



Southern Africa Compressed Gases Association

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Requirements to become a Registered SACGA Gas Practitioner (Design)

To become a registered SACGA Gas Practitioner for “Design” the Applicant shall:

- Complete in full an application form for Design.
- The application form can be found on either www.saqccgas.co.za or www.sacga.za.org
- The Applicant shall be in prior receipt of a SAQCC Gas licence issued for Industrial Oxygen installations.
- Proof of attendance (SACGA Certificate of Attendance) at the applicable SACGA training sessions covering SANS 10260-1, Industrial gas pipeline installations, SANS 10260-3 Acetylene industrial gas pipeline installations and SANS 7396-1 for medical gas pipeline installations. For Acetylene and Medical design applications prior attendance at the SANS 10260-1 training is a prerequisite.
- An application for Design requires the Applicant to comply with the requirements given in the Design Selection Matrix (see below) and the Graph as attached defining the years of relevant industry experience verse the applicant’s technical qualification.
- Detailed proof of competence (refer to separate document detailing competence criteria for Design) shall be submitted with the application as part of the applicant’s portfolio of evidence comprising but not limited to:
 - Five designs comprising of a mandatory three designs for Industrial Oxygen regardless of the gas type for which the application is being submitted for (See next bullet point for Medical gases). The remaining two designs shall be for the other gas/s applied for based on the selection Matrix below.
 - When applying for a design Gas Licence for Medical gases it is a mandatory requirement to submit three designs for Medical Oxygen. The remaining two designs shall be for the other gas/s applied for based on the selection Matrix below.
 - Technical ability: i.e., Qualification (Refer to Graph showing Qualification Vs Experience).
 - Experience and knowledge relating to gas system location and layout.
 - Experience and knowledge relating to gas system design for maintenance
 - Experience and knowledge pertaining to gas system design for pressure testing.
 - Experience and knowledge to complete gas system technical calculations.
 - Experience and knowledge of design criteria specific to the gas type.
 - Knowledge of design standards applicable to the gas/s applied for.

- Knowledge of applicable legislation and ability to incorporate requirements into the gas system design. (refer to separate document for an overview of Gas System Design requirements in relation to the OHS Act No. 85 of 1993 and SANS 347).
- Experience and knowledge to conduct HAZARD Reviews.
- Knowledge and application of system cleanliness' criteria.
- The completed designs shall be peer reviewed by a committee of suitably qualified SAQCC registered personnel assigned by the SACGA to conduct design reviews in relation to the scope of work that the application is related too.
- In the event that the members of the peer review committee are satisfied that the supplied documentation and the designs are technical compliant they will sign the application form.
- Your Line Manager / Supervisor shall review and sign the application form.
- All the above information shall be included with the completed application form. Refer to sections 1 to 5 in the application form.
- After approval by the members of the peer review committee the application will be assessed by the SACGA's Gas Practitioner Registration Working Group and will be based upon the portfolio of evidence submitted with the application on a case-by-case basis.

Design Selection Matrix

A Design Licence issued for a Gas listed in columns 1 to 6 below shall also entitle the applicant to perform designs for gases marked with the Black letter "Y" in reference to column A.

How to read the Design Selection Matrix

1. From columns 1 to 6 select the gas (shown in Red) for which you are applying for a licence.
 2. Reading vertically down the column the selected gas will be show with a Red "Y".
 3. Reading vertically down/up the same column will show the gases that are also included in the scope of the design licence as marked with the Black letter "Y" in reference to column A.
- Note. When applying for any of the gases in columns 1 to 6, Industrial O2 is a Mandatory requirement with the exception for Medical O2.

Example: A design Licence issued for Food and Beverage gases in column 5 also allows the applicant to conduct designs for Ind O2 (Mandatory) and Inert gases.

A	1	2	3	4	5	6
	Med O2	Industrial O2	Inert Gases	Flammable Gases	Food & Beverage	Special Gases
Med O2	Y mandatory					
Ind O2	Y	Y mandatory	Y mandatory	Y mandatory	Y mandatory	Y mandatory
Inert gases	Y	Y	Y		Y	
Flammable				Y		
Food & Bev	Y				Y	
Special gas						Y
Cryogenics						Y