



# Fiberglass composite reinforcement

Manufacturers from the EU and Ukraine

2023



# Content

Introduction	3
1. Fiber-reinforced polymer (FRP) reinforcement market overview	4
2. Manufacturers of composite fiberglass reinforcement in the EU and Ukraine	6
2.1. Schöck Bauteile GmbH	6
2.2. Owens Corning	7
2.3. Röchling Group 7	7
2.4. ASA.TEC	8
2.5. CG TEC GmbH	
2.6. Torgpromkontrakt	
2.7. Nano-SK	9
2.8. RTC TRADE, LLC	12
2.9. IMPERATYV	13
2.10.Rebar	
3. Equipment for the production of fiberglass reinforcement	15
4. EU associations and alliances	17
5. Market news	18





# Introduction

Currently, composite materials are used in various industries, such as aircraft manufacturing, shipbuilding, railways and electronics, energy and biomedicine, chemistry and petrochemicals, and, of course, in all types of construction.

Composite materials are distinguished from other structural materials by their unique combination of rigidity, corrosion resistance, and high strength, lightweight, and ability to withstand high temperatures, facilitate transportation and handling, assembly, and installation while being the most cost-effective throughout their service life. Disadvantages that can hardly be called critical include a low modulus of transverse elasticity and insufficient heat resistance.

Today, along with conventional reinforcement, composite reinforcement is increasingly used to reinforce concrete structures. The main types of composite reinforcement are fiberglass and basalt.

The name of the reinforcement stores the material from which the reinforcement is made. Each of its types has unique properties. Composite reinforcement is usually supplied with a diameter from 4 to 32 mm and any complete length, and with a diameter over 12 mm, it is cut into rods.

One of the key benefits of fiberglass reinforcement is its ability to extend the life of concrete structures, ensuring their strength and reliability for many decades. This makes it an environmentally friendly option as it reduces the need for frequent repairs and replacements, thereby minimizing waste and resource consumption.

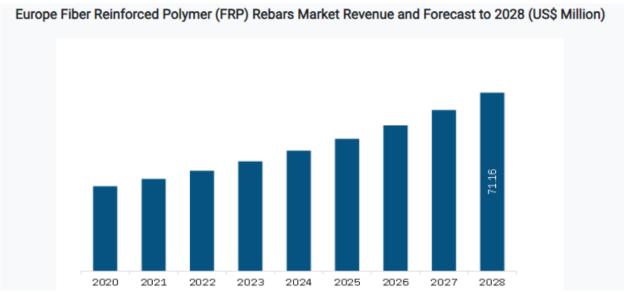




# 1. Fiber-Reinforced Polymer (FRP) Rebar Market Overview

The European fiber-reinforced polymer (FRP) rebar market is segmented into Germany, France, Italy, the UK, Russia and the Rest of Europe. The fiber-reinforced polymer (FRP) rebar market witnessed high growth during the forecast period owing to its applications such as highway bridge construction and marine structure and embankment construction as well as water treatment plants. The product has high tensile strength and corrosion resistance properties, which contributes to the development of the market. The region's growing construction industry and rising government spending on maintenance and construction are driving growth in the fiber-reinforced polymer (FRP) rebar industry. For example, according to the European Union's FIEC statistical report, the construction industry grew by 5.2% in 2021.

European Fiber Reinforced Polymer (FRP) Rebar Market Revenue and Forecast to 2028 (USD Million))



The fiber-reinforced polymer (FRP) rebar market in Europe is expected to grow from US\$39.98 million in 2022 to US\$71.16 million by 2028. It is estimated to grow at a CAGR of 10.1% between 2022 and 2028.

Based on the type of resin, the market is segmented into vinyl ester, polyester, epoxy, and others. In 2022, the vinyl ester segment held 42.56% of the market with sales of \$17.02 million. It is projected to generate \$30.84 million in revenue by 2028 and grow at a CAGR of 10.4% from 2022-2028.

Based on fiber type, the market is segmented into glass fiber composites, carbon fiber composites, and basalt fiber composites. In 2022, the fiberglass composites segment accounted for 69.88% of the market with a volume of US\$27.94 million. It is projected to generate \$50.33 million in revenue by 2028 and grow at a CAGR of 10.3% from 2022-2028.

Based on application, the market is segmented into highway bridges and construction, marine structures and embankments, water treatment plants, and others. In 2022, the highway bridges and construction segment accounted for 49.48% of the market with a volume of US\$19.79 million. It is projected to generate \$36.72 million in revenue by 2028 and grow at a CAGR of 10.9% from 2022-2028.

Based on country, the European fiber-reinforced polymer (FRP) rebar market is segmented into Germany, France, Italy, Spain and Rest of Europe. Our regional analysis shows that the rest of Europe captured 27.07% of the market in 2022. It was valued at US\$10.82 million in 2022 and is likely to reach US\$17.84 million by 2028, registering a CAGR of 8.7% during the forecast period.

The key players dominating the European fiber-reinforced polymer (FRP) rebar market are Owens Corning; Pultron Composites; FiRep Inc.; Schock Bauteile GmbH; and Dextra Group.

In 2021; Owens Corning Infrastructure Solutions Launched MATEENBAR Fiberglass Rebar to Strengthen Its Position in the US Composites Industry.

In 2022; Owens Corning entered into a joint venture agreement with Pultron Composites Ltd., a manufacturer of fiber-reinforced pultrusion, to expand its composites manufacturing capabilities. The agreement will help the company expand the reach of its PINKBAR+ Fiberglass Rebar and MATEENBAR Fiberglass Rebar Products in the US market.



From Sameer Joshi's review +1-646-491-9876, sales@businessmarketinsights.com

# 2. Manufacturers of composite fiberglass reinforcement in the EU and Ukraine

# 2.1. Schöck Bauteile GmbH

Schöck Bauteile GmbH  $\Phi \ddot{\text{M}} \text{L}2$  is a manufacturer of composite fiberglass reinforcement in the EU and Ukraine.



# Fiberglass reinforcement Schöck Combar®:

 Straight Schöck Combar® rods from 8 to 32 mm diameter.

Price from 2.7 EUR to 23.40 EUR.

- Schöck Combar® rod with head
- Bracket Schöck Combar®

Technical solutions and price support available upon request:

Tel: +49 7223 967 567 combar@scho

https://stelter-bautechnik.de/wp-

content/uploads/2021/01/Preisliste 2021 gueltig ab 01.01.20218609.pdf

https://www.schoeck.com/en/combar







# 2.2. Owens Corning, France

<u>Owens Corning</u> is a global leader in building materials, committed to building a sustainable future through materials innovation. The company operates three integrated business lines - composites, insulation, and roofing - and employs approximately 20,000 people in 33 countries.



# **Products:**

 Owens Corning PINKBAR+ 0.375-in x 10-ft Pink Fiberglass #3 Rebar

Pink fiberglass reinforcement

Price \$6.28 (Lowes), \$5,65 per unit (discount 10%) when purchasing 60+

 Owens Corning PINKBAR+ 0.5-in x 10-ft Pink Fiberglass #4 Rebar

Pink fiberglass reinforcement

Price \$7.88 (Lowes), \$7,08 per unit (discount 10%) when purchasing 60+



owenscorning.com

# 2.3. Röchling Group

Röchling Group is a large selection of thermoplastics and composites for technical applications. They supply products in the form of semi-finished products such as sheets, rods, tubes, flat bars, profiles, and finished castings, right through to precision machined parts.



The staff of 11,737 people, in 92 locations in 25 countries.

# **Products**

Durostone® FRP reinforcement High-quality reinforcement bars up to 12,000 mm long.



Durostone ® FRP reinforcement is developed and produced in collaboration between Röchling Industrial and ASA.TEC.

https://www.roechling.com/industrial/products/composites/gfrp-cfrp/rebars

# 2.4. ASA.TEC, Австрия

**ASA.TEC** Ukraine was created in 2008 after the takeover of TZI Kyiv, a basalt fiber manufacturer with many years of experience in this field. Further development of ASA.TEC fiber required the creation of a research center that meets advanced



Western European standards. For this reason, in 2010 he was transferred to Ebensee (Upper Austria) to complete his research activities there. Once the research and development work is completed, the next milestone will be the industrialization of this innovative technology.

# **Products:**

 Durostone® FRP Rebar/ Fiber reinforced composite rebar

Product range: Standard sizes: 10 mm, 13 mm, 16 mm, 19 mm, 25 mm, 32 mm.

https://www.asatec.at/products



# 2.5.CG TEC GmbH

CG TEC GmbH - company for the production of plastic products, Spalt, Germany



CG TEC Carbon und Glaserfibrilltechnik GmbH is a technology

leader in the production of carbon fiber and glass fiber round profiles in Germany and Europe. The core competence lies in the production of round and flat profiles, plates, rods, and complete components.

# **Products:**

 GFRP fiberglass rod pultruded Ø 3 mm, length 2005 mm dyed black Art. n.: 1003000-2005schw/ FRP pultruded fiberglass rod

Price 1.74 euros incl. 19% VAT + delivery, 10 pcs. 1.09 €, 20 pcs. 0.87 €.





https://www.cg-tec.de/

# 2.6. Torgpromkontrakt, Dnepr, Ukraine

Torgpromkontrakt - A dynamically developing company in the Ukrainian and international markets of building materials.



# **Products:**

 Plastic rods reinforced with Arvit glass fiber 4mm, 6mm, 7mm, 8mm, 10mm, 12mm, 14mm,16mm.



Arvit Fiberglass Reinforced Plastic Bars have helical fins formed as a result of wrapping the roving with a special thread saturated with a polymer binder.

Custom-made reinforcement can be made from rods of any construction length as agreed with the customer. Cutting is carried out on flexible connections (300, 350, 400 mm), according to the size of cards for pouring industrial floors, etc.

Price on request: <a href="https://arvit.com.ua/en/products/product-range-and-prices/">https://arvit.com.ua/en/products/product-range-and-prices/</a>

+38 050 460 88 44, +38 067 560 88 44 sales@arvit.com.ua https://arvit.com.ua

# 2.7. Nano-SK, Kyiv, Ukraine

The Nano-SK company is a leading manufacturer of composite reinforcement in Ukraine.



# **Products:**

Price per meter

Glass-composite reinforcement Nano-Sk

Composite 4mm (Replaces 6mm steel AIII))

Coil diameter 70cm. thickness 5cm. Weight of one linear meter 0.025 kg

4.57 UAH up to 4500 meters

4.40 UAH from 4500-20000 meters

4.30 UAH from 20000-90000 meters

Negotiable price of more than 90,000 meters

Composite 6mm (Replaces 8mm steel AIII))

Coil diameter 70cm. thickness 7cm.



Weight of one linear meter 0.049 kg
Price per meter
7.84 UAH up to 2500 meters
7.65 UAH from 2500-12500 meters
7.35 UAH from 12500-50000 meters
Negotiable price of more than 50,000 meters
Composite 7mm (Replaces 10mm steel AIII))
Coil diameter 80cm. thickness 8cm.
Weight of one linear meter 0.07 kg
Price per meter
11.90 UAH up to 1500 meters
11.80 UAH from 1500-8000 meters
11.70 UAH from 8000-32000 meters
Negotiable price of more than 90,000 meters

Composite 8mm (Replaces (12mm steel AIII)
Coil diameter 90cm. thickness 10cm.
Weight of one linear meter 0.094 kg
Price per meter
17.17 UAH up to 1000 meters
17.05 UAH from 1000-5500 meters
16.15 UAH. from 5500-22500 meters
Negotiable price of more than 90,000 meters



Composite 10 mm. Replaces 14mm steel AIII)
Coil diameter 110cm. thickness 11cm.
Weight of one linear meter 0.111 kg
Price per meter
23.38 UAH. up to 800 meters
23.10 UAH. from 800-4000 meters
22.35 UAH. from 4000-12500 meters
Negotiable price of more than 90,000 meters

Composite 12 mm. Replaces 16mm steel AIII)
Coil diameter 160cm. thickness 15cm.
Weight of one linear meter 0.198 kg
Price per meter
34.53 UAH. up to 600 meters
33.00 UAH from 600-3000 meters
32.50 UAH. from 3000-12500 meters
Price is negotiable for more than 12500 meters

Composite 14 mm. Replaces 18mm steel AIII)
Released with rods
Weight of one linear meter 0.28 kg
Price per meter
49.95 UAH up to 500 meters
47.95 UAH. from 500-2500 meters
46.95 UAH. from 2500-10000 meters
Price is negotiable for more than 10,000 meters



Composite 16 mm. Replaces 20mm steel AIII)
Released with rods
Weight of one linear meter 0.46 kg
Price per meter
57.36 UAH. up to 400 meters
56.98 UAH. from 400-2000 meters
54.85 UAH. from 2000-8000 meters
Negotiable price of more than 8000 meters

Composite 18 mm. Replaces 25mm steel AIII)
Released with rods
Weight of one linear meter 0.56 kg
Price per meter
Check the price up to 1000 meters
Check the price more than 1000 meters

Composite 20 mm. Replaces 28mm steel AIII)
Released with rods
Weight of one linear meter 0.63 kg
Price per meter
Check the price up to 1000 meters
Check the price more than 1000 meters
+38(097)2999400 | +38(099)6802247 +38(063)9063864
nanoarmatura@ukr.net
https://nano-sk.com/

# 2.8. STYRON PLUS, LLC, Dnepr, Ukraine

Production of composite reinforcement using modern high-tech equipment.

# СТАЙРОН ПЛЮС

# **Products:**

• Fiberglass composite reinforcement d. 4 mm - 20 mm.



Fiberglass reinforcement is produced by TU U V 2.6-22.2-32389368-001:2014 and DSTU-N B V.2.6-185:2012. Confirmed by the UkrSEPRO quality certificate.

Diameter 4 mm

Price per meter 4 UAH.

Diameter 6 mm

Price per meter 7.10 UAH.

Diameter 7 mm

Price per meter 11 UAH.

Diameter 8 mm

Price per meter 15.50 UAH.

Diameter 10 mm

Price per meter 21.80 UAH.

Diameter 12 mm

Price per meter 28 UAH.

Diameter 14mm

Price per meter 38 UAH.

Diameter 16mm

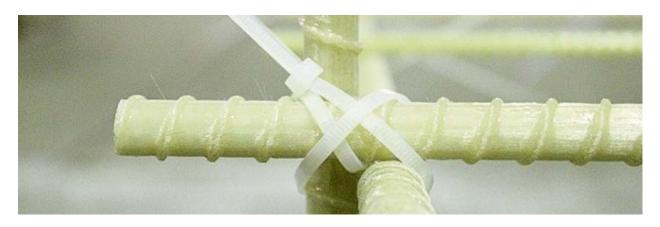
Price per meter 46 UAH.

Diameter 18mm

Price per meter 55 UAH.

Diameter 20mm

Price per meter 72 UAH.



+38 (056) 3761290 stairon@ukr.net http://www.stairon.dp.ua/

# 2.9. IMPERATYV, Ukraine



# Offices:

Kharkiv, Ivano-Frankivsk, Ukraine, Poland, Great Britain, Hungary, Jordan

The Ukrainian corporate group "IMPERATIVE" has been producing products from composite fiberglass reinforcement for more than 10 years. Since 2012, IMPERATIVE has been a manufacturer of HARDplus® fiberglass reinforcement and HARDmesh® fiberglass mesh. Ukrainian corporate group "IMPERATIVE" has an integrated production plant with a full production cycle.

# **Products**

• HARDplus fiberglass reinforcement

Price on request +48 22 153 03 21, +38 096-0213-213 sales@imperatyv.ua



# 2.10. Rebar, Kyiv, Ukraine

KOTE UNION, LLC is a world-class manufacturer of reinforcing materials REBAR (glass fiber and basalt). Manufacturing company: The plant is located in Dnipro, Ukraine- Modern Production Lines and own Research Laboratory- European certification and LCA.

The monthly production of composite reinforcement reaches 470,000 m.



# **Products:**

• Fiberglass reinforcement, diameter from 2 to 32mm.

# **Prices:**

Diameter 6 mm
Price per meter 7.82 UAH.
Diameter 7 mm
Price per meter 9.57 UAH.
Diameter 8 mm
Price per meter 13.16 UAH.
Diameter 10 mm
Price per meter 17.94 UAH.
Diameter 12 mm
Price per meter 23.74 UAH.
Diameter 14 mm
Price per meter 33.30 UAH.
Diameter 16 mm
Price per meter 45.36 UAH
+380935313653



rebar.union@gmail.com

https://rebar.com.ua

# 3. Equipment for the production of fiberglass reinforcement, Ukraine

**PP GRIVAS Ukraine s**pecializes in the design and production of equipment that provides a full cycle of production of lightweight cellular concrete under the GRIVAS Ukraine brand. For more than 18 years, products have been presented



on the market of Ukraine and other countries of the world. Since 2016, GRIVAS specialists have been working on an area that is relevant to the construction industry - designing equipment for the production of fiberglass reinforcement. Since 2018, the line for the production of fiberglass reinforcement has been operating under the LiteCem ARM trademark. In addition, the production of fiberglass reinforcement "LiteCem-Strong" and composite supports for plants "LiteCemAgro" has been launched.



LiteCem ARM lines for the production of composite rebars guarantee high productivity and long service life. With their help, it is possible to produce composite reinforcement with a diameter from 4 to 22 mm. The line requires a small production area of 82 sq.m. meters.

- The LiteCem ARM line can produce up to 10,000 meters of composite reinforcement per day.
- All parts have a high safety margin, which allows the equipment to operate 24/7.
- Automatic cutting of reinforcement to the required size from 1 to 150 meters.



If necessary, GRIVAS specialists will install the line, start up and commission, and also train personnel in the operation and maintenance of the LiteCem ARM line with the subsequent release of a trial batch of products.

# **Products:**

Composite reinforcement LiteCem Strong:

Diameter 4, coil 100 m 500 €

Diameter 6, coil 100 m 875 €

Diameter 8, coil 100 m 1650 €

Diameter 10, coil 100 m 2290 €

Diameter 12, coil 100 m 2995 €



+38 (068) 194-33-33 info@litecem.com.ua http://www.litecem.com.ua



# 4. EU associations and alliances

**AEGIS** Europe is an industry alliance of more than 20 European manufacturing associations representing the entire value chain, from raw materials to final consumer products. Comprised of leaders in sustainable manufacturing and social and environmental responsibility, this industry alliance is committed to European manufacturing as a fundamental driver



of innovation, growth, and job creation in Europe. Aegis members account for more than €500 billion in annual turnover and millions of jobs across the EU.

# aegiseurope.eu

**EuCIA** is the European composites industry association, representing European national composites associations as well as industry industry groups at the EU level. EuCIA closely monitors relevant standards and



legislation, actively communicates how composites contribute to a more sustainable world and promotes educational activities. EuCIA is committed to ensuring the healthy growth and continued competitiveness of the more than 10,000 companies and approximately 150,000 employees engaged in the composites industry across Europe.

# eucia.eu

**Glass Alliance Europe** is the European Glass Industry Alliance. Its unique feature is the regrouping of all glass companies to work on common problems. It consists of 14 national glass associations and 5 major glass industry sectors: container glass, flat glass, specialty glass, household glass, and continuous glass fiber. The glass industry includes more than 500 factories, providing 500,000 direct and indirect jobs.



# Glassallianceeurope.eu

**NEPSI** is an acronym for the European Silica Network, created by European industry associations of workers and employers who signed the Social Dialogue Agreement on the Protection of Workers' Health through the Proper Handling and Use of Crystalline Silica and Products Containing It on 25 April 2006. These associations represent 15 industries, i.e. more than 2 million employees and a business with a turnover exceeding 250 billion euros.



# nepsi.eu

**TECH-FAB Europe** is an association of European manufacturers of technical textiles. Technical textile products are high-performance textiles that bring lightweight solutions, durability, and many other benefits to our daily lives,



with a strong focus on sustainability and in line with the European Green Deal to create a climate-neutral economy by 2050. The association represents a diversity of markets and companies of varying sizes, with a strong network based on mutual respect.

# tech-fab-europe.eu



# 5. Market news

07/14/23 The European Union announced the extension of anti-dumping measures against fiberglass rebar originating in China for another five years.

Over the past decade, the European market has been flooded with subsidized fiberglass products from Chinese manufacturers, both originating in China and newly established operations outside China. The latter began producing glass fiber after the first European trade protection measures came into force - in particular, to access the Union market without paying duties on imports from China. Alarmingly, China's excess capacity is currently double the total European market demand for glass fiber reinforcement, posing a major challenge to the European industry.

