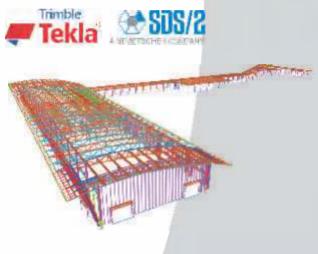


Structural Steel Detailing
Rebar & Precast Detailing
Process Equipment Design & Detailing
Building Information Modelling (BIM)



Structural Steel Detailing

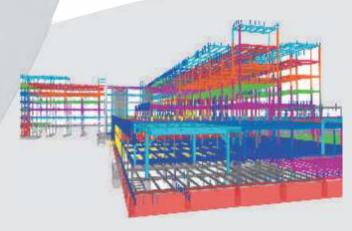




Rebar & Precast Detailing









REBAR CAD | CADS RC

Process Equipment Design & Detailing





PV Elite[®]
Etank
STAAD.pro



Building Information Modelling (BIM)





APPLICATIONS

- Commercial Buildings
- Infrastructure
- ☐ Transport Buildings
- Medical, Healthcare
- □ Residential
- Agricultural
- Educational
- □ Public Utility, Non-Buildings
- ☐ Parking Structures & Storage
- ☐ Government Buildings, Civic, Security & Defense
- Military
- Industrial Structures
- Power Providers
- Process Engineering Equipments
- □ Religious Buildings
- □ Other Miscellaneous Structures

OUR PRESENCE

- Pan Gulf has established a strong foothold as a preferred engineering services provider in USA, UK, Ireland, Australia, Japan, Korea, Turkey, Saudi Arabia, Qatar, and other regions of the world.
- Our 14 years of strong local presence offers a guarantee of stability, security, proven cultural and linguistic knowledge, and an understanding of local contexts, essential for managing a project.
- ☐ International Sourcing Division of Pan Gulf deals in Trade & Export of Engineering Tools & Equipment, caters to broader spectrum of clients in Middle East, North Africa, and Europe region and enhance our capabilities as an Engineering Solutions company.

INFRASTRUCTURE, RESOURCES & CAPABILITIES

- ☐ ISO 9001: 2015 Certified Company
- ☐ A team of more than 400 skilled professionals who can work with any structure or a design project regardless of material, size or complexity
- □ Robust, state-of-the-art infrastructure of 54000 sq. ft. comprising of 4 offices and delivery centres well-equipped with in-house library, training and conference rooms
- Understanding of fabrication processes, procedures, materials, costs, quality and industry codes
- Use of latest IT Systems, Modelling and Detailing Software Library
- □ Secured & safe access to electronic resources and databases like, Tekla, Tekla X-Steel, SDS/2, AutoCAD, STAAD-Pro, PV Elite, E-Tank, RebarCAD, REVIT, CADS RC
- Building code standards such as ASTM, ACI, CRSI, AS and BS as per client specifications
- ☐ Delivered more than 750 projects ranging from 100 T to more than 20000 T
- ☐ A part of the renowned conglomerate Pan Gulf Holding, Saudi Arabia
- ☐ An associate network of equally efficient and certified vendors for different outsourced or managed engineering solutions (as per requirement)



PROCESS EQUIPMENT DESIGNING & DETAILING

www.pangulftech.com

MAJOR PROJECTS & FEATURES

PGT Deliverables

Design and Detailing of Process Equipment -

- Design Calculation
- ☐ G.A. Drawings
- ☐ Fabrication Drawings
- Nozzle Details
- ☐ Plate Layout
- ☐ As-built Drawings

Speciality Services

- □ Pressure Vessel Design & Analysis
- ☐ Tank Design
- ☐ SKIDS Design
- ☐ Heat Exchangers: cost effective, high precision heat exchangers designs services.

Software Used CAD / CAE, E-TANK PRO

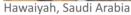
Key Benefits

- ☐ expert team of design engineers for pressure vessels
- ☐Rich experience in process equipment design and detailing services.
- □Customisation as per client requirement to match equipment specifications.
- □Superior quality of workmanship
- □ Fabrication friendly,
 maintenance-free design to
 optimize the performance of
 the equipment

Applications

Storage Tanks, Tank farms, Cryogenic Tanks, Columns, Heat Exchangers, Pressure vessels, Spheres, Bullets, Silos, Receivers, Stacks, Chemical Injection Skids, and many more







SHARQ III Expansion, Saudi Arabia











STRUCTURAL STEEL DETAILING

www.pangulftech.com

MAJOR PROJECTS & FEATURES

PGT Deliverables

- □ 3D Model and 2D Shop Drawings
- □ Erection Drawings for fabrication and erection of Industrial as well as commercial structures.
- ☐ Connection Design
- Structural dimensioning

Software Used

☐ Tekla, SDS/2

Key Benefits

- ☐ Simplified Drawings
- □ Accurate Detailing

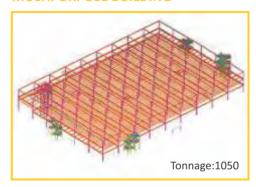
Steel Detailing Applications Commercial & Infrastructure Projects

- ☐ Airport Terminals, Heliport systems
- ☐ Museums Theme Parks
- ☐ Sports Arena Stadiums
- Defence projects
- ☐ Roads & Bridges
- ☐ Schools Colleges Training & Development Centres
- □ Hotels, Casinos, Spa & Therapy centres
- ☐ Hospitals, Healthcare, and Medical facilities
- □ Auditorium Concert halls Multiplexes
- □ Commercial buildings shopping complexes -Corporate Offices

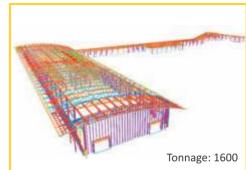
Industrial Projects

- ☐ Oil & Gas, Petrochemical refineries
- ☐ Plant structures / factories industrial sheds
- ☐ Industrial conveyors

MULTIPURPOSE BUILDING



AIRPORT TERMINAL



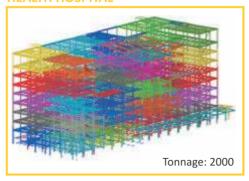
WAREHOUSE



CONVEYOR SYSTEM



HEALTH HOSPITAL



INTERNATIONAL AIRPORT, ISRAEL



SPORTS ARENA



SOLAR THERMAL PLANT





REBAR DETAILING

www.pangulftech.com

MAJOR PROJECTS & FEATURES

PGT Deliverables

- □ Provide all aspects of rebar detailing process, including estimation, detailing and rebar 3D modelling.
- ☐ Provide accurate, complete and timely bar lists and placing drawings that maintain production schedules and maximize production capabilities.
- ☐ Shop/Placing Drawings
- □ A/E Design Drawings

Software Used

RebarCAD, REVIT, CADS RC

Key Benefits

- ☐ Legible, easy to understand drawings
- ☐ Accurate & error free information
- ☐ Project planning & scheduling
- Experienced Team

Rebar Detailing Applications Commercial structure

- □ Foundations
- □ Rafts
- ☐ Flat Slabs
- Columns and beams
- □ Shear and retaining walls
- ☐ Concrete Masonry Units (CMU)
- ☐ Slab on Grade
- ☐ Elevator Pits
- Infrastructure structure
- Abutments
- Piers
- Approach and deck slabs
- Wing walls
- □ Crosshead beams

Industrial structure

- □ Footings
- Pedestals
- □ Ground Beams
- ☐ Slab on Grade
- □ Pit

STATE HIGHWAY, CALIFORNIA



RAPID BRIDGE REPLACEMENT PROJECT Pennsylvania, USA



STATE HIGHWAY 180, CALIFORNIA



SPORTS ARENA, DALLAS, TEXAS, USA



MUSEUM BUILDING, GIZA, EGYPT



BUSINESS SCHOOL, DUBLIN, IRELAND



COMMERCIAL BUILDING, UK







PRECAST DETAILING

www.pangulftech.com

MAJOR PROJECTS & FEATURES

PGT Deliverables

- □ Production of shop drawings
- ☐ Detailing of Precast Concrete elements
- ☐ Precast detailing drawings:
 - > Structural Design details
 - > Concrete Shop Drawing
 - > Fabrication Drawings
 - Detailed Concrete Connections
 - Detailed Schedules
 - > Sketches
- Precast fabrication and shop detailing
 - > Hollow Core Slab
 - > StairCases
 - > WallPanels
 - > Flat Slab
 - Beams
- ☐ Rebar & Precast Estimation
- > Preparing an estimate of the quantity of reinforcement steel that will be required in a project.
- Provide structural General
 Arrangement drawings and the
 Reinforcement Detailing
 Instructions
- > Estimation Take off Report,
- > Simplified bending schedule
- > Preparation of bar bending schedule from a Rebar detail drawing

Software Used

☐ CADS RC ,Rebar CAD, Autocad, Tekla, Revit

Key Benefits

- □ A professional team for precast detailing and related intricacies.
- Experience of working on Precast Concrete Structures
- Accurate estimates

Precast Detailing Applications

Multi-Level Residential Buildings, Commercial Structures, Airports,

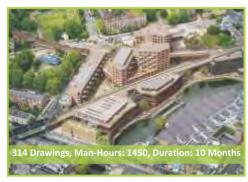
SADARA PROJECT PIPERACK, SAUDI ARABIA



EDUCATIONAL BUILDING, UNITED KINGDOM



COMMERCIAL BUILDINGS









BUILDING **INFORMATION MODELLING (BIM)**

ARCHITECTURE

www.pangulftech.com

PGT DELIVERABLES

PGT'S BIM PHILOSOPHY

A complete loop to capture all practical aspects of a construction project from a BIM perspective.

LEAN



INDUSTRY BEST PRACTICES



TIMELINES AND OPTIMUM COSTS



EFFICIENT MODELING METHODOLOGY



- Mass model / Conceptual model / Volumetric model
- Architectural BIM
- Construction Documentation
- Site modeling in Revit
- Interior mock-up
- Point cloud to BIM model



- Facade BIM
- Curtain wall / Aluminum cladding model
- Rendering / Presentation model
- Shop drawings



FLEXIBILITY TO DELIVER NON-STANDARD REQUIREMENTS

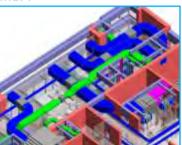


HIGHLY SCALABLE AND INTEROPERABLE SOLUTIONS



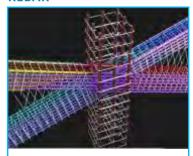
BETTER FUNCTIONALITY CATERING TO INDUSTRY DEMAND

MEPF



- MEPF BIM
- ASMEPF coordination
- Shop / As-built Drawings
- Mechanical room walkthrough
- BOQ / Quantity Take-off
- Construction sequencing

REBAR



- Rebar model in Tekla, Revit, Rebar CAD 3D / CADS RC 3D
- Rebar coordination
- Rebar detailing
- BBS

STEEL

TAILORED



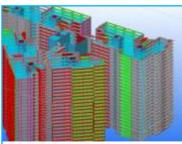
CUSTOMIZED **SOLUTIONS AS PER** REQUIREMENTS AND **PRIORITIES**



DETAILED UNDERSTANDING OF **WORK FLOW AND PROJECT STANDARDS**



INTENT & SOLUTION APPROACH



- Precast model in Revit, Tekla
- Concrete Shop Drawings
- Fabrication Drawings
- Detailed schedules

PRECAST

SDS2, Revit

Shop Drawings

• Erection Drawings • Anchor Bolt Drawings

• Structural Steel model in Tekla,

WHY DO YOU NEED THIS?



EFFICIENT BIM

MANAGEMENT







FASTER & ACCURATE PROJECT DELIVERY

FOR DETAILS, E-MAIL: BIM@PANGULFTECH.COM VISIT: WWW.PANGULFTECH.COM

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