an adjacent platform or handling equipment available for ease of transfer. If such equipment is not available, assistance with lifting or lowering must be sought. With practice, it is possible to maneuver cylinders into difficult positions by a tilting and churning action
Reminder

- Do NOT roll cylinders on their sides; in such conditions they are not under control which may result in damage or injury
- Do NOT throw or drop from vehicles or platforms; DO lower or lift in a controlled manner
- Be aware that taller cylinders can topple if placed on a sloping surface
- Be aware that damage can occur to shrouds and base rings. Check bolt on or screw on shrouds are not loose before lifting. Damaged base rings may cause a cylinder to churn in an erratic manner or fall over while maneuvering, or not stack evenly
- Work at a steady rate, concentrating on the factors that could be hazardous and take precautions

The information in this document is intended to give guidance and believed to be accurate and represent good practice at the time of publication. It does not replace the need to consult other formal documents where further information may be required.

No responsibility or liability is accepted by Calor Gas Limited for any loss or damage arising out of the information given. It is important that users of this publication adhere to all legal requirements, Regulations, CoP’s and Standards, particularly, those relating to gas safety.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form, or by any means, electronic, electrostatic, magnetic tape, mechanical, photocopying, recording, or otherwise, without permission in writing from Calor Gas Ltd.