

L 27517-66 EWT(m)/EWP(e)/EWP(j)/T/EWP(v) IJP(c) WW/RM/WH
 ACC NR: AP6005846 (N) SOURCE CODE: UR/0403/65/000/003/0008/0011
 AUTHOR: Biryukovich, Yu. (Director of laboratory); Serbin, V. (Senior engineer); Biryukovich, D. (Team leader, Member of technical help 25 B)
 ORG: (Biryukovich, Yu.) VNIINSM, Kiev; (Serbin, V.) Institute of Mechanics AN UkrSSR (Institut mekhaniki AN UkrSSR); (Biryukovich, D.) VNIINSM.
 TITLE: Glass-wool cements in the national economy
 SOURCE: VDNKh SSSR. Informatsionnyy byulleten', no. 3, 1965, 8-11
 TOPIC TAGS: general construction, structural mineral product, ship-building
 ABSTRACT: The authors describe a new anisotropic construction material of glass-wool fibrous aggregates bound together by cement (or polymer-cement) glue. Its unit weight varies between 0.80 and 1.85 g/cu cm and its specific elongation is 0.9%. The material has good resistance against formation of cracks and fissures. The formation of micro-fissures starts at stresses in the range of 80 to 90% of tensile strength. The new material based on latex-cement glue has high dielectric properties. Its volume resistivity attains a value of 10^{14} ohm-cm
 Card 1/2

L 27517-66

ACC NR: AP6005846

and its surface resistivity goes up to 10^{13} ohm-cm. Puncture voltage is about 8 kv/mm. Thermal conductivity is about 0.1 to 0.9 kcal/m.hr. degree. The material is fireproof, waterproof, frostproof and resistant to the action of mineralized water. It can readily be machined, riveted bolted, glued and assembled. It can be colored by addition of pigments to its binding mineral glue. The glass-wool cement is about 30 times cheaper than structural glass-plastics. It is more expensive than reinforced concrete. However, its higher cost is compensated by a lesser weight needed for construction because the tensile and bending strengths of glass-wool cement exceed many times the strengths of reinforced concrete. The glass-wool cement is especially suitable for construction of window frames, thin walls, tanks, pipes, boat hulls, etc. Some examples of developing, testing and using this material for various constructions (mostly in the Kiev area) were presented, including apartment buildings, irrigation installations and shipbuilding. The motor-yacht "Novinka" built of glass-wool cement was shown in a photo. Its hull walls were only 1 cm thick for a yacht size 18 cu m. The yacht covered 3000 km during the 1963 navigation season (Dnepr River and Black Sea). Orig. art has: 2 photos.

SUB CODE: 11,13 / SUBM DATE: None / ORIG REF: 000 / OTH REF: 000

Card 2/2 BLS

BIRYUKOVICH, K.L., inzh.; BIRYUKOVICH, D.L., inzh.

Boat made of glass cement. Sudostroenie 27 no.4:40-42 Ap '61.
(MIRA 14:3)

(Boatbuilding)

L-2904-66
AM5010321

EWP(e)/EPA(s)-2/EWT(m)/EPF(c)/EWP(i)/EWP(j)/I/EWP(b)

BOOK EXPLOITATION

WM/RM/WH

UR/
6S3
B64

Biryukovich, Konstantin L'vovich; Biryukovich, Yuriy L'vovich; Biryukovich, Dmitriy L'vovich

Glass cement (Steklotsement) Kiev, Izd-vo "Budivelnik", 1964. 113 p. illus., biblio. 2400 copies printed.

TOPIC TAGS: cement; glass product; fiberglass; general construction, construction material, solid mechanical property

PURPOSE AND COVERAGE: The book deals with a new construction material glass cement, consisting of highly durable glass fiber and cement. Component materials and manufacturing technology of glass cement and different constructions from glass cement are described. Attention is given to the physical and mechanical characteristics of the glass cement and to the factors determining its strength and deformability. The practical use of glass cement, the technical and economical aspects, and data describing the most efficient use in the future are presented. The book is intended for engineering and technical workers in the construction industry and for designing and research organizations. It can be used as a university textbook.

Card 1/2

L 2904-66

AM5010321

TABLE OF CONTENTS (abridged):

Introduction -- 3

Materials for glass cement -- 6

Types of glass cement -- 21

Manufacturing technology of glass cement and glass cement constructions -- 27

Physical and mechanical characteristics of glass cement -- 44

Glass cement constructions and products and their technical and economical efficiency -- 84

General definitions -- 84

Models of glass cement constructions and products -- 85

Solution of designing problems -- 105

Bibliography -- 113

SUB CODE: MT

SUBMITTED: 19Nov64

NO REF SOV: 049

OTHER: 000

Card 2/2

L 52220-65 EWP(e)/EWP(m)/EWP(o)/EWP(i)/EWP(v)/EPR/T/EWP(b) Po-1./Pr-1./Ps-1.

ACCESSION NR: AP5017074

UR/0193/64/010/006/0623/0627

AUTHOR: Biryukovich, Yu. L. (Biryukovich, Yu. L.) (Kiev), Serbin, V. P. (Kiev)

TOPIC TAGS: glass product, nonmetal strength, nonmetal elasticity, nonmetal

ABSTRACT: Results are given of a study on the change in glass properties with age and glass composition.

L 52220-65

ACCESSION NR: AP5017004

BIRYUKOVICH, K.L.; BURYUKOVICH, Yu.L.; SERBIN, V.P.; BIRYUKOVICH, D.L.

Structural elements of glass cement. Prom. stroi. 41
no.4:36-37 Ap '64. (MIRA 17:9)

BIRYUKOVICH, K.I., kand. tekhn. nauk; BIRYUKOVICH, D.I., inzh.; BIRYUKOVICH,
Yu.L., inzh.; SERBIN, V.P., inzh.

Glass-reinforced cement yachts. Sudostroenie 30 no.12:29-33
D '64. (MIRA 18:6)

BIRYUKOVICH, Konstantin L'vovich; BIRYUKOVICH, Yuriy L'vovich;
BIRYUKOVICH, Dmitriy L'vovich; SINTSOV, G.M., inzh.,
retsenzent; ZELICHENKO, A.Ya., nauchn. red.; KAZAROV,
Yu.S., red.

[Small glass reinforced concrete and mesh reinforced
concrete vessels] Melkie suda iz steklotsementa i armo-
tsementa. Leningrad, Sudostroenie, 1965. 163 p.
(MIRA 18:7)

BIRYUKOVICH, D.L., inzh.

Launches made of mesh-reinforced concrete. Sudostroyeniye 27
no.10:48 O '61. (MIRA 14:12)

(Boatbuilding)

(Reinforced concrete construction)

BIRYUKOVICH, K.L., kand.tekhn.nauk; BIRYUKOVICH, Yu.L., inzh.; SHIRYAYEV,
Ist., inzh.

Concerning the use of glass cement in the agricultural machinery industry. Trakt.i sel'khoz mash. 32 no.4:37 Ap '62.

(MIRA 15:4)

1. Kiyevskiy politekhnicheskiy institut (for K.L.Biryukovich).
2. Institut mekhaniki AN USSR (for Yu.I.Biryukovich).
(Agricultural machinery industry—Equipment and supplies)

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These handled in the same manner as a check

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BYRUKOVICH, K.L.

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67949

S/097/59/000/07/018/021
E141/E164

15.2120

AUTHOR: Biryukovich, K.L. (Engineer)

TITLE: The Strength and Deformation of Reinforcement made of Glass Fibre ¹⁵

PERIODICAL: Beton i zhelezobeton, 1959, Nr 7, pp 326-328 (USSR)

ABSTRACT: Investigations have recently been carried out, both in Russia and abroad, on the properties of glass fibre reinforcement, especially as to the possibility of using it for reinforcement in concrete.¹⁵ Glass fibres can be used as reinforcement for concrete constructions if they are used as wires are used in steel cables. The strength of such reinforcement decreases with the increasing amount of threads from which the cable or strip is made. According to M. Koul (Ref 1) the strength of threads twisted from fibres having a limit of strength of 11000 kg/cm² is, in the case of a 0.5 mm cable, approximately 7000 kg/cm², and in the case of 3 mm diameter fibre it is approximately 2000 kg/cm². I. Rubinsky (Ref 2) and Dzh. Weis (Ref 3) also state that with increased diameter of this glass fibre reinforcement its strength decreases. Weis also shows that cables in

Card
1/4

67949

S/097/59/000/07/018/021
E141/E164

The Strength and Deformation of Reinforcement made of Glass Fibre which threads are placed in straight runs are much stronger than those with twisted threads. This was also proved by A.K. Burov (Ref 4) as far back as 1945. The decrease in the strength of glass fibre cables with increased number of threads was discovered by the author of this article. The results of investigations of glass fibre reinforcement in the form of plaited ropes with fibres not in a straight line were given at the Third International Congress on Prestressed Reinforced Concrete, held in 1958. It was then stated that residual deformation of such reinforcement reaches 30%. Values given by the All-Soviet Scientific and Research Institute for Glass Fibre (VNIISV) showed that with the increase of the number of fibres corresponding strength of the batch decreases (Ref 7). V.Ye. Sheyko (Ref 8) found that short time tensioning of fibre (from 3 to 75% of its strength) results in increased strength of between 5 and 10%. The present author investigated the possibilities of defining the strength and elasticity of glass fibre cables and strips in relation to numbers of threads and conditions of tensioning. Tests were carried out using continuous

Card
2/4

67949

S/097/59/000/07/018/021

E141/E164

The Strength and Deformation of Reinforcement made of Glass Fibre non-alkaline alumino-borosilicate glass fibre, of 6 to 7 μ diameter and modulus of elasticity of 750 000 kg/cm², with limit of strength of 22 000 kg/cm². A diagram of the tensioned glass fibre is given in Fig 1. Due to the fact that glass fibre strips and cables are extremely sensitive to mechanical damage during fixing in the anchors of the tensioning machine, which relies on friction to hold the sample, the author worked out a method of anchoring to obviate this risk. Fig 2 shows this new method of fixing. For the purpose of investigation the samples were divided into two groups: the first, cables and strips, tested once only, the load being then increased progressively to breaking point; the second, cables and strips, tested twice. The first time they were tensioned to 70% of the breaking stress; the stress was then removed and the sample was moved along to change the place of anchoring, after which tensioning continued up to breaking point. The tests with the first group showed a definite order in the reduction of the strength and modulus of elasticity with increase in the number of threads. This is illustrated by the curves in Fig 3.

Card
3/4

67949

S/097/59/000/07/018/021

E141/E164

The Strength and Deformation of Reinforcement made of Glass Fibre

Fig 4 shows the relationship of the modulus of elasticity of cables and strips with the quantity of fibres used. The investigations carried out with the second group showed that cables and strips subjected initially to 70% of the critical stress, with subsequent change of the anchoring position, reached 20 to 50% greater strength than similar samples of the first group. It can be concluded that increased strength of cables and strips due to preliminary tensioning is caused by engaging individual fibres in a more uniform way. According to investigations by V.Ya. Sheyko (Ref 8) it can be concluded that in given circumstances cables and strips do not show exceptional elastic deformation. The modulus of elasticity of cables and strips tested after preliminary tensioning up to 20-25% was found to be higher than the modulus of elasticity of those tested without preliminary tensioning.

There are 4 figures and 8 references, of which 5 are Soviet, 2 English and 1 French.

Card
4/4

BIRYUKOVICH, K.L., -insh.

Boat made of fiberglass-reinforced cement. Sudostroenie 26
no. 11:44-45 N '60. (MIRA 14:1)
(Boatbuilding)

BIRYUKOVICH, K. L.

Cand Tech Sci - (diss) "Search for an effective system of forming material on the basis of cement stone reinforced with glass fiber." Kiev, 1961. 19 pp; (Ministry of Higher and Secondary Specialist Education Ukrainian SSR, Kiev Construction Engineering Inst); 170 copies; price not given; list of author's works on pp 18-19 (12 entries); (KL, 6-61 sup, 214)

BIRYUKOVICH, K.L., inzh.; BIRYUKOVICH, Yu.L., inzh.

Boat shells made of glass reinforced cement. Bet.1 shel.-bet.
no.6:275-278 Je '61. (MIRA 14:7)
(Kiev--Reinforced concrete) (Boat building)

38633

S/081/62/000/009/051/075

B166/B144

15.3200

AUTHORS: Biryukovich, K. L., Biryukovich, Yu. L.

TITLE: Glass-reinforced cement, - a constructional material reinforced with unstressed glass fibers

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 9, 1962, 421, abstract 9K376 (Stroit. materialy, no. 11, 1961, 18-20)

TEXT: In the constitution of this new material, glass-reinforced cement, a system of reinforcing the cement with glass fiber is used. Advantage is taken of the microscopically small thickness of the fiber, which gives it a large surface development, to secure favorable conditions for the combined deformation of the fiber and the concrete. To prepare glass-reinforced KB-1 (KB-1) cement, alkali-free glass fiber of 7-8 μ diameter was used in the form of a mesh 360-600 mm wide with 1-3 mm individual cells, plus a protective solution of divinylacetylene resin in xylene (ethinol varnish) with bitumen type III added, and cement. The best results are obtained with alumina, waterproof, expanding cement of a grade not lower than 500, as well as with pozzolan Portland cement. Besides these components, glass-Card 1/2

Glass-reinforced cement, - a....

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B166/B144

reinforced KB-2 (KB-2) cement contains polyvinyl acetate latex and a casein stabilizer which controls the normal course of the reaction when the cement is mixed with an aqueous latex emulsion. In the manufacture of the glass-reinforced cement the glass mesh is lowered into the solution of ethinol-bitumen varnish, lightly squeezed out and dried, after which it is deposited in several layers and each layer cemented with a cement mortar (w/c 0.55-0.6) in the case of the KB-1 material, or using cement (62%) mixed with a latex emulsion (32%) and stabilizer (6%) for the manufacture of glass-reinforced KB-2 cement. A high quality glass-reinforced cement is obtained with a glass: cement ratio of 1 : 8. Fields of application are indicated. [Abstracter's note: Complete translation.]

Card 2/2

Biryukovich, K.L.

K.L.
BIRYUKOVICH, K.L., inzh.; BIRYUKOVICH, D.L., inzh.

Boat made of glass cement. Sudostroenie 27 no.4:40-42 Ap '61.
(MIRA 14:3)

(Boatbuilding)

BIRYUKOVICH, K.L., kand.tekhn.nauk; BIRYUKOVICH, Yu.L., inzh.

Glider vessels made of glass cement. Sudostroenie 29 no.7:
44-47 J1 '63. (MIRA 16:9)
(Boatbuilding) (Motorboats)

BIRYUKOVICH, Konstantin L'vovich; BIRYUKOVICH, Yuriy L'vovich;
BIRYUKOVICH, Dmitriy L'vovich; VOLOSHCHENKO, Z.N., red.

[Glass cement] Steklotsement. Kiev, Budivel'nyk, 1964.
113 p. (MIRA 17:12)

BIRYUKOVICH, K.L.; BURYUKOVICH, Yu.L.; SERBIN, V.P.; BIRYUKOVICH, D.L.

Structural elements of glass cement. Prom. stroi. 41
no.4:36-37 Ap '64. (MIRA 17:9)

BIRYUKOVICH, K.L., kand. tekhn. nauk; BIRYUKOVICH, D.L., inzh.; BIRYUKOVICH,
Yu.L., inzh.; SERBIN, V.P., inzh.

Glass-reinforced cement yachts. Sudostroenie 30 no.12:29-33
D '64. (MIRA 18:6)

BIRYUKOVICH, Konstantin L'vovich; BIRYUKOVICH, Yuriy L'vovich;
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[Small glass reinforced concrete and mesh reinforced
concrete vessels] Melkie suda iz steklotsementa i armo-
tsementa. Leningrad, Sudostroenie, 1965. 163 p.

(MIRA 18:7)

L 2904-66 EWP(e)/EPA(s)-2/EWT(m)/EPF(c)/EWP(1)/EWP(j)/I/EWP(b) WH/RM/NH
AM5010321 BOOK EXPLOITATION

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B6L

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Biryukovich, Konstantin L'vovich; Biryukovich, Yuriy L'vovich; Biryukovich,
Dmitriy L'vovich

Glass cement (Steklotsement) Kiev, Izd-vo "Budivel'nyk", 1964. 113 p. illus.,
biblio. 2400 copies printed.

TOPIC TAGS: cement; glass product; fiberglass; general construction, construction
material, solid mechanical property

PURPOSE AND COVERAGE: The book deals with a new construction material glass
cement, consisting of highly durable glass fiber and cement. Component
materials and manufacturing technology of glass cement and different
constructions from glass cement are described. Attention is given to the
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determining its strength and deformability. The practical use of glass cement,
the technical and economical aspects, and data describing the most efficient
use in the future are presented. The book is intended for engineering and
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organizations. It can be used as a university textbook.

Card 1/2

L 2904-66

AM5010321

TABLE OF CONTENTS (abridged):

Introduction -- 3

Materials for glass cement -- 6

Types of glass cement -- 21

Manufacturing technology of glass cement and glass cement constructions -- 27

Physical and mechanical characteristics of glass cement -- 44

Glass cement constructions and products and their technical and economical efficiency -- 84

General definitions -- 84

Models of glass cement constructions and products -- 85

Solution of designing problems -- 105

Bibliography -- 113

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SUBMITTED: 19Nov64

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OTHER: 000

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Card 2/2

L 26079-66(N) EWP(j)/EWT(m)/ETC(m)-6/I RM/WW

ACC NR: AM5026480

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27
B-1

Biryukovich, Konstantin L'vovich; Biryukovich, Yuriy L'vovich; Biryukovich, Dmitriy L'vovich

Small vessels made from glass reinforced concrete and mesh reinforced concrete
(Melkiye suda iz steklotsementa i armotsementa) Leningrad, Izd-vo "Sudostroyeniye",
1965, 163 p. illus., biblio. 7000 copies printed.

TOPIC TAGS: fiberglass, reinforced cement, shipbuilding engineering, marine engineering

PURPOSE AND COVERAGE: This book is intended for a wide circle of amateur boat-builders and may also be used by specialists in small-boat building and steel-reinforced concrete ship construction. Experiments in small-craft construction using new materials such as cement-glued fiberglass and mesh-reinforced concrete are covered and the advantages of these materials over traditional boat-building materials are discussed. The properties of these new materials are given and methods of their preparation are presented. Methods of building small boats using these materials are described in detail and several small boats built in the USSR and abroad are covered.

TABLE OF CONTENTS:

Cord 1/2

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ACC NR: AM5026480

PART I. Building and Repairing Boats Made of Cement-Glued Fiberglass and Mesh-Reinforced Concrete—8

- Ch. I. Cement-glued fiberglass — 8
- Ch. II. Mesh-reinforced cement — 37
- Ch. III. Hull design of cement-glued and mesh-reinforced concrete ships — 48
- Ch. IV. Building cement-glued fiberglass ships — 69
- Ch. V. Building mesh-reinforced cement ships — 82
- Ch. VI. Use and repair of cement-glued and mesh-reinforced cement ships — 100

PART II. Ships Made of Cement-glued Fiberglass and Mesh-reinforced Cement — 107

- Ch. VII. Description of several ships made of cement-glued fiberglass — 107
- Ch. VIII. Description of several ships made of mesh-reinforced cement — 146

Bibliography — 161

SUB CODE: 13/ SUBM DATE: 20Apr65/ ORIG REF: 044/

Cord 2/2

GODIK, Yefrem Il'ich, dotsent, kand.tekhn.nauk; YANUSHEVSKIY, Sergey
Konstantinovich, kand.tekhn.nauk; BIRYUKOVICH, Lev.Konstan-
tinovich, arkhitekt; SOROKA, M.S., red.

[Handbook on mechanical drawing] Spravochnoe rukovodstvo po
chercheniu. Pod red. E.I.Godika. Kiev, Gos.nauchno-tekhn.
izd-vo mashinostroit.lit-ry, 1959. 714 p. (MIRA 12:9)
(Mechanical drawing--Handbooks, manuals, etc.)

BIRYUKOVICH, M.

BIRYUKOVICH, M., inzh.

Better information from the radar station "Neptune." Mor.flot
17 no.10:23 0 '57. (MIRA 10:12)
(Radar in navigation)

Biryukovich, M. M.

PHASE I BOOK EXPLOITATION

378

Biryukovich, Mikhail Mikhaylovich, and Bukshpun, Marat Yakovlevich

Sudovaya radiolokatsionnaya stantsiya "Neptun" (The Ship Radar Installation "Neptune") Moscow, Izd-vo "Morskoy transport", 1957.
203 p. 9,000 copies printed.

Ed.: Chernyayev, R. N.; Ed. of Publishing House: Kolchinskiy, M. L.;
Tech. Ed.: Tikhonova, Ye. A.

PURPOSE: This monograph is addressed to ship navigators who are acquainted with the fundamentals of radio engineering and to specialists attached to the ship's navigation room.

COVERAGE: The monograph is concerned with the operation and design principles of the ship radar installation "Neptune". Methods of adjusting its component units and of detecting and correcting defects are described. The "Neptune" radar equipment is standard on many ships of the Soviet seagoing fleet (p.3). This book was composed on the assumption that the ship's navigator must understand the operating principles of the radar installation as a whole, as well as of its separate units if he is to be able to operate radar equipment properly, and to make repairs at sea,

Card 1/12

The Ship Radar Installation "Neptune"

378

or in foreign ports where it is very often impossible or difficult to find radar specialists in emergencies. Considerable attention is given in the book to methods of tuning and adjusting radar units and aggregates of radar units. Circuit diagrams of the master indicator, of the receiver-transmitter and of the antenna as well as of the remote indicator are given. These circuits, however, are not described in detail, but are given only to aid the reader to see the interrelation between the separate units. Soviet-produced electrical, electronic and mechanical parts and components entering into the completely assembled radar unit and its accessories are mentioned or discussed at length throughout the monograph. It is pointed out that since publication of this book, the "Neptune" radar equipment may have undergone certain modifications. For this reason the diagrams given in the book may be somewhat different from those in the radar equipment actually being produced. Extensive tables of characteristics of various types of tubes and of other components are given. The basic design parameters and characteristics of the "Neptune" radar and its components are given in tabular form (pp.16-18). The book is accompanied by a set of six inserts

Card 2/12

The Ship Radar Installation "Neptune"

378

(appendices 5, 6, and 7). There is a bibliography of six Soviet sources.

TABLE OF
CONTENTS:

Preface

3

GENERAL OPERATING PRINCIPLES
OF SHIP RADAR

Reflection of radio waves

4

Operating wave bands of radar transmitters

5

Pulse principle of radar operation

6

Principle underlying the determination of slant range

8

Determination of bearing

9

Obtaining images of surrounding settings on the plan
position indicator

10

Characteristics of ship radar

11

Card 3/12

The Ship Radar Installation "Neptune"

378

Section I.

DESIGN OF THE SHIP
RADAR INSTALLATION "NEPTUNE"

Ch. I. Operating and Technical Data	16
1. Basic parameters and characteristics	16
2. Component assemblies	19
Ch. II. Master Indicator, Assembly I	21
1. Function and interaction of units of the master indicator	21
2. Sine-wave oscillator (I-1) and the high-pass cutoff frequency filter (I-2)	30
3. Quadrature networks (I-15) and the phase inverter (I-16)	34
4. Formation of trigger pulses (I-4)	36
5. Formation of expanding range circles (I-3)	39
6. Formation of scanning-, brightening-, fixed range circle-, and balanced wave-pulses	41
7. Video-mixer unit (I-12)	48
Card 4/12	

The Ship Radar Installation "Neptune"

378

8. Cathode-ray tube unit (I-6), selsyn unit (I-14)	50
9. Monitor panel (I-11)	50
10. Control panel (I-9)	51
11. Indicator power supply unit (I-8)	53
Ch. III. Transmitter-receiver, Assembly P	55
1. Function and interaction of the transmitter-receiver units	55
2. Radio-frequency head (P-2)	59
3. Receiver (P-3 and I-7)	63
4. Automatic frequency control (P-4)	68
5. Transmitter modulator (P-6)	71
6. Magnetron oscillator (P-5) and high voltage rectifier (P-7)	74
7. Transmitter power supply unit (P-8)	75
Ch. IV. Antenna-waveguide System	77
1. Function and block diagram	77
2. System for the channeling, emission and reception of superhigh frequency energy (A-1)	78
Card 5/12	

The Ship Radar Installation "Neptune"

378

3. Antenna drive (A-2)	79
4. Waveguide channel	80
Ch. V. Remote Indicator -- Assembly V	81
1. Function and block diagram	81
2. Scanning pulse amplifiers (V-1, V-2, V-3)	83
3. Video amplifier (V-5)	85
4. Cathode-ray tube unit (V-4)	87
5. Power supply unit (V-8)	87
6. Control panel (V-6) and monitor panel (V-7)	88
Ch. VI. Heating System, Telephone Communications System, Dehumidifier, Power Supply Unit	89
1. Heating system	89
2. Telephone communications system	90
3. Dehumidifier	90
4. Power supply units	91

Card 6/12

The Ship Radar Installation "Neptune"

378

Ch. VII. Metering Apparatus Attached to the Equipment	91
1. Synchroscope 25-I	91
2. AVO-5M type ampere-volt meter	93
3. M-592 type microammeter set	93
4. M1101 type megohmmeter	94

Section II.

INSTALLING AND TUNING THE "NEPTUNE"
RADAR ON BOARD SHIP

Ch. VIII. Disposition of Radar Assemblies on Board Ship	95
1. Disposition of antenna	95
2. Disposition of transmitter-receiver	96
3. Disposition of master indicator	97
4. Disposition of remote indicator	97
5. Disposition of power supply units	98
6. Disposition of auxiliary equipment and assemblies	98
7. Assembly of the waveguide channel	99

Card 7/12

The Ship Radar Installation "Neptune"

378

Ch. IX. Switching the Equipment On and Off. Tuning the Equipment During Operation	100
1. General safety requirements when switching on and tuning the equipment	100
2. Switching equipment on and off	100
3. Tuning the components and units	102
Focussing the electron beams of the indicators	102
Sweep centering	103
Aligning the movable scale of assembly I with the gyrocompass	103
Antenna alignment	103
Zero adjustment of the range meter	104
Matching the disposition of the fixed range circles with the movable range circles	106
Regulating magnetron current	106
Adjusting the automatic frequency control and tuning the r-f head of the transmitter-receiver. Matching the antenna-waveguide channel with the magnetron	107
Adjusting image contrast range on the screen of the master indicator	110
Card 8/12	

The Ship Radar Installation "Neptune"

378

Matching the remote indicator scanning with master indicator scanning	110
Adjusting the scanner amplifiers of the remote indicator	111
Adjusting image contrast range on the remote indicator screen	112

Section III

ADJUSTMENT OF THE UNITS, ASSEMBLIES AND
THE EQUIPMENT AS A WHOLE

Ch. X. Tracking Down Faulty Units in the I Assembly	113
1. Preliminary remarks	113
2. Procedure for detecting faults in the I assembly	114
Ch. XI. Adjustment and Detection of Faults in the Units of the I Assembly	134
1. Adjusting the I-1 unit	135
2. Adjusting the I-2 unit	137

Card 9/12

The Ship Radar Installation "Neptune"

378

3. Adjustment of units I-15 and I-16	137
4. Adjustment of unit I-3	138
5. Adjustment of unit I-4	139
6. Adjustment of unit I-5	139
7. Adjustment of unit I-17	140
8. Adjustment of unit I-12	140
9. Checking the operation of units I-6, I-8, I-9, I-11	141
10. Detecting defects in the units	141
11. Correcting characteristic defects when tuning and adjusting the I Assembly	142
Ch. XII. Detection of Defective Units in the P assembly	142
1. Procedure in checking pulses	142
2. Sequence in the detection of defects in the P assembly	146
Ch. XIII. Adjustment and Detection of Defects in the P Assembly Units	152
1. Adjustment of unit P-4	152
2. Adjustment of unit P-6	154
3. Adjustment of units P-3 and I-7	154
Card 10/12	

The Ship Radar Installation "Neptune"

378

4. Adjustment of unit P-2	155
5. Adjustment of units P-5, P-7 and P-8	155
6. Correcting characteristic defects when adjusting the P assembly	155
Ch. XIV. Adjusting the A Assembly	155
1. Procedure for detecting defects in the A assembly	155
2. Correcting characteristic defects when adjusting the A assembly	159
Ch. XV. Detection of Defective Units in the V Assembly	159
1. Procedure for checking pulses	159
2. Sequence in detecting defects in the V assembly	160
Ch. XVI. Detection of Faults and Adjustment of V Assembly Units	169
1. Adjustment of units V-1, V-2, V-3	169
2. Adjustment of unit V-5	170
3. Correcting characteristic defects when adjusting the V assembly	171
Card 11/12	

The Ship Radar Installation "Neptune"	378
Appendix 1. Table of oiling schedules for the mechanical parts of the "Neptune" radar	173
Appendix 2. Tables of resistance values between the tube bases and the chassis	174
Appendix 3. Table of d-c tube operating parameters	179
Appendix 4. Coil winding data for the electrical components of the "Neptune" radar	187
Appendix 5. Schematic diagram of the master indicator - assembly I	insert
Appendix 6. Schematic diagram of the transmitter-receiver and of the antenna: assemblies A and P	insert
Appendix 7. Schematic diagram of the remote indicator: assembly V	insert
Bibliography	201

AVAILABLE: Library of Congress

Card 12/12

JJP/vm
June 25, 1958

L 12593-63 EPF(c)/EWT(m)/BDS Pr-4 RM/WW
ACCESSION NR: AP3001602 S/0189/63/000/003/0018/0023

AUTHOR: Topshiyeva, K. V.; Romanovskiy, B. V.; Biryukovich, M. M.

TITLE: A study of the inhibitory effect of cumenehydroperoxide in the cracking reaction

SOURCE: Moscow. Universitet. Vestnik. Seriya 2. Khimiya, no. 3, 1963, 18-23

TOPIC TAGS: cumene, cumenehydroperoxide, cracking, catalysis of cracking, aluminosilicate catalyst, acetophenone, inhibition of catalysis

ABSTRACT: While the cracking of cumene is today widely used in evaluating the capacity of aluminosilicate catalysts, it is essential to take into consideration the inhibiting effect of hydroperoxides of cumene on the kinetic laws of the reaction. This seems to be due to competition of cumene and hydroperoxide for the active centers of the catalyst. In this present work the adsorption coefficients of the hydroperoxide of cumene and its decomposition products (acetophenone and acetone) were determined. The principle of the method used consisted in studying the effect on the reaction rate constant of various amounts of hydroperoxide, as well as using dilutions by an inert substance - cyclohexane. The obtained results showed that the magnitude of the adsorption coefficient of hydroperoxide is very

Cord 1/2

L 12593-63

ACCESSION NR: AP3001602

2
sizable - an indication that the adsorption equilibrium is substantially shifted towards the formation of a stable complex between the hydroperoxide and the catalyst's active centers. It was also found that acetophenone equals the hydroperoxide in inhibition effect, while acetone has a four times lesser adsorption coefficient. Orig. art. has: 4 formulas, 4 charts, and 1 table.

ASSOCIATION: Moskovskiy universitet, kafedra fizicheskoy khimii (Moscow University, Department of Physical Chemistry)

SUBMITTED: 11Jul61

DATE ACQ: 09Jul63

ENCL: 00

SUB CODE: 00

NO REF SOV: 011

OTHER: 002

Card. 2/2

ROZOVSKIY, A.Ya.; BIRYUKOVICH, M.M.; IVANOV, A.A.; LIBEROV, L.G.;
BUTYUGIN, V.K.; KAGAN, Yu.B.; KRYUKOV, Yu.B.; BASHKIROV, A.N.

Mechanism of the carbide-forming reaction of fused iron
catalysts for synthesis from CO and H₂. Neftekhimiya
3 no.1:97-103 Ja-F '63. (MIRA 16:2)
(Iron catalysts) (Iron carbides)
(Chemistry, Organic--Synthesis)

ROZOVSKIY, A.Ya.; BIRYUKOVICH, M.M.; IVANOV, A.A.; KAGAN, Yu.B.;
BASHKIROV, A.N.

Kinetics of reactions involving the solid phase. Part 3:
Carbide formation in fused iron catalysts induced by carbon
monoxide. Kin. i kat. 4 no.3:373-381 My-Je '63.

(MIRA 16:7)

1. Institut neftekhimicheskogo sinteza AN SSSR.
(Carbides) (Iron catalysts)
(Chemical reaction, Rate of)

TOPCHIEVA, K.V.; ROMANOVSKIY, B.V.; BIRYUKOVICH, M.M.

Study of the inhibiting action of cumene hydroperoxide in
the cracking reaction. Vest. Mosk. un. Ser. 2:Khim. 18 no.3:
18-23 My-Je '63. (MIRA 16:6)

1. Kafedra fizicheskoy khimii Moskovskogo universiteta.

ROZOVSKIY, A. Ya.; BIRYUKOVICH, M.M.; IVANOV, A.A.; KAGAN, Yu.B.; BASHKIROV, A.N.

Kinetics and mechanism of the carbidizing treatment of iron catalysts for synthesis from CO and H₂. Neftekhimiia 4 no.2: 269-274 Mr-Apr'64 (MIRA 17:8)

1. Institut neftekhimicheskogo sinteza AN SSSR imeni Topchiyeva.

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SO: U-4630, 16 Sept. 53, (Letopis 'Zhurnal 'nykh Statey, No. 23, 1949).

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SO: U-4630, 16 Sept. 53, (Letopis 'Zhurnal 'nykh Statey, No. 23, 1949).

BIRYUKOVICH, P. V.

RASIN, S. D., PROTOPOPOV, V. P., BIRYUKOVICH, P. V.

Treatment of manic depressive subjects with lumbar novocaine block.
Nevropat. psikiat., Moskva, 19:6, Nov.-Dec. 50. p. 28-35

CIML 20, 3, March 1951

BIRYUKOVICH, P. V.

BIRYUKOVICH, P.V., kand.med.nauk; RASIN, S.D., kand.med.nauk

V.P.Protopopov's career. Medych.zhur. 20 no.5:3-8 '50. (MIRA 11:1)
(PROTOPOPOV, VIKTOR PAVLOVICH, 1880-)

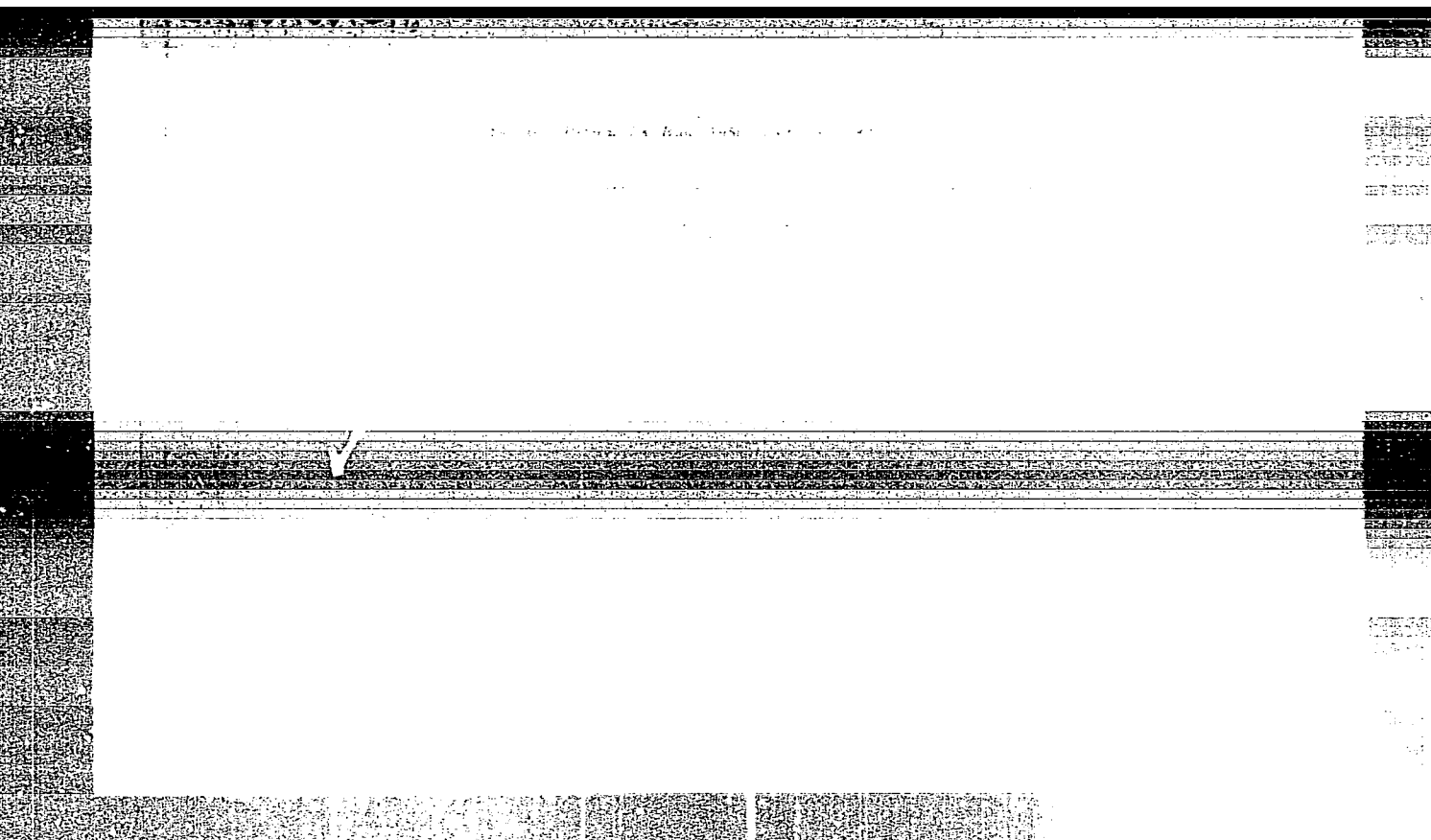
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PROTOPOPOV, V.P.; BIRYUKOVICH, P.V., kand.med.nauk; RASIN, S.D., kand.
med.nauk

Treating manic-depressives by lumbar novocaine block. Medych.shur.
20 no.5:9-18 '50. (MIRA 11:1)

1. Z viddilu psikhiiatrii (sav. viddilom - diysniy chlen AN URSS
V.P.Protopopov) Institutu klinichnoi fiziologii im. akad. O.O.
Bogomol'tsa AN URSS (direktor - chlen-kor AN URSS prof. R.Ye.
Kavets'kiy)

(NOVOCAINE) (MANIC-DEPRESSIVE PSYCHOSES)



BIRYUKOVICH, P.V.

Some preliminary symptoms of manic-depressive psychoses. Fiziol.zhur.
[Ukr.] 2 no.4:56-61 J1-Ag '56. (MIRA 9:10)

1. Institut fiziologii imeni O.O.Bogomol'taya Akademii nauk USSR,
viddil psikhatrii i patologii vishchoi nervovoi diyal'nosti.
(MANIC-DEPRESSIVE PSYCHOSES)

BIRYUKOVICH, P.V.

Viktor Pavlovich Protopopov; 75th birthday and 50th anniversary
of his scientific activities. Zhur. nevr. i psikh. 56 no.3:277-280
'56 (MLRA 9:7)

(PROTOPOPOV, VIKTOR PAVLOVICH, 1880-)

BIRYUKOVICH, P.Y.

Vladimir Mikhailovich Bekhterev; on the 100th anniversary of his
birth. Fisiol.smur. [Ukr.] 3 no.1:3-11 Ja-F '57. (MLRA 10:3)
(BEKHTEREV, VLADIMIR MIKHAILOVICH, 1857-1927)

BIRYUKOVICH, Petr Viktorovich

[Pathophysiological characteristics of patients with a manic-depressive psychosis and ways for preventing attacks] Patofiziologichna kharakterystyka khvorykh na maniakal'no-depresyivnyi psykhoz i shliakhy profilakty toho prystupiv. Kyiv, Vyd-vo Akad. nauk URSS, 1958. 152 p. (MIRA 13:9)

(MANIC--DEPRESSIVE PSYCHOSES)

BIRYUKOVICH, P. V., Doc Med Sci -- (diss) "Pathophysiological characteristics of patients with maniac-depressive psychosis in a seizure and in remission and means toward prophylaxis from attacks of this psychosis." Kiev, 1960. 23 pp; (Academy of Sciences Ukrainian SSR, Division of Biological Sciences); 280 copies; price not given; (KL, 17-60, 166)

BIRYUKOVICH, P.V. [Biriukovych, P.V.]

Anton Erofeevich Khil'chenko; on his 70th birthday. Fiziol. zhur.
[Ukr.] 7 no.5:711-713 8-0 '61. (MIRA 14:9)
(KHIL'CHENKO, ANTON EROFEEVICH, 1891-)

L 27517-66 EWT(m)/EWP(e)/EWP(j)/T/EWP(v) IJP(c) WW/RM/WH
ACC NR: AP6005846 (N) SOURCE CODE: UR/0403/65/000/003/0008/0011
AUTHOR: Biryukovich, Yu. (Director of laboratory); Serbin, V. (Senior engineer); Biryukovich, D. (Team leader, Member of technical help bureau) 25
ORG: (Biryukovich, Yu.) VNIINSM, Kiev; (Serbin, V.) Institute of Mechanics AN UkrSSR (Institut mekhaniki AN UkrSSR); (Biryukovich, D.) VNIINSM. B
TITLE: Glass-wool cements in the national economy
SOURCE: VDNKh SSSR. Informatsionnyy byulleten', no. 3, 1965, 8-11
TOPIC TAGS: general construction, structural mineral product, ship-building
ABSTRACT: The authors describe a new anisotropic construction material of glass-wool fibrous aggregates bound together by cement (or polymer-cement) glue. Its unit weight varies between 0.80 and 1.85 g/cu cm and its specific elongation is 0.9%. The material has good resistance against formation of cracks and fissures. The formation of micro-fissures starts at stresses in the range of 80 to 90% of tensile strength. The new material based on latex-cement glue has high dielectric properties. Its volume resistivity attains a value of 10^{14} ohm-cm 2
Card 1/2

L 27517-66

ACC NR: AP6005846

and its surface resistivity goes up to 10^{13} ohm-cm. Puncture voltage is about 8 kv/mm. Thermal conductivity is about 0.1 to 0.9 kcal/m.hr. degree. The material is fireproof, waterproof, frostproof and resistant to the action of mineralized water. It can readily be machined, riveted bolted, glued and assembled. It can be colored by addition of pigments to its binding mineral glue. The glass-wool cement is about 30 times cheaper than structural glass-plastics. It is more expensive than reinforced concrete. However, its higher cost is compensated by a lesser weight needed for construction because the tensile and bending strengths of glass-wool cement exceed many times the strengths of reinforced concrete. The glass-wool cement is especially suitable for construction of window frames, thin walls, tanks, pipes, boat hulls, etc. Some examples of developing, testing and using this material for various constructions (mostly in the Kiev area) were presented, including apartment buildings, irrigation installations and shipbuilding. The motor-yacht "Novinka" built of glass-wool cement was shown in a photo. Its hull walls were only 1 cm thick for a yacht size 18 cu m. The yacht covered 3000 km during the 1963 navigation season (Dnepr River and Black Sea). Orig. art has: 2 photos.

SUB CODE: 11,13 / SUBM DATE: None / ORIG REF: 000 / OTH REF: 000

Card 2/2 BLC

"APPROVED FOR RELEASE: 06/08/2000

CIA-RDP86-00513R000205410010-8

PIRUKOVICH, YU.I.

APPROVED FOR RELEASE: 06/08/2000

CIA-RDP86-00513R000205410010-8"

BIRYUKOVICH, Yu.L.

STREL'BITSKAYA, A.I. [Strel'bits'ka, O.I.]; BIRYUKOVICH, Yu.L.
[Biriukovich, Yu.L.]

Testing rolled girders for oblique bending beyond the
elastic limit. Dop.AN URSS no.1:22-26 '60.
(MIRA 13:6)

1. Institut stroitel'noy mekhaniki AN USSR. Predstavleno
akademikom AN USSR F.P.Belyankinym [F.P.Beliankinym].
(Girders) (Flexure)

STREL'BITSKAYA, A.I. [Strel'bits'ka, O.I.] (Kiyev); BIRYUKOVICH, Yu.L.
[Biriukovych, Yu.L.] (Kiyev); PRIADKO, E.A. [Priadko, E.O.]
(Kiyev)

Experimental investigation of elastic-plastic oblique bending of thin-walled beams. Prikl.mekh. 6 no.3:289-301
'60. (MIRA 13:8)

1. Institut mekhaniki AN USSR.
(Orders)

BIRYUKOVICH, K. L.: and BIRYUKOVICH, Yu. L., inzh.

Boat shells made of glass reinforced cement. Bet. 1 zhel. -bet.
no.6: 275-278 Je '61. (MIRA 14:7)
(Kiev--Reinforced concrete) (Boat building)

38633
S/081/62/000/009/051/075
B166/B144

15.3200
AUTHORS:

Biryukovich, K. L., Biryukovich, Yu. L.

TITLE:

Glass-reinforced cement, - a constructional material reinforced with unstressed glass fibers

PERIODICAL:

Referativnyy zhurnal. Khimiya, no. 9, 1962, 421, abstract 9K376 (Stroit. materialy, no. 11, 1961, 18-20)

TEXT: In the constitution of this new material, glass-reinforced cement, a system of reinforcing the cement with glass fiber is used. Advantage is taken of the microscopically small thickness of the fiber, which gives it a large surface development, to secure favorable conditions for the combined deformation of the fiber and the concrete. To prepare glass-reinforced KB-1 (KB-1) cement, alkali-free glass fiber of 7-8 μ diameter was used in the form of a mesh 360-600 mm wide with 1-3 mm individual cells, plus a protective solution of divinylacetylene resin in xylene (ethinol varnish) with bitumen type III added, and cement. The best results are obtained with alumina, waterproof, expanding cement of a grade not lower than 500, as well as with pozzolan Portland cement. Besides these components, glass-

Card 1/2

Glass-reinforced cement, - a....

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reinforced KB-2 (KB-2) cement contains polyvinyl acetate latex and a casein stabilizer which controls the normal course of the reaction when the cement is mixed with an aqueous latex emulsion. In the manufacture of the glass-reinforced cement the glass mesh is lowered into the solution of ethinol-bitumen varnish, lightly squeezed out and dried, after which it is deposited in several layers and each layer cemented with a cement mortar (w/c 0.55-0.6) in the case of the KB-1 material, or using cement (62%) mixed with a latex emulsion (32%) and stabilizer (6%) for the manufacture of glass-reinforced KB-2 cement. A high quality glass-reinforced cement is obtained with a glass: cement ratio of 1 : 8. Fields of application are indicated. [Abstracter's note: Complete translation.]

Card 2/2

BIRYUKOVICH, K.L., kand.tekhn.nauk; BIRYUKOVICH, Yu.L., inzh.

Glider vessels made of glass cement. Sudostroenie 29 no.7:
44-47 J1 '63. (MIRA 16:9)
(Boatbuilding) (Motorboats)

L 52220-65 EWP(a)/EWT(b)/EPW(c)/EWP(1)/EWP(v)/EPR/T/EWP(b) Po-h/Pr-h/Ps-l

Wd Wh

ACCESSION NO. 114 114

L 52220-65

ACCESSION NO. 44

are 59, 42-46 and 55% of the momentary modulus of elasticity respectively.
Orig. art. has: 10 graphs. 1 table.

2/2

L 2904-66 EWP(e)/EPA(s)-2/EWT(m)/EPF(c)/EWP(i)/EWP(j)/I/EWP(b) WW/RM/WH
AM5010321 BOOK EXPLOITATION

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633
B64

45
271

Biryukovich, Konstantin L'vovich; Biryukovich, Yuriy L'vovich; Biryukovich, Dmitriy L'vovich

Glass cement (Steklotsement) Kiev, Izd-vo "Budivel'nyk", 1964. 113 p. illus., biblio. 2400 copies printed.

TOPIC TAGS: cement; glass product; fiberglass; general construction, construction material, solid mechanical property

PURPOSE AND COVERAGE: The book deals with a new construction material glass cement, consisting of highly durable glass fiber and cement. Component materials and manufacturing technology of glass cement and different constructions from glass cement are described. Attention is given to the physical and mechanical characteristics of the glass cement and to the factors determining its strength and deformability. The practical use of glass cement, the technical and economical aspects, and data describing the most efficient use in the future are presented. The book is intended for engineering and technical workers in the construction industry and for designing and research organizations. It can be used as a university textbook.

Card 1/2

L 2904-66

AM5010321

TABLE OF CONTENTS (abridged):

Introduction -- 3

Materials for glass cement -- 6

Types of glass cement -- 21

Manufacturing technology of glass cement and glass cement constructions -- 27

Physical and mechanical characteristics of glass cement -- 44

Glass cement constructions and products and their technical and economical efficiency -- 84

General definitions -- 84

Models of glass cement constructions and products -- 85

Solution of designing problems -- 105

Bibliography -- 113

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SUBMITTED: 19Nov64

NO REF SOV: 049

OTHER: 000

OC
Card 2/2

BIRYUKOVICH, Konstantin L'vovich; BIRYUKOVICH, Yuriy L'vovich;
BIRYUKOVICH, Dmitriy L'vovich; SINTSOV, G.M., inzh.,
retsenzent; ZELICHENKO, A.Ya., nauchn. red.; KAZAROV,
Yu.S., red.

[Small glass reinforced concrete and mesh reinforced
concrete vessels] Melkie suda iz steklotsementa i armo-
tsementa. Leningrad, Sudostroenie, 1965. 163 p.
(MIRA 18:7)

BIRYUKOVICH, K.L., kand. tekhn. nauk; BIRYUKOVICH, D.L., inzh.; BIRYUKOVICH,
Yu.L., inzh.; SERBIN, V.P., inzh.

Glass-reinforced cement yachts. Sudostroenie 30 no.12:29-33
D '64. (MIRA 18:6)

BIRYUKOVICH, Yu.L. (Kiyev); SERBIN, V.P. (Kiyev)

Strength and deformability of glass-cements with various glass fiber fillers. Prikl. mekh. 1 no.12:75-81 '65.

(MIRA 19:1)

1. Institut mekhaniki AN UkrSSR. Submitted Nov. 25, 1964.

L 26079-66 (N) EWP(1)/EWT(m)/ETC(m)-6/T RM/YW

ACC NR: AM5026480

UR/ 27
841

Biryukovich, Konstantin L'vovich; Biryukovich, Yuriy L'vovich; Biryukovich, Dmitriy L'vovich

Small vessels made from glass reinforced concrete and mesh reinforced concrete
(Melkiye suda iz steklotsementa i armotsementa) Leningrad, Izd-vo "Sudostroyeniye",
1965, 163 p. illus., biblio. 7000 copies printed.

TOPIC TAGS: fiberglass, reinforced cement, shipbuilding engineering, marine engineering

PURPOSE AND COVERAGE: This book is intended for a wide circle of amateur boat-builders and may also be used by specialists in small-boat building and steel-reinforced concrete ship construction. Experiments in small-craft construction using new materials such as cement-glued fiberglass and mesh-reinforced concrete are covered and the advantages of these materials over traditional boat-building materials are discussed. The properties of these new materials are given and methods of their preparation are presented. Methods of building small boats using these materials are described in detail and several small boats built in the USSR and abroad are covered.

TABLE OF CONTENTS:

Card 1/2

UDC: 629.12.01.17

L 26070-66

ACC NR: AM5026480

PART I. Building and Repairing Boats Made of Cement-Glued Fiberglass and Mesh-Reinforced Concrete—8

Ch. I. Cement-glued fiberglass — 8

Ch. II. Mesh-reinforced cement — 37

Ch. III. Hull design of cement-glued and mesh-reinforced concrete ships — 48

Ch. IV. Building cement-glued fiberglass ships — 69

Ch. V. Building mesh-reinforced cement ships — 82

Ch. VI. Use and repair of cement-glued and mesh-reinforced cement ships — 100

PART II. Ships Made of Cement-glued Fiberglass and Mesh-reinforced Cement — 107

Ch. VII. Description of several ships made of cement-glued fiberglass — 107

Ch. VIII. Description of several ships made of mesh-reinforced cement — 146

Bibliography — 161

SUB CODE: 13/ SUBM DATE: 20Apr65/ ORIG REF: 044/
Cord 2/2

L 26079-66 (N) EWP(1)/EWT(m)/ETC(m)-6/T RM/WW

ACC NR: AM5026480

UR/ 29
841

Biryukovich, Konstantin L'vovich; Biryukovich, Yuriy L'vovich; Biryukovich, Dmitriy L'vovich

Small vessels made from ¹⁵glass reinforced concrete and mesh reinforced concrete ¹⁵
(Melkiye suda iz steklotsementa i armotsementa) Leningrad, Izd-vo "Sudostroyeniye",
1965, 163 p. illus., biblio. 7000 copies printed.

TOPIC TAGS: fiberglass, reinforced cement, shipbuilding engineering, marine engineering

PURPOSE AND COVERAGE: This book is intended for a wide circle of amateur boat-builders and may also be used by specialists in small-boat building and steel-reinforced concrete ship construction. Experiments in small-craft construction using new materials such as cement-glued fiberglass and mesh-reinforced concrete are covered and the advantages of these materials over traditional boat-building materials are discussed. The properties of these new materials are given and methods of their preparation are presented. Methods of building small boats using these materials are described in detail and several small boats built in the USSR and abroad are covered.

TABLE OF CONTENTS:

Cord 1/2

UDC: 629.12.01.17

I 26079-66

ACC NR: AM5026480

PART I. Building and Repairing Boats Made of Cement-Glued Fiberglass and Mesh-Reinforced Concrete—8

Ch. I. Cement-glued fiberglass — 8

Ch. II. Mesh-reinforced cement — 37

Ch. III. Hull design of cement-glued and mesh-reinforced concrete ships — 48

Ch. IV. Building cement-glued fiberglass ships — 69

Ch. V. Building mesh-reinforced cement ships — 82

Ch. VI. Use and repair of cement-glued and mesh-reinforced cement ships -- 100

PART II. Ships Made of Cement-glued Fiberglass and Mesh-reinforced Cement — 107

Ch. VII. Description of several ships made of cement-glued fiberglass — 107

Ch. VIII. Description of several ships made of mesh-reinforced cement -- 146

Bibliography — 161

SUB CODE: 13/ SUBM DATE: 20Apr65/ ORIG REF: 044/
Card 2/2

BIRYUKOVICH, K.L., kand.tekhn.nauk; BIRYUKOVICH, Yu.L., inzh.; SHIRYAYEV,
I.T., inzh.

Concerning the use of glass cement in the agricultural machinery
industry. Trakt.i sel'khoz mash. 32 no.4:37 Ap '62.

(MIRA 15:4)

1. Kiyevskiy politekhnicheskoy institut (for K.L.Biryukovich).
2. Institut mekhaniki AN USSR (for Yu.I.Biryukovich).
(Agricultural machinery industry—Equipment and supplies)

- SHMAYN, Yu.A., inzh.; BIRYULEV, V.G., inzh.

Problems concerning the design of a circuit for the ignition of
ignitrons. Elektrichestvo no.6:61-65 Je '61. (MIRA 14:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut elektroenergetiki.
(Mercury-arc rectifiers)

SEMAYN, Yu.A., inzh.; Primalni uchastiye: KHARLAMOV, S.Kh., inzh.;
BIRYULEV, V.G., inzh.; TAMANTSEVA, I.S., inzh.; IGLITSYN, I.L.,
red.; LARIONOV, G.Ye., tekhn.red.

[Study of ignitron characteristics and design of firing circuits]
Issledovanie kharakteristik zazhigatelei i raschet skhem zashiga-
niia ignitronov. Moskva, Gos.energ.izd-vo, 1960. 57 p. (Moscow.
Vsesoyuznyi nauchno-issledovatel'skii institut elektroenergetiki.
Informatsionnye materialy, no.56). (MIRA 14:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut elektroenergetiki
(for Kharlamov, Biryulev, Tamantseva).
(Mercury-arc rectifiers)

1 8521-05 BWT 1 MW 1000-1 P-1 1000-1

L 8521-65

ACCESSION NR: AP4044975

ASSOCIATION: 2001arstvennyy* v opticheskiy

NR 851 0001

Card 1/4

1. 0501-65

ACCESSION NO: AF4044971

REMARKS: 01

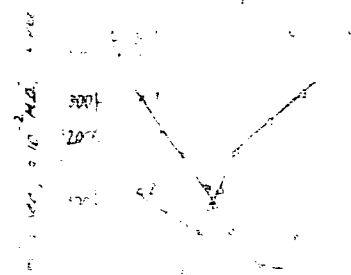


Fig. 1. Temperature dependence of the carrier mobility (1), the carrier mobility μ , the Hall constant (2), and the time constant τ of PbS layers.

BEREZHNAYA, I.A.; BIRYULEV, V.I.; KOPILEVICH, I.G.; PROKOF'YEV, Ye.V.

Mechanism of photoconductivity in lead sulfide layers. Fiz. tver.
tela 6 no.9:2873-2876 S '64.

(MIRA 17:11)

1. Gosudarstvennyy opticheskiy institut imeni Vavilova, Leningrad.

BIRYULEV, V. V.

BIRYULEV, V. V. - "Pre-Stressed Steel Beams." Min Higher Education USSR. Kiev
Construction Engineering Inst. Chair of Metal and Wooden Structures. Kiev,
1954. (Dissertation for the Degree of Candidate in Technical Sciences)

So; Knizhnaya Letopis' No 3, 1956

BIRYULEV, V.V., kand. tekhn. nauk; SIL'VESTROV, A.V., kand. tekhn. nauk;
KLYACHIN, A.Z., inzh.; LEVENSON, Ya.S., inzh. (Novosibirsk)

Some characteristics of prestressed steel continuous crane girders.
Prom. stroi. 42 no.10:18-21 0 '64. (MIRA 17:11)

BIRYUKOVICH, K.L., inzh.; BIRYUKOVICH, Yu.L., inzh.

Boat shells made of glass reinforced cement. Bet.i zhel.-bet.
no.6:275-278 Je '61. (MIRA 14:7)

(Kiev--Reinforced concrete) (Boat building)

PIKULIN, A. P., BUNGSDOFF, V. V., MAKHLIN, B. Yu.

"Wing Loads On Overhead Transmission Lines."

report to be submitted for Intl. Conference on Large Electric Systems (CIGRE),
18th Biennial Session, Paris, France, 15-25 Jun 60.

~~BIRYULIN, A.P.~~, inzh.; BURGSDORF, V.V., doktor tekhn.nauk;
MAKHILIN, B.Yu., inzh.

Wind pressure on overhead line conductors. Elek. sta.
31 no.8:59-65 Ag '60. (MIRA 14:9)
(Electric lines—Overhead)

DIRYULIN, G.M.

AUTHOR: Berdichevskiy, L. S., Candidate of Biology 30-58-7-41/49

TITLE: Biological Foundations of Ocean Fishing (Biologicheskiye osnovy okeanicheskogo rybolovstva) All-Union Conference (Vsesoyuznoye soveshchaniye)

PERIODICAL: Vestnik Akademii nauk SSSR, 1958, Nr 7, pp. 131-133 (USSR)

ABSTRACT: The Ichthyological Committee of the AS USSR (Ikhtiologicheskaya komissiya Akademii nauk SSSR) together with the All Union Scientific Research Institute for Ocean Fishing Economics and Oceanography /VNIRO/ (Vsesoyuznyy nauchno-issledovatel'skiy institut morskogo rybnogo khozyaystva i okeanografii /VNIRO/), and the Institute for Oceanography of the AS USSR (Institut okeanologii Akademii nauk SSSR) held this conference April 11 - 16. It was attended by: representatives of a great number of biological scientific research institutions of branch institutes of fishing industry, of many universities and a number of Councils of Economy. The following lectures were held:

1) A. M. Batalin

V. V. Leont'yeva

V. A. Burkov

On new data concerning oceanological conditions in a number of regions of the Pacific Ocean (Tikhii okean)

2) G. M. Biryulin on the utilization of oceanological data in ocean fishing.

~~BIRYULIN, G.M.~~

Oceanography and sea fisheries. Trudy sov. Ikht. kom. no.10:41-46
'60. (MIRA 13:10)

1. Tikhookeanskiy nauchno-issledovatel'skiy institut rybnogo
khozaystva i okeanografii (TINRO).

(Pacific Ocean--Fisheries--Research)

(Pacific Ocean--Oceanographic research)