



# AWRING

## MAAD SANAT

INDUSTRIAL EQUIPMENT

ENGINEERING & MANUFACTURING  
OIL, GAS, PETROCHEMICAL, POWER PLANT,  
STEEL & MINE INDUSTRIES

GENERAL CATALOG



انجمن سازندگان تجهیزات صنعتی ایران

پارسیس  
منطقه  
فناوری  
پارس

**PARDIS**  
Technology Park  
IRAN SILICON VALLEY

## About Us

Awning Maad Sanat Company is a knowledge-based company that was founded in 2010 with the objective of producing, developing, and upgrading the functional equipment required by the industrial sector, particularly in the oil and gas and petrochemical industries. The company prides itself on relying on the abilities and expertise of a group of academic experts and elites.

Awning Maad Sanat relies on expert power and believes in strategic thinking when adopting strategic planning principles to design, produce, and

implement its own projects. The company aims to produce and reverse engineer required parts and ensure optimal implementation of industrial projects in the fields of oil, gas, and petrochemical. This is done with a focus on quality, standardization, safety, and the final price of the products. Over the past decade, the company has taken significant steps in this direction. Additionally, teamwork, partnership, and cooperation with other specialized industrial production units are accepted as part of the company's work and production policy.



### VISION

The engineering group of Awning Maad Sanat is committed to providing innovative and optimal solutions in the design, production, development, and enhancement of its products in the field of oil, gas, and petrochemicals. The company relies on the strength of engineering expertise and the utilization of cutting-edge technologies to ensure the highest standards and quality of its products.

Therefore, the company focuses on enhancing the quality of its products by adhering to quality standards and improving product efficiency. It also considers innovative environmental standards to ensure the sustainability of its products. Ultimately, Awning Maad Sanat aims to satisfy customers and provide post-sales services related to product quality assurance. These objectives are diligently and sensitively pursued.

## Product List

### Packages and Processes Equipment

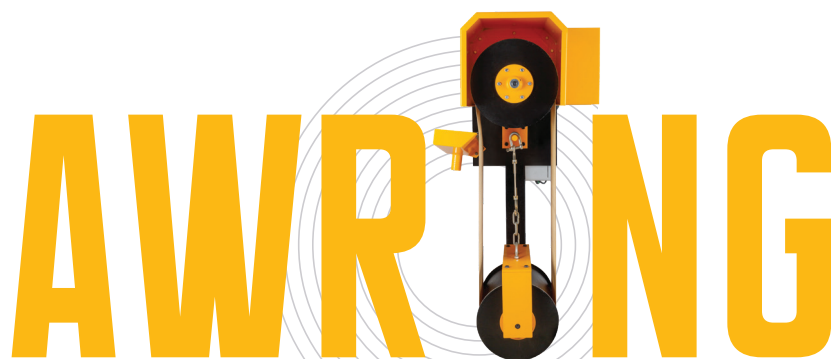
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ENGINEERING & MANUFACTURING OF INDUSTRIAL EQUIPMENT

## Oil Skimmer

Code: AMS-OS

Oil skimmers are simple, dependable, and effective machines used for removing oil, grease, and other hydrocarbons that float on the surface of water. They are commonly employed in situations where oil spills pose a threat to the environment, but they can also be utilized in various industrial operations.

### Choosing the Right Type of Oil Skimmer

Different types of Oil skimmers are available for different applications. Which one you choose depends on the recovery rate required, the thickness of the oil on the surface and the context of still or flowing water.

There are several types of industrial oil skimmers. Choosing one best suited for your application will maximize oil removal while minimizing capital outlay and skimmer operating costs.

### Types of Oil Skimmers

#### Belt Skimmers

Belts skimmers have a revolving strip, or belt, that rotates in a fixed path around a submerged pulley, continually picking up the floating surface oil as it makes contact.

#### BELT OIL SKIMMER

Model	Capacity	Belt (mm)	Dimension (mm)	Power (w)	Weight (Kg)	Material
AMS-OS/BLT-75	35-110	100	300 x 480 x 268	400	30	SS304
AMS-OS/BLT-125	70-220	150	377 x 608 x 380	400	45	SS304
AMS-OS/BLT-225	90-270	200	450 x 608 x 380	600	55	SS304
AMS-OS/BLT-275	140-340	300	800 x 775 x 524	900	90	SS304
AMS-OS/BLT-375	180-500	400	800 x 785 x 524	900	110	SS304

#### Disc Skimmers

Disc skimmers are fixed devices that work by submerging the lower edge of a revolving disc to collect the oil on the surface of the water.

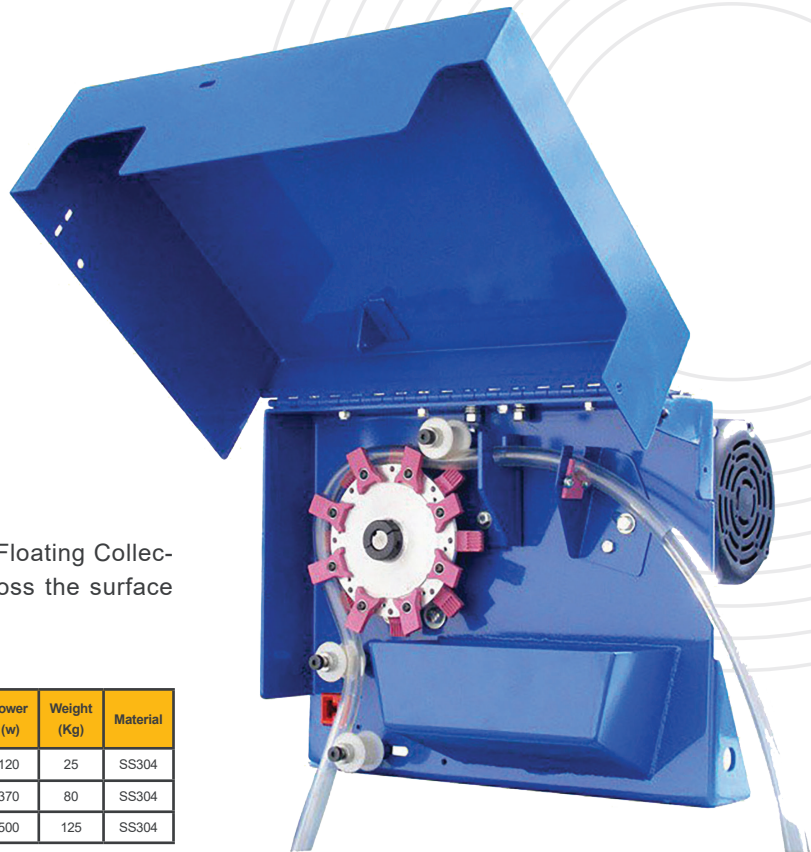
#### DISC OIL SKIMMER

Model	Capacity	Disc (mm)	Dimension (mm)	Power (w)	Weight (Kg)	Material
AMS-OS/DSC-10	5-20	200-500	500 x 500 x 380	100	35	SS304
AMS-OS/DSC-40	20-50	400-600	600 x 600 x 500	250	60	SS304
AMS-OS/DSC-100	70-150	500-800	800 x 800 x 670	500	95	SS304
AMS-OS/DSC-350	200-500	600-900	900 x 900 x 720	1000	140	SS304



# Oil Skimmer

Code: AMS-OS



### Tube Skimmers

Tube skimmers operate with a Free-Floating Collector Tube that continuously moves across the surface of water.

#### TUBE OIL SKIMMER

Model	Capacity (L/h)	Tube Length (M)	Tube Diameter (mm)	Power (w)	Weight (Kg)	Material
AMS-OS/TUB-200	10-200	Up to 20	16-22	120	25	SS304
AMS-OS/TUB-500	100-500	Up to 50	16-22	370	80	SS304
AMS-OS/TUB-800	300-800	Up to 100	16-22	500	125	SS304

### Floating Skimmers

Floating Skimmers is a device used to remove debris and contaminants from surface of a body of water. It is designed to float on waters surface and collect leaves, bugs, and other floating debris.

#### FLOATING SUCTION SKIMMER

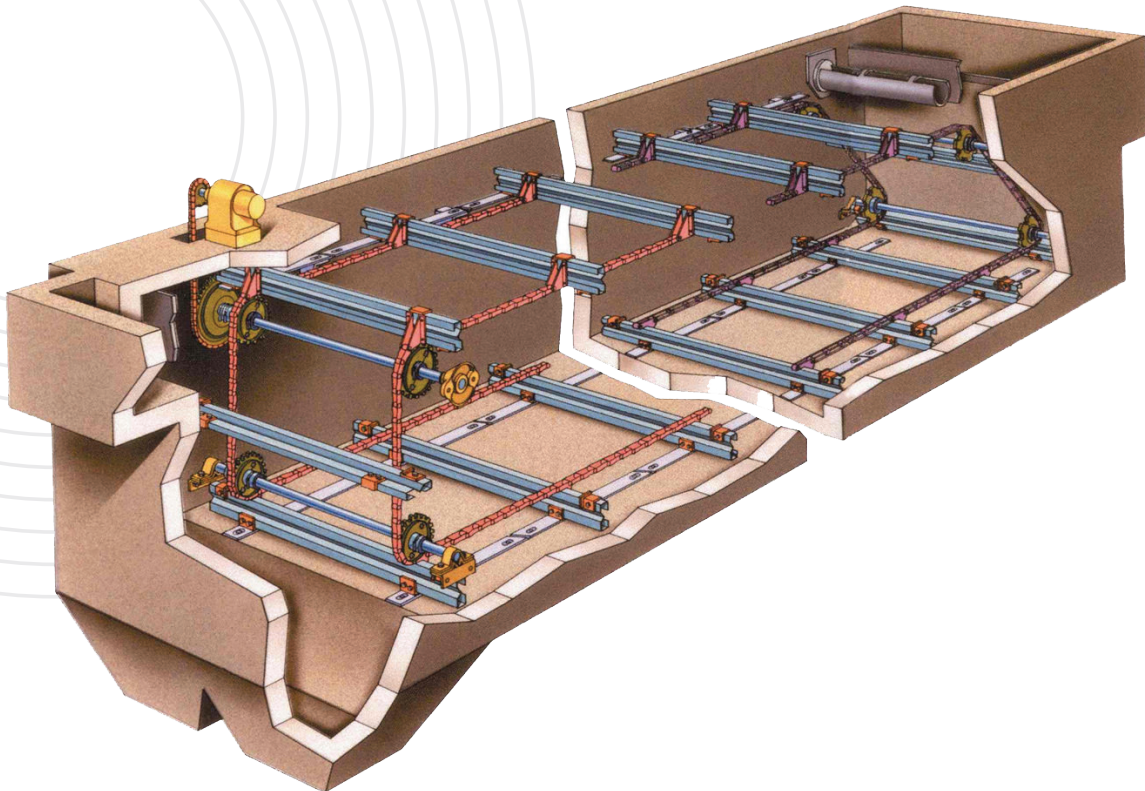
Model	Capacity	Suction Head	Absorption Device(mm)	Power (w)	Weight (Kg)	Material
AMS-OS/FLT-50	50	1	370 x 70 x 225	15	10	SS304
AMS-OS/FLT-80	80	1	370 x 70 x 225	15	15	SS304
AMS-OS/FLT-300	300	4	550 x 110 x 225	550	55	SS304



**AWRING MAAD SANAT** has extensive experience in Oil Skimmers. Our trained technical experts can assist you in customizing, supplying, and training your team.

## API Separator

Code: AMS-API



API oil-water separator is a device designed to separate gross amounts of oil and suspended solids from industrial wastewater produced at oil refineries, petrochemical plants, chemical plants, natural gas processing plants and other industrial oily water sources.

The API separator is normally the first, and arguably, most important wastewater treatment step in petroleum refineries.

The primary function of a properly designed API separator is to remove the majority of oil and suspended solids from refinery wastewater before it enters downstream wastewater treatment processes.

Key factors influencing API separator performance in-

clude water temperature, horizontal velocity, the density and size of the oil droplets, and the quantity and characteristics of the suspended solids.

### API Separator Main Parts

Separator Parts	Description	Material	Remark
Drive Unit	Electromotor-Gear	Acc. To Spec.	In hazardous area explosion
Flight	Flights work as surface scrapers and sweep the settled-down sludge from the bottom of the sump	Polymeric / S.S.	Size and length depend on sump dimensions
Chain & Sprockets	The transmitter of drive unit force to flights	Polymeric / S.S.	Size and length depend on total forces

The experts engineers of **AWRING MAAD SANAT** Company have the necessary capability and experience in the field of designing and manufacturing API package.

# Sampling Connection

Code: AMS-SMC



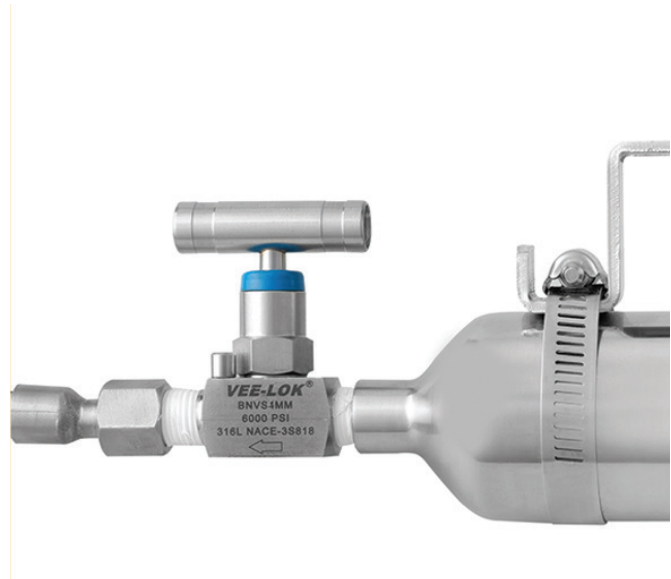
A Sampling Connection is a type of connection in piping that allows for the extraction of a representative sample of a fluid or gas from within a pipeline for the purpose of analysis or testing. It can be found in a variety of industries, including oil and gas, chemical processing, pharmaceuticals, and food and beverage production.

Overall, sampling connection systems play a critical role in ensuring the safety, quality, and efficiency of processes in a wide range of industries, including the oil and gas industry.

### Sampling Cylinder Technical Data

Model	Volume (Cm <sup>3</sup> )	Type	Material	Pressure Rating PSI (Bar)	Thread Size	Thread Type
AMS-SM-S-150	150	Single Ended / Double Ended	S.S 304L / S.S 316L	1,800 (124)	1/4"	NPT
AMS-SM-S-300	300					
AMS-SM-S-500	500					

**AWRING MAAD SANAT** design and manufacture sample connection system according to your requirements.



# Mechanical Interlock

Code: AMS-MIL



A Mechanical Interlock is an interlock that is physically connected to another device to prevent unintended actions. Most accidents in the process, oil, and gas industries are related to procedures that do not occur frequently but can have catastrophic effects when executed incorrectly. Start-ups, shutdowns, and handovers are all good examples of processes where a slight mistake or lack of concentration can lead to disastrous consequences. Mechanical Interlock systems ensure that valves are opened and closed in the correct order.

By using Mechanical Interlocks, you force operators to follow the correct valve opening and closing procedure and so create safer working environments. It also reduce costs by preventing product spills or losses due to incorrect changeovers.

**When you choose AWRING MAAD SANAT Mechanical Interlock, you eliminate human error.**

### Features

- Permanently Mounted on Valve
- Suitable for All Hand Wheel Operated Applications.
- No Grease or Other Lubrication Required
- Entrance Protection of Key Slots by Self-Sealing Weather Strips
- Single or Double Key Versions are Available.

### Mounting

- No Alterations to Host Valve Required
- Custom Made Bracket and Adaptor for Mounting to the Valve
- Original Nut is used if Possible
- Can be Mounted in a Live Plant
- Can be Mounted on Each Size of Valve, however to a Maximum Valve Spindle Size of 68 mm. Above That Size, a Customized Interlock is Provided.

### Keys

- Linear Keys
- Uniquely Coded
- Key Codes are Registered, for Easy Replacement and to Avoid use of Duplicate Keys
- Spare Keys Available
- Master Keys Available
- Colored Tag Marks
- Master Key & Master Key Cabinet
- Keys are Inserted Linearly and the Internal Locking Mechanism Consists only of Linear Moving Components.



# Flame Arrester

Code: AMS-FA



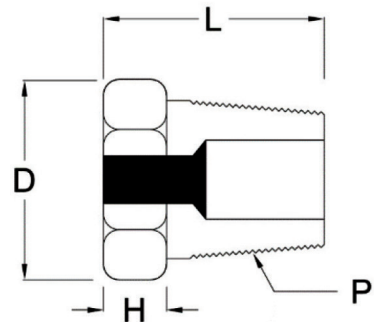
A flame Arrester, as the name suggests, is a device used to stop a flame from entering into an atmosphere where combustible gases may be present and prevent explosions. A standard flame arrester has many small tubes that help produce the required venting capacity while preventing the passage of flame. It works on the principle that the speed of the flame decreases with the reduction in the diameter of the pipe.

<b>Design Codes</b>	EN 16852 / ASTM F1273
<b>Design Temperature</b>	-10/+250°C for C.S., -120/+250°C for S.S.
<b>MESG</b>	IIA / IIB / IIC
<b>Factory Tested</b>	Dimensional, Hydrotest
<b>Sizes</b>	From 2" to 12"
<b>Connections</b>	Flanged ANSI / DIN / ASME B16.5

Model	DN (inch)	DN (mm)	A (mm)	B (mm)	C (mm)	D (mm)
AMS-FA-E020	2"	50	334	140	272	165
AMS-FA-E025	2 ½"	65	334	140	302	185
AMS-FA-E030	3"	80	354	150	333	200
AMS-FA-E040	4"	100	376	160	363	220
AMS-FA-E060	6"	150	478	210	475	285
AMS-FA-E080	8"	200	518	230	560	340
AMS-FA-E100	10"	250	550	250	646	405
AMS-FA-E120	12"	300	611	280	765	460

**AWRING MAAD SANAT** design and manufacture flame Arrester according to your requirements.

**Fusible Plug** Code: AMS-FUP



Fusible Plug is a threaded cylinder of metal, usually bronze, brass or gunmetal, with a tapered hole drilled completely through its length.

Fusible plugs serve as warning devices used in compressed air systems, wellheads, and steam systems. They are considered the last line of defense and are often employed to prevent catastrophic failures. It operates as a safety valve when dangerous temperatures, rather than dangerous pressures, are reached in a closed vessel.

The initial use of the fusible plug was as a safety precaution against low water levels in steam engine boilers, but later applications extended its use to other closed vessels, such as air conditioning systems and tanks for transporting corrosive or liquefied petroleum gases.

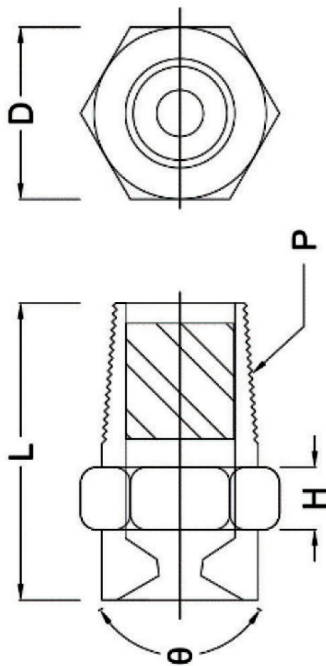
Model	Material	Threaded Size (P)	Dimensions (mm)		
			L	H	D (Hex.)
AMS-FUP-S2	Brass / Stainless Steel	¼" NPT	21	6	16
AMS-FUP-S3		⅜" NPT	23	8	18
AMS-FUP-S4		½" NPT	25	8	22
AMS-FUP-S6		¾" NPT	30	10	27

Set Point Stamp	Melting Point		Color Code
	°C	°F	
71	71	160	Black
100	100	212	Orange
124	124	255	Green
138	138	281	Red

**AWRING MAAD SANAT** Company has experience in the field of designing, manufacturing, and producing fusible plug. If you prioritize quality, standards, and safety, feel free to contact us.

# Spray Nozzle

Code: AMS-SNZ



A Spray Nozzle is a simple device used to break apart a fluid flow into a spray pattern. It is designed to control the direction or characteristics of a fluid flow, especially to increase velocity as it exits or enters an enclosed chamber or pipe.

It is often a pipe or tube with varying cross-sectional areas, and it can be used to direct or modify the flow of a fluid, whether liquid or gas. The nasal spray nozzle has the ability to spray at angles of 30 degrees, 60 degrees, 90 degrees, and 120 degrees, creating various patterns

such as a circle, ellipse, and square.

The hydraulic nozzle is a single-fluid type of spray nozzle that commonly sprays water or other liquids, such as chemicals or oil, depending on the application.

**AWRING MAAD SANAT design and manufacture Spray Nozzle system according to your requirements.**

Model	Material	TYPE	Thread Size (P)	K Factor	Approx. Orifice Dia. (mm)	Spray Angel (Θ)	Dimensions (mm)		
							L	H	D (Hex.)
AMS-SNZ-B4-K12	Brass/ Stainless Steel	Full Cone	1/2 NPT	12	5.2	30° 60° 90° 120°	38	8	22
AMS-SNZ-B4-K14				14	5.6				
AMS-SNZ-B4-K16				16	5.8				
AMS-SNZ-B6-K18	Brass/ Stainless Steel	Full Cone	3/4 NPT	18	6	30° 60° 90° 120°	44	10	27
AMS-SNZ-B6-K24				24	7.2				
AMS-SNZ-B6-K28				28	8				

## Maad-Wood

Code: AMS-MWD

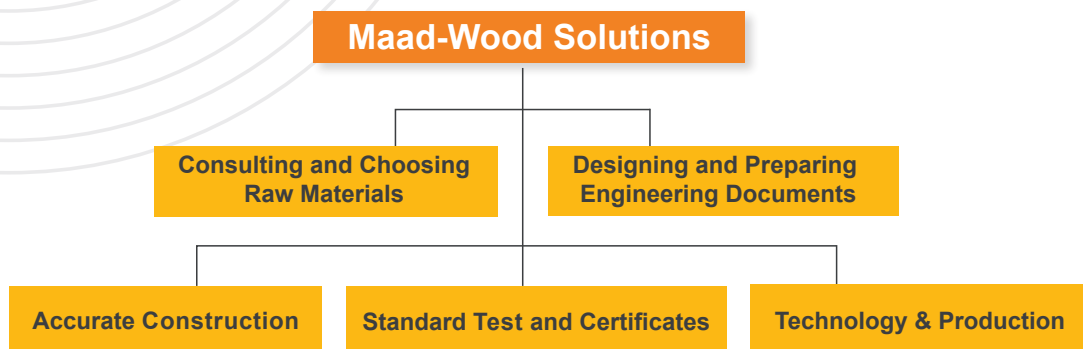
Maad Wood™ was introduced to the market in 2016 as a product of Awring Maad Sanat Company, resulting from a collaboration between our company's engineers and a group of wood specialists from the University of Tehran. All Maad Wood products are manufactured in accordance with international standards, and the company ensures the quality of its products by obtaining a quality assurance certificate for all of them.

Relying on its specialized knowledge and practical experience in the field of processed woods, Maad Wood is capable of providing customers with the highest level of

technical and engineering quality through consultations and services. Our processed wood, which meets industrial standards, serves as an excellent alternative to conventional wood in the market, offering both efficiency and durability.

Maad Wood Solutions

- Consultation and Raw Material Selection
- Design and Engineering Document Preparation
- Processing and Production
- Precision Manufacturing (Measuring, Precise Cutting, and Drilling)
- Services in Testing and Standard Certification

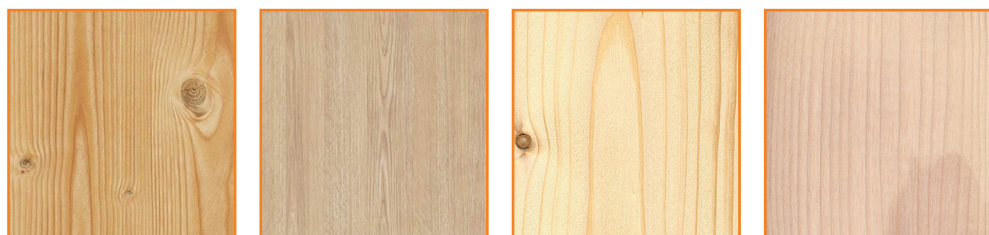


# Maad-Wood

Code: AMS-MWD



Common Name	(WENGE)	(TEAK)	(IROKO)	(BEECH)
Average Dried Weight	870 (KG/M3)	655 (KG/M3)	660 (KG/M3)	710 (KG/M3)
Shrinkage	12.9 (%)	7.2 (%)	8.8 (%)	17.3 (%)
Elastic Modulus	17.59 (GPA)	12.28 (GPA)	9.38 (GPA)	14.31 (GPA)
Modulus of Rupture	151.7 (MPA)	97.1 (MPA)	87.6 (MPA)	110.1 (MPA)
Crushing Strength	80.7 (MPA)	54.8 (MPA)	54 (MPA)	57 (MPA)
Janka Hardness	8600 (N)	4740 (N)	5610 (N)	6460 (N)



Common Name	(PINE)	(OAK)	(SPRUCE)	(ASH)
Average Dried Weight	475 (KG/M3)	775 (KG/M3)	435 (KG/M3)	675 (KG/M3)
Shrinkage	11.8 (%)	16.3 (%)	11.8 (%)	13.3 (%)
Elastic Modulus	10.81 (GPA)	12.15 (GPA)	10.76 (GPA)	12 (GPA)
Modulus of Rupture	64.4 (MPA)	102.3 (MPA)	66 (MPA)	103.5 (MPA)
Crushing Strength	38.4 (MPA)	50.8 (MPA)	33.6 (MPA)	51.1 (MPA)
Janka Hardness	2920 (N)	5990 (N)	2180 (N)	5870 (N)

## Project List

1. Design & Manufacturing of **Mechanical Interlocking System** | Jam Petrochemical Company
2. Design & Manufacturing of **API Separator Package** | Ilam Petrochemical Company
3. Design & Manufacturing of **Belt Oil Skimmer** | Abadan Oil Refinery Company
4. Design & Manufacturing of **Tube Oil Skimmer** | Gol-Gohar Iron & Steel Development Company (MSVCO)
5. Design & Manufacturing of **Flame Arrester** | Ilam Petrochemical Company (PIDEMCO)
6. Design & Manufacturing of Gauge Hatch | Ilam Petrochemical Company (PIDEMCO)
7. Design & Manufacturing of **Mechanical Interlocking System** | Ilam Petrochemical Company (GSS Co.)
8. Design & Fabrication of **Sampling System** | Ilam Petrochemical Company (NORAHAN SANAYEH Co.)
9. Design & Manufacturing of **Floating Oil Skimmer** | Shahid Hashemi Nezhad Gas Refinery Company
10. Design & Fabrication of **Wooden Blocks** (Hard Woods) | PIDEMCO
11. Design & Fabrication of **Wooden Blocks** (Hard Woods) | Kangan Petrochemical Company (TASHA SANAT Co)
12. Design & Fabrication of **Insulation Blocks** | Kangan Petrochemical Company (TASHA SANAT Co.)
13. Fabrication of **Coring Wooden Boxes** | National Iran Drilling Company
14. Design & Manufacturing of **Spray Nozzles** | Ilam Petrochemical Company
15. Design & Manufacturing of **Fusible Plugs** | Ilam Petrochemical Company
16. Design & Manufacturing of **Sampling Cylinder** | Saba Power Plant
17. Design & Manufacturing of **Sampling Cylinder** | Kermanshah Gas Company
18. Supply & Manufacturing of **Tube Oil Skimmer** (Spare Parts) | Khorasan Steel Complex
19. Supply & Manufacturing of **Tube Oil Skimmer** (Spare Parts) | Vian Steel Complex
20. Supply & Manufacturing of **Belt Oil Skimmer** (Spare Parts) | Jahan Ara Steel Company

## CUSTOMERS & PARTNERS



# Certificates



**گواهینامه عضویت**  
It is hereby certified that  
**Awring Maad Sanat**  
Has been accepted as members in the Iran Industrial  
Equipment Manufacturers Association (SATSA) on  
05.18.2022 with registration No. 234  
This Certification is Valid up to 05.16.2024



**بروانه فن مهندسی**  
شماره: ۱۷۷۲۶۱۶۸۷۵  
تاریخ: ۱۴۰۲/۰۹/۰۱



**بروانه فعالیت تحقیق و توسعه**  
شماره: ۱۷۷۲۶۱۶۸۷۵  
تاریخ: ۱۴۰۲/۰۹/۰۱



**گواهی فعالیت تولید بدون کارخانه**  
شماره: ۱۷۷۲۶۱۶۸۷۵  
تاریخ: ۱۴۰۲/۰۹/۰۱

ردیف	نام محصول	کد استاندارد	ظرفیت	واحد مشخص	تاریخ
۱	فلکهات کپسورینگ	۱۷۷۲۶۱۶۸۷۵	۱۲	عدد	تاریخ شروع قرارداد: ۱۴۰۲/۰۳/۰۲
	تولیدات	شماره کسب و کار: ۱۷۷۲۶۱۶۸۷۵			تاریخ پایان قرارداد: ۱۴۰۲/۰۳/۰۲



**گواهینامه تایید صلاحیت ایمنی**  
Accreditation Certificate Safe  
وزنه اشخاصی حوزوی

## CUSTOMERS & PARTNERS



## OUR SERVICES

### Equipment & Spare Parts Services:

- Manufacturing of Industrial Equipment & Spare Parts
- Supply of Industrial Equipment & Spare Parts

### Design & Engineering Services:

- Basic & Detailed Design & Engineering
- Reengineering & As-Built Engineering
- Reverse Engineering

### Installation, Commissioning & Maintenance Services:

- Installation, Commissioning of Equipment & Facilities
- Overhaul & Maintenance of Equipment & Plants.



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