

Curriculum Vitae - PAOLO CALVANO

Personal details

Date and place of birth:	April, 24 1965, Milan - Italy
Education:	Mechanical Technician / Civil Works
Languages:	Italiano – Español – English
Link:	it.linkedin.com/in/paolocalvano/
Valid Visa Entry	Russian Federation

I authorize the processing of personal data in accordance to the law

Professional

with extensive experience in large and medium international Companies in Operation and Commercial

- **Mechanical/Civil Field Supervisor/Advisor/Site Manager**
- **Construction Proposal – Home Office Construction**
- **Construction/Project Engineer**
- **Cost/Proposal Engineer**

The professional growth was focused on Projects as :

- Power Plants : Cogeneration - Combined/Open Cycle - Steam Gas/Oil-Coal; Waste to Energy; Biomass
- Wet/Dry Desulphurization retrofit FGD Plants from storage and preparation of reagent to end product
- Sulphur Recovery : Smelter Metallurgical Plants – Refineries
- Solar Power Plants with solar boiler
- LNG Plants (Liquified Natural Gas) : Terminal - Treatment - Storage - Compression
- Air Quality Control Systems Plants - Retrofit Environmental Plants (DeNOx, DeSOx, and ESP)
- Utility Boiler (Coal - Gas/Oil) - Critical and Supercritical Boiler with Ljungström
- Heat Recovery Steam Generator (HRSG)
- Petrochemical : separation - treatment – flashing
- Nuclear dismantling of radioactive liquid waste

Main positions carried out as part of my competences in EPC and C Companies :

- Home Office Construction
- Site Manager
- Construction Engineer / Mechanical Field Supervisor
- Cost Engineering - Cost estimate - Construction Estimator
- Claims and Changes Specialist
- Quantity surveyor
- Cost Analyst / Cost-plus contract
- Construction Proposal
- Mechanical Field Supervisor/Advisor in EPC contracts of packaged parts of plant
- Project Manager in EPC contracts of packaged parts of plant (lower 500tons)

Main activities :

(in company's headquarter or branch or in field)

- Home Office Construction – Methodology and Cost Estimation
- Site Manager in Flue Gas Treatment (FGT System) – Biomass Plant
- Analysis and use of Customer Specifications for each Project (ITB Tender Offer/Client's Contract)
- Cost Estimating and Budgeting of total job project – new Plants and Revamping
- Cost/Price analysis including Cash Flow, Overhead & Profit
- Project lay-out definition and solutions
- Preparation of Mechanical Erection Guidelines/Procedure and Erection Sequence
- Team head in Feasibility and Constructability Plan looking Transport, Climatic and Environmental constrains; preparation of Job Cards per Item or Activity; scheduling per Capital Activities and WBS

- Direct Hiring Construction analysis including Direct Labour mix composition, Supervision and site Staff, Construction Equipment and consumptions, timing and scheduling, construction equipment hiring
- Analysis of Erection Production and Composite Rates by erection site locations for Construction Labour Productivity – Erection Standard Productivity to Erection Actual/Expected ManHours
- Study and analysis of Temporary Construction Facilities, Field Running Cost and Supervision
- Preparation of Mechanical Take Off and B.o.Q. (in case sizing) for Pipes & Piping, Steel Structures and Static Equipment
- Preparation of Mechanical Work Requisition and alignment of received offer
- Standardization of Mechanical Work Requisition for Plant or per Single large Item (Boilers, HRSG, Absorber, Columns, Turbines and so on)
- R.f.Q. for Mechanical Equipment/Machinery/Bulk materials and analysis of technical/commercial offer
- Standardization of algorithms and Cost Estimating Relationship and Cost Drives
- Develop and maintain methods and tools
- Tutor of young employees and young graduates

Knowledge and Tools :

- Material selection according to Codes and Standards regulations (ASME – EN - JS).
- ASTM - ANSI – ASME – EN codes and standards
- API codes and KKS codes for process and WBS application.
- Literature of SMh Construction productivities (Standard Man Hours) and Man Power
- Literature of Compass and Global Construction Cost and Reference
- Literature of process design for Power Plant, FGD Plant, Steam Generator
- Sizing of pressure vessels and tank (ASME - API – PED)
- Process Piping Calculation ASME B31.1/ B31.3 Power Piping – transpose of Mollier Diagram in .xls file and also include Schedule thk. and all range thk. according to ANSI 36.10, ASME allowable stress from Carbon Steel to Alloy Steel (P91) materials
- Estimating steel structures and piperack weight calculation
- Various .xls tools for database, quantities generator (Painting / Insulation sq.m.), transport P.U. and packaging, shop rate production, Engineering Manhours estimation
- WFGD Absorber weight calculation from geometrical design including Steel Play Materials, erection and welding sequence, Rubber Liner Quantities and application list
- Direct Hiring cost calculation tool in .xls file including time schedule, ‘S’ Curve and ManPower histograms

Skills :

- Problem solving and research
- Design to Cost/Target price
- Computer interfaces hardware and software – Excellent knowledge of Excel, Word, Power Point, HTML and php, Communication, Acad, SAP end-user

Personal publications:

- Project work as Tutor: (in Italian language – final paper is 40)
Methodology for the Estimation of Construction Activities of Process Plants
MEC Master in Engineering and Contracting - University Master's Degree
- Study of prototype of HRSG 26mt module tubes General Electric / C.M.I. / Tenaris
Phase IV - Construction Comparison Cost and Timing 21mt/26mt - three different location for sub-Contract and Direct Hiring
- Methodology of Take Off Cost for Process Plant – (*under development*)

Certificates and Courses:

In force and contracted activities accredited by Ministry of Employment and Technological Development of the Andalucía's Boards – resolution 164/04 with the following :

- Job Security
- Industrial Hygiene
- Ergonomics and Psycho-Sociology and Health Surveillance

Training Certificates

- Prevention of Occupational hazard in Hot Work
- Work at Height
- Confined Spaces
- ATEX Zone
- Site Management Safety Training Scheme (SMSTS) – expire 30.09.2021
- Medical certificate of fitness – expire 03.04.2018

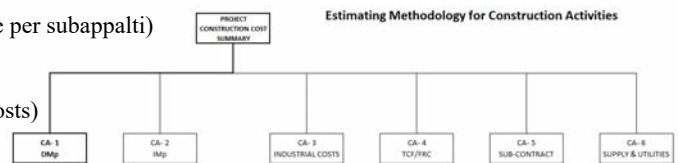
Experience

2018 - Consultant - Center Italy

Consultant for build-up the Home Office Construction

Preparation of standard Estimating Methodology for Construction Activities

- Construction Estimation work terminology
- Build up the estimation by category
- SDR – Share of duties and responsibilities (di progetto e per subappalti)
- Cost Summary Sheet
- Cost allocation definition (CA-1 CA-6)
- Direct Manpower details (CA-1) (Manhours, mix and costs)
- Productivity factor details
- Direct Manpower vs Subcontract (CA-1)
- Indirect Manpower details (CA-2) (Manhours, nationality and costs)
- Industrial costs details (CA-3)
- TCF (Temporary Construction Facilities) and FRC (Field Running Costs) (CA-4)
- Provision of welfare facilities during construction work (CA-4)
- Minor Subcontracts details (CA-5)
- Supply and utilities details (CA-6)
- Construction equipment details (CA-4 and CA-5) (Asset / Rental)



Develop lifting and installation studies for heavy equipment or modules
Develop of Construction Strategy and feasibility

2017 - REDECAM Group - Italy Milano – Cramlington Northumberland U.K.

Construction Site Manager

at Cramlington Biomass CHP Plant for **BWSC (Burmeister & Wain Scandinavian Contractor)** construction of Flue Gas Treatment System;
Site Management, Site Construction Supervisor;
Preparation of Construction “Job Cards” for Mechanical and Insulation including methodology of job execution and construction;
Risk Assessment Methods Statement supervision;
Progress meeting with Client;
Preparation of “Three Weeks Lookahead” - weekly construction program;
Safety

2015 - TERMOKIMIK Corporation - Italy Milano – Los Barrios Cadiz Spain

Construction Supervisor in Mechanical and Civil discipline at:

Los Barrios – Cadiz - Spain - Construction of Retrofit Environmental Plants DeNOx

Los Barrios Power Plant (E.ON / Viesgo) - Hard Coal Fired Unit 590MW

SCR – Selective Catalytic Reduction Implementation Plant

Preparation of Construction “Job Cards” for Mechanical and Civil discipline including client’s approval, methodology of job execution and construction supervision; also includes the survey on the existing plant and design of feasibility on the existing Power Boiler for tie-ins of piping routing, steel structures main, secondary and services.

2014 - Hitachi / Gicotecnica Milano – Jazan Project

Consultant for Project Execution Documents of EPC phase Constructability Concepts

Refinery and Marine Terminal at Jazan - Saudi Arabia

2013 - O.M.A. Group – Italy Pescara

Consultant in Operation department as :

Construction Proposals for

- Saipem - landfall and pipeline construction (pigging lines) – RUSSIA- ANAPA
- Aster Termomeccanica
Budowa Zakładu Termicznego Przekształcania Odpadów Komunalnych dla Bydgosko-Toruńskiego Obszaru – Metropolitalnego – Poland
- Saipem - IVAR AASEN T&I PROJECT – Fabrication of Spreader Bar and Rigging Platform
- Saipem - Construction of the suction pile foundations SiRCoS for South Stream
- Saipem - West Kuwait Saipem Project - West Kuwait (BS-171)- new gas booster stations

2011 - TECHINT Engineering & Construction – Italy Milano – Egypt El Cairo

Consultant in Operation department as :

Constructability Team Head
Construction Engineer /Construction Cost Engineer
Claims and Changes Specialist on revamping
Quantity surveyor
Work Requisition Standardization and Quantity Price List
Feasibilities Study
Direct Hiring Proposals

I have also contributed to the prototype studies of HRSG having 26 meters length Module Tubes working directly with Tenaris and General Electric.

I tutored young employees for the Company in apprenticeship.

2008 - ANSALDO CALDAIE – Italy Gallarate VA

in Proposal department my duties were to prepare overall construction and material costs, Erection Procedure and Guidelines on Utility Boilers, Spiral Coal / Oil; Box Oil / Gas - critical and supercritical.

2006 - SIIRTEC NIGI – Italy Milano

Consultant in Operation department as Project Engineer, Technical Advisor, material co-ordinator, Procurement and Shipping in a termination of EP Sulphur Recovery Project in Kazakhstan;

In the Commercial and Operation department as Manager of Subcontracting of EPC contracts.

Cost Estimator of overall total project plants and deal in the preparation of requests for tender for all disciplines.

I interfaced and transfer my report directly to the Executive Branch.

Tutorship to young graduates

2005 - GENERAL MONTAGGI – Italy Milano / Roma / Napoli

Proposal Manager for Direct Hiring Proposals

1995 - ABB / ALSTOM POWER – Italy Milano

Senior Cost Estimator and Proposals - Technical and Commercial – Coordinator of estimating department.

During the first two years, I was in the commercial office of the Power Generation Department, followed the estimation mainly for mechanical optimizing costs and drawing up the sale price. I worked in a number of Tenders and Feasibilities for the Italian and foreign markets.

In the ECS (Environmental Control System) division as coordinator of the multidisciplinary estimates and Construction Guidelines prevalently on Wet Flue Gas Desulfurization (WFGD) Plants, also the systems of Integrated Dry Desulfurization (NID) and Waste to Energy (WtE).

Bidding and follow-up activity on the operation project in the executive phase for a Wet Flue Gas Desulphurisation plant in Thailand, Mae Moh. Looking suppliers and sub-contractor in local market for execution of part of plant. Preparation of Mechanical Material Take Off and B.o.Q. for Piping, Steel Structures and Static Equipment

Preparation of Mechanical Work Requisition and alignment of received offer.

For many bidding phase I've research suppliers of material and Sub-contractor for erection activities in local market as WFGD Plants in Bulgaria (Marica), Portugal (Pego), England (Cottam in Consortium), Turkey (Kangal), Slovenia (Sostanj), Brasil (Jacui in Consortium), Hungary (Orozlany) and site survey for the revamping in Fusina Italy and Erection manpower production in the execution of construction in Florina (Greece).

In ABB USA (Knoxville) headquarters, I attended the Technology Transfer seminar to the Wet Flue Gas Desulfurization (WFGD) process, estimation and costing and erection procedures and guidelines.

I built a computer tool system receiving process data that is able to produce the dimensional, weight, cost and erection ManPower development of the Absorber and other static Equipment.

1990 - FOSTER WHEELER – Italy Milano

Fiat Avio Foster Wheeler Energy company founded in 1990 to combine the resources of both technologies.

I prepared the coding and standardization of piping materials, valves and specification.

I followed the feasibility studies from preparation of layout to estimate costs.

In 1992, I was responsible of Cost Estimating department of Power Plant Projects.

1989 - Snamprogetti/Agip – Italy Milano

Consultant for EPC petrochemical packages as Project Engineer, Construction Supervisor and Inspector, planning, budgets cost and procurement.

1988 - BGMB – Italy Milano/Bergamo

Drafting Construction Engineer, Quantities Surveyor, Cost Control and Cost Estimation plant skids and prefabricated modules and components for the petrochemical and power industry.

I've converted the Disneyland's rollercoaster steel structures American shapes to European norms for Paris Location.

1986 - METANO IMPIANTI - Italy Milano

as Workshop Manager, Cost Estimator, Construction Engineer, Site Supervisor, Workshop and site inspector for the construction of Natural Gas Plant and Gas Treatment Equipment as Pipelines, pipeline pig launchers and receivers.

Mechanical Supervisor installation and testing of Natural Gas Compression Station, Natural Gas Pressure Reduction and Measurement station and for feed Natural Gas line to Gas Turbine in Fiat Mirafiori factory.

Projects

2018 - Construction Proposals for:

- ENI – SANNAZZARO de BURGONDI – Refinery REBUILDING EST
- CCPP 250MWe – Yerevan – Armenia
- ENI – Cassiopea Compression Station

BWSC (Burmeister & Wain Scandinavian Contractor) Cramlington Biomass CHP Plant for BWSC (Burmeister & Wain Scandinavian Contractor) construction of Flue Gas Treatment System - 800tons

Cramlington – Northumberland – U.K.

TERMOKIMIK CORPORATION

Los Barrios – Cadiz - Spain

Construction of Retrofit Environmental Plants DeNOx

Los Barrios Power Plant (E.ON / Viesgo) - Hard Coal Fired Unit 590MW

SCR – Selective Catalytic Reduction Implementation Plant

Hitachi / Gicotecnica Milano – Jazan Project

O.M.A. Group – Italy Pescara

- Saipem - landfall and pipeline construction (piggings lines) – RUSSIA- ANAPA
- Aster Termomeccanica
Budowa Zakładu Termicznego Przekształcania Odpadów Komunalnych dla Bydgosko-Toruńskiego Obszaru – Metropolitalnego – Poland
- Saipem - IVAR AASEN T&I PROJECT – Fabrication of Spreader Bar and Rigging Platform
- Saipem - Construction of the suction pile foundations SiRCoS for South Stream
- Saipem - West Kuwait Saipem Project - West Kuwait (BS-171)- new gas booster stations

TECHINT Engineering & Construction

- Russian Federation Siberia - Norlisk Nickel - **Constructability Plan** - Front End Engineering Design (FEED) Reconstruction of elementary sulphur production of Copper Plant
- El Ameria Egypt – **Direct Hiring** – CCPP - EPC Project
- South Helwan Egypt - PGESCO CP-106- Supercritical T. P. P. - (Units 1,2 &3) - N° 3 Steam Turbine Generators - Steam Tube Condensers – Auxiliaries
- Suez Egypt - PGESCO CP-118 - **Direct Hiring** - Supercritical T.P.P. 1 x 650MW Gas/Oil Fired Boiler
- Saluggia Italy- CEMEX – Eurex Plant – Ele/Mec - Nuclear dismantling of radioactive liquid waste
- El Seyouf Egypt - **Direct Hiring** - Fast Track 3xGT13E2 – Alstom Power - EPC
- Varsavia Poland – **Ele/Mec Erection** - Fiat Avio - Polonia Aero Cold Flow Turbine Test Facility – EPC
- PKN Orlen Poland -
- Rotterdam Netherlands - Vopak Gasunie - **Ele/Mec Erection** - Gate terminal revamping/Expansion LNG
- Al Anbar Iraq – **Ele/Mec Erection** CCPP – Power Plant 2X 800 MW
- Evergem Belgium- Nest Energie - **Ele/Mec Erection** 800-970MWe Combined Cycle Gas Turbine - EPC
- Kirklareli, Turkey - Sedko Urundul Enerji - **Ele/Mec Erection** CCPP 430 MWe — Turkey EPC BoP
- Onne Nigeria – Indorama - **Direct Hiring** - IEPL Onne Port Project - Multi-Purpose Terminal- EPC
- Dairut Egypt - EDF/Edison - **Direct Hiring** - 3*750MWe Combined Cycle Power Plant
- Zeebrugge - **Ele/Mec Erection** - LNG Plant - EPC

ANSALDO CALDAIE

- Porto do Acu (Spiral Coal) 525MWe – Turn Key - Brazil
- Sokhna (Spiral Oil) 650MWe – Turn Key – Egypt
- Hassyan (Box Gas/DieselOil) 250MWe – Turn Key
- **Abu Qir (Box Oil/Gas) 650MWe – Turn Key – Egypt**
- Jindal (Spiral Coal) 660MWe – Turn Key – India
- Barrancones (Coal) – 350MWe – Coal Turn Key - Chile
- Barrancones (Coal) – 250MWe – Coal - Chile
- Torre Valdaliga Sud – 350MWe Coal Repowering unit 4 (TV7) - IT
- Vado Ligure – 460MWe Coal – IT
- **Ivenpah – Solar Boiler – 100MWe – Solar (Prototype solar boiler)**
- Krishnapatnam – 660MWe – Coal – India
- Yuma USA – 250MWe – Natural Gas
- Bulk – Supercritical 660MW – India
- Red Dragon 350 MW – Chile

GENERAL MONTAGGI

- Linate Airport Italy - Commissioning Italia – CCPP - Mechanical Erection
- Geregu Nigeria - Siemens – GTPP - Mechanical Erection of 3 GT V94.2 and Aux.
- Gioia Tauro Italy - BFB Boiler/ Slovenske Energeticke Strojarnje /Transelektro - Mechanical Erection 2x Steam Boiler
- Sparanise Italy – Ansaldo Caldaie – Mechanical Erection – horizontal HRSG
- Teverola Italy – General Electric – EMEI Erection - GE Fr. 9FA GT/GE A15 ST- CICO
- Santa Barbara Italy – ENELPOWER- Mechanical/Electrical Erection- GT e Generator
- Turbigio 800 Italy- Techint- Disassembly and conservation - 4 GT 50 + ECO + Diverter
- Lomellina Energia – Alstom Power – Mechanical Erection - WtE
- Lomellina Energia Italy – Foster Wheeler - Mechanical Erection- Steam Boiler- RRP
- Modugno Italy - Alstom Power – Mechanical Erection -GT & Gen./ST & Gen/HRSG/Heller Cooling Sys./KA26-2 GT CCPP
- San Filippo del Mele Italy - Fisia Italimpianti - Mechanical Erection - WFGD
- Aprilia/Turano Lodigiano Italy - Techint – Mechanical Erection - BOP + Aux/ 2x GT 250MW each/1 ST 270 MW/Air Condenser/2x HRSG Horizontal and Stacks / 3 Generators Hydrogen Cooled - CICO

ABB/ALSTOM POWER

- Ye Long – Taiwan – PP – 1995 ÷ 1997
- Takoradi – Ghana – CCPP – 1996
- Quinbei – China – PP – 1997
- **Los Barrios – Spain - WFGD - 2005**
- **Carboneras – Spain - WFGD - 2004**
- **Shoaiba – Saudi Arabia – PP + FGD – 1997 ÷ 1999**
- San Mateo – Philippine – WtE - 2001
- **Mae Moh – Thailand – WFGD – 1996 ÷ 2004**
- Sostanj – Slovenija – WFGD - 1998
- **Maritza – Bulgaria –WFGD – 1999 ÷ 2005**
- Kangal – Turkey – WFGD – 2001
- Elbistan – Turkey – WFGD – 2000
- Orozlany – Hungary – WFGD - 2001
- Ruttemberg – Israel - WFGD – 1999
- Jacui – Brasil – WFGD - 2001
- Alma Petroli Ravenna – Italy – WFGD - 2002
- Brindisi Nord – Italy – SCR - 2003
- Amager – Danimark – WFGD - 2003
- Cottam – U.K. – WFGD – 2001 - 2002
- **Elektrenai – Lituania – FGD - 2005**
- **SNET – France – 2 FGD – 2003 ÷ 2005**
- **Pego – Portugal – WFGD**
- Boa II – Germany – WFGD
- Hai Phong – Vietnam – WFGD
- Torrevadalliga Nord – Italy – WFGD - 2004
- Stongoli – Italy - Biomass - 2001
- **Florina – Greece – PP+WFGD – 1996 ÷ 2004**

Some places in the world that I have visited both for business and for tourism :

- Cramlington – Northumberland – Newcastle – U.K. – 9 months
- Sydney, Brisbane - Australia - 5 months
- São Paulo - Brazil - 30 days
- Knoxville - USA - 30 days
- Bangkok, Bang Chang - Thailand - 2 months
- Ungeria - (in search of sub-contractors) - all - 30 days
- Bucharest, Brasov, Arad, Timisoara - Romania - 30 days
- Slovenia - all - 30 days
- Croatia - all - 30 days
- Czech Republic - Prague and Bohemia - 20 days
- Ankara, Istanbul - Turkey - 30 days
- York, Newcastle, London - UK - 40 days
- Maritza, Stara Zagora, Sofia, Ruse - Bulgaria - 30 days
- Southern France all
- Southern Spain throughout
- All of Switzerland
- Amsterdam and neighboring - 30 days
- Thessaloniki, Florina, Alexandropolis - Greece - 45 days
- Dubai - UAE - 10 days
- Kuala Lumpur - Malaysia - 10 days
- Cairo - Egypt
- Germany - various locations
- Throughout Italy

Construction literature for reference :

- J.A. Bent, A. Thumann, “ Project Management for Engineering and Construction”
- A. Zucconi, “ Construction standard manhours: un unico parametro per l’ attività di cantiere”
- E. Cagno, F. Caron, M. Mancini, “ Cost Estimation of Industrial Risk in the Bidding Process” ,
- M. Titolo, “ La competizione internazionale nel mondo dell’ impiantistica” , Franco Angeli, Milano 2005
- J.S. Page, “ Conceptual Cost Estimating Manual” , Gulf Publishing Company, Houston (USA)
- M. D’ Adda, “ Fixed capital cost estimating” , Elsevier Science BV, Burlington (USA) 1997
- Total Cost Management Framework - An Integrated Approach to Portfolio, Program, and Project Management – 2012 AACE® International
- Compass International – Global Construction Cost and reference Yearbook
- Constructability Working Practice - Value Enhancing Practice B. Manoli - Techint
- Construction Industry Institute – Constructability Improvement during Engineering and Procurement