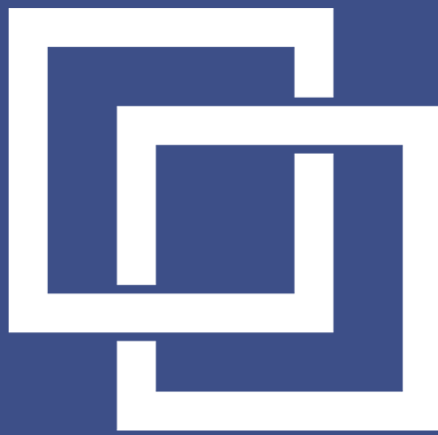


# TEC Square Solutions

Engineering Support



TEC SQUARE  
GROUP OF COMPANIES



## ABOUT US

**TEC Square Solutions Inc. (TSSI)** is an engineering consultancy and project engineering company based in Cebu , Philippines that supplies engineering solutions to medium and large sized enterprises.

**TSSI** is part of the **TEC Square Group of Companies**.

TSSI's workforce is composed mainly of young, dynamic and experienced technical staff with high level of skills and competencies gathered through years of experience.

We specialize in projects with highly complex processes. Our core competencies are in the field of roasting, extraction, aroma recovery, evaporation, spray drying, freeze drying and agglomeration. We support your project from concept to realization and beyond.

Our main activities are centered around :

- **Project Concept** : Consulting on technologies and other design questions.
- **Project Execution** : Bringing a project from concept to realization.
- **Production and Technical Support** : Supporting operations after a project is finished.

We pride ourselves in our belief that we are partners throughout a project and see to it that you are well satisfied throughout the process.

TEC Square Solutions Inc. has gone through the challenges of many projects and guarantee the following are met:

- **Quality** : The quality of our solutions is one of our top priorities. We guarantee that you have the best possible solution every time you work with us.
- **Delivery** : We ensure that projects are delivered on time, every time.
- **Cost** : Our cost-effective solutions will help you stay well within your budget while still suiting your requirements.

## OUR CAPABILITIES



### PROCESS ENGINEERING

We can help you conceptualize, analyze, and design a new process or improve an already existing one.

- Establish Project Concept
- Generate process descriptions and flowsheets
- Generate proposed system layouts
- Generate project cost estimates



### DETAILED ENGINEERING

We can execute a wide range of detailed engineering activities:

- Establishment of piping and instrumentation diagram (P&ID)
- Calculate detailed plant heat and mass balance including energy requirements
- 3D layouts and isometric piping plus BOM
- Provide specifications for process equipment



## ELECTRICAL ENGINEERING

Our Electrical Engineering Team is capable of:

- Electrical system design
- Electrical panel design
- Manufacture of electrical panels
- Generation of electrical drawings
- Supervision of electrical works



## INSTRUMENTATION AND AUTOMATION

Our Team of Application Engineers for Automation are well rounded in the field of Instrumentation, Controls and Automation. Among their areas of expertise are:

- Control system design and integration
- Programming of PLC and PAC
- Development of HMI and SCADA
- Process control system simulation
- Installation and Commissioning
- Calibration and maintenance of field instruments and devices

TEC Square Solutions Inc. is a registered system integrator of **Wonderware**, **Ignition** and **Rockwell**.



## CONSTRUCTION AND SUPERVISION

We involve ourselves in various administrative, technical and managerial aspects of constructing projects. This can include:

- Purchase of equipment
- Selection of contractors
- Site supervision
- Change order management



## COMMISSIONING

During start-up and commissioning, we ensure the proper installation and operation of systems prior to the handover to the end user. The following are performed:

- Piping check-out
- Mechanical completion check
- Electrical System check and power-up
- Device IO checkout
- Instrumentation calibrations
- PLC and HMI function test
- System dry and wet test
- Production run



## PRODUCTION AND TRAINING

During or after a project, our experts can visit your facility to conduct classroom and/or actual field training of the installed process.

Training assistance can also be provided to new and existing plants with new operators or as a stage in an optimization process.



## MOBILE APP DEVELOPMENT

We develop customized mobile solutions adaptable to a multitude of applications:

- Mobile Process Control : designed to run or monitor your equipment on a mobile device.
- Mobile Data Capturing : The alternative way of allowing discrete data capture as example surveys and census in the most effective way.

**WE ARE YOUR PARTNER THROUGHOUT A PROJECT**

## SOFTWARES & APPLICATIONS

We are proficient in the use of the following

 AUTODESK  
AUTOCAD LT<sup>®</sup>

 Autodesk  
Inventor<sup>®</sup>

 AUTOCAD  
PLANT 3D

 AUTOCAD  
ELECTRICAL

 SIEMENS  
SOLID EDGE

 Rockwell  
Automation  
Recognized  
System  
Integrator

 Wonderware  
REGISTERED  
SYSTEM INTEGRATOR

 Ignition  
Registered  
Integrator

## PAST PERFORMANCES

List of past and on-going projects



**DEVEX Verfahrenstechnik GmbH, Germany:** Complete basic and detailed engineering, automation, start-up & commissioning of a new instant coffee factory in Vietnam.



**Mellow Coffee, China :** supplied detailed engineering for green coffee & roasted coffee handling and storage for two roasters.



Complete replacement of **Geo Coffee's** automation program of its facility in **Beijing, China**.



Supplied the engineering and automation of a new Aroma Recovery System for two of **Indus'** facility in **India**.

 PROSOL  
PRODUCTOS SOLUBLES S.A.

**PROSOL Coffee, Spain:** detail engineering of additional parts of existing installation.


## AFFILIATIONS



PEZA Certificate of Registration  
No. (1-158)

## CONTACT DETAILS

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GROUP OF COMPANIES

**TEC Square Project Management SL**  
Málaga, Spain

**TEC Square S.L.**  
Málaga, Spain

**TEC Square B.V.**  
Dongen, the Netherlands

**TEC Square Electrical BV**  
Oud Gastel, the Netherlands

**TEC Square Solutions Inc.**  
Cebu, Philippines

[www.tecsq.com](http://www.tecsq.com)

