

## Engineering is our Passion

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### Our Story



- SVS Consultancy Engineering is established officially in 2019 based on its founders experience more than 20 years in plant design.
- SVS Consultancy Engineering aims to provide complete engineering and consultancy services to his partners from all around the word
- SVS Consultancy Engineering has ability to utilize latest versions of technological design and detailing instruments. SVS has full integration to all international design codes in force.

### Founders



### Serdar MESUTGİL



Structural Eng. (M.Sc)

### **Engineering Manager / Experienced Team Leader**

More than 20 years experience in the design of industrial structures

15 years experience in planning and project management

Expertise in cement plants, power plants and mining facilities

Good skills in coordination of different disciplines

### Founders



### Volkan AYDOĞAN



Structural Eng. (M.Sc)

#### **Experienced Design Chief & Project Manager.**

Have 20 years experience in the industrial plant design - focusing mining and power plants.

Completed considerable no of large scale engineering projects with international partners/clients

Manage and coordinate multidiscipline

Experience in planning and execution of projects, supervision of project construction development, program scheduling, and cost estimate &control

### Founders



### Selim ÖZTÜRK



Structural Eng. (M.Sc)

### Experienced Design Leader Project engineering manager.

20 years experience in Design & Consultancy of industrial plants and heavy construction projects

@ South America, Europe, North Africa, Asia.

Focus on structures and process systems at cement facilities, chemical plants, power plants, etc

Good understanding of scheduling, cost estimation, procurement and project controls disciplines

### Field of Activities



### **Engineering**

- Feasibility & Cost Est.
- Layout Studies
- Basic Design Coor.
- Detail Engineering
  - Mechanical
  - O Structural /Civil
  - Architectural
  - Piping

### Consultancy

- Owner's Engineering
- Value Engineering
- O Peer Review
- Assessment

### **Engineering Management**

- Multidiscipline integration
- Design Scheduling
- Quality Assurance

## Field of Expertise



#### **Industrial Plants**

- Cement Plants
- O Power Plants
- Mining Plants
- Petro Chemical Plants

#### **Architectural**

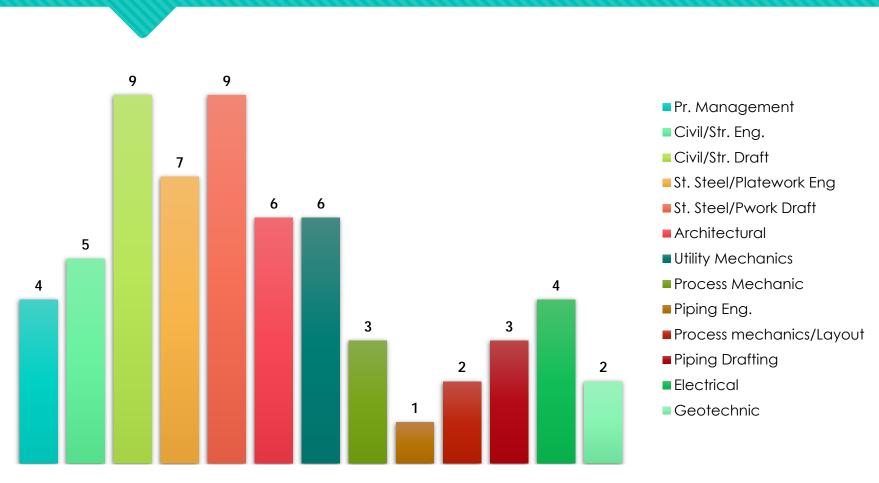
- Large Scale Public Facilities
- Large Scale Hotel & Residential Complex

### **Special Topic**

- Dynamic Analysis of Vibrating Equipments
- Long Span / High Rise Structures Design
- Composite, Post Tension Structures
- Hot Gas ducting

### **Current ManPower**





## Experience



- Founders have gained great experience on Industrial Plant design during their professional life
- O Founders have completed several Industrial Plant projects having different sector, investment amount, scope of work, contract type, location.
- As a summary;

## Experience

(personal references of founders)



industry	# of Project (*)
Architectural	7
Cement Plant	12
Industrial Plant	3
Mining Plant	8
Petro&Chemical	2
Power Plant	6
Grand Total	38
(*) number of project managed by founders during	their professional life

industry	$\Sigma$ of engineering bugdet (*)
Architectural	\$3,290,000.00
Cement Plant	\$6,630,000.00
Industrial Plant	\$3,400,000.00
Mining Plant	\$21,415,000.00
Petro&Chemical	\$5,960,000.00
Power Plant	\$6,804,000.00
Grand Total	\$47,499,000.00
(*) engineering budget managed by foun	ders during their professional life

Sum of engineering manhour(*)	Basic Design			Г	Detail Design				Consultancy	Grand Total
industry		Architectural	Structural (Concrete)	Structural (Steel)	Civil/ Infrastructure	Electrical	Mechanical	Piping		
Architectural		16,500	25,500	65,000	7,000	13,500	13,500			141,000
Cement Plant		2,500	138,500	108,500	5,000		10,000	5,000		269,500
Industrial Plant		12,500	65,000	20,000	2,500	5,000	12,500			117,500
Mining Plant	70,000	6,000	40,000	35,250	16,000	7,500	50,250	12,000	60,000	297,000
Petro&Chemical	24,000	3,000	30,000	7,000	10,000					74,000
Power Plant			207,000	36,000						243,000
Grand Total	94,000	40,500	506,000	271,750	40,500	26,000	86,250	17,000	60,000	1,142,000



#### **ENGINEERING**

SVS Consultancy Engineering has reached totally 55.000 manhour of Engineering service with 73 staff in 12 months since establishment.

#### Fields of Services

- O Power Plants
- Cement Plants
- O Mining Plants
- Steel Plants
- Architectural Complexes
- Oil & Gas Plants
- Selected References;



#### O Power Plants

Project Name	Project Location	industry	Contract type	Client origin	Client	Services	Engineering Manhour	Status / Sample Documents
Tufanbeyli 450 MW Thermal Power Plant Chemical Warehouse	Turkey	Power	Investor	turkey	EnerjiSa	Detail Design:  * Architectural,  * Structural,  * Utility Mechanic  * Electrical  *Firefighting	800	Completed
Noor Energy 700 MW CSP + 250 MW PV Hybrid Project,	Dubai		Contrac tor	China	CSCEC	Detail Design: * Geotechnical * Structural Optimization * Structural Detailing	100	Complleted
Tufanbeyli 450 MW Thermal Power Plant Warehouse No: 4	Turkey	Power	Investor	Turkey	EnerjiSa	Detail Design:  * Architectural,  * Structural,  * Utility Mechanic  * Electrical  * Firefighting	850	Completed
ZETES III 2x700 MW Thermal Power Plant Ash Stokyard	Turkey	Power	Investor	Turkey	Eren Enerji	Detail Design:  Layout Study  Structural Design  Drainage Design	450	Completed



### O Power Plants (continued)

Project Name	Project Location	industry	Contract type	Client origin	Client	Services	Engineering Manhour	Status / Sample Documents	Completion Date
Kangal Thermal Power Plant Feasibility Study for Magnesium Based Wet Desox System	Turkey	Power	EPC	Poland	SBB Energy	Feasibility Study for FGD  * Layout Study  * Architectural,  * Structural,  * Piping  * Packing Plant Process  Design  * PFD for Material Handling  System  *CAPEX Study	4,500	Completed	-
Arkun Hydropower Plant Multifunction Complex	Turkey	Power Plant	Investo r	Turkey	EnerjiSa	Detail Design: * Structural,	400	Completed	-
Chiahui IPP Phase II Expansion project, Main Piperack	Taiwan	Power Plant		Italy <sup>′</sup>	Prokon Mott Macdonald	Detail Design: * Structural,	1000	Completed	-



#### Cement Plants

Project Name	Project Location	industry	Contract type	Client origin	Client	Services	Engineering Manhour	Status / Sample Documents	Completion Date
Riobamba -2 Cement Plant Clinker & Additives Feeding Zone	Ecuador	Cemen t Plant	EPC		Pfeiffer	Detail Design of Clinker Feed Line:  * Mechanical Layout for Feeding Zone,  * Clinker Additive Bunkers Mechanical Design  * Clinker & Additives Conveyors Mechanical Design  * Structural Design for bunker supporting structure, Bucket elevator structure, Conveyors & Air slide bridges	4.300	Completed	-
Aslan Cement Plant New Grinding Zone	Turkey	Cemen t Plant	EPCM	Turkey	Prokon	Detail Design of Grinding Line:  * Mechanical Layout for Conveying System,  * Mechanical, Structural Design of Crusher Building  * Mechanical Design for Conveyors  * Structural Design for Conveyors  * Hot Gas Ducting Supporting system Design  * Dedusting system Mechanical design and ducting	8.200	Completed	-



Cement Plants (continued)

Project Name	Project Location	industry	Contract type	Client origin	Client	Services	Engineering Manhour	Status / Sample Documents	Completion Date
Uzbekistan Navoi Cement Plant – New Kiln Line	Uzbekistan	Cement Plant	EPC	Turkey	CETA	Detail Design:  * General Layout Study  * Mechanical Design Raw Material Feeding Clinker Cooler & Exhaust Gas System Exhaust Gas System, Cooling Tower, Kiln Filter, Preheater Maintenance Platforms, Hot Gaz Ducting & Comp. Air Sys  * Mechanical Details Conveyors (Chain, Belt) Pneumatic Systems Air slide, Feeders, Hoppers, Chutes  * Structural Design All Conveyors supporting structures All Hot gas supporting structures Raw meal Bin, Cooling Tower, Preheater Tower, Main Filter structure Kiln Piers & access platforms Clinker Cooler Building Cooler Filter,Fan & Stack foundations Substations	11.000	Ongoing	Feb' 20
Cyclon Platforms	Saudi Arabia	Cement Plant	Р	Germany	IKN	Detail Design of Cyclone Supporting Platform	300	Completed	-



### Mining Plants

Project Name	Project Location	Industry	Contract type	Client origin	Client	Services	Engineering Manhour	Status / Sample Documents	Completion Date
Gökırmak Copper Concentration Plant	Turkey	Mining	I	Turkey	ACACIA	Detail Design Process water system feed by TMF return water * Process water PFD - P&ID * Hydraulic Design (Pipe stress, Pump Selection) * Process Water Tank Design & Detailing as per API650. * Mechanical Layout for new PWS and existing Thickening Area * Structural Design for Thickening Area * 3D modelling & Piping detail engineering (Isometric, list, supports, etc)	600	Completed	-
Milas Feldspat Fine Grinding Plant	Turkey	Mining	I	Turkey	ESAN	Detail Design of New Grinding Unit  * PFD - P&ID, Equipment Selection  * Mechanical Layout for Grinding and Material Handling System  * Mechanical Detail design(Conveyors, Chutes, Bunkers, feeders, elevators)  * Structural detail design  - Steel structure design  - Mill block dynamic analysis & design  - equipment & access platform  * Electrical design (Single line diagram, power, lighting, earthing, etc.)	2,000	Completed	<u>-</u>



Mining Plants (Continued)

Project Name	Project Location	Industry	Contract type	Client origin	Client	Services	Engineering Manhour	Status / Sample Documents	Completion Date
Siirt Madenköy Copper Concentration Plant	Turkey	Mining	I	Turkey		Detail Design of New Grinding Unit  * PFD - P&ID, Equipment Selection  * Mechanical Layout for Grinding and Material Handling System  * Mechanical Detail design(Conveyors, Chutes, Bunkers, feeders, elevators)  * Structural detail design  - Steel structure design  - Mill block dynamic analysis & design  - equipment & access platform  * Piping Design Shydraulic Analysis, Piping layout, isometric, etc.)	1000	Ongoing	Feb' 19



### Architectural Complex

Project Name	Project Location	industry	Contract type	Client origin	Client	Services	Engineering Manhour	Status / Sample Documents	Completion Date
Turkish Armed Forces Common Headquarter, Conference Hall	Turkey	Architectural	Е	Turkey	TOKİ	Detail Design of 50.000 m2 Conference Hall:  * Structural Architectural Coordination,  * Reinforced Concrete Design and Detailing  * Post-tension Design for terrace console (~13 m span )  * Design and detailing of Steel Roof with 55 m span	5.600	Completed	-
Roketsan Lalahan Warehouse and Workshop	Turkey	Architectural	EPC	Turkey	ABT	Detail Design of Workshop & Warehouse:  * Structural Architectural Coordination,  * Reinforced Concrete & Cold form  Steel Design and Detailing  * Utility Mechanic Design  * Electrical Design	1,250	Ongoing	Oct'19



### Steel Plants

Project Name	Project Location	industry	Contract type	Client origin	Client	Services	Engineering Manhour	Status / Sample Documents	Completion Date
Riva Industries Steel Plant		Steel Plant		,	Danieli Prokon	Detail Design  * Coil Conveyor  * Coil Finishing End Area  * Electric Arc Furnace Platforms  * Laddle Furnace Platforms	1.800	Completed	-
Kroman Steel Plant	,	Steel Plant	E	Turkey	Prokon	Detail Design * Steel Main Hall Building	2.400	Completed	-



#### Oil & Gas Plants

Project Name	Project Location	industry	Contract type	Client origin	Client	Services	Engineering Manhour	Status / Sample Documents	Completion Date
Steel Shed & Guard Tower	Iraq	Oil&Gas	I	USA	Chevron	Detail Design; * Structural,	400	Completed	-
POAŞ Derince Madeni Yağ Fabrikası, FO-PO Rehabilitasyon Projesi	Turkey	Oil&Gas	Е	Turkey	POAŞ	Site Investigation Soil Investigation Tank foundation Assessment	1,072	Completed	-
Asfalt Plent Tower	Turkey	Oil&Gas	Р	,	Marini Makina	Detail Design; * Structural,	400	Completed	-
Star Rafinery Subcontractor Area Truck Scale	Turkey	Oil&Gas	EPC	Turkey	ABT	Detail Design;  * Layout  * Structural  * Infrastructure  * Electrical	400	Completed	-

# Reference Projects SVS (Consultancy)



#### CONSULTANCY

SVS Consultancy Engineering has reached totally 6.000 manhour of Consultancy service with 16 staff in 12 months since establishment.

#### Selected References

- KEF Ore preparation and Concentration Plant Assessment Study, YILMADEN, Turkey
- Tufanbeyli Thermal Power Plant, Cafeteria Building Structural Design Review, ENERJISA, Turkey
- Tufanbeyli Thermal Power Plant, Flue Gas Duct System Supporting Structure Assessment Study, ENERJISA, Turkey
- Solar Power Plant, Site Facilities General Layout and Conceptual Philosophy Report, CSCEC, Dubai
- NE1-700 MW CSP + 250 MW PV Hybrid Project, Receiver Tower Shaft Design and Site Condition Evaluation, CSCEC, Dubai



- American Concrete Institute Codes and Regulations (ACI)
  - i.e. ACI 318: Building Code Requirements for Structural Concrete
    - ACI 307: Design and Construction of Reinforced Concrete Chimneys
    - ACI 313: Standard Practice for Design and Construction of Concrete Silos and Stacking Tubes for Storing Granular Materials
    - ACI 349: Code Requirements for Nuclear Safety Related Concrete Structures
    - ACI 350: Environmental Engineering Concrete Structures
- American Institute of Steel Construction Codes and Regulations (AISC)
  - i.e. ANSI/AISC 360: Specification for Structural Steel Buildings
    - ANSI/AISC 341: Seismic Provisions for Steel Buildings
    - ANSI/AISC N690: Specifications for Safety Related Steel Structures for Nuclear Bolts
- American Society of Civil Engineers Codes and Regulations (ASCE)
  - i.e. ASCE 7-16: Minimum Design Loads and Associated Criteria for Buildings and Other Structures
- American Society of Mechanical Engineers Codes and Regulations (ASME)
  - i.e. ASME B31.3-2002:Process Piping



- American Society for Testing and Materials Codes and Regulations
- International Code Council
  - i.e. IBC 2015: International Building Code
    UBC 97: Uniform Building Code
- American Petroleum Institute Codes and Regulations
  - i.e. API 650: welded Tanks for Oil Storage
     API 2610: Design, Construction, Operation, Maintenance, and Inspection of Terminal & Tank Facilities
- Federal Emergency Management Agency (FEMA) Codes and Regulations



- DIN (German Institute for standards)Codes and Regulations
  - i.e. DIN 18800: Structural Steellworks
- Eurocodes
  - i.e. EC 0: Basis of Structural Design
    - EC 1: Actions on Structures
    - EC 2: Design of Concrete Structures
    - EC 3: Design of Steel Structures
    - EC 4: Design of Composite Steel and Concrete Structures
    - EC 7: Geotechnical Design
- British Standards and Codes
  - i.e. BS 8110: Structural Use of Concrete
    BS 5950: Structural Use of Steel
- Turkish Standards and Codes
- Algerian Codes and Standards
  - i.e. CCM 97: Règles de conception et de calcul des structures en acier\_DTR BC 2.44 CCM 97
     CBA 93: Règles de conception et de calcul des structures en béton armé\_C.B.A.93
     RPA 99: Règles de parasismiques Algeriennes



- Chinese Codes and Regulations
  - i.e. GB 50011: Code for Seismic Design of Buildings
    - GB 50007: Code for Design of Building Foundations
    - GB 50009: Load Code for the Design of Building Structures
- Mexican Codes and Regulations
  - i.e. CFE SISMO: Manual De Diseño De Obras Civiles Diseño Por Sismo
    - CFE Viento: Manual De Diseño De Obras Civiles Diseño Por Viento
- Russian Codes and Regulations
  - i.e. SNiP 2.01.07-85 :Loads and Effects
    - SNIP 2.03.01-84: Concrete Structures
    - SNIP 2-23-81 : Steel structures\_eng
    - SNIP 2.09.02-85: Industrial Buildings
    - SNiP 2.09.03-85: Structures of Industrial Enterpreises
    - SNIP 2.11.01-85: Storage Buildings -1998