



4, allée des Noisetiers  
77144-Montévrain  
tél : 33 (0)1 60 07 43 97  
33 (0)6 79 65 15 71  
michel.cluzeau@link-instrum.com

## Michel CLUZEAU,

### Senior Specialist / Inspection engineer

**Date of birth: Octobre the 31rst 1957 (50 years old)**  
**married, 2 childrens ( 19 et 21 ans)**

#### Targetting

Execution and management tasks relevant to technical and contractual aspects of oil and gas EPCC projects related to electrical and instrumentation equipments (E&I).

#### Skills overview

More than 20 years experience in large process industrial project, mostly international. Multiple skills to suit the various issues and objectives during a project life cycle:

- Preparation of the budgetary workman hours of the project E&I team members
- Recruitment and assignment of the roles and tasks of the project E&I team members
- Preparation of the list of documents making up the contract deliverables
- Tasks scheduling
- Identification of the contract crucial points: technical, contractual, surrounding
- Organisation and actions in order to face and overcome crucial point difficulties
- Coordination of the project E&I team members:
  - Supervision/monitoring of the project general and particular documents (General specifications, Rules and Guide lines, Particular specifications, procedures, Requisitions)
- Internal and external diffusion of key information and instructions
- Organization of communication paths towards the others disciplines (project management, process, piping, mechanical packages, pressure vessels, procurement, expediting, inspection)
- Organization of the documentation and filing system for the E&I working group (classification, diffusion, circulation of the documents)
- Interface and reporting near the project director
- Interface and coordination with the customer (if reside local) -
- Control and council of the E&I tasks - Reporting near the head of discipline department
- Update of plans and schedules tasks
- Undertaking of specific tasks:
  - Particular specification
  - Bid comparison tables and final recommendations meetings with the key suppliers
  - Vendor documentation review (drawings, functional analysis, logic diagrams, specs, testing procedures and test reports)
  - Inspections, FAT
- Coordination and following up of main sub-contractors and suppliers:
  - detailed installation studies
  - installation works

## Achievements

July 2007 to December 2007

**PROSERNAT**

La Defense-92

### **Electrical /Instrumentation engineer**

- Purchasing requisition of the electrical and instrumentation equipment for a desulfuration process skid at the BARRANCA BERMEJA refinery (Colombia):
  - Control Valves
  - Safety relief valves
  - Electrical Motors
  - Lighting
  - Electrical heating
  - Electrical cables

February 2004 to July 2007

**GAZ DE FRANCE**

Gennevilliers-92

### **Instrumentation Engineer**

- Safety upgrade works follow up at Villiers le Bel connection station
- Main engineer (all disciplines) for the Optimization study of Villiers le Bel gas connection station
- Project assistant at Evry-Gregy station for the metering renewal project

December 2003 to date (2007)

**BIE**

AN Leidschendam  
Pays-Bas

### **E&I Inspection engineer**

#### **ARAMCO approved inspector**

See inspection equipment list

May 2006 to date (2007)

**PSC-EUROPE**

Dalmine-Italy

### **E&I Inspection engineer**

- John-Zink Thermal oxidiser incinerator fans at Fläkt Woods
- Prosernat package expediting for the DARQUAIN (Iran) project
- GE-MCC at Bielsko Biala (Poland) factory for OBOB Naoc project

June 2003 to December 2003

**SAIPEM**

Saint Quentin en Yvelines-78

### **Instrumentation Engineer**

#### **GUANG DONG LNG TERMINAL PROJECT (China)**

Responsible for the technical specification and the bid evaluation for the supply of:

- Metering skids with flowmeters
- Master and individual run flow computers
- Flow management PC with data loggers and servers
- Analyser shelters (Gas chromatographs, H2S, Total Sulfur, etc...)

**Achievements  
(continue)**

Decembre 2002/June 2003      **DOLPHIN-ENERGY Ltd**      Paris-75

**Instrumentation Engineer**

- Technical bid evaluation and final recommendations of Long Lead Items for the purpose of the DOLPHIN project (UAE) (in charge of the control and instrumentation part of it):
  - 7 Gas turbo-compressors double stage in parallel , 30 MW each
  - 7 Heat recovery steam generators
  - 4 HP Steam Boilers (44 barg – 450°C – 250 T/H)
  - 3 Steam turbine generators, 30 MW each

Novembre 2001/ Decembre 2002      **PARAGON-LITWIN**      Rueil-92

**Lead instrumentation engineer ( 9 engineers ):**

- Responsible for the instrumentation design study of the FYIP YOKRI project  
End user: SHELL PETROLEUM DEVELOPMENT COMPANY (SPDC)-Nigeria  
Contractor: STOLT-OFFSHORE
  - DCS / IPS-ESD (DeltaV DCS – HIMA IPS)
  - Well head Control panels
  - Flare gas flowmeters
  - Fire & gas detectors
  - pressure transmitters, valves, safety relief valves, etc...in accordance with SHELL DEP's and using INTOOLS software  
The project scope includes the construction of a new oil processing offshore platform, the construction of 7 new oil production clusters, and renewing of 18 existing oil clusters.  
Budgetary man-hours (excluding installation studies) : 14 000 hours  
Project duration for design and detailed engineering : 12 months  
Instrumentation procurement budget: 20 millions of euros

February 2001 / November 2001      **INGEROP-LITWIN**      Rueil-92

**Instrumentation engineer:**

- Coordinating instrumentation engineer of farm storage tanks extension project of the LIMBE refinery (Cameroun) for SONARA (Total-FINA-ELF share holder) :
  - Implementation of safety design and equipment according to the french regulation named as "Arrêté du 10 Mai 1985": Construction of a new 3300 m3 BUPRO spheric storage tank and renewing of two existing spheric storage tanks with capacity of 800 m3 and 1000m3 each
  - Tank gauging system
  - Fire & Gaz systemProject duration : 7 months

May 2000 / February 2001      **SOFREGAZ**      Clichy-92

**Lead instrumentation engineer :**

- Lead engineer on S3/ S6 project, gas compression station for IRAN:
  - S3 : 4 off 28 MW turbine driven centrifugal compressors group from NUVO PIGNONE
  - S6 : 3 off 28 MW turbine driven centrifugal compressors group from NUVO PIGNONE

**Achievements (continue)**

Coordinating activities for basic engineering and detailed engineering studies : SCS, ESD, Fire & Gas, telecom system, Gas Metering system, in line instruments.

Monitoring of detailed engineering studies by an Iranian contract-partner : OIEC.  
Instrumentation interfacing activities with MARK V control cabinets from GE.  
Design and implementation of a new anti-surge control strategy.

March 2000 / May 2000: **KREBS-SPEICHIM** La Défense-92

**Instrumentation engineer :**

- FERGANA P.O AZOT project: Production units of magnesium and sodium chlorate.

Instrumentation specification and technical bid comparison table for pressure transmitters , pressure self-control valve, temperature self-control valve, rotameters, thermal sensors, pressure gauges, etc...

Novembre 1999 / February 2000 **KVAERNER-HEURTEY** Vincennes-94

**Instrumentation engineer :**

- New steam cracker project for Fina Antwerpen Olefins :

Spécification for flowmeters, thermal sensors, pressure transmitters, on-of valves, désuperheaters, level gages, level switches...

Installation design studies: hook-ups, cable book, cable way paths implementation with using INTOOL software.

From 1994 to 1999 **TECHNIP (IPEDEX)** La Défense-92

**Electrical and instrumentation chief inspector**

- Responsible for a 7 inspectors team.
- Inspectors tour organisation
- Assessment and audit of overseas electrical and instrumentation suppliers in Brasil, Danemark, Saudi Arabia, Hungary, USA...
- Organisation and setup of quality control operations and manufacturing progress surveys for critical and long lead items.

**Instrumentation engineer :**

- SINCOR project (Vénézuéla), Upstream oil processing units: preparation of the technical bid

- DSM project (Gelsenkirchen) , Polypropylene unit :

Design specification for instrumentation / technical bid comparison / technical clarifications:

- safety relief valves, control valves, pressure transmitters, flowmeters, ...  
with using INTOOL software

Checking and monitoring of application by vendors of the German regulations related to under-pressure vessels.

Package vendors follow up of:

- K-TRON dosing system
- WAESCHLE pneumatic conveyor

**achievements (continue)**

- From 1992 to 1993 **MSA** Saint-Ouen l'Aumône-95  
( *Gas detection and analyse* )  
**Design chief engineer ( construction )**
- Draft office management
  - Manufacturing studies and orders launching .
  - Sub-contracting procurement.
  - Workshop schedule and management .
- From 1990 to 1992 **SERDAT** Enghien-95  
**Contract instrumentation engineer**
- Contract with TECHNIP (LPG plant project in Bonny Island-Nigeria).  
Vendors assessment – Technical bid comparisons.
  - Contract with SGN (La Hague-France nuclear waste treatment plant: R2 workshop)
- From 1988 to 1990 **KDG-MOBREY** Saint-Ouen l'Aumône-95  
( *flow metering-level metering* )  
**Contract manager**
- Responsible for the achievement of the company lead contracts.
  - Technical, financial and orders management
  - Interfacing with company plants for sub-manufacturing
- From 1986 to 1988 **TCS / MECI** Clichy-92 / Les Ulis-91  
( *instrumentation, digital control systems* )  
**Sales engineer**
- Sales promotion and prospection in Normandy and Paris area
- From 1985 to 1986 **ROSEMOUNT** Rungis-94  
**Contract manager**
- Responsible for the achievement of the company lead contracts.
  - Technical, financial and orders managing
  - Company plants sub-manufacture interfacing
- From 1983 to 1985 **FOXBORO** Saint-Ouen l'Aumône-95  
**Inside sales engineer**
- Bid preparation, technical support
  - Inside sales organisaton
  - Order entry, order management

**Education**

- 1975-1977 Ecole Nationale de la Marine Marchande. Nantes-44
- **Elève officier technicien ( 2° classe ) option électricité-électronique**  
*equivalent to BTEC Higher National Diploma (electronic-electricity specialty)*

**• Baccalauréat F1 : Construction Mécanique – A level in Mechanical design****Training courses**

- 2003: Challenge and opportunities in turbomachinery control (CCC)
- 2002 : Oil production processing on surface units / ENSPM / 5days
- 2001 : INTOOLS / INTERGRAPH / 3days
- 1990 : Level metering & Flowmetering course / MOBREY / 5days
- 1988 : MOD 30 system / TAYLOR / 5days
- 1988 : MOD 300 system / TAYLOR / 5 days
- 1983 : Fundamentals of Mechanical and pneumatic instrumentation course /  
FOXBORO / 10 days
- 1983 : Fundamentals of Control course / FOXBORO / 5 days
- 1983 : SPEC 200systems and electronic field equipment course /  
FOXBORO / 10 days

**Specific skills**

Languages : English read, spoken, written (allows me to sustain professional talks and to participate/lead meetings in English )

Computers : WINDOWS software environment - INTOOLS

First aid diploma

Marathon runner

Singer in a choral group

---