

In hazardous areas all Ex equipment needs to be installed and operate correctly according to the certification of the equipment.



- One of the most common ways for Ex equipment to fail is to wrongly specify or wrongly fit cable glands.

Most glands consist of several loose components such as cones, cone rings, and seals. All of which must be correctly fitted to achieve a safe Ex installation.



Sample of cable glands with loose cone, cone rings;
Brands "A" – "E".



CCG with captive components

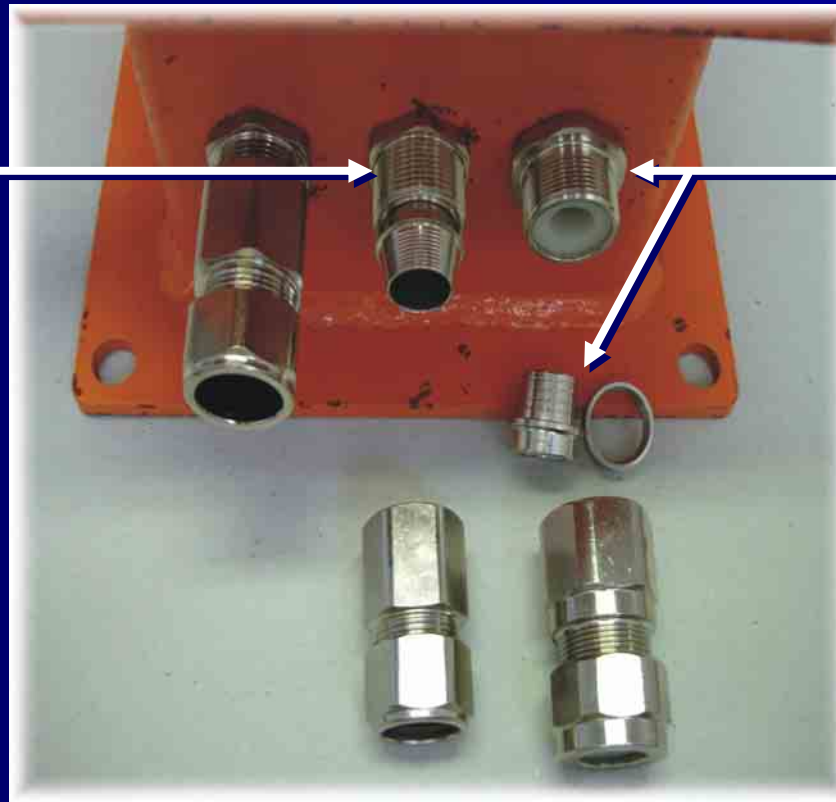
An apparatus such as this Exd enclosure could be fitted and supplied with glands as a complete unit.



The problem as displayed here is that the glands could have loose components

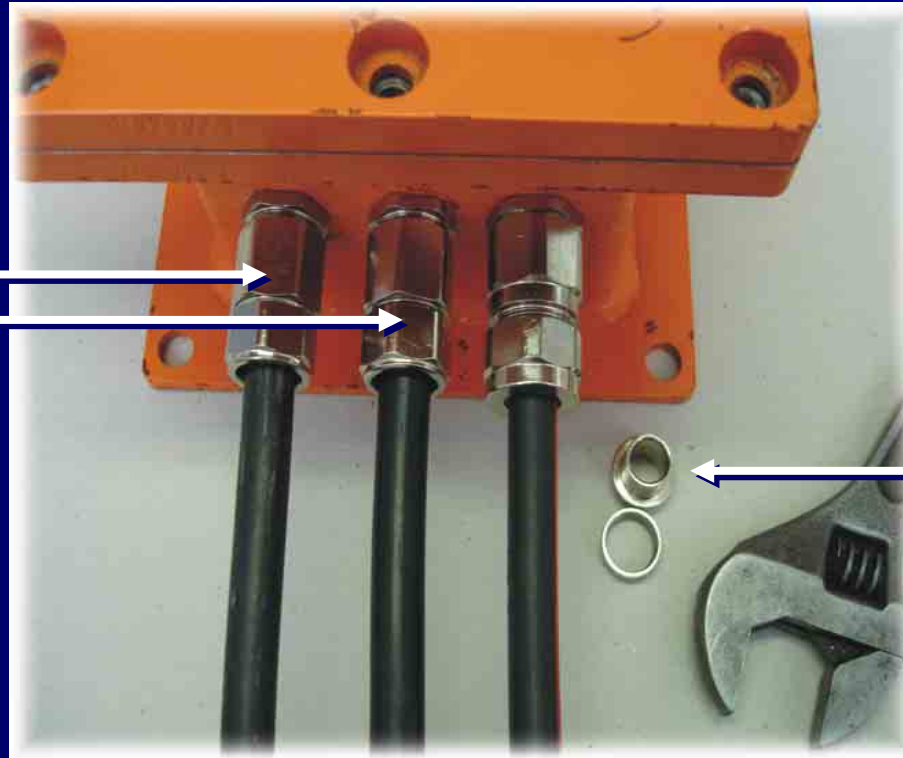
CCG gland has captive components

A gland with loose components



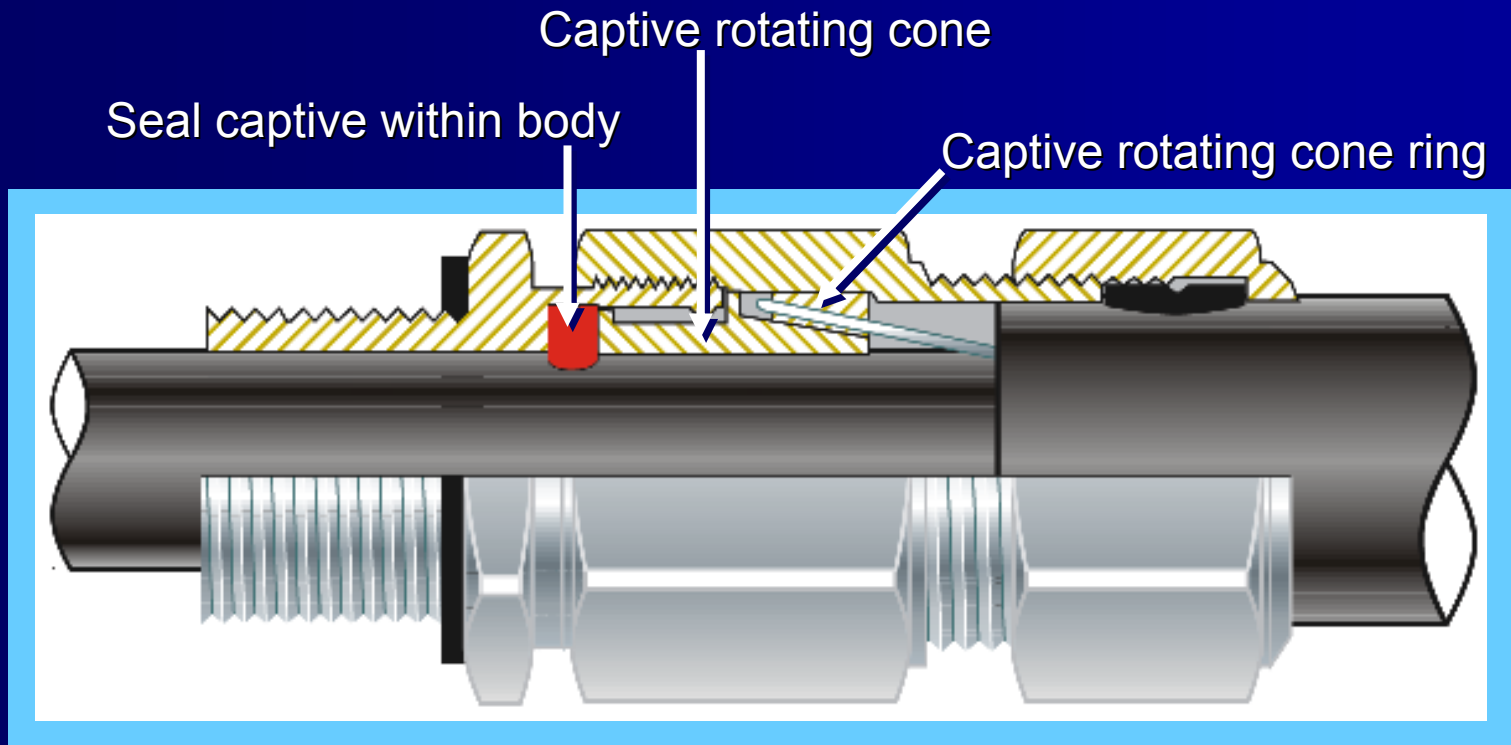
Cable Gland components could be left out

With the CCG captive component gland this is impossible



These loose components could be left out or lost or incorrectly fitted during installation

The CCG gland with its captive components with genuine two piece handling gland with all its parts built in for safety.



Ease of installing a CCG Captive Component Two Part Gland

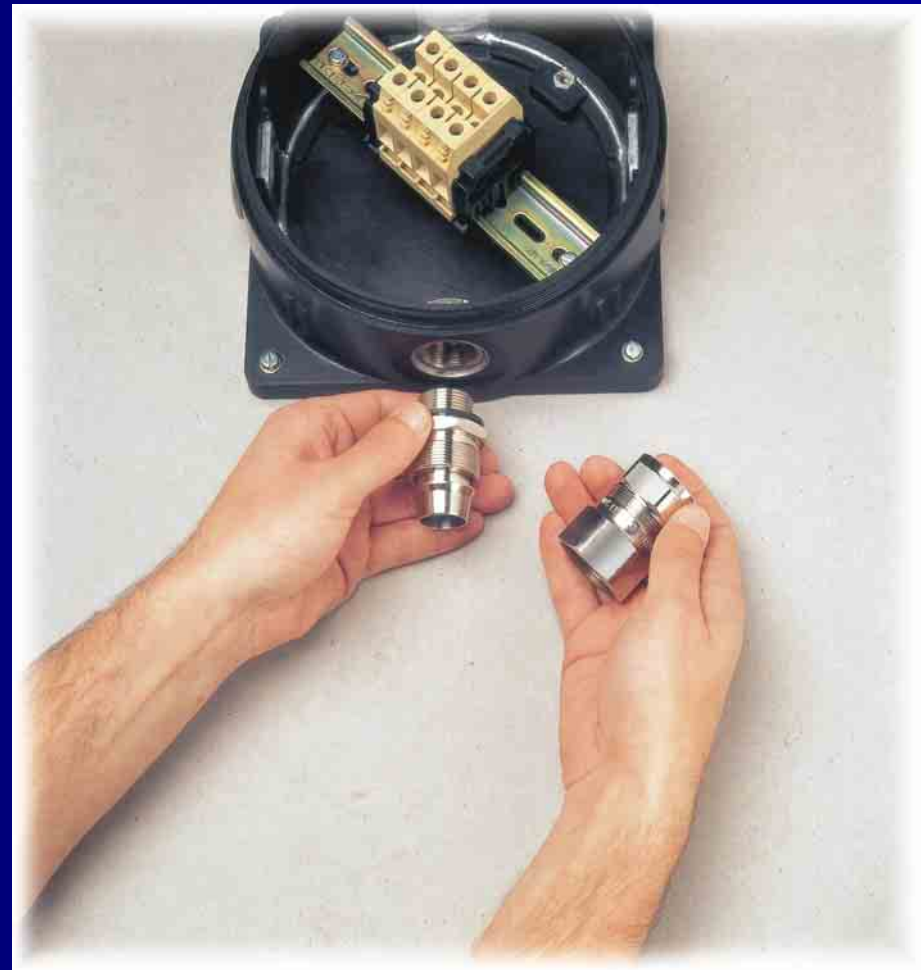
- Remove the orange cap safety gauge.



- Check the correct cable gland sizing, by using the thread cap safety gauge. If the cable inner bedding cannot pass through the small diameter on the safety gauge, the cable gland is the correct size for the cable.



- Remove the outer gland body from the gland inner.
- Note: The CCG Captive Cone concept means that the installer does not have to worry about loose parts being lost – Genuine 2 part handling speeds up the installation process.



- Screw the gland inner assembly into the apparatus and tighten with a spanner.



- Slide the gland outer body assembly over the cable outer sheath.
- Splay the cable armouring and pass the inner bedding of the cable through the bore of the inner gland assembly.
- Splay the armouring over the cone.



- Screw the outer gland assembly over the inner gland assembly and tighten with a spanner.
- Tighten the outer nut with a spanner to give a moisture proof seal.



- To inspect that the cable armouring has been correctly clamped, loosen the outer gland body from the inner gland body to expose the cable armouring.
- It will be clearly seen that the captive cone ring is now securely clamped onto the cable armouring.



After installation the armour and armour clamp can be inspected.

- Multi Armour Cone (MAC) for use on different armour types, only 1 gland required.
- Dual certified EExde IIC.
- Captive / disconnect cone and cone ring concept, providing an armour clamp and earth bond without twisting the armouring, which can be inspected after installation.
- Factory fitted captive electrometric seals for built in safety.
- Seals on both inner and outer sheaths to IP66/68.
- Nickel plating as standard for added protection against bi-metallic corrosion.
- Complete with a polypropylene gasket.



I found a cone on site earlier today, I wonder which gland it came from? I should have used those CCG glands.





CCGG[®]

Built in Safety!
Install with Confidence!



7 April, 2006

CCG Cable terminations P/L
P.O Box 285
Joondalup
Western Australia WA 6919

Attention: Mark Brown

To whom it may concern,

We at Bechtel are currently involved with the construction and commissioning of the Darwin LNG facility owned by ConocoPhillips.

We are using CCG Ex cable glands, Ex junction boxes and various Hazardous area Ex certified brassware for most of the electrical and instrument installation, hazardous and non-hazardous areas.

CCG have met supply and delivery deadlines with their available stocks. They have always been available when a technical issue has arisen when involved with hazardous areas and been most helpful and knowledgeable.

The service and range of their products is very reliable and we would not hesitate to recommend them for future projects involving hazardous and non-hazardous areas.

Yours Sincerely

Archie Thompson
Lead Electrical Field Engineer
Bechtel Australia Pty Ltd
Darwin LNG Project
Wickham Point,
Darwin, N.T.
Australia

61 (8) 89199107
aqthomps@bechtel.com



FLUOR DANIEL

Mr. Mark Brown
CCG
Unit 1 No. 4 Lincoln Lane
Joondalup
Western Australia 6027

Date 31st of January 2000

Sir,

I have now completed another successful project where we have utilised CCG glands and on this project we used the new series of junction boxes that allow bottom entry of Three 20mm cables.

Although the primary use of the Junction Boxes were for power and lighting services to the plant, we also used them for instrumentation connections where the vendor had supplied the equipment with hermetically sealed cables.

This was of enormous benefit to us during the commissioning of the plant, it enabled the pre-commissioning personnel to isolate the instrument with ease and to place testing equipment direct to the instrument.

Recently we had a light fitting fail due to a faulty ballast, the Junction boxes again came into there own making fault finding a breeze with the ability to isolate parts of the circuit quickly and safely so that production was able to continue with the absolute minimum disturbance.

As you are aware, Fluor Daniel are involved in many large scale projects, and I must admit that when Fluor specified your cable glands and Junction boxes for the first time, I was some what hesitant to use them.

It is always worrisome to go into a new large-scale project with untried equipment, and if a gland fails or a Junction box allows the entrance of water and the like, the replacement time and cost are quite considerable.

The fact that Fluor has specified your equipment again only reflects the professionalism and quality of the CCG product and the after market sales support.

I have taken particular interest in the continuing product development, especially into the hazardous areas market.

The times when I have rang CCG for technical advise, I have been pleasantly surprised that not only did I get accurate information and possible alternatives in the CCG range, there were follow up phone calls to ensure that the product met with the requirements and approval.

I would like to take this opportunity to thank CCG for all of the assistance that has been afforded to me and that I look forward to utilising CCG products on the next project.

Best regards



Darren Hall
Electrical and Instrument Superintendent
Flour Daniel Mining and Minerals.

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SECUNDA
2302

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FAX (017) 610-2058



INSPEKTEX (PTY) LTD

Co Reg No 95/02421/07

INSPECTION, MAINTENANCE AND INSTALLATION
OF EXPLOSION PROTECTED ELECTRICAL AND
INSTRUMENT EQUIPMENT

August 29, 1997

TO WHOM IT MAY CONCERN

This letter serves to confirm that I have been approving and using CCG products since 1980 in my previous capacity as Head, Electrical and Instrument Construction at Sasol and in my present capacity as Managing Director of Inspektex.

The main reasons for my choice of CCG cable glands and junction boxes are the fact that they have no loose parts such as seals, cones and screws that can get lost during installation. This means guaranteed safety in hazardous areas.

CCG has also been in the forefront of corrosion protection with their corrosion resistant cable glands and junction boxes which makes the maintenance of electrical installations so much easier and safer.

Inspektex is a company that inspects, refurbish, install and maintain electrical equipment in hazardous areas and where ever we are involved, we recommend only CCG products.

In our line of work we come up against unique problems. CCG is the company that always came up with unique solutions with the products they developed exclusively to overcome our problems.



S J GROVÉ
MANAGING DIRECTOR

Krupp Uhde

Krupp Engineering (Pty) Ltd, P. O. Box 1636, Gallo Manor, 2052

ATTN: To whom it may concern

Your ref.	Our ref.	Date	Telephone	Fax
		13 December 2002	(016) 920 2461	(016) 920 2497


This letter is to confirm that CCG cable glands, junction boxes and related cable termination accessories were specified by SASOL and installed by Krupp Uhde in the recent construction of the SASOL Butnaol Plant in South Africa.

We would like to state that because of the design and built in safety features of the CCG cable glands and junction boxes, the installation of these products was both quicker and safer than that of competing products.


We at Krupp Uhde found that after sales service which was critical to the commissioning of this plant was exceptional.

I would therefore highly recommend that CCG products be used on all projects where safety in explosive hazardous plants is critical.

Yours faithfully



L. van den Berg
Site Manager
Krupp Uhde



B. Madrach
Ele/Instr. Field Engineer
Krupp Uhde

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K. Schneiders* (Chairman) B. Paton (Alt)
W. H. M. Günther* (Managing Director) M. Otto (Alt)
D. J. Morcombe** (Deputy Managing Director)
J. Bauer* L. Robson (Alt)
Dr R. Glück* B. Bassett (Alt)
K. G. Kaminski*
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*German, **British



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Our Ref./Ons Verwys : EE/BAR8/960015.BAR/hjs

TO WHOM IT MAY CONCERN

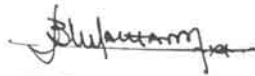
CCG COMPANY ON OUR APPROVED SUPPLIER'S LIST

This is to confirm that the CCG Company is on our Approved Supplier's Information List.

All their products have been continuously used in all the Sasol Plants for the past fourteen years (ie specially CCG Glands and Junction boxes).

The CCG products are preferred as a result of the built-in safety and corrosion protection features. This insures the continuous safety and reliability of cable terminations on Sasol's various Plants.

On every project done in-house or by Turnkey Contractors, (eg Fluor Daniels - Uhde - Babcock - Linde - Lurgi - EMS - Lummis) on behalf of Sasol; the above products have been specified and approved as a standard item by Sasol.



BAR MACHADO
Chief Engineer
Electrical Engineering

Stolt Comex Seaway Australia Pty Ltd

A subsidiary of
Stolt Comex Seaway S.A.

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Tel: +61 9 244 2572
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16 April, 1997

Mr Nicholas Lackinger
Export Director
CCG Systems
Johannesburg
SOUTH AFRICA

Dear Sir

As a manufacturer of underwater robotic systems for the Oil and Gas industry, we are very conscious of the quality of all components used within our products.

The ocean is a harsh and dynamic environment and our equipment must work reliably day in and day out. To maintain our reputation as a quality service provider to the Oil and Gas sector, we must constantly monitor the performance of existing equipment and evaluate new products for their suitability to our application.

Most equipment failures are a result of water ingress into an electrical or hydraulic system and to this end the integrity of all bulk head penetrations represent a possible transition point where water could invade the system.

We have been using Posi Glands since 1992 for cable transits between the electrically inert oil environment of our power distribution enclosures and the surrounding ocean. In these conditions the gland has acted as a barrier in ocean depths up to 670 meters. It must be noted there is only a 10 PSI pressure differential between these fluids, however, the gland must contend with all the dynamics this environment presents.

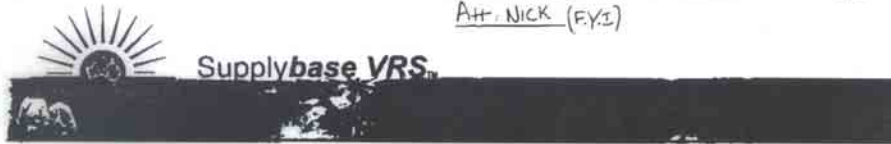
It is my pleasure to give you this accolade for your product as we have not encountered any failure of performance since their incorporation into our systems.

We look forward to continuing our association with your company and wish you all the best in the future.

Yours faithfully
for **STOLT COMEX SEAWAY AUSTRALIA PTY LTD**

Paul Colley
OPERATIONS MANAGER - Subsea Services

ATT. NICK (F.Y.E)



30 August 2000

Mr Mark Brown
Sales Manager
CCG Australia Pty Ltd
1/4 Lincoln Lane
JOONDALUP WA 6027



Dear Mr Brown

Australian Competitive Energy is proud to invite CCG Australia Pty Ltd to be a part of the Supplybase VRS™ (Vendor Registration System) for the oil, gas & downstream processing industries.

The Supplybase VRS™ is a Web-based system in which contractors and suppliers are listed, along with their skills, products, services, expertise and experience. As the companies listed below intend to use the Supplybase VRS™ database as their prime source of potential suppliers in the future, registering your capabilities will ensure that your company is considered where applicable in future exploration, development and downstream processing projects in the region.

Supplybase has been developed on behalf of APPEA, the peak industry body, through its ACE Initiative. Supplybase VRS™ is fully endorsed by these leading industry members: Woodside, Chevron, Clough, BHP, Phillips, Brown & Root, Apache and Fluor Daniel. These organizations have contributed to development funding and will be relying on the Supplybase VRS™ as a principal source of supplier information. It is your affiliation with one or more of these organisations that has led to this invitation to participate in the Supplybase VRS™.

The enclosed brochure outlines the benefits of the Supplybase VRS™. We recommend it to you and encourage your participation in this important new industry initiative. You can log into the Supplybase VRS™ immediately, at www.supplybase.com.au. To access the system type in the username: [redacted] and password: [redacted].

Yours sincerely



Graham Collins
Technical Director
Australian Competitive Energy



John Syms
Supply & Logistics
Manager
Apache



F.E. McKeon
Manager Supply
& Logistics
BHP Petroleum



Gerry Hasell
Procurement
Manager
Brown & Root



Andrew McIntosh
Supply Team
Leader
Chevron



Jim Scombe
Procurement
Manager
Clough



Rod Schmidt
Manager Materials
& Procurement
Fluor Daniel



Alistair McGregor
Procurement
Manager
Phillips



Mike Wain
Procurement
Team Leader
Woodside
Petroleum





22nd December 2004

Mr. Adrian Wells,
Managing Director,
CCG Australia Pty Ltd.
9/210 Winton Road,
Joondalup, WA, 6027

Dear Sir,

This is to verify that CCG Cable Glands, were selected as the preferred product for the construction of Woodside's LNG Train 4.

The product was selected based on its technical merits and ease of installation.

In addition, CCG Junction boxes and other associated products were also used.

The North West Shelf Venture is Australia's largest hydrocarbons project, based on the Burrup Peninsula near Dampier in the Pilbara region of Western Australia.

The participants of the venture are Woodside Energy Ltd., Shell Development (Australia) Ltd., BHP Petroleum (North West Shelf) Pty Ltd., Chevron Australia Pty Ltd., and Japan Australia LNG (MIMI) Pty Ltd. Each owns an equal one sixth share.

Regards



Adrian Carr
Principal Electrical Engineer