POSITION DESIRED: Mechanical Engineer Mechanical Field Engineer Piping Design Engineer Piping Field Engineer



### **CESAR D. MELLA IV** Registered Mechanical Engineer

# **CAREER HISTORY:**

With almost 11 years of working experience in EPC company mostly in mechanical and piping works involving engineering and design, field construction and field inspection in Waste Water Treatment Plant, Waste Incineration Plant, Oil and Gas Plant, Petrochemical Plant and Industrial Plant Projects. Previously employed with **JFE ENGINEERING CORPORATION** formerly NKK Design and Engineering Corp. (Nippon Kokan Kabushiki Kaisha), as Mechanical and Piping Design / Field Engineer from Dec. 1997 to January 2008. Underwent intensive training program through a Japanese government sponsored scholarship and had stayed in JFE Japan for four years including actual field assignment.

# **EMPLOYMENT HISTORY:**

### 1) Mechanical / Piping Design Engineer

July 9, 2008 to Present Woo-byung Engineering Co., Ltd. A201, SK-Twintower, 345-9, Gasan-dong, Gumcheon-ku, Seoul 153-773, Korea

### **Projects Involved**

### MANIFA GAS FACILITIES AT KHURNASIYAH GAS PLANT

**Description :** A capacity of 90 million standard cubic feet per day(MMSCFD) sour associated gas and 66,400 barrel per stream day(BPSD) sour condensate operation revamping and to renovate current facilities.

**Responsibility :** Making P&ID using smart plant P&ID software base on client P&ID which is in PDF file. Checking some inconsistency in P&ID and reporting it to the client.

# MA'ADEN PHOSPATE PROJECT POWER AND DESALINATION PLANT

**Description :** Power plant capacity 126.76MW base load and 146.53MW peak load. The desalination plant will utilise Entropie Multi Effect Distillation (MED) and can process up to 40,000 cubic metres per day.

**Responsibility :** Making P&ID using smart plant P&ID software base on client P&ID which is in AUTOCAD. Checking some inconsistency in P&ID and reporting it to the client.

### AIR PRODUCT KOREA, SAMSUNG TANGJUNG LCD PLANT

**Description :** The project entails an LCD(liquid crystal display) manufacturing facility. **Responsibility :** Making P&ID using smart plant P&ID software base on client P&ID which is in AUTOCAD. Checking some inconsistency in P&ID and reporting it to the client.

### SAUDI KAYAN PETROCHEMICAL COMPLEX PHENOLICE FACILITIES

**Description :** A mega petrochemical complex with an annual capacity exceeding 4 million metric tons of chemical products. It will add some specialized chemicals to the Saudi marketplace that will be produced in Saudi Arabia for the first time.

Responsibility : Piping modeling using PDS software for Silo and Conveyor area.

### 2) Mechanical and Piping Design / Field Engineer (Group Leader)

December 15,1997 to January 2008 JFE Techno Manila, Inc.(formerly NKK Techno Manila Inc.) Environmental Industries Engineering Department Environmental Plant Piping Group 23<sup>rd</sup> Floor, WYNSUM CORPORATE PLAZA 22 Emerald Avenue, Ortigas Center 1605 Pasig City, Philippines

### Mechanical and Piping Design / Field Engineer in Japan

October 10, 2007 to October 31, 2006 November 20, 2006 to December 20, 2006 June 5, 2006 to September 2, 2006 September 22, 2003 to October 31, 2004 April 4, 2001 to March 29, 2002 March 16,1998 to March 2, 2000

JFE Design and Engineering Corporation (formerly NKK Design Engineering Corporation) Environmental Piping Department 4<sup>th</sup> FIr. SOLDEC Bldg., 3 – Benten-Cho, Tsurumi-Ku, Yokohama 230-0044 Kanagawa, Japan

### **Projects Involved**

Philippine Sinter Heat recovery & Waste Water Treatment Plant Inagawa Waste Incineration Plant Sasebo Ash Melting & Waste Water Treatment Plant Inagawa Waste Incineratin Plant Hamada Waste Incineration Plant Yorii Waste Incineration Plant Kyoto Waste Incineration Plant Tokorozawa City Clean Center Kagamihara waste Incineration Plant Kasugai City Garbage & Waste Water Treatment Center Yokohama City Refuse Treatment Center Osaka Waste Incineration Plant Kyoto South Municipal No. 1 Waste to Energy Plant

### **Duties and Responsibilities:**

As a Mechanical and Piping Design Engineer:

- Proposed final equipment location base on plot plan.
- Study and proposed nozzle location and orientation of the equipment assigned in the area with coordination to process discipline.
- Proposed and design vessel support and vessel clips based on mechanical standard for vessel support and vessel clips.
- Design of required volume of water tank and it's nozzle orientation.
- Making of piping and instrument diagram (P&ID) for liquid and air.
- Piping pressure loss calculation.
- > Pump specifications calculation.
- Performs piping studies, pipe routings, and basic design analysis in accordance to Japanese International Standard(JIS) codes and project standards.
- Conducts preliminary study on the proposed piping arrangement drawings. Converts manual proposed drawing to CAD. If required by the client, produce Eye-CAD 3D models.
- > EYECAD 3D modeling from piping plan drawings, vendors equipment drawing, civil and steel

structure drawings and electrical raceway drawings.

- > Extracts preliminary piping & valve material quantities to support defined estimates & early orders.
- Runs batch process to identify piping interference of all components in the entire plant.
- > Prepares piping spool drawings for shop fabrication and plant construction purposes.
- Prepares and issues CAD drawings (plan, isometric, elevation and detailed drawings, etc.) for proposal to client and construction purposes.
- Preparation of line lists, valve lists and equipment lists.
- Preparation of bill of materials.
- Preparation of piping arrangement drawings.

As a Mechanical and Piping Field Engineer:

- Checking of equipments, piping materials and instument materials that arrived in the construction site. Cross check the packing list versus order list.
- Coordinates and provides technical assistance to the construction team to ensure compliance to project specifications and standards.
- Served as coordinator / liaison in communcating with suppliers, vendors, design team and shop floor personnel.
- > Co-ordination and scheduling for both mechanical and piping construction activities.
- Responsible for reviewing and responding the RFI-Request for Information and technical queries raised by the subcontractor prior to the field modifications to be done as per project standard and specifications.
- Created drawing change notifications, new bill of materials and assisted in design for customer proposed changes.
- Conducts final engineering punch list ensuring all items are installed as per project specifications, from a mechanical and piping design standpoint.
- Responsible for ensuring engineering and design quality, technical accuracy of drawings, material quantities, specifications, procedures etc.
- > Conducts final interference checking between pipes and other obstruction to it.
- Carries out accessibility check on monitor & inspection routes for routine operation, space for regular maintenance work.
- > Attends meetings regarding daily work and project status.
- > Performs other duties that may be assigned by the immediate superior.
- > In charge in the control of piping materials.
- Check piping support actual location and installation condition.

On Site Jobs

# SINTER WASTE HEAT RECOVERY & WASTE WATER TREATMENT PLANT

Cagayan De Oro, Philippines Plant Construction May 2007 to December 2007

### KYOTO CITY WASTE INCINERATION PLANT

Kyoto City, Japan Plant Construction April 5, 2004 – September 27, 2004

#### KASUGAI CITY GARBAGE & WASTE WATER TREATMENT CENTER

Kasugai City, Nagoya Japan Plant Construction December 3, 2001 – January 25, 2002

### YOKOHAMA CITY REFUSE TREATMENT CENTER

Kanazawa, Yokohama-Shi, Japan Plant Construction September 06,1999 – March 10, 2000

# TRAININGS:

Training Course Internal QMS Auditor ISO 9001:2000	ISO 9001:2000 A Process Approach By Neville-Clarke Philippines Inc. JFE Techno Manila Inc. 23 <sup>rd</sup> Floor, WYNSUM CORPORATE PLAZA 22 Emerald Avenue, Ortigas Center 1605 Pasig City, Philippines July 30 & August 6, 2005	
In-House Training Course ISO 9001:2000	ISO 9001:2000 A Process Approach By Neville-Clarke Philippines Inc. JFE Techno Manila Inc. 23 <sup>rd</sup> Floor, WYNSUM CORPORATE PLAZA 22 Emerald Avenue, Ortigas Center 1605 Pasig City, Philippines April 23, 2005	
Technical Training Course	<ul> <li>JFE Design &amp; Engineering Corporation(formerly NKK) Environmental Piping Department 4<sup>th</sup> Fir. NSS Bldg., 3 – Benten-cho, Tsurumi-Ku, Yokohama 230-0044 Japan April 04, 2001 to March 29, 2002(Under AOTS)</li> <li>1) Design Fundamentals in Steel Structural</li> <li>2) Application of 3 Dimensional Computer Aided Design</li> <li>3) Detailed Design of Refuse Disposal Plant</li> <li>4) Test-run of the Machinery in the Refuse Disposal Plant</li> <li>April 5, 1999 to March 2, 2000(Under AOTS)</li> <li>1) Steel Structural &amp; Mechanical Design in General</li> <li>2) Detailed Drawings of Environment Plant (Waste Incinerator Plants) by CAD System such as Its Surrounding Pipes, Conveyor Lines, and Various Frames and Brackets</li> </ul>	
General Orientation Course Japanese Language & Lessons	<b>The Association for Overseas Technical Scholarship</b> AOTS, Kitasenju, Tokyo, Japan April 5 – May 21, 1999	
Japanese Language & Culture	<b>Overseas Vocational Training Association (OVTA)</b> Chiba,Tokyo, Japan August 11 – 26, 1998	
On Jobsite Training	<b>Kyoto South Municipal No.1 Waste to Energy Plant</b> Kyoto, Kyoto City, Japan Incineration Plant Construction Nov 2 – 27, 1998	
Eye-CAD Training	<b>Asahi Engineering Corporation Ltd.</b> Shinagawa, Tokyo, Japan May 25 – June 19, 1998	

## **PROFESSIONAL LICENSE ACCREDITED:**

**Registered Mechanical Engineer** 

PRC License Number: 0051952 (10/27/97)

# **AFFILIATION:**

Member

PSME – Philippine Society of Mechanical Engineers

### **COMPETENCY:**

PDS Intermediate Level. Eye-CAD Ver. 6 Software (Piping 3D modeling, 2D extraction, piping isometric extraction and knowledge of Eyecad reference data base modification) Administrator level. With knowledge on Autocad 2000, Autocad LT(Japanese version), Autocad 2008 With knowledge on Windows 95, 98, 2000, XP With knowledge on Microsoft Office With International living experience

### LANGUAGE PROFICIENCY:

Filipino, English, and Nihongo (Japanese Language)

# **EXAMINATIONS TAKEN:**

Mechanical Engineering National Licensure Board Examination......Passed October 10 to 12, 1997 Japanese Language Proficiency Exam (Level 3).....Passed December 1, 2002

### **EDUCATION:**

College	University of Santo Tomas (UST)
C C	España, Manila
	Bachelor of Science in Mechanical Engineering
	1992 to 1997
FRSONAL DATA	

# PERSONAL DATA:

Birthdate Birthplace	
Age	
Height	
Weight	
Sex	Male
Civil Status	Married
Religious Affiliation	
SSS No	
TIN	
Passport No	WW0191183