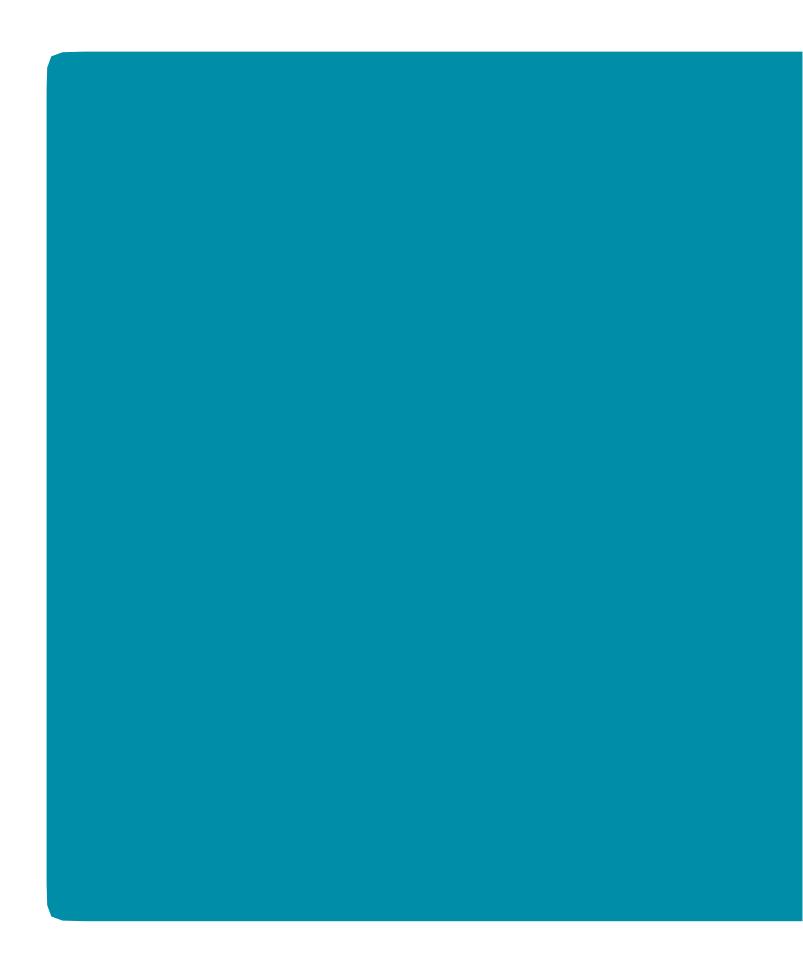




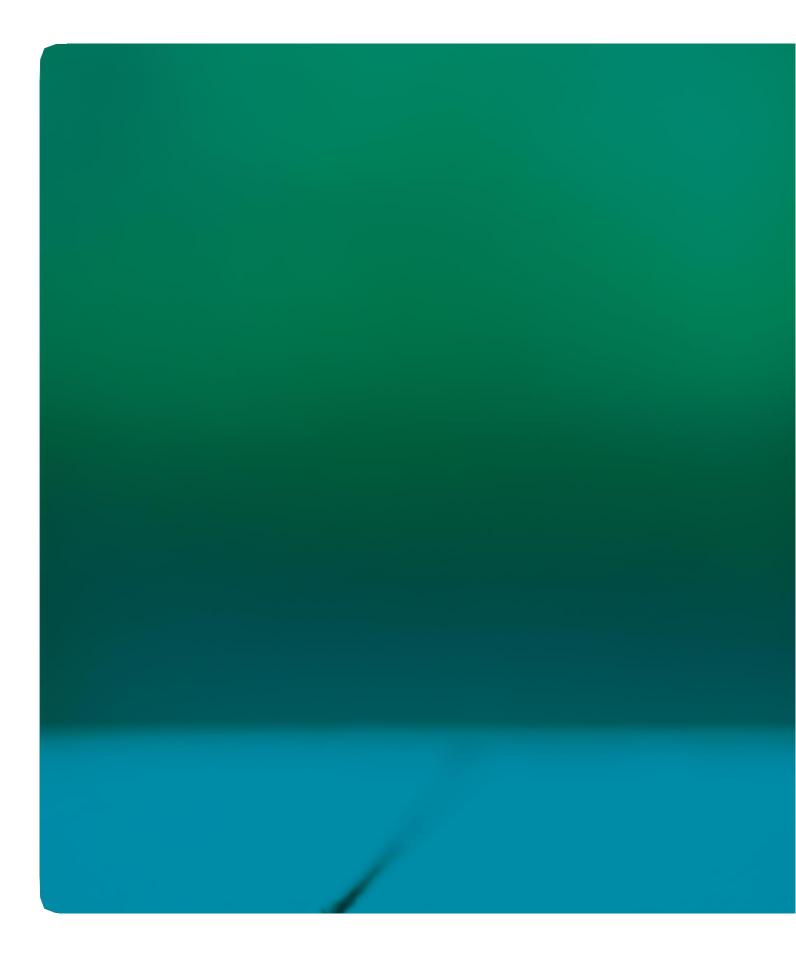
THE STATE
OF THE ART
MANUFACTURING
FACILITY



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## OBEIKAN INVESTMENT GROUP

# A JOURNEY OF PERSISTANCE AND ASPIRATION

Obeikan Investment Group (OIG) is a true story of success that began in Riyadh.



Leadership has no limits. It has to be developed, maintained and preserved. Obeikan Investment Group (OIG) understand that this is essential to meet and keep up with market necessities locally and globally. OIG, by the grace of God then its employees' efforts, managed to assume a leadership position in KSA and the world. Such a position was achieved through the utmost proficiency in these fields, starting with printing and publishing which are regarded as the group's starting point, then expanding through various fields of packaging solutions to education, curriculum development and glass manufacturing. OIG with all its sectors has won various (ISO) international certificates, in addition to safety, security and protection certificates.

Obeikan Group has proudly become a strategic partner for its customers due to the mutual respect and high ability of meeting their needs worldwide. Its experience, planning and commitment in providing practical solutions that cope with the developments of local and global markets. OIG has dedicated a great deal of special care to its social and environmental responsibilities and has interacted with great care utilizing its powers and potential for the better of the Kingdom.



SAIC

# FOCAL POINT OF COMPETITIVE INDUSTRY





Saudi Advanced Industries Company (SAIC) established in 1987 as a Saudi joint stock company with the capital, 108 million Saudi riyals however in 2007 increased the capital to 432 million Saudi riyals and then in 2015 increased to 500 million Saudi riyals.

The aim of establishing the company is to help the private sector to participate in the industrial's development in the Kingdom, and also to participate in the companies and to import the advanced technologies to the Kingdom.

Since the company established its been participated with number of companies which is member of the Economic Offset Program, in addition to other industrial projects and has focused lately on the industries that have more competitive advantages such as the industries of petroleum, gas and petrochemical industries and manufacturing industries, construction materials and services associated with.

### OBEIKAN GLASS COMPANY

# THE STATE OF THE ART MANUFACTURING FACILITY

The largest glass manufacturing facility of its kind in the Middle East region.

The state of the art manufacturing facility is situated besides Red sea in the Western side of Saudi Arabia. Obeikan Glass Company is the largest glass manufacturing facility of its kind in the Middle East

region. With a manufacturing capacity of 800 tons per day, Obeikan Glass is capable to produce clear float glass, conforming to International Quality standards, in a range of thickness from 3 to 12 mm.

The plant was designed utilizing the latest float glass technologies and was constructed by companies with a worldwide recognition for excellence in glass plant construction.



## **MISSION & VISION**

# FUTURISTIC PERSPECTIVE

#### Mission

To provide excellent glass quality products and superior customer services through value chain processes and innovation by highly qualified human resources.

#### Vicion

To gain superiority and leading position in the float glass industry.



## **VALUES**

# VALUES THAT LEAD TO LEADERSHIP

#### Respect

We respect our customers, our employees & our partners. We respect the environment, our duty to society and the law.

#### Integrity

We believe in integrity in business and trust our employees to be ethical and honest.



#### **Fairness**

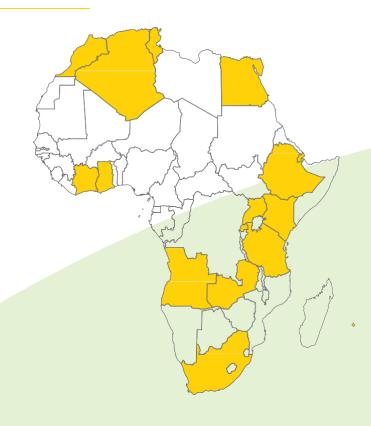
We treat all our employees equally and develop and promote them with fairness.

# **GLOBAL APPEARANCE**

# **OUR QUALITY IS SPREADING TO THE WORLD**

We are exporting to the world's many points from the Middle East.

## **AFRICA**





- Algeria
- Angola
- Djibuti
- Egypt
- Ethiopia
- Ghana
- Ivory Coast
- Kenya
- Mauritius
- Morocco
- RwandaSouth Africa
- Tanzania
- Tunusia
- Uganda
- Zambia

**ASIA** 



Singapore

• Sri Lanka

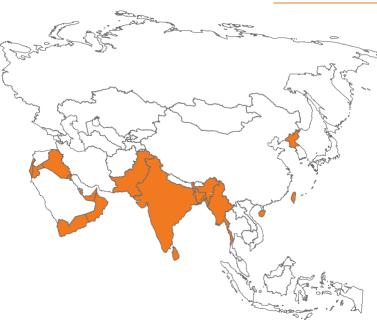
• Taiwan

Yemen

• UAE

- Bahrain
- Bangladesh
- · Hong Kong
- India
- Iraq
- Jordan
- Korea

- Kuwait
- Lebanon
- Myanmar
- Oman
- Pakistan
- Palestine
- Qatar



## **EUROPE**





- Bosnian Herzegovina
- Bulgaria
- Estonia
- Greece
- Italy
- Malta
- Polonia

- Portugal
- Romania
- Serbia
- Spain
- Turkey
- UK

## **SOUTH AMERICA**



- - Argentina
  - Bolivia
  - Brazil
  - Chile
  - Columbia
  - Ecuador

- Paraguay
- Peru
- Uruguay
- Venezuela



- Canada
- Dominician
- Guatemala
- Haiti

- Nicaragua
- Panama
- U.S.A





## **PLANT**

#### 800 TONS PER DAY



#### Where is the plant located?

The plant is located besides Red Sea, in the Western side of Saudi Arabia, in the port city of Yanbu.

#### What is the area?

Total area of the site is 378,000 square meters, enough for two float lines.

#### What is the total project cost?

Total project cost was around 180 million USD.

#### Where is the current capacity of the plant?

Current capacity of the plant is to produce 815 tons of float glass per day.

#### Where is the current capacity of the plant?

Current capability of the plant is to produce float glass from 3 to 12 mm thickness with a maximum width of 3.6 meters.

#### Who are our technical partners?

Obeikan Glass Company had tied up with renowned international suppliers for design, equipment and installation of the plant.

- Batch Plant Zippe, Germany
- Furnace Fives Stein, France
- Tin Bath Fives Stein, Belgium
- · Annealing Lehr Fives Stein, France

- Inspection ISRA Vision, Germany
- · Cutting Line Grenzebach, Germany
- · Packing TMB, Germany

#### PRODUCTION LINE

## WORLD CLASS FLOAT GLASS QUALITY



#### **OBEIKAN CLEAR FLOAT GLASS**

We manufacture world class quality clear float glass with a lustrous finish which has excellent functional properties clarity, uniform thickness, scratch resistance, bubble free and devoid of distortion.



## FLOAT GLASS - NOVA FLOAT



# **SUPERIOR QUALITY**

Float glass is superior in quality when compared to other flat glass

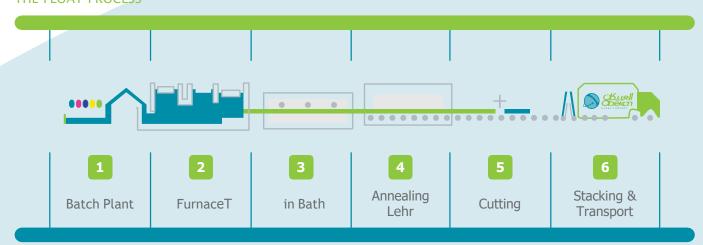
Float Glass is superior in quality when compared to other flat glass and has the unique characteristics of excellent surface finishing, flatness, uniform thickness, high optical quality and bright appearance. The float process was invented in 1952.

Float technology has rapidly replaced plate and sheet facilities worldwide in recent decades. Float glass derives its name from the float process used where the molten glass floats on the top of molten tin.

Available thicknesses in mm and inches:

- 3, 3.2, 3.5, 4, 5, 5.5. 6. 8, 10 and 12 mm
- 7/64, 1/8, 5/32, 3/16, 1/4, 5/16, 3/8, 1/2 inches

#### THE FLOAT PROCESS



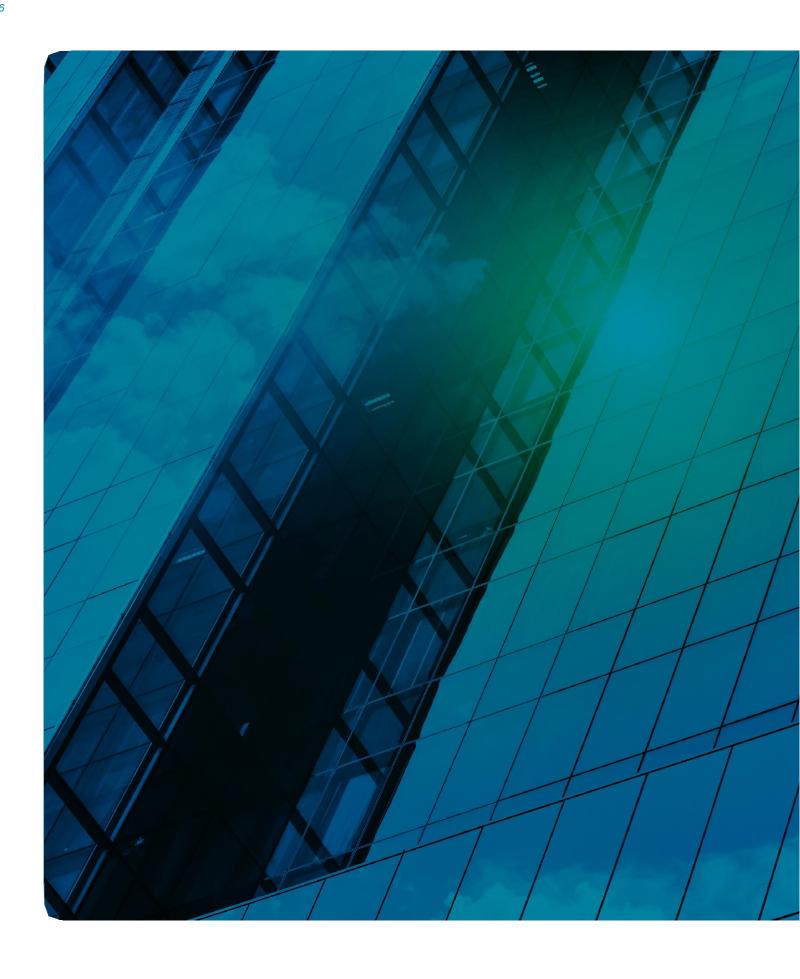
# LAMINATED GLASS - NOVA LAM



#### **SAFETY FIRST**

Laminated glass is a type of safety glass that holds together when shattered

Laminated glass is a type of safety glass that holds together when shattered. In the event of breaking, it is held in place by an interlayer, typically of polyvinyl butyral (PVB), between its two or more layers of glass. At least 2 Glass Panels and 1 Binding Agent is necessary to produce Laminated Glass.





# **POLICY**

# WORLD'S PROVEN QUALITY MANAGEMENT SYSTEM

Obeikan Glass Company is committed to satisfy customers requirements



Obeikan Glass Company is committed to satisfy customers requirements by manufacturing and supplying high quality float products and services by practicing world's proven quality management system.

OGC Strives to Enhance its Quality Management System by:

- · Applying people, process and product (3p) and reduce, reuse and recycle (3R) concepts in its related activities.
- · Setting and review of the quality objectives.
- Commitment to control environment pollution and occupational hazards.
- Commitment to comply with all statutory requirements.
- Commitment to continuously improve the effectiveness through consistent monitoring and review.

# **CERTIFICATES**



ISO 9001-2015

# **PERFORMANCE PARAMETERS**

# HIGH STANDARD PERFORMANCE

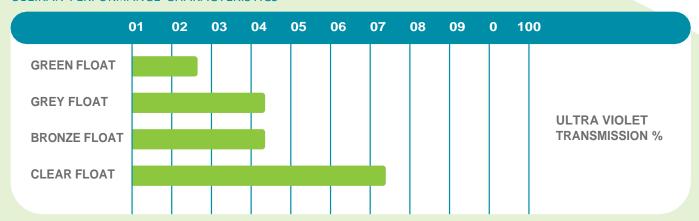


#### **OBEIKAN CLEAR FLOAT GLASS**

Glass Type	Thickness (mm)	<b>Uv</b> Trans %	Visible Light Trans %		Solar Direct Energy %			(2)	60	U Value	Color Rend
		tuvt	vp	V	te	inside pe	outside pe	(g)	SC	W/M <sup>2</sup> K	Color Relia
CLEAR	3	68	90	9	86	8	8	88	1	5.8	99.3
	4	67	90	9	86	8	8	87	1	5.8	99.2
	5	65	90	9	85	8	8	86	1	5.7	99
	6	61	89	9	83	8	8	85	0.98	5.7	99
	8	57	88	8	81	8	8	83	0.95	5.6	99
	10	53	88	8	78	7	7	81	0.93	5.6	98
	12	50	86	8	76	7	7	80	0.92	5.5	98

Notified Testing Body For Clear Glass: By TUV Rhineland, Germany EN410-2011: Spectrophotometric Values

#### **OBEIKAN PERFORMANCE CHARACTERISTICS**



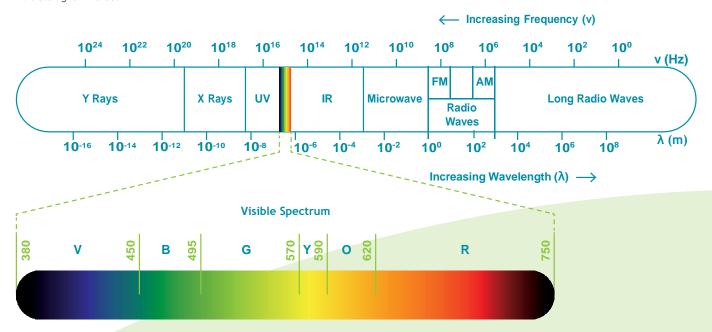
# **SOLAR SPECTRUM**

# SOLAR IS UNDER CONTROL

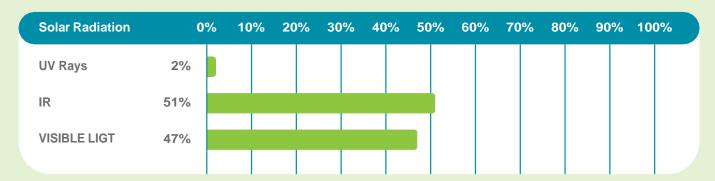


The sun radiates solar energy or sunlight by electromagnetic waves over a range of wavelengths known as the Solar Spectrum (290 - 2500 nanometers,). The solar spectrum is divided into three bands, these are:

- Ultra Violet rays.
- · Visible light Infrared.



#### COMPONENTS OF SOLAR RADIATION REACH TO THE EARTH

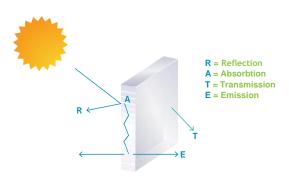


# RAT EQUATION THERMAL HEAT TRANSFER

# NO ISOLATION TRANSMISSION

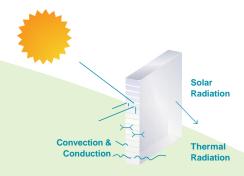


When Solar Radiation strikes Glass sheet, it is partly reflected, partly absorbed in the thickness of the glass and partly transmitted.



RAT Equation? When the combined UV, visible light and infrared (solar energy) strikes glass it is reflected (R), absorbed (A) and transmitted (T) in different proportions, depending on the type of glass involved. This gives us the RAT Equation which accounts for 100% of solar energy.

Thermal Heat: Transfer Heat is transferred either by convection (upward warm air currents), conduction (passing from one object to another) or radiation (where heat passes through space to an object where it is reflected, absorbed or transmitted). The absorbed portion of the energy is subsequently dissipated by reradiation (or emission) to both the outside and inside, in varying proportions, dependent on the type of glass and external weather conditions





Shading co-efficient(SC): The ratio of total solar radiation through a particular glass type, relative to the total solar radiation through 3mm clear float glass. This show the glass performance in reducing heat.

## **APPLICATION PROCESS**

# **APPLICATION EXCELLENCE**



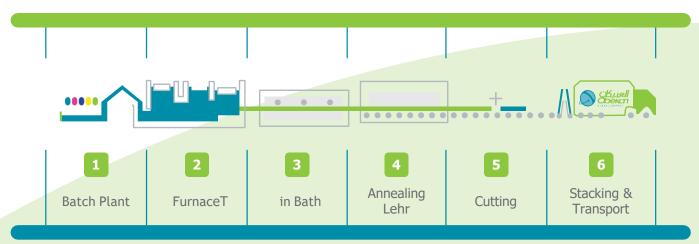
#### FLOAT GLASS APPLICATION

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#### Some Applications of Float Glass:

- Architectural Purposes
- Coated Glass
- Table Tops
- Automative Glass
- Windows
- Insulated Glass
- Reflective Glass
- Mirrors
- Frameless Doors

#### THE FLOAT PROCESS





#### **Obeikan Glass Company**

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