



Aryan Tarh Mandegar Summary Profile

ARYAN TARH MANDEGAR (ATM) is a registered company specializing in Civil, Structural and Architectural Engineering and design.

Established in 2014, ATM adheres to international design and drafting standards to offer high quality deliverables to customers in a wide spectrum of industries including oil, gas and petrochemical plants, industrial complexes, commercial buildings and high-rise buildings.

The team comprises high-calibre professionals with domain expertise in their chosen fields. At your service are mechanical engineers, civil engineers, structural engineers and architects, supported by engineering draftsmen and design and animation specialists.

Engineering Services

Structural Engineering Design

- ❖ Using industry-standard design and finite element tools, ATM conducts design and analysis for all types of residential and commercial buildings both RCC and Steel.
- ❖ Engineering, Analysis, Detail Design and Drawing Preparation for:
 - Open structures for pipe racks including steel structures, RCC and composite structures
 - Equipment supporting structures and shelters
 - Blast resistant control and substation buildings
 - Vibrating machine foundations (pumps and compressors, turbines, electrical motors)
 - Fixed type equipment foundations (pressure vessels, process towers, reactors)
 - Foundation for skids
 - Above ground pipeline infrastructure (RCC sleepers, culverts, pipe bridges)
 - Special steel pipe supports
 - Misc. Structural steel such as platforms, access ways, jump overs
 - Above ground storage tanks foundation
 - Underground and above ground RCC storage tanks, half buried pits and tanks
 - Box type concrete cooling towers
 - Long span hangars and warehouse building structures
- ❖ Package Preparation to Hire Technical Services for:
 - Site and soil investigation scope of works
 - Seismic hazard studies and site specific ground motion for seismic design
 - Ground improvement
- ❖ Procurement Services:
 - Material requisition and MTOs for structural steel
 - Anchor bolts and bolt installation templates
 - Sandwich panel cladding
- ❖ Construction and Fabrication Stage:
 - Shop drawing preparation for structural steel
 - Shop drawing review and mark up



Civil Engineering

ATM covers the entire gamut of design & drafting services in civil engineering across industries. ATM caters to various geographies with tailor-made services and is backed by highly experienced civil engineers. Key services offered by ATM include:

- ❖ Scope of work for site surveying package
- ❖ Ground improvement study
- ❖ Site grading study to minimize cost of site preparation
- ❖ Preliminary rough grading drawings and site level design
- ❖ Design of temporary and permanent access ways to site
- ❖ Geometric design of on plot roads and streets
- ❖ Design for engineered embankments, flexible and rigid pavements
- ❖ Slope stability analysis and retaining wall design
- ❖ Drainage design including:
 - Hydrological and climatological data collection and analysis and flood mitigation study and design
 - Flood control design
 - Surface run-off study and drainage system design
 - Underground drainage systems
 - Chemical plant drainage networks including oily water systems, potentially oily water, blow downs and clean waters
 - Sanitary sewer networks and septic tanks
 - Composite underground drawings, 3d modelling and coordination through Aveva PDMS

ATM uses Autodesk Civil 3D, Storm and sanitary design packages for design works.

Architectural Engineering

- ❖ Study of the physical, structural and performance aspects of built environments for industrial, semi industrial and non-industrial buildings including admin building, canteen, dormitories, clinic, fire station, guard house
- ❖ Area validation study and report
- ❖ Basic design for buildings
- ❖ Detail architectural design and quantity take-off
- ❖ 3d modelling
- ❖ BIM based designs based on Revit packages
- ❖ Landscaping design for industrial and non-industrial buildings
- ❖ Planning and design for laboratories at chemical plants
- ❖ Architectural design of control buildings and substations

Contract Administration

In contract administration department, ATM provides contractual services to our esteemed clients by preparing following packages:

- ❖ Requisitions for civil construction materials such as anchor bolts, structural steel and special building material items such as cladding material, blast resistant doors
- ❖ Tender packages for civil and underground works
- ❖ Tender package for building construction
- ❖ Material take offs

Managing Consult

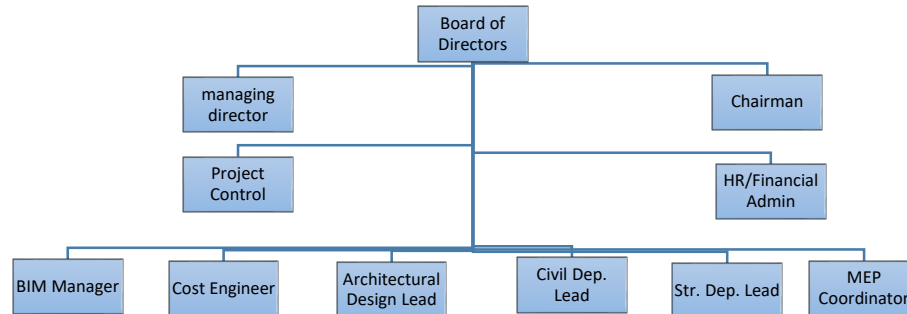
Apart from being your partner in engineering and design works ATM also caters its esteemed clients as managing consultant in civil/structural and building works. ATM has also been partnered to umbrella consultants in execution of engineering projects as CSB department.

The spectrum of our responsibilities includes:

- ❖ Assisting clients to effectively conduct early works such as site preparing works, soil investigation and seismic hazard studies.
- ❖ Preparation of drawings and technical documents to support obtaining permits
- ❖ Tender packaging works, technical evaluation of bidders
- ❖ Preparing design basis and annexes to E, EPC tenders
- ❖ Review of engineering documents, specification
- ❖ Verification of drawings per project design basis



Organization Chart

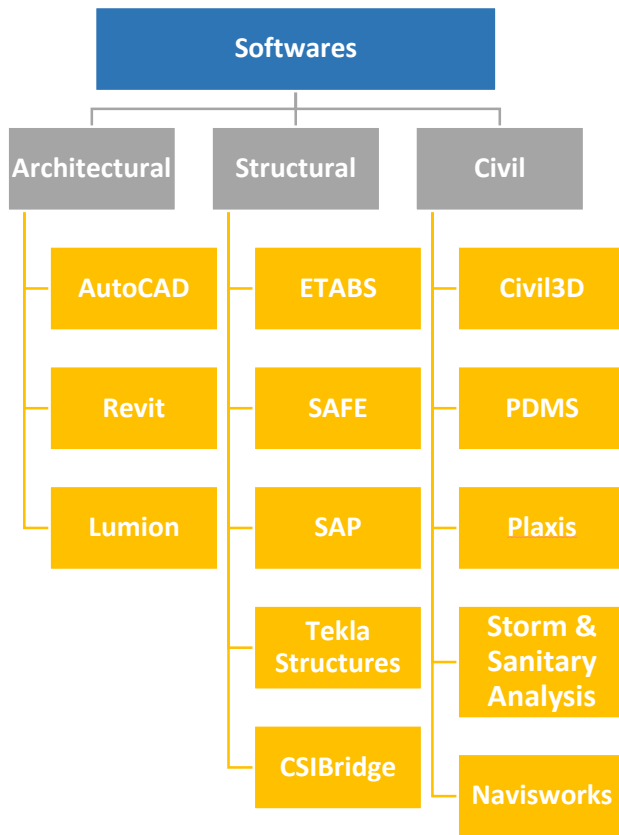


International Codes and Standards

ATM undertakes design works as per international codes and standards as follows:

- 1- IBC
- 2- ASCE 7
- 3- AISC (360,341,358)
- 4- ACI 318 and other publications from American concrete institute
- 5- API
- 6- NFPA
- 7- FEMA 356
- 8- AASHTO

ATM also uses Neufert for architectural design, and ASCE publications and guidelines in petrochemical industries.



ATM have developed ready to use tools for the design of foundations, base plates and connections, taking into considerations all the design code requirements and the appropriate checks

Summary of Completed and On-going Project

Project Name	Type of contract	Industry Sector	Civil Works	Structural	Architecture
Farzanegan Oil Refinery	ENG	Oil/Gas	✓	✓	✓
Gheshm Utility	ENG	Oil/Gas	✓	✓	✓
Silicon Wafer Factory	ENG	Industrial	✓	Foundation design only	✓
Mokran Water Intake Utility Centre and water transmission Pipeline	ENG	Utility/Infrastructure	✓	✓	✓
Methanol Sina	MC	Chemical Plant	✓	✓	✓
Methanol Soroush	MC	Chemical Plant	✓	✓	✓
Dehloran Petrochemical	MC	Chemical Plant	✓	✓	✓
Precast Pile Production Hall in Abadan	ENG	Industrial		✓	
Assaluya Centralized Tank Farm	ENG	Oil/Gas/Chemical	✓	✓	✓
Bushehr Petrochemical	MC	Chemical	✓	✓	
Medical Equipment Production Hall	ENG	Industrial		✓	✓
Demercaptanization Unit	ENG	Oil/Gas	✓	✓	✓
APG GUM REMOVAL Tabriz Petrochem	ENG	Chemical		✓	
Bandar Abaas Hospital	Eng.	Commercial		Conceptual Design	
Rotana Hotels Isfahan	Eng.	Residential/Commercial		✓	
Creek Harbour Tower Dubai	ENG	Residential/Commercial		Concept and detail	
PDH/PP Kangan	MC	Chemical	✓	✓	✓