

# Tailing & Dewatering Solutions

Engineering Development & Tailor Made Equipment

شرکت کانی فرآور کاسپین

Caspian Mineral Processing Eng. Co

# Who we are?

## MIN-TEC in Brief

Caspian Mineral Processing Engineering Company (under trade name MIN-TEC) established in 2009 by a group of qualified engineers with many years work experiences in copper & iron mine industries of Iran. MIN-TEC objective plans providing engineering, manufacturing and procurement services as an engineering, consultant or Integrated Project Management Solutions.

MIN-TEC stockholders have sufficient experiences in several the mining projects of Iranian huge mineral processing plants.

Within the years of the hi-level projects experiences, our management team learned how to serve to the clients and meet their requirements.



[Process Engineering](#)

[Equipment design](#)

[Equipment Supply](#)

[Our Workshops](#)

# Our View/ Our Philosophy

World Class Engineering Services, Best Solution for More Efficiency with Qualified Experts and Engineers

We are focused on providing Integrated & Tailored Solutions to our clients across four main services ; Engineering design Services, Mineral Processing Engineering, Equipment Supply and Specialist Engineering services. Let us help you achieve your business goals through our Tailored & Integrated Solutions.

We plans to be a well-known in mineral processing equipment supplying company and try to find and develop the newest technology in our field as we want to show " WE KNOW HOW".

MIN-TEC's plans have been identified in the following priority policies:

- Right recognize our client requirements.
- Well-organized engineers and staffs to present best services.
- Continuous Improvement and development in all levels of MIN-TEC's staffs .
- Develop of cooperation with well-known companies around the world to share abilities.

We believe to catch the above priority policies, effective cooperation and all engineers and staffs have to act in this manner.

Director Manager is responsible to accede the mentioned goals and right recognize and execute the policies. Also our policies will checked and revised by management commission.

# Management Team



## **Abbas Alibakhshi**

### **Director Manager , CEO**

- Mechanical Engineer
- Designer of Copper and Iron Plant
- Lime Plants
- Steel Plants
- More than 28 years Experiences



## **Ms. Nazanin Tayebi**

### **Project Manager , Board Member**

- Co-founder
- Industrial Engineer
- Project Control Expert
- More than 15 years Experiences



## **Saeed Moghani**

### **Factory Manager-ARVAND Factory**

- Mechanical Engineer
- Production Expert
- Factory& Site Manager
- More than 17 years Experiences



## **Dr. Mahdi Alibakhshi**

### **Project Manager, Board Member**

- Co-founder
- Ph.D. Civil Engineer
- Concrete & Structural Expert
- 23 years Experiences



## **Mohsen Faramini**

### **Factory Manager- Alborz Factory**

- Mechanical Engineer
- Production Expert
- Factory& Site Manager
- More than 35 years Experiences

# Our Dewatering & Tailing History

Considering the location of the most important mineral reserves of Iran and most countries with high mineral reserves, it is located in dry and low water desert areas, which is actually one of the most important threats to the development of mineral and base metal industries.

Due to the above reasons, large water recovery and tailing management projects in the mining industry are at the top of development projects in large and small mining companies in the world.

As an engineering company, Min-Tec started its work in the field of designing and manufacturing water recovery and tailings management equipment from the CHEHEL KOREH Copper Plant project and in the phase 2 project of Gol-Gohar tailings dewatering as one of the main contractors for the supply, construction and installation of equipment. Along with Moshiran company, as an EPC contractor, We experienced the first project in the big business.



GOLGOHAR DEWATERING & TAILING MANAGEMENT PROJECT Phase2

# Our Services

This company has put providing a set of engineering, supply, construction and installation services as a short-term goal and creating the necessary structure and mechanism for the implementation of water and waste management projects as a medium-term goal in its development strategy.

The capabilities and short-term services that can be provided at the moment are as follows:



- 1 Engineering and design services:**  
The engineering design services of this company include conceptual and feasibility design, basic and detailed design development in the disciplines of mechanics, process, civil and structure and electricity, instrumentation and automation.
- 2 Supply of dewatering equipment:**  
Design and manufacture of Agitator equipment, Flocculent and Anti-scalant Chemical Package preparation and injection system, Thickener and clarifier, cake and tailings transfer system
- 3 Installation , Erection and commissioning**  
including material transfer systems, filters, mixers, thickeners and metal structures, automation and electrical implementation, piping implementation as well as participation in commissioning operations and hot and cold tests.

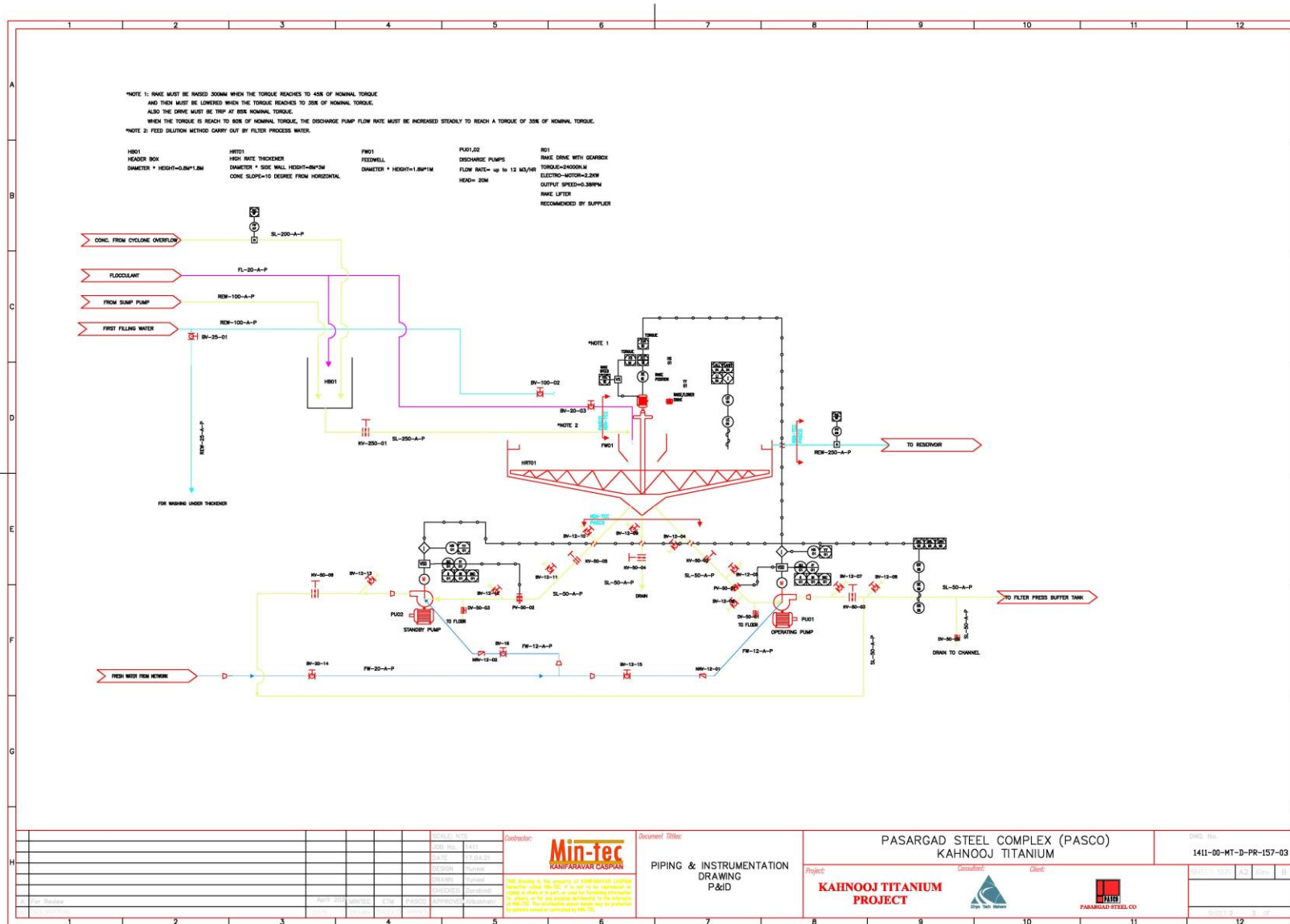
## 1 Engineering Services



### Process Engineering

- Designing and Performing sedimentation and dewatering laboratory tests
- Conceptual design and preparation of the Dewatering circuit
- Performing mass and energy balance
- Calculations and determining the type and amount of flocculent consumption
- Determining the size and specifications of Equipment Sizing
- Preparation of PFD, P&ID
- Compilation of control philosophy

# Our Services/ Engineering Services



**Piping & Instrumentation  
Diagram**



DATE	BY	CHECKED	APPROVED

Contractor: **Min-tec**  
KANI FARAVAR CASPIAN

Document Title: **PIPING & INSTRUMENTATION DRAWING P&ID**

Project: **PASARGAD STEEL COMPLEX (PASCO) KAHNOOJ TITANIUM PROJECT**

Client: **KAHNOOJ TITANIUM PROJECT**

Document No.: **1411-00-MT-D-PR-157-03**

Scale: **1:1**

Sheet No.: **01** of **01**





## 1 Engineering Services

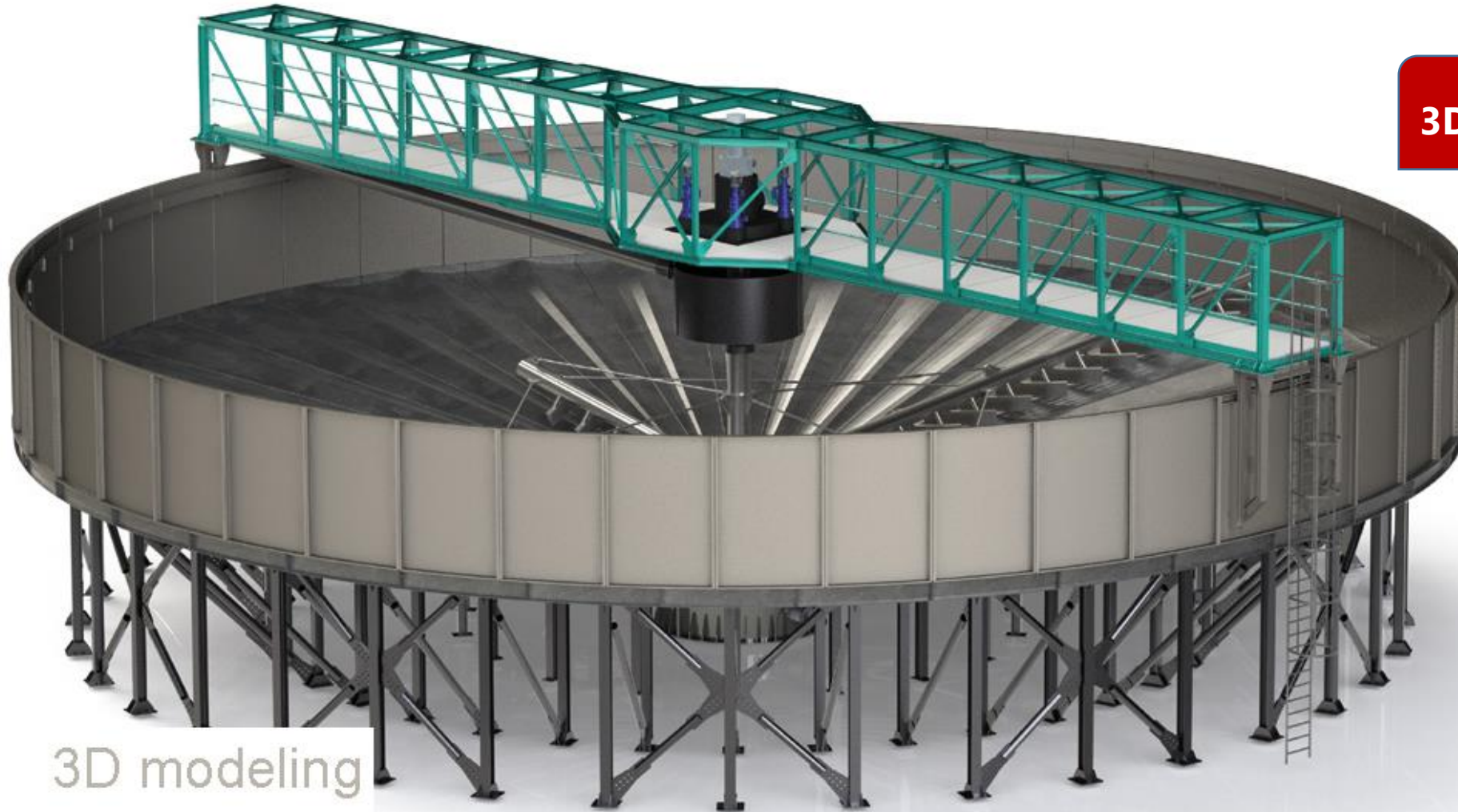


### **Mechanical & Piping Engineering**

- Thickener 3D design and modeling with Inventor 2020 software
- Preparation of workshop and executive construction plans by Sheet Metal method
- Designing and carrying out stress analysis calculations using the finite element method in the design of the shaft (Torque Tube) and also the rack structure
- Determining the size and specifications & Sizing equipment
- Preparation of PFD, P&ID
- Compilation of control philosophy

# Our Services/ Engineering Services

3D Modeling



3D modeling

درایو استیشن



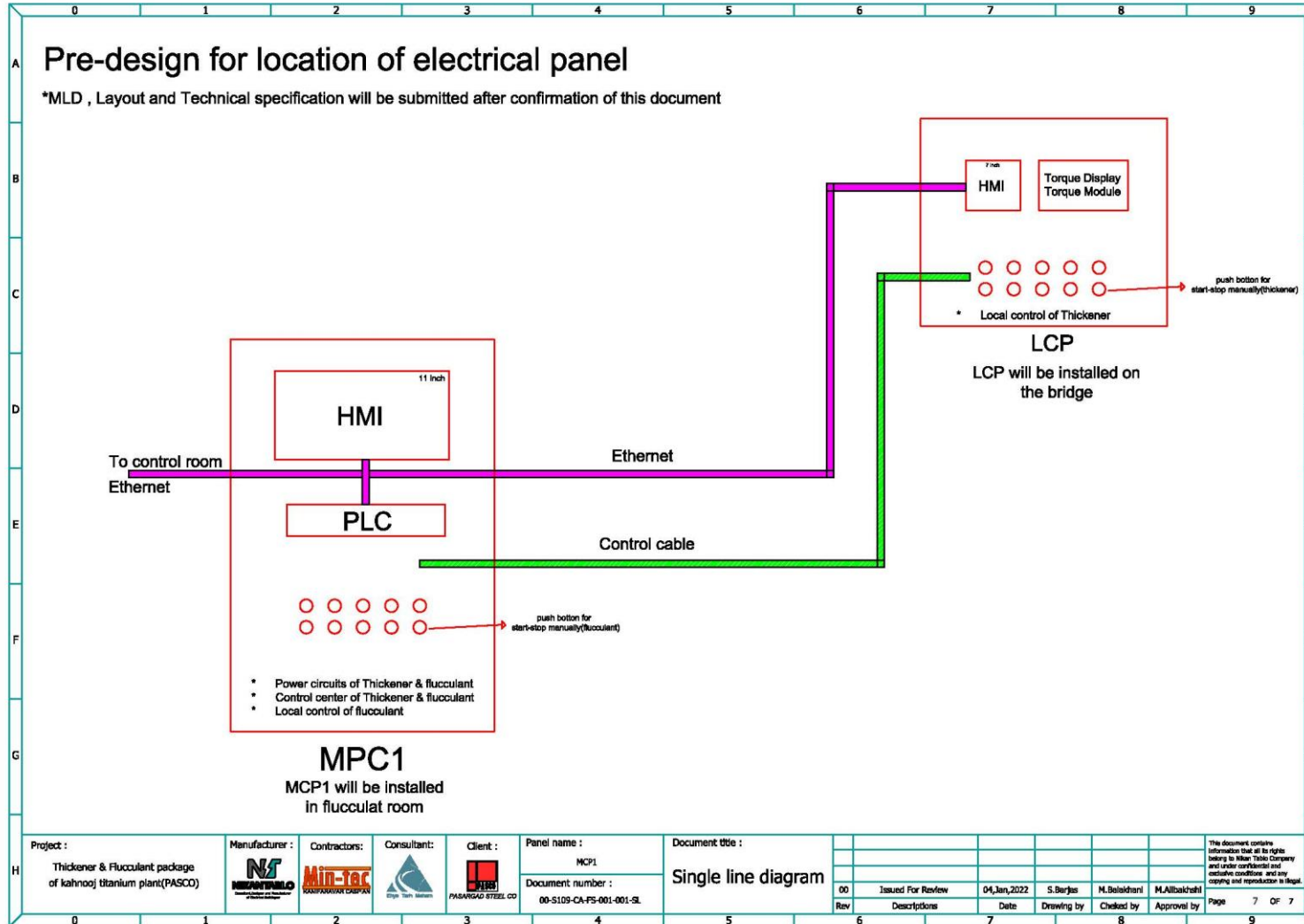
## 1 Engineering Services



### **Electrical, I&C and Automation Engineering**

- Detailed electrical and automation design
- Preparation of Philosophy Control & Logic diagram
- Preparation of executive plans for electrical and automation panels
- PLC programming
- Preparation of data list of instruments and control valves

# Our Services/ Engineering Services



**Control Architectural**



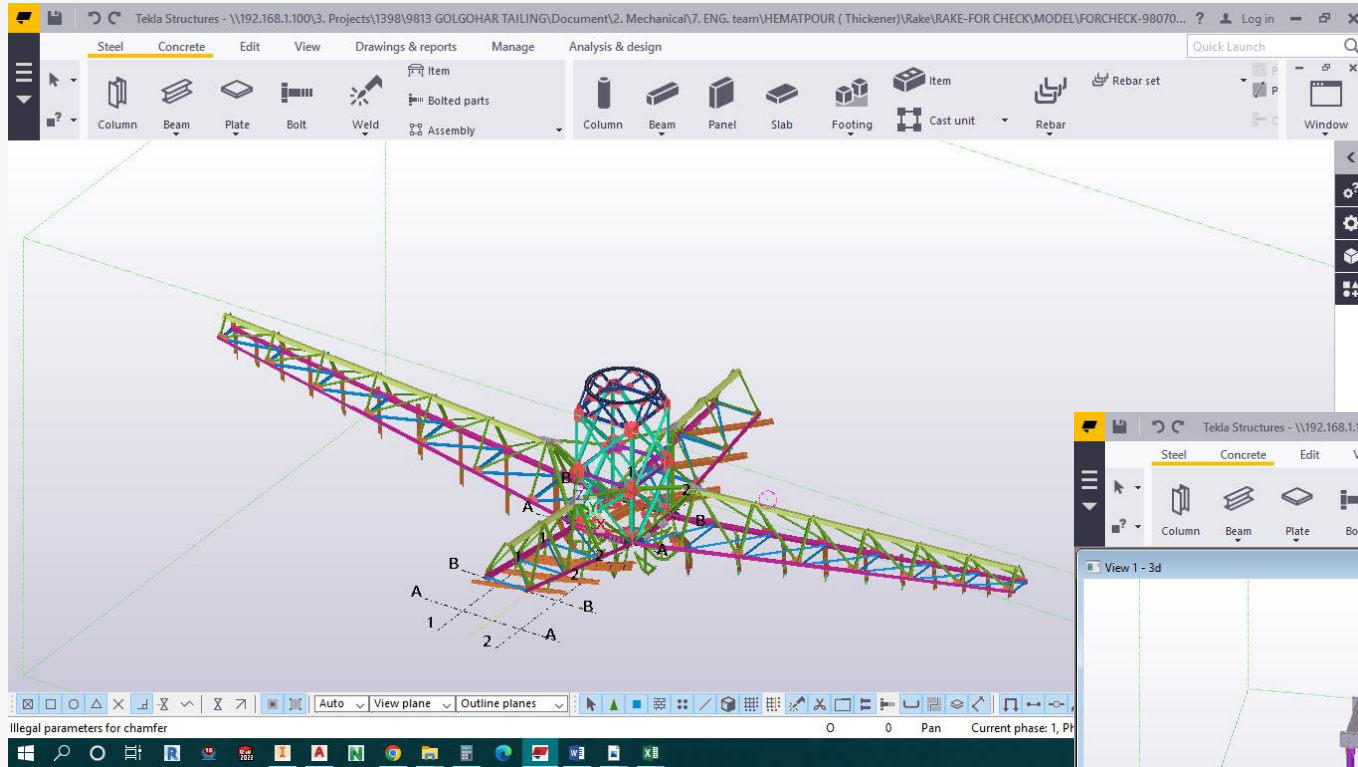
## 1 Engineering Services



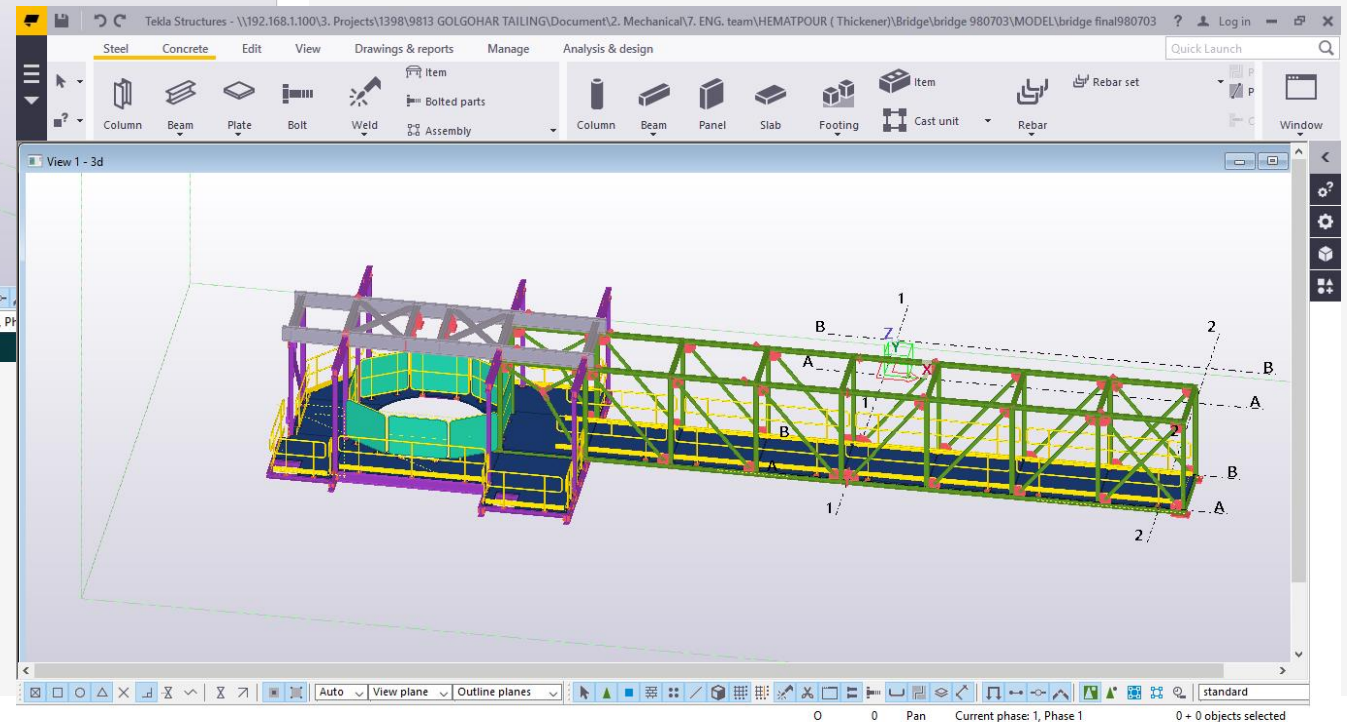
### Civil & Structure Engineering Design

- structural calculations of civil foundations and structures
- Preparation of executive plans of Civil Foundation and Thickener Tank
- Preparation of execution plans and modeling of TEKLA Structure
- Preparation of accounting books based on SAP

# Our Services/ Engineering Services



**Structural Design**



### 2 Dewatering Equipment Supply



- Agitator tank equipment: designed and manufactured by Min-Tec
- Filter press: exclusive representative of CHOQUENET France with more than 100 years of experience
- Conveyor belt and cake transfer system: designed and manufactured by Min-Tec
- Thickener and clarifier: designed and manufactured by Min-Tec or in partnership with MIP South Africa as an exclusive agent.
- Flocculant preparation and Dosing package: designed and manufactured by Min-Tec
- Slurry pumps: Italy Pemo Pump Company
- Belt feeder discharge filter press: design and manufacture by Min-Tec company or participation in supply with Spain's VIDMAR GROUP as an exclusive representative.

# Our Services/ Equipment Supply

## 2 Dewatering Equipment Supply



Dewatering Agitator  
75 Kw  
Tank Dia. 9.7 Height: 10.2





تامین و ساخت تجهیزات آبیاری

2

۱. پکیج کاملا اتوماتیک آماده سازی فلوکولانت

۲. پکیج آماده سازی مواد شیمیایی Reagent



پکیج مواد شیمیایی تیکنر ۲۵ متری فولاد  
پاسارگاد  
تا ۱۴ کیلو گرم آماده سازی پودر فلوکولانت در  
ساعت



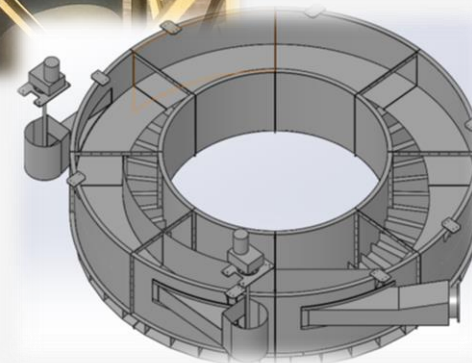
# Our Services/ Equipment Supply

**Min-tec**  
Best Solution, Most Efficiency

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تامین و ساخت تجهیزات آبیاری

2



طراحی و ساخت تیکنر ، سیستم رک ، فیدول به روش CFD

# Our Services/ Equipment Supply

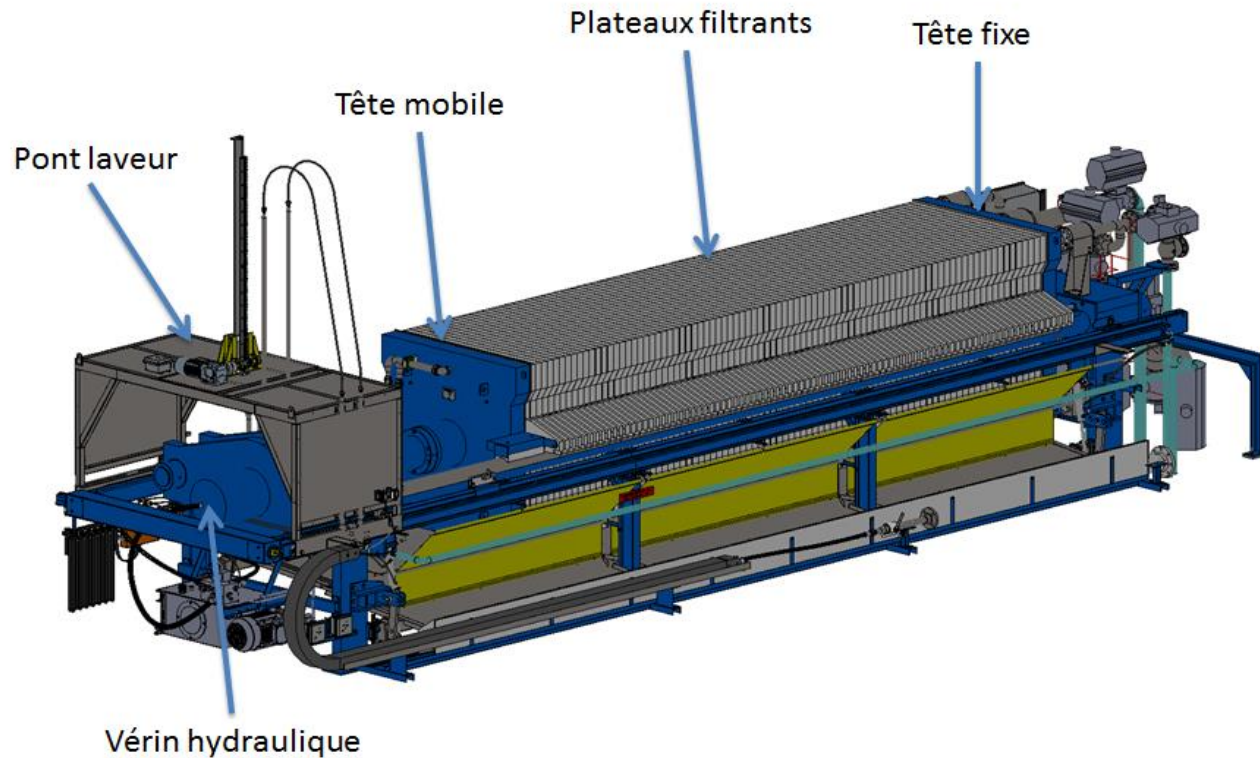
**Min-tec**  
Best Solution, Most Efficiency

شرکت کانی فرآورد کاسپین

تامین و ساخت تجهیزات آبگیری

2

۱. تامین فیلتر پرس از شرکت CHOQUENET فرانسه با  
قدمتی نزدیک به ۱۰۰ سال



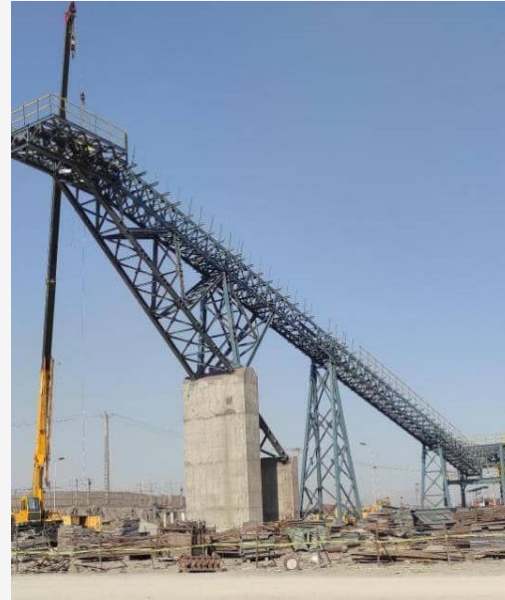
طراحی و ساخت فیلتر پرس با اندازه صفحه تا ۲۰۰۰X۲۰۰۰



## PEMO PUMPS

- با توجه به محدودیت های بوجود آمده برای تامین پمپهای اسلاری و شیمیایی از برندهای WEIR WARMANN, SVEDALA, METSO و ، در سال ۲۰۱۱ مینتک در جستجوی یافتن شریک مطمئن برای پر کردن این خلاء با شرکت PEMO ایتالیا تفاهم نامه همکاری امضاء و به عنوان نماینده انحصاری این شرکت در ایران معرفی شد.
- این شرکت از سال ۱۹۴۷ میلادی در ایتالیا مشغول تولید پمپهای اسلاری و شیمیایی سانتر فیوژ میباشد و بازار هدف این شرکت عمدتاً اروپا و کشورهای آمریکای لاتین میباشد.





تامین و ساخت تجهیزات آگیری

2

۱. بلت فیدر جمع آوری کیک باطله از فیلتر پرس

۲ نوار انتقال و بارگیری کیک باطله



# تجربیات ما / Our References

ردیف	موضوع پروژه	سال اجرا	کارفرما	وضعیت
۱	طراحی و ساخت سیستم آماده سازی و تزریق فلوکولانت تیکنر باطله - مجتمع مس سونگون	۱۳۹۱	موسسه امین	در حال بهره برداری
۲	طراحی و ساخت سیستم آماده سازی و تزریق فلوکولانت تیکنر کنسانتره- مجتمع مس سونگون	۱۳۹۱	موسسه امین	در حال بهره برداری
۳	تامین فیلتر پرس مس چهل کوره - زاهدان	۱۳۹۲	طرح جامع آب مس	در حال بهره برداری
۶	تامین فلوکولانت و تیکنر مس چهل کوره - زاهدان با شرکت MIP قطر ۲۵ متر	۱۳۹۲	طرح جامع آب مس	در حال بهره برداری
۷	طراحی و ساخت سیستم آماده سازی و تزریق فلوکولانت Past تیکنر مجتمع مس میدوک	۱۳۹۲	طرح جامع آب مس	در حال بهره برداری
۸	تیکنر مرکزی گل گهر ( بخش ساخت داخل شرکت MIP ) قطر ۳۲ متر	۱۳۹۷	سایبر بین الملل	در حال بهره برداری
۹	تیکنر آگیری باطله فاز ۲ گل گهر ( بخش ساخت داخل شرکت MIP ) قطر ۴۵ متر	۱۴۰۰	مشیران	در حال بهره برداری
۱۰	طراحی و ساخت تیکنر آگیری کنسانتره + پکیج فلوکولانت مدار بازیابی قطر ۱۰ متر	۱۴۰۰	فولاد پاسارگاد	در حال بهره برداری
۱۱	طراحی و ساخت تیکنر ۲۵ متری + پکیج فلوکولانت	۱۴۰۰	فولاد پاسارگاد	تحویل شد
۱۲	طراحی و ساخت درایو کلاریفایر ۵۰ متری	۱۴۰۱	فولاد پاسارگاد	در حال انجام
۱۳	۲ مجموعه تیکنر + پکیج فلوکولانت گهر زمین قطر ۳۸ متر با همکاری MIP	۱۴۰۱	آسفالت توس	تحویل شد
۱۴	طراحی و ساخت بلت فیدر تخلیه فیلتر پرس ۷ دستگاه پروژه گهر زمین	۱۴۰۲	آسفالت توس	در حال انجام
۱۵	درایو تیکنر کنسانتره فاز ۲ سونگون تیکنر جهت جایگزینی با درایو تیکنر FLS	۱۴۰۲	شرکت ملی مس	در حال انجام
۱۶	طراحی و ساخت سیستم آماده سازی و تزریق فلوکولانت Past تیکنر مجتمع مس دره زار	۱۴۰۲	طرح جامع آب مس	در حال انجام
۱۷	طراحی و ساخت درایو و پل تیکنر سیستم بازیابی آب شرکت Arab Potash (APC) با همکاری KENETIC اردن	۱۴۰۲	KENETIC	تحویل شد

## Our Contact Details:



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