VOLKOV, Ye M

JOLKOV, Ye. M.

AID P - 3709

Subject   : USSR/Electricity

Card 1/1   Pub. 29 - 14/25

Author   : Volkov, Ye. M., Eng.

Title   : Remodeling of the drive of an oil circuit breaker of
                the FS-600 type for automatic reclosure

Periodical   : Energetik, 12, 19-20, D 1955

Abstract   : The author describes the remodeling of an oil circuit
                breaker drive of the FS-600 type, manufactured by the
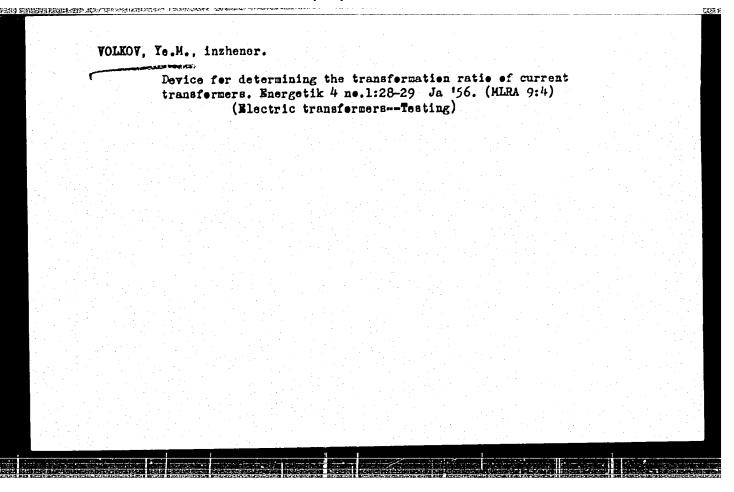   Sachsenwerk Plant, for automatic reclosure operation.
                One schematic drawing of the drive.

Institution : None

Submitted   : No date

VOLKOV, Ye.M., inzhener.

Device for determining the transformation ratio of current
transformers. Energetik 4 no.1:28-29 Ja '56. (MLRA 9:4)
    (Electric transformers--Testing)

NAMESTNIKOV, Aleksandr Fedorovich, kand. tekhn. nauk; BELOUSOV,D.P., inzh.; VOLKOV,Ye.N., kand.tekhn.nauk; LIPOVSKIY,M.S., inzh.; SAVZDARG,V.E., red.; BALLOD,A.I., tekhn.red.

[Collective-farm cannery] Kolkhoznyi konservnyi zavod. Mo-skva, Gos.izd vo sel'khoz.lit-ry, 1959.   275 p.
(MIRA 14:5)

1. Nauchno-issledovatel'skiy institut konservnoi i ovoshche-sushil'noy promyshlennosti, Moskva, Novoslobodskaya, 7 (for Namestnikov). 2. Gipropishcheprom, Butyrskiy val, 68 (for Belousov)
          (Canning industry--Equipment and supplies)

ANTONOV, Mikhail Vasil'yevich; DZHAFAROV, Abdulla Fataliyevich;
     VOLKOV, Yevgeniy Nikitich; SABUROV, N.V., prof., retsenzent;
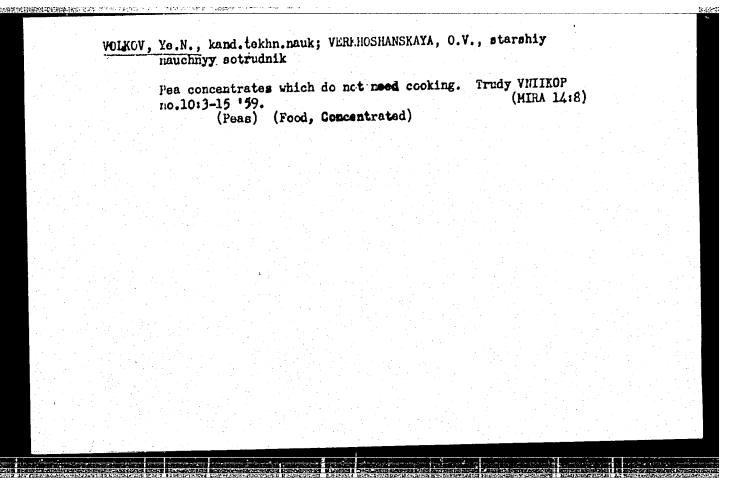   SKROBANSKIY, G,G., prof., retsenzent; RUKOSUYEV , A.N., red.;
     SINEL'NIKOVA, TS.B., red.; AYRIYEVA, N.S., red.; TERYUSHIN,
     M.I., tekhn. red.

     [Commercial guide to food products; vegetables and fruit]Tovaro-
     vedenie prodovol'stvennykh tovarov; ovoshchi i plody. Pod red.
     A.N.Rukosueva. Moskva, Gostorgizdat, 1962. 400 p.
                                              (MIRA 16:1)
        (Vegetables) (Fruit)

VOLKOV, Ye.N., kand.tekhn.nauk; VERKHOSHANSKAYA, O.V., starshiy
nauchnyy sotrudnik

Pea concentrates which do not need cooking. Trudy VNIIKOP
no.10:3-15 '59.   (MIRA 14:8)
          (Peas) (Food, Concentrated)

DIKKER, G.L.; DRUZHININA, L.N., kand. tekhn. nauk, dots.; ISKENDEROV, A.A.,
kand. tekhn. nauk, dots.; KLYUYEVA, T.K., kand. tekhn. nauk, dots.;
LOGOTKIN, I.S., kand. tekhn. nauk; MEL'MAN, M.Ye., kand. tekhn. nauk,
dots.; MISNIK, I.A.; kand. tekhn. nauk; RUSH, V.A., dots.; RUKOSUYEVA,
A.N., dots., red.; KAFKA, E.V., prof., retsenzent; FERTMAN, G.I., dots.,
retsenzent; SOBOLEVA, M.I., dots., retsenzent; BUDNITSKAYA, R.S., kand.
tekhn. nauk, retsenzent; VOLKOV, Ye.N., kand. tekhn. nauk, retsenzent;
AREF'YEV, I.I., inzh., retsenzent; KHARITONOV, A.F., retsenzent; GUREVICH-
GUR'YEV, Ye.S., retsenzent; KUZ'MINSKIY, M.M., retsenzent; INIKHOV, G.S.,
prof., retsenzent; KHOMUTOV, B.I., dots., retsenzent; BORODINA, Z.N.,
dots., retsenzent; BORISOVA, G.A., red.; MEDRISH, D.M., tekhn. red.

[Starch, sugar, honey, confectionery products, condiments, fats, milk,
and milk products] Khrakhmal, sakhar, med, konditerskie, vkusovye to-
vary, zhiry, moloko i molochnye produkty. Moskva, Gos. izd-vo torg. lit-
ry, 1961. 750 p.   (MIRA 14:7)
                        (Food industry)

VOLKOV, Ye.N., kand. tekhn. nauk; STEPCHKOV, K.A., kand. tekhn. nauk; STRASHNENKO,
    Ye.S.; PYATIGORSKAYA, T.I.; PARAMONOVA, Ye.S.; KOTOVICH, A.G.; NENTSOVA,
    A.S.

    Production technology, testing and storage of hydrolyzates and protein
    enrichers from soya. Trudy VNIIKOP no.11:66-76 '62.   (MIRA 17:9)

RUNOVA, N.V.; VOLKOV, Ye.N.; STEPCHKOV, K.A.

Food for tourists. Kons. i ov. prom. 16 no.9:23-25 S '61.
(MIRA 14:8)

1. TSentral'nyy nauchno-issledovatel'skiy institut konservnoy i
ovoshchesushil'noy promyshlennosti.
(Food, Canned)

VOLKOV, Ye.N., kandidat tekhnicheskikh nauk; PYATIGORSKAYA, T.I., starshiy nauchnyy sotrudnik.

Technology of producing powdered beans. Trudy VNIIKOP no.6:151-159 '56.   (MLRA 10:5)

(Beans--Drying)

ARTEM'YEV, B.V.; VOLKOV., Ye.N.

Preparation of instant barley coffee.   Kons.i ov. prom. 16 no.2:
19-21 F '61.   (MIRA 14:4)

1. TSentral'nyy nauchno-issledovatel'skiy institut konservnoy i
ovoshchesushil'noy promyshlennosti.
            (Coffee)   (Barley)

VOLKOV, Ye.N.; GENIN, S.A.

Means for increasing the admission capacity of enterprises and combining manufactures in the vegetable dehydration industry. Kons.i ov. prom. 16 no.2:39-42 F '61.   (MIRA 14:4)

1. TSentral'nyy nauchno-issledvatel'skiy institut konservnoy i ovoshchesushil'noy promyshlennosti.
                    (Vegetables—Drying)

BREGER, A.Kh.; RYABUKHIN, Yu.S.; TUL'KES, S.O.; VOLKOV, Ye.N.

Indium-gallium circulation loop of an IRT nuclear reactor.
Trudy Inst.fiz.AN Gruz.SSR 8:51-58 '62.   (MIRA 16:2)
                            (Nuclear reactors)

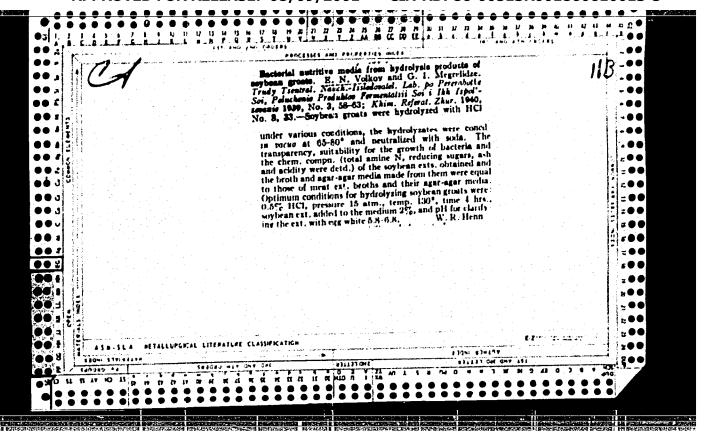Denaturation of soya-bean proteins by organic solvents and by heat. E. Volkov and I. Dvinianinova (J. Appl. Chem. Russ., 1940, 13, 287—274).—Denaturation of the proteins during treatment with org. solvents proceeds rapidly during the first 30 min. but only very slowly subsequently. The extent of denaturation rises with increase in temp. of extraction, in water content of the material, and in polarity of the solvent (denaturing effect of benzene or benzine is less than that of acetone, which is less than that of ethyl alcohol).   R. T.

Bacterial nutritive media from hydrolysis products of soybean groats. E. N. Volkov and G. I. Megrelidze. *Trudy Tsentral. Nauch.-Issledovatel. Lab. po Pererabotke Soi, Paluchenie Produktov Fermentatsii Soi i Ikh Ispol'zovanie 1939*, No. 3, 58–63; *Khim. Referat. Zhur. 1940*, No. 8, 33.—Soybean groats were hydrolyzed with HCl

under various conditions, the hydrolyzates were concd. in vacuo at 65–80° and neutralized with soda. The transparency, suitability for the growth of bacteria and the chem. compn. (total amine N, reducing sugars, ash and acidity were detd.) of the soybean exts. obtained and the broth and agar-agar media made from them were equal to those of meat ext., broths and their agar-agar media. Optimum conditions for hydrolyzing soybean groats were: 0.5% HCl, pressure 15 atm., temp. 130°, time 4 hrs., soybean ext. added to the medium 2%, and pH for clarifying the ext. with egg white 5.8–6.8.   W. R. Henn

IIB

ASM–SLA   METALLURGICAL LITERATURE CLASSIFICATION

BC

B-II-8

Soya-bean casein for plastic mass production. B. T. Yegorov and P. G. Gascoyne (From. Org. Chim., 1934, 9, 18—19).—Plastics are obtained by ... pts. of a mixture of soya-bean casein ... CaO ... active ... stearic acid ... stearate ... and ... 205 pts. with 17·5 pts. of a mixture of hexamethylenetetramine 34·4, (CH₂)₆N₄; 2·3 pts., stearic acid ... and Zn stearate 0·05 pt.   R. T.

Denaturation of soybean proteins by organic solvents and heat. K. N. Volkov and I. I. Dymshakova. *J. Applied Chem.* (U. S. S. R.) 13, 267-71 (in German, 273-4) (1940). Treatment of soybeans with gasoline and alc. caused the denaturation of protein in 30 min. Treatment for 3.5 hrs. did not visibly affect the degree of denaturation. The denaturation action of the solvents is greatest for the solvent of highest dielec. const. Heat increases the denaturing effect of alc., but has little effect on that of acetone. In all cases, the greatest degree of denaturation is effected in the protein contg. the most moisture. Therefore, to protect protein from denaturation, soybean material should be dry and the temp. not over 181°.   A. A. Podgorny

Albuminous plastics from soybean press cake. E. S. Volkov, P. G. Grigor'ev and V. Gulyaev. *Org. Chem. Ind.* (U.S.S.R.) 6, 517-18 (1939); cf. C. A. 33, 8838.— The inferior qualities (discoloration, swelling and permeability to water) of pressed articles from soybean casein and rosinol were traced to the presence of decompn. products of albumins. The phys. and mech. properties of the moldings can be greatly improved by the use of casein or press cake freed from the decompn. products by preliminary washing with dil. NaOH and neutral zinc with 4% HCl.   Chas. Blanc

A. S. M. — S. L. A.   METALLURGICAL LITERATURE CLASSIFICATION

13

The interaction between soy glycinin and formaldehyde. E. N. Volkov, P. G. Grigor'ev and O. A. Rezvetsov. *J. Applied Chem.* (U. S. S. R.) 14, 416–18(1941).—The globulin-glycinin fibers of the soy bean were fixed by treatment with 2½%, 4% and 0.5% soln. of formaldehyde. The beans were extd. with gasoline b. 78–80°, the gasoline was removed *in vacuo*, the degreased seeds were ground to fine powder and digested with 20 vols. of a 0.2% soln. of KOH, let stand for 18–20 hrs., the soln. was decanted and albumin was coagulated with 4% HCl at the isoelec. point (pH = 4.5 – 4.6). The pptd. glycinin was washed with tepid water till free of Cl ions. On treatment with formaldehyde, the amount of glycinin fixed increases with the concn. of formaldehyde and with the duration of treatment. The equil. between formaldehyde and glycinin is reached in all cases after 48 hrs. 6 references.

A. A. Hochtlingk

BC

B-2-1

PROCESSING AND PROPERTIES INDEX

Interaction of soya-glycinin and formaldehyde. E. N. Volkov, P. G. Grigoriev, and O. A. Rozvetaov (*J. Appl. Chem. Russ.*, 1961, 14, 416—418).—Interaction of soya-glycinin (I) and CH_2O was investigated for $[CH_2O]$ 0-5—22%, and for 30 min. to 90 days, the reaction being followed by determination of CH_2O not bound to (I). Increase in $[CH_2O]$ or a longer time of reaction increased the quantity of CH_2O bound to 1 g. of (I). Equilibrium between (I) and CH_2O was almost reached after 48 hr. contact at all the three concns. of CH_2O used.   N. G.

A50-SLA   METALLURGICAL LITERATURE CLASSIFICATION

Ca

16

The character of the hydrolysis of protein and carbohydrate substances in soybean fermentation. K. N. Volkov and O. A. Rezvetsov. *Trudy Tsentral. Nauch.-Issledovatel. Lab. Pererabotke Soi, Poluchenie Produktov Fermentatsii i ikh Ispol'zovanie* 1939, No. 3, 18–22; *Khim. Referat. Zhur.* 1940, No. 8, 130.—The ripening of soy sauce under the influence of *Aspergillus oryzae* is a typical biochem. process. Polypeptides and amino acids are formed from proteins under the influence of proteolytic enzymes. Diastatic enzymes decomp. the carbohydrate substances into disaccharides and monosaccharides. The monosaccharides are transformed into alc. and org. acids,

mainly into AcOH and lactic acid. The presence of these substances proves the presence of other enzymes.

W. R. Henn

METALLURGICAL LITERATURE CLASSIFICATION

Removing the bitter taste from lupine. M. I. Prakhin, P. M. Valkov and V. A. Rush. Russ. 55,003, Sept. 30, 1939; addn. to Russ. 53,302 (C. A. 34, 5199). Russ. 55,302 is modified in that lupine is treated with aq. solns. of weak alkalies for the extn. of alkali-sol. albumins before extn. of the alkaloids with acids.

A59-SL6 METALLURGICAL LITERATURE CLASSIFICATION

Soybean casein for plastic-mass production. E. N.
Volkov and P. G. Grigor'ev. Org. Chem. Ind. (U. S.
S. R.) 6, 13-15 (1939). — Plastics are obtained by pressing
82.2 parts of a mixt. of soybean casein 60, 30% CaCl₂
(s.br 30, stearic acid 1.5, Zn stearate 1.5 and sawdust
225 parts with 17.8 parts of a mixt. of hexamethylenetetramine
(CH₂)₆N₄ 2.2 parts, stearic acid 0.35 and Zn stearate
0.35 part.   H. C. P. A.

METALLURGICAL LITERATURE CLASSIFICATION

VOLKOV

B-II-8

Soya-bean cake as material for production of protein plastics. B. Volkov, P. Gorgonov, and V. Gorlanov (From Ing. Chim., ism. 6, 617—619).— The cake is treated successively with aq. NaOH and HCl, and the product is incorporated into plastic mass compositions.   R. T.

A10-SLA   METALLURGICAL LITERATURE CLASSIFICATION

VOLKOV,

BC

A-1

Stability of sodium glycinin sols. E. Volkov and I. Dvinjaninova
U. *Appl. Chem. Russ.*, 1961, **14,** 854—858).—The stability of 10%
and 12% Na glycinin (I) sols on ageing at room temp. in the presence
of 1·0—30·0% NaOH (calc. as % of the protein present) was in-
vestigated by measuring their surface tension (γ). γ decreases with
increasing [NaOH]. 10% (I) sols are unstable at all [NaOH]
investigated, the sols separating into two phases. The 12% sols
are stable over the range 4·5—6·0% NaOH (calc. on the protein):
below 4·5% NaOH, the sols tend to change to gels, whilst above
6·0% NaOH separation into two phases occurs at a rate which
increases with increasing [NaOH].   N. G.

ASM.SLA METALLURGICAL LITERATURE CLASSIFICATION

Plastic masses. E. N. Volkov, P. G. Grigor'ev and V. N. Gulyaev. Russ. 58,090, Oct. 31, 1940. Plastic masses are prepd. from phenolaldehyde resins and soy bean meal from which 12-15% of the protein has been removed by extn. with an alk. soln., followed by the neutralization with acid.

BLOSHTEYN, I.I., kand. tekhn. nauk; BUYANOV, A.A., inzh.; VOLKOV, Ye.N., inzh.

Device for testing and automatic control of the viscosity of
lacquer and paints. Der. prom. 14 no.9:22-23 S '65.
(MIRA 18:12)

VOLKOV, Ye.N.

Review of A.P. Kuzbatov's booklet "Mechanization of the production
of saurerkraut." Kons. i ov. prom. 17 no.8:44 Ag '62.
(MIRA 17:1)

KOROLEV, D.D.; VOLKOV, Ye.N.; SPIRIDONOV, D.I., spets. red.;
       SIDEL'NIKOVA, L.A., red.; SOKOLOVA, I.A., tekhn. red.

[Manufacture of potato chips] Proizvodstvo zharenogo khru-
stiashchego kartofelia. Moskva, Pishchepromizdat, 1961. 43 p.
                                                (MIRA 15:7)
       (Potato chips)

VOLKOV, Ye. N.; STEPCHKOV, K.A.; STRASHNENKO, Ye.S.

Technology of the production of soybean-protein reinforcing agent
for food concentrates. Kons. i ov. prom. 14 no.9:23-25 S '59.
(MIRA 12:12)

1.TSentral'nyy nauchno-issledovatel'skiy institut konservnoy
i ovoshchesushil'noy promyshlennosti.
(Food, Concentrated)

VOLKOV, YE. N.

The interaction between soy glycinin and formaldehyde. Ye. N. Volkov, P. G. Gagarin and A. A. Rozvelov. J. Applied Chem. (U. S. S. R.) 14, 416 (1941).—The globulin-glycinin fibers of the soy bean were fixed by treatment with 22%, 4% and 0.5% soln. of formaldehyde. The beans were extd. with gasoline b. 73-80°, the gasoline was removed in vacuo, the degreased seeds were ground to fine powder and digested with 20 vols. of a 0.2% soln. of KOH, let stand for 18-20 hrs., the soln. was decanted and albumin was coagulated with 4% HCl at the isoelec. point (pH = 4.5 — 4.6). The pptd. glycinin was washed with tepid water till free of Cl ions. On treatment with formaldehyde, the amount of glycinin fixed increases with the concn. of formaldehyde and with the duration of treatment. The equil. between formaldehyde and glycinin is reached in all cases after 48 hrs. 6 references.

A. A. Boehtling's

BULKIN, Yu.M.; VOLKOV, Ye.N.

Nuclear reactors used for scientific investigations. Inzh.-fiz.
zhur. no.10:3-10 O '58.   (MIRA 11:11)
                    (Nuclear reactors)

VOLKOV, Ye.N.

Useful brochure ("Production of soy fermentation and delicatessen
sauces" by V.P. Potorzhinnkii. Reviewed by E.N. Volkov). Kons. i
ov. prom. 13 no.11:46 N '58.   (MIRA 11:11)
       (Soybean)   (Sauces)

VOLKOV, Ye.N.;STEPCHKOV, K.A.;PYATIGORSKAYA, T.I.

Use of soybean hydrolysates for increasing the nutritive value and
flavor quality of concentrates. Kons. i ov. prom. 12 no.3:5-8 Mr '57.
(MIRA 10:5)

1. Vsesoyusnyy nauchno-issledovatel'skiy institut konservnoy i ovoshche-
sushil'noy promyshlennosti.
(Soybean) (Food concentrated)

VOLKOV, Ye. N.

VOLKOV, Ye.N.; SHELAMOVA, A.S.

Improve the quality of dehydrated potatoes and vegetables. Kons.i
ov.prom. 12 no.9:1-3 S '57.   (MIRA 10:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut konservnoy i
ovoshchesushil'noy promyshlennosti.
                    (Vegetables--Drying)

VOLKOV, Ye.N.; IVANOVA, G.A.; PROKOF'YEVA, A.M.

Concentrates of creamed vegetable soups. Kons.i ov.prom.
15 no.2:20-22 F '60.   (MIRA 13:5)

1. TSentral'nyy nauchno-issledovatel'skiy institut konservnoy
i ovoshchesushil'noy promyshlennosti.
        (Soups) (Food, Concentrated)

VOLKOV, Ye.N.; STEPCHKOV, K.A.; NAMESTINIKOV, A.F.

Sodium glutamate and its use in canned foods and food concentrater.
Kons, i ov. prom. 12 no.4:4-5 Ap '57.   (MIRA 10:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut konservnoy i
ovoshchesushil'noy promyshlennosti.
            (Glutamic acid)   (Food, Canned)

VOLKOV, Ye.N.; GENIN, S.A.

      Technical conditions for the production of dehydrated vege-
tables and potatoes. Kons.i ov.prom. 15 no.1:24-25 Ja '60.
                                  (MIRA 13:5)

      1. TSentral'nyy nauchno-issledovatel'skiy institut konservnoy i
ovoshchesushil'noy promyshlennosti.
             (Vegetables--Dried)

VOLKOV, Ye.N., kandidat tekhnicheskikh nauk.; VERKHOSHANSKAYA, O.V., starshiy nauchnyy sotrudnik.

Study of varieties of peas as a raw material for the production of concentrates. Ref. nauch. rab. VNIIKOP no.3:71-76 '55. (MIRA 9:11)
    (Peas—Varieties)

VOLKOV, Ye.N.; STEPCHKOV, K.A.; KOTOVICH, A.G.

Manufacture of dehydrated mashed potatoes in jet-grinder mills.
Kons.i ov.prom. 15 no.11:16-19 N '60.   (MIRA 13:10)

1. TSentral'nyy nauchno-issledovatel'skiy institut konservnoy
i ovoshchesushil'noy promyshlennosti.
                    (Potatoes)

VOLKOV, Ya.N., kand.tekhn.nauk; PROKOF'YEVA, A.M., starshiy nauchnyy
sotrudnik; IVANOVA, G.A., starshiy nauchnyy sotrudnik;
KHAKHINA, L.P., starshiy nauchnyy sotrudnik; YERMOSHANSKAYA,
O.V., starshiy nauchnyy sotrudnik.

For a greater variety of food concentrates. Trudy VNIIKOP
no.10:115-120 '59.   (MIRA 14:8)

(Food, Concentrated)

VOLKOV, Ye.N., kand.tekhn.nauk; PROKOF'YEVA, A.M., starshiy nauchnyy
sotrudnik; VERKHOSHANSKAYA, O.V., starshiy nauchnyy sotrudnik

Preparing vegetable and fruit powder in a roller dryer.
Trudy VNIIKOP no.10:121-127 '59.   (MIRA 14:8)
        (Vegetables, Dried) (Fruit, Dried)

ABOVSKIY, B.TS.; VOLKOV, Ye.P.; ROZENBERG, A.Ya.

Method for determining the completion of the destruction in a
single viscose apparatus. Khim.volok. no.4:62-64 '59.
(MIRA 13:2)

1. Mogilevskiy zavod.
(Viscose)

VoLKov, Ye.P.

5(3) SOV/63-4-3-19/31

AUTHORS: Mogilevskiy, Ye.M., Candidate of Technical Sciences, Finger, G.G.

TITLE: Scientific-Technical Conferences and a Seminar on the Production and Processing of Chemical Fibers

PERIODICAL: Khimicheskaya nauka i promyshlennost', 1959, Vol 4, Nr 3, pp 398-401 (USSR)

ABSTRACT: In November-December 1958 the All-Union Scientific-Technical Conference on Problems of the Application of Chemical Fibers in the Textile, knit goods and Haberdashery Industry [illegible] It was attended by 300 persons of plants and scientific research and designing installations. The President of the Gosudarstvennyy komitet Soveta ministrov SSSR po khimii (State Committee for Chemistry in the Council of Ministers of the USSR) V.S. Fedorov pointed out the great importance of developing the production of chemical fibers. A.I. Borisov (Upravleniye khimicheskikh volokon - Board of Chemical Fibers) read a paper on the tasks of workers of the industry of chemical fibers; Candidate of Technical Sciences G.I. Kudryavtsev (VNIIV) on the subjects of research work in the field of chemical fibers; S.L. Dich (GIPROIV) on new techniques applied in newly built plants; I.G. Shisko (Kiyevskiy kombinat iskusstvennykh volokon - Kiyev Combine of Artificial Fibers) on research conducted in the combine concerning the production of caprone fiber and artificial silk; V.P. Yunitskiy (Kalininskiy kombinat - Kalinin Combine) on technical improvements in the Combine; Professor N.V. Mikhaylov on: "Work in the Field of Preparing Highly-Resistant Viscose Cord"; S.M. Geysberg (Leningradskiy zavod iskusstvennogo volokna - Leningrad Plant of Artificial Fibers) on the experience of introducing a unit for the continuous production of alkali cellulose; Candidate of

Card 3/6

Technical Sciences Ye.M. Mogilevskiy (VNIIV) on the development of apparatuses for the continuous production of viscose silk; I.P. Sakharov and S.P. Lipinskiy (VNIIV) on increasing the spinning rate for viscose silk to 90 - 95 m/min and on the electric spindle EV-3 developed by them; L.M. Slobodkina, Kalinin Combine, on the method of regenerating the precipitation tank by contact with smoke gases which has been developed in the USSR; B.G. Zabrodin, Kalinin Combine, and Ye.P. Volkov (Mogilevskiy zavod iskusstvennogo volokna - Mogilev Plant of Artificial Fiber) on the work of viscose fiber plants and its improvement; N.N. Avramovskiy (VNIIV) and Ye.S. Marzon (GIPROIV) on the production of carbon disulfide; G.A. Boronichev, Kalinin Combine, on the work of an installation for the regeneration of carbon disulfide; N.A. Khlusin, Kiyev Combine, and Candidate of Technical Sciences K.D. [illegible] (VNIIV) on the continuous production of caprolactam and the spinning of caprone silk; Candidate of Technical Sciences K.V. Khait (VNIIV) on the production of caprone cord fiber; M.I. Petrunin, Kalinin Combine, and Candidate of Technical Sciences B.V. Petukhov (VNIIV) on the production of the fibers nitron and lavsan; T.A. Bukov (Klinskiy kombinat -

Card 4/6

Klin Combine) on the improvement of the quality of caprone cord and silk. A seminar on the subject: "New Technique and Advanced Technology in the Production of Artificial and Synthetic Fibers and Semi-Finished Products for Them" took place December 18-20, 1958. N.Ya. Alechin (GUTK [illegible]) read a paper on the development of chemical fibers; Candidate of Chemical Sciences G.I. Kudryavtsev on achievements in the field of the production of synthetic fibers; Candidate of Technical Sciences Ye.M. Mogilevskiy on technological achievements in the production of viscose fibers; G.G. Finger (VNIIV) on the acceleration of the desulfuration process of viscose silk without application of alkali reagent; A.P. Kraynov (Branch of VNIIV) on the formation of fibers from triacetylcellulose sirups; Candidate of Technical Sciences A.A. Beer on "The Preparation of Monomers for Synthetic Fibers Based on the Reaction of Telomerisation"; Candidate of

Card 5/6

Technical Sciences A.A. Artem'yev and Ye.V. Genkina (GIAP) on the preparation of raw material for polyamide fibers; Candidate of Technical Sciences K.S. Kharlov and Ye.G. Veniel'shteyn (GIAP) on the preparation of dimethylterephthalate for polyester fiber.

L 09001-67   EWT(d)/EWP(c)/EWP(v)/EWP(k)/EWP(1)   IJP(c)

ACC NR: AP6012157   SOURCE CODE: UR/0413/66/000/007/0073/0073

AUTHORS: Shalikhov, G. S.; Kondrashova, G. P.; Volkov, Ye. S.; Medov, B. P.;
Sidnov, N. F.; Luts'ko, S. P.; Snopov, G. A.   45

ORG: none

TITLE: Magnetic flaw detector. Class 42, No. 180391

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 7, 1966, 73

TOPIC TAGS: flaw detection, magnetic amplifier, magnetic method

ABSTRACT: This Author Certificate presents a magnetic flaw detector containing
a power transformer, electromagnets, a capacitor, and rectifiers through which
pulsed discharge of the capacitor is produced, and an automatic circuit con-
trolling the rectifier triggering. Longitudinal magnetization in the automatic
circuit is produced by electromagnets, and circular magnetization—by the gating
of the pulsed current. To check parts of any size or form with subsequent total
demagnetization, the controlled rectifiers are in the form of opposing controlled
semiconductor diodes and are connected in the transformer primary and secondary
circuits. The control electrodes of the primary diodes are connected to the
UDC: 620.179.141.1/.2

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ACC NR: AP6012157

0

capacitor discharge circuit. The control electrodes of the secondary diodes are connected to the automatic circuit. To establish the required strength of the magnetization current and the reversing frequency of the demagnetization current, the automatic circuit contains magnetic amplifiers whose outputs are connected to the control electrodes of the transformer secondary, and the input windings—with a potentiometer.

SUB CODE: 14, 20, 09/ SUBM DATE: 31Dec64

Card 2/2   nut

VOLKOV, Ye.T.; MIKHASENOK, Ye.Yu.

Z.M.Penkina, compiler of a complete bibliography of Russian books
on the sea. Okeanologiia 2 no.5:954-958 '62.   (MIRA 15:11)
                    (Penkina, Zinaida Mikhailovna, 1861-1887)

AUTHOR: Volkov, Ye.T.   3-5A-7-26/36

TITLE: To Know the Book and How to Work with It (Znat' knigu, umet'
               s ney rabotat')

PERIODICAL: Vestnik vysshey shkoly, 1958, Nr 7, p 76 (USSR)

ABSTRACT: Bibliographic information at the Naval Academy imeni Voroshilov
               is given in special bulletins published periodically. New
               books arriving at the library are classified and information
               about them is sent to the departments of the Academy. Periodi-
               cal expositions of new books are held.

ASSOCIATION: Biblioteka Voyenno-morskoy akademii imeni K.Ye. Voroshilova
               (The Library of the Naval Academy imeni K.Ye. Voroshilov)

Card 1/1

VOLKOV, Ye.V., inzh.; PEYN, L.M., inzh.; RYBAKOV, N.F., dots.;
SKORONICD, V.F., inzh.; SILPINO, B.Ye., inzh.; SILIN,
N.B., inzh.

Conversion of boiler furnaces from block peat to milled peat
by installing cyclone furnaces. Izv. vys. ucheb. zav.; energ.
4 no. 1:116-122 Ja '61.   (MIRA 14:2)

1. Ural'skiy politekhnicheskiy institut imeni S.M. Kirova,
Uralmashzavod i Uralenergocher.ot. Predstavlena kafedroy
prompteploonergetiki Ural'skogo politekhnicheskogo institута.
                    (Furnaces)

11(7)   SOV/143-59-2-10/19
AUTHORS: Volkov, Ye.V., Engineer; Rysakov, N.F., Docent; and
                Shalayev, N.B., Engineer

TITLE: The Application of Cyclone Stokers With Liquid Slag
                Removal for Firing Cut Peat (O primeneniyem tsiklon-
                ynykh topok s zhidkim shlakoudaleniyem dlya szhiga-
                niya frezernogo torfa)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy - Energetika,
                1959, Nr 2, pp 79-86 (USSR)

ABSTRACT: Since about 50% of the coal required by the economic
                districts of the Ural, including the Sverdlovsk,
                Perm' and Chelyabinsk Oblast', are mined in Karagan-
                da, Kuznetsk, Ekibastuz, Cheremkhovo and Khakasiya,
                the authors recommend exploiting the local peat
                deposits as a boiler fuel. In the past, many methods
                for using peat as a boiler fuel have been tried, but
                these experiments failed, since an economic and
                stable firing of peat could not be achieved. Only
                the pneumatic stokers of TsKTI, which were based on
Card 1/6   the whirl principle of A.A. Shershnev, had some

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· Firing Cut Peat

success and together with the shaft-mill method, they
found the most wide-spread application. The cyclone
stokers, suggested by Professor G.F. Knorre, are the
latest development in this field. The shaft-mill
method has a heat liberation value of $150 \cdot 10^3$ kcal/
m^3 h, while that of the TsKTI stoker is $120 \cdot 10^3$ kcal/
m^3 h, which is relatively low and therefore large
stoker volumes are required. In addition, soot traps
must be installed, since about 85% of the peat ash
are carried out of the smokestacks with the first
method and almost 100% with the TsKTI stoker. The
large stoker volumes and the soot traps of the pre-
sently used methods are not suitable for a large-
scale conversion of boiler stokers to use peat as
fuel. Therefore, only 2.09 million tons of peat
were mined in the Sverdlovsk Oblast', in 1957, while
the annual output could be around 40-50 million
tons annually, since the peat deposits in this area
alone are estimated at 4.5 billion tons. The Ural

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peat is composed of small particles, those having a size of 3-4 mm amount to only 10-15% and its ash content is 8.9-9%. The melting point of the ash varies between 1050 and 1170°C. The moisture content changes annually; in 1956 it was 46.3%, while it decreased in 1957 to 42%. Mining one ton of peat costs presently 16-18 rubles, but this cost could be reduced with large-scale mining methods. For using peat as boiler fuel on a large scale, the authors recommend a cyclone stoker with liquid slag removal. However, there are no publications available on data for firing peat in cylone stokers. According to data furnished by M.A. Nadzharov /Ref 5/ for coal-fueled cyclone stokers, the slag viscosity must not exceed 250 poise at 1400°C. Calculations showed that with a 50% moisture content of the peat, temperatures of only 1400-1500°C could be obtained at the outlet of the cyclone stoker, even if hot air of 400° C was blown in, while theoretically 1640°C were re-

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quired. The authors had the opinion that such a
temperature would not provide a stable and continous
removal of the liquid slag. When burning peat in a
cyclone stoker with liquid slag removal, the main
problem is to provide a temperature in the combustion
chamber which exceeds the melting temperature of the
slag to a considerable degree. The authors perform-
ed the same calculations for peat with a moisture
content of 30-35% which showed that a temperature
of 1706-1733°C could be achieved when blowing in
air at 350-400°C. Figure 1 shows the graphical pre-
sentation of the calculation results. A footnote
says that the slag viscosities of various fuels are
under investigation at UPI - Ural'skiy politekhni-
cheskiy institut imeni S.M. Kirova (Ural Polytech-
nical Institute imeni S.M. Kirov). Based on the
theoretical calculations an experimental cyclone
stoker was built at UPI, as shown by figure 2. A

Card 4/6   fan was used, powered by a 50 kw asynchronous motor,

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The Application of Cyclone Stokers With Liquid Slag Removal for
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which produced a pressure of 2,000 mm water column
at 3,000 m^3/h air consumption. The air heater pro-
vided temperatures of up to 500°C. The combustion
chamber of the cyclone stoker is shown by figure 3.
The peat used for the experiments was preliminarily
dried and had a moisture content of 15-20%, its ash
content was 11% with 62-69% volatile matter. Its
heat value was 3900-4100 kcal/kg. The peat was fed
into the cyclone stoker at a rate of 450 kg/h at an
air temperature of 350°C, whereby heat liberation
values Q/V_{ts} = 9·10^6 kcal/m^3h and Q/F_{ts} = 7.5·10^6
kcal/m^3h were obtained. The gas temperatures in
the cyclone stoker were 1500-1600°C while the surface
temperature of the liquid slag flowing out of the
tap hole was 1380-1440°C. Pyrometer errors must be
taken into consideration, thus the actual temperatures
were somewhat higher. Based on the positive results
of the experiment, the Kafedra PTE - Kafedra promtep-

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loenergetiki   (Chair   of Industrial Thermal Power
Engineering) of UPI suggested at a conference of the
technical council of TETs UZTM and the Toplivnyy ko-
mitet NTOEP (Fuel Committee NTOEP) on June 28, 1957,
to install a cyclone stoker for burning peat with
a reduced moisture content at one of the boilers of
TETs UZTM. The conference recommended the suggest-
ed reconstruction to the administration of the TETs
UZTM and asked the Kafedra PTE of UPI to work out
a project for such a reconstruction. There are 2
diagrams, 1 graph and 9 Soviet references.

ASSOCIATION: Ural'skiy politekhnicheskiy institut imeni S.M. Kiro-
va (Ural Polytechnical Institute imeni S.M. Kirov)

PRESENTED: Kafedra promteploenergetiki   (Chair   of Industrial
Heat Engineering)

SUBMITTED: November 10, 1958

Card 6/6

VOLKOV, Ya.V.

From the Exhibition of the Achievements of the National Economy
to industry, from industry to the Exhibition of the Achievements
of the National Economy. Stroi.mat. 10 no.12:28-30 D '64.
(MIRA 18:1)

SYRO4YATNIKOV, N.I., doktor tekhn.nauk; VOLKOV, Ye.V., assistent; SUSLOV,
    V.I., aspirant

    Features of approximate simulation of nonisothermal gas flow in cy-
    clone furnaces. Trudy Ural. pcliitekh. inst. no.108:66-78 '61.
                                                        (MIRA 16:9)

RUBTSOV, Leonid Ivanovich; VOLKOV, Ye.V.[translator]; SOKOLOV,
I.A., red.

[Trees and shrubs in landscape architecture] Dereva ta
kushchi v landshaftnii arkhitekturi. Kyiv, Budivel'nyk,
1965. 118 p.   (MIRA 19:1)

VOLKOV, Ye V.

PHASE I BOOK EXPLOITATION   SOV/5290

Soveshchaniye po prikladnoy gazovoy dinamike, Alma-Ata, 1956

Trudy Soveshchaniya po prikladnoy gazovoy dinamike, g. Alma-Ata, 23-26 oktyabrya 1956 g. (Transactions of the Conference on Applied Gas Dynamics, Held in Alma-Ata, 23-26 October 1956) Alma-Ata, Izd-vo AN Kazakhskoy SSR, 1959. 255 p. Errata slip inserted. 900 copies printed.

Sponsoring Agency: Akademiya nauk Kazakhskoy SSR. Kazakhskiy gosudarstvennyy universitet imeni S.M. Kirova.

Editorial Board: Resp. Ed.: L.A. Vulis; V.P. Kashkarov; T.P. Leont'yeva and B.P. Ustimenko. Ed.: V.V. Aleksandriyskiy. Tech. Ed.: Z.P. Korolina.

PURPOSE: This book is intended for personnel of scientific research institutes and industrial engineers in the field of applied fluid mechanics, and may be of interest to students of advanced courses in the field.

Transactions of the Conference (Cont.)   SOV/5290

COVERAGE: The book consists of the transcriptions of 31 papers read at the conference on gas dynamics which was convened under the initiative of the Kazakhskiy gosudarstvennyy universitet imeni S.M. Kirova (Kazakh State University) and the Institut energetiki Akademii nauk Kazakhskaya SSR (Institute of Power Engineering of the Academy of Sciences Kazakhskaya SSR) and held October 23-26, 1956. Three branches of applied gas dynamics were discussed, namely: jet flow of liquids and gases, aerodynamics of furnace processes, and the outflow of liquids. The practical significance of the Transactions of the conference consists in the elaboration of theory to methods of technical computation and measuring methods related to industrial furnaces and other industrial processes in which aerodynamic phenomena play a predominant role. Eight papers read at the Conference are not included in this collection for various reasons. The authors of the missing papers are: L.D. L'vov (Thermal and Aerodynamic Characteristics of Pulverized Coal Place Burners) and A.A. Colpersky (Outlines and Physical Models of the Jet Motion Mechanics of Fluids), Z.I. Antonov, Ye. P. Bogdanov, S.V. Bukhman, T.K. Khronenko, A.B. Rezryakov, and G.V. Yakubov. L.G. Loviyarskiy is mentioned as being in charge of a department of the Kazakh State University, Docent, and I.D. Malyukov, Candidate of Physical and Mathematical Science, at the end of at a member of the same university. References are found at the end of

Session of October 28, 1956 (Morning)

Antonova, O.S. Investigating Turbulence Characteristics of a Free Nonisothermic Jet and an Open Flare   45

Kashkarov, V.P. (Candidate of Physical and Mathematical Sciences). On Parallel and Contrary Motion of Two Uniform Flows of Compressible Gas   55

Transactions of the Conference (Cont.)   SOV/5290

Leont'yeva, T.P. (Candidate of Technical Sciences). Expansion of Axially Symmetrical Jets in Parallel and Contrary Flows

Bukhman, S.V. Regularity of Motion and Combustion of Coal Particles

Mesnuchuk, M.M., and M.I. Polotskiy. On the Crisis in the Viscous Flow of Gas in a Plane Parallel Channel   61

Contents of the Discussion in Brief

Session of October 24, 1956 (Evening)

Torokhina, E.M. Expansion of an Axially Symmetrical Jet of Gas in a Medium of Different Density

Chebyshev, P.V. (Vasesoyuznyy elektrotekhnicheskiy institut (All-Union Electrotechnical Institute)). Electrohydrodynamometers and Their Use in Investigating Nonisothermic Gas Flows

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SOV/5290

Transactions of the Conference (Cont.)

Trofimenko, A.T. Investigating a Semirestricted Turbulent Jet

Akatnov, N.I. Survey of the Works of the Department of Hydroaero-
dynamics of the Leningrad Polytechnical Institute imeni Kalinin
on the Jet Theory

Shepelev, S.F., and S. Tsoy. Plane Jet in a Cross Section of an
Air Conduit

Bespalov, V.G. Use of Hydrointegrators For Solving Jet Problems

Contents of the Discussion in Brief

Session of October 25, 1956 (Morning)

Kataev, B.D. [Candidate of Technical Sciences; Docent; Tsentral'nyy
Kotloturbinnyy Institut imeni Polzunova, Leningrad] (Central Turbine and
Boiler Institute imeni Polzunov, Leningrad)).
Some Problems of the Aerodynamics of Furnace Cyclone Chambers and of the
Combustion of Coal Powder Pulverized Coal

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Transactions of the Conference (Cont.)

Ustimenko, B.P. Candidate of Technical Sciences, Aerodynamics of
an Involute Jet and of a Cyclone Chamber

Volkov, Ye. V. Some Aerodynamic Problem of a Two-Phase Flow in
Cyclone Furnace

Pontkovskiy, A.V., and I.P. Basina. On the Problem of the Working
Process in a Cyclone Chamber

Yakubov, G.V. Generalizing Aerodynamic Laws of Cyclone Chambers

Contents of the Discussion in Brief

Session of October 25, 1956 (Evening)

Reinalov, A.B. [Doctor of Technical Sciences; Institut energetiki
(Institute of Power Engineering)]. Uniflow Flow of Pulverized Coal

Telegin, A.S. Regularities of Gas Flame Burning

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SOV/5290

Transactions of the Conference (Cont.)

Ershin, Sh. A. Aerodynamics of a Turbulent Gas Flow

Kolarov, N.I. [Candidate of Technical Sciences: Ural'skiy
politekhnicheskiy Institut imeni Kirova, Sverdlovsk (Ural
Polytechnical Institute imeni Kirov, Sverdlovsk)]. Industrial
Testing of New Gas Heads of Open Hearth Furnaces

Rapinov, Ye. P. On the Thermal Regime of the Gasification Process

Contents of the Discussion in Brief

Final Session, October 25, 1956

Chulayev, F. Zh. [Candidate of Technical Sciences; Docent].
Survey of Work on Hydrodynamics done by the Institut Energetiki
Akademiya (Institute of Power Engineering of the Academy of
Sciences Kazakhskaya SSR)]

Kvasnikov, A.V. (prepared). Main Problems of Flow Thermodynamics
in Real Boundary Conditions

Card 9/9

85628

S/170/60/003/008/015/019/XX
B019/B067

10.4100

AUTHOR: Volkov, Ye. V.

TITLE: Rotational Motion of a Gas in the Zone of a Cyclone Chamber
               Near Its Axis

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, 1960, Vol. 3. No. 8,
               pp. 26 - 30

TEXT: In studying the rotational component of the velocity of an iso-
thermal flow in the zone near the axis, the author assumed the flow in
this zone to be helical. The equation of Gromek for the helical flow of a
viscous incompressible liquid which contains no dissipation terms is
written down as follows: $\varrho \frac{\partial \vec{w}}{\partial t} + \text{grad } \vec{H} = -\mu \text{ curl } \vec{\omega}$ (1) ($\vec{w}$ vector of the
averaged velocity, $\vec{H}$ vector of the total energy). In his studies, the
author deals only with the steady flow, and shows that the Laplace
equation holds for the averaged vorticity vector $\vec{\omega}$. The author obtains the
following solution by means of a Fourier expansion:

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Rotational Motion of a Gas in the Zone of a   S/170/60/003/008/015/019/XX
Cyclone Chamber Near Its Axis   B019/B067

$$\frac{\omega}{\omega_T} = 1 - I_0(2.4\frac{r}{r_\varphi})\frac{sh\left(2.4\ \frac{z}{r_\varphi}\right)}{sh\left(2.4\ \frac{z_0}{r_\varphi}\right)}$$ (12). Here, ω_T is defined by boundary

conditions established on the basis of experimental data. (12) is the
solution of the Laplace equation satisfying the boundary conditions. It
describes the distribution of angular velocity in the cyclone chamber.
Other authors determined $W_\varphi = \omega r$ experimentally (Ref. 2). As is proved
by the diagrams shown in Figs. 2 and 3, these values are in good agree-
ment with the curves calculated by the author. With these results, also
the interactions between the flow near the axis and the peripheral flow
can be studied. There are 3 figures and 4 Soviet references.

ASSOCIATION: Ural'skiy politekhnicheskiy institut im. S. M. Kirova, g.
             Sverdlovsk (Ural Polytechnic Institute imeni S. M. Kirov,
             Sverdlovsk)

SUBMITTED: January 22, 1960

Card 2/2

81810

S/096/60/000/08/007/024

E194/E484

10.7000

AUTHOR: Volkov, Ye.V., Engineer

TITLE: The Rotation of an Isothermal Flow of Gas in a Cyclone Chamber

PERIODICAL: Teploenergetika, 1960, Nr 8, pp 32-37 (USSR)

ABSTRACT: Earlier experimental work published in Teploenergetika, 1954, Nr 9, established the main qualitative relationships of the isothermal flow of gas in cyclone chambers and also gave quantitative relationships for some aspects of cyclone flow. However, theoretical consideration of the problem is made difficult by the great complexity of aerodynamic processes in cyclones. Indeed, some features of cyclone flow structure have not yet been explained qualitatively. Accordingly, it is desirable first to study individual typical features of this complex process and subsequently to analyse the process as a whole. Experiments showed that two characteristic zones may be distinguished in the distribution of the rotational component of the velocity over the radius of the cyclone: a peripheral region where this component increases towards the centre and an axial region where

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S/096/6C, vOC/08/007/024
E194/E484

The Rotation of an Isothermal Flow of Gas in a Cyclone Chamber

it diminishes towards the centre. By analogy with
the rotation of a liquid the peripheral zone is often
called the quasi-potential rotation zone and the axial
zone the quasi-solid rotation zone. The present work
mainly concerns the axial zone and it should accordingly
be mentioned that in theoretical hydromechanics, the law
of quasi-solid rotation of liquids is derived from
analysis of laminar rotary motion or else is introduced
to complete the mathematical descriptions of plane
rotation of the liquid. The results derived on this
formal basis may be very different from experimental data.
A typical feature of the isothermal flow in cyclone
chambers is the presence of an axial return flow of gas
which commences outside the chamber and penetrates to the
back wall of the cyclone. As this return flow penetrates
into the cyclone chamber the distribution of the
rotational component of the velocity is seriously affected.
In other words, the rotational component should be
considered as a function of two variables, the radius and
the distance from the back of the cyclone. Accordingly,

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the development of rotary motion in the axial zone may be represented by the diagrams given in Fig 1 where section 1 is near to the discharge section of the cyclone and the only layer of gas with considerable rotary motion is that near the discharge vortex. The layer of gas near the axial return flow swirls either little or not at all. As the return flow penetrates into the chamber its inner layers commence to swirl and this swirling motion increases until the back of the chamber is reached. This effect has previously been explained by the transfer of angular momentum from the outer layers of gas to the air but the explanation is unsatisfactory in some respects and modifications are suggested. The limiting rotational velocity distribution in a turbulent flow of gas is an interesting theoretical problem, which cannot be considered here, particularly as the limiting distribution appears not to be set up in the relatively short cyclone chamber models tested. Formulae are derived for the distribution of the rotary component of motion in the axial zone of the cyclone

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chamber starting from hydrodynamic equations of an
incompressible viscous liquid in the form given by
Reynolds, see Eq (1). The methods of vector calculus
are applied to obtain this expression in the form of
Eq (5a) and the boundary conditions are given by Eq (8).
Eq (5a) is then solved by the Fourier method and an
integral is obtained in the form of a Bessel function.
A general solution of Eq (5a) is then obtained in the
form of Eq (17). Certain simplifications are then made
which are expressed by Eq (18) so that Eq (17) is
converted to the form of Eq (19). Finally, an expression
for calculating the relative angular velocity is obtained
in the form of expression (20) which is a solution of
Eq (5) and satisfies the boundary conditions (6). This
equation describes the distribution of angular velocity
over the length and radius of the axial zone of the
cyclone chamber and thus reflects the process of
developing swirl of the neighbouring masses of gas.
Calculated curves of the distribution of relative angular
velocities in the axial zone of the cyclone chamber are

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S/096/60/000/08/007/024
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The Rotation of an Isothermal Flow of Gas in a Cyclone Chamber

plotted in Fig 2. The theoretical curves are then
compared with the experimental results published in
Teploenergetika, 1954, Nr 9, see Fig 3.   It will be seen
that, in general, agreement between theory and practice
is very satisfactory and an explanation is offered for
the differences that are observed. This good agreement
indicates that although the mathematical approach adopted
is as yet without theoretical foundation it nevertheless
appears to be acceptable. Eq (17) and (20), in addition to
giving the velocity distribution at any section of the
axial zone of the cyclone chamber also affords the
possibility of explaining a number of special features in
the distribution of static and total heads in this zone.
The equations may also be used to analyse the interaction
between the flows in the axial and peripheral zones. There
are 4 figures and 6 Soviet references.

ASSOCIATION: Ural'skiy politekhnicheskiy institut
(Ural Polytechnical Institute)

Card 5/5

Volkov, Ye. V.

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Sovetskanie po prikladnoy gazovoy dinamike. Alma-Ata, 1959

Trudy (Transactions of the Conference on Applied Gas Dynamics) Alma-Ata, Izd-vo AN KazSSR, 1960. 231 p. Errata slip inserted. 600 copies printed.

Sponsoring Agency: Kazakhskiy gosudarstvennyy universitet imeni S.M. Kirova.

Ed.: V.V. Alexandrovskiy, Tech. Ed.: S.P. Korokina; Editorial Board: L.A. Vulis (Resp. Ed.); V.P. Kashkarov, T.P. Leont'yeva, and A.P. Ustimenko.

PURPOSE: This book should be of interest to scientists and engineers working on problems of applied gas dynamics and may be of use to students.

COVERAGE: This book presents reports and brief summaries of the discussions which took place at the Conference on Applied Gas Dynamics in Alma-Ata in October 1959. The conference was subdivided into three areas of applied gas dynamics: jet flows of fluids and gases, the aerodynamics of heating processes, and the discharge of a fluid. The practical value of the "Transactions of the Conference" consists in the development of theory, methods of technical calculation and methods for systematic measurement applied to heating, furnace, and other industrial processes for which, in most cases, aerodynamic phenomena are decisive factors.

AVAILABLE: Library of Congress

VOLKOV, Ye.V., assistant.

Study of an experimental cyclone furnace with wet-bottom slagging.
Trudy Ural.politekh.inst.no.61:25-37 '56.
(Furnaces)   (MLRA 10:2)

VOLKOV, Ye.V.

Rotary movement of a gas in the preaxial zone of a cyclone chamber.
Inzh.-fiz.zhur. no.8:26-30 Ag '60.
(MIRA 13:8)

1. Ural'skiy politekhnicheskiy institut im. S.M.Kirova,
g. Sverdlovsk.
(Fluid dynamics)

VOLKOV, Ye.V.

Concerning the aerodynamics of a two-phase flow in a cyclone furnace with concentrated secondary air intake. Trudy Ural politekh. inst. no.76:24-34 '60.   (MIRA 16:6)

(Furnaces)

VOLKOV, Ye.V.; GASYUK, A.I.; MAGRACHEV, S.L.; SYROMYATNIKOV, N.I.

Characteristics of Otor'insk coal. Trudy Ural politekh. inst.
no.76:35-40 '60.
(MIRA 16:6)

(Khanty-Mansi National Area—Coal—Analysis)

BASKAKOV, A.P., kand.tekhn.nauk; VOLKOV, Ye.Z., inzh.; SHALAYEV, N.B., inzh.

In reference to the article "Thermal calculation of brick linings for modern high-power steam boilers." Elek.sta. 29 no.8:92 Ag '58.   (MIRA 11:11)

(Boilers)

1. VOLKOV, YU

2. USSR (600)

4. Coal Preparation

7. Mechanical treatment of brown coal, Mast.ugl. 2 no. 2, 1953.

9. Monthly List of Russian Accessions, Library of Congress, _____APRIL_____ 1953, Uncl.

BROUN, K.; DMITRIYEV, K.; YEVTYUKHOV, K.; VOLKOV, Yu., starshiy nauchnyy
sotrudnik

Discussing the article "Methods of drawing-up industrial safety rules
and their contents." Okh. truda i sots. strakh. no.6:47-54 Je '59.
(MIRA 12:10)

1.Starshiy inzhener po tekhnike bezopasnosti ordena Trudovogo Krasnogo
Znameni tresta "Yuzhuraltyazhstroy" Orenburgskogo sovnarkhoza, g.Orenburg
(for Broun). 2.Tekhnicheskiy inspektor stantsii Sinarskaya Yuzhno-
Ural'skoy zheleznoy dorogi (for Dmitriyev). 3.Zamestitel' nachal'nika
Spetsinspektsii Gosgortekhnadzora RSFSR (for Yevtyukhov). 4.Vsesoyuznyy
nauchno-issledovatel'skiy institut okhrany truda Vsesoyuznogo tsentral'-
nogo soveta profsoyuzov, Leningrad (for Volkov).
(Industrial safety)

VOLKOV, Yu., starshiy nauchnyy sotrudnik

Designers need unified standrads. Okhr.truda i sots. strakh.
no.10:16-17 O '59.   (MIRA 13:2)

1. Leningradskiy institut okhrany truda Vsesoyuznogo tsentral'-
nogo soveta profsoyusov.
   (Industrial safety) (Factories--Design and construction)

VOLKOV, Yu., prepodavatel' fizicheskogo vospitaniya

Lessons in the fresh air. Prof.-tekhn.obr. 19 no.11:26 N '62.
(MIRA 16:2)

1. Remeslennoye uchilishche No.16 g. Moskvy.
(Physical education and training)

VOLKOV, Yu.A.

Concerning the Q-factor of a transistor stage. Izv.vys.ucheb.
zav.; radiotekh. 5 no.5:561-567 S-O '62.   (MIRA 15:11)

1. Rekomendovana kafedroy elektroniki Moskovskogo inzhenerno-fizi-
cheskogo instituta.
                        (Transistors)

VOLKOV, YU. A.

USSR/ Engineering - Steel resistance

Card   1/1   : Pub. 128 - 20/31

Authors   :: Amuchin, M. A., and Volkov, Yu. A.

Title   :: The influence of casehardening by heating with HF current on steel
               resistance to withstand impact

Periodical : Vest. mash. 10, 83 - 84, Oct 54

Abstract   : The editorial gives some information on tests conducted to determine
              the resistance to impact of casehardened prismoidal components made
              of steels, Mark 40, 40Kh, and 30KhN4A. Three USSR references (1940 -
              1952). Graphs; diagram.

Institution : ....

Submitted   : ....

Volkov, Yu. A.

1087*   (Effect of Shot Peening on the Endurance Limits of Specimens Subjected to Repeated Shock Loads.) Vlijanie poverkhnostnogo naklepa drob'iu na ogranichennuin dolgovechnost' obraztsov pri povjornom udare. M. A. Anuchin and Iu. A. Volkov. Vestnik Mash inostroeniia, v. 34, no. 8, Aug. 1954, p. 55-58.

Effects of shot peening variables on strength of polished and unpolished specimens of alloy steel. Graphs, tables. 2 ref.

ANUCHIN, M.A., doktor tekhnicheskikh nauk, professor; VOLKOV, Yu.A.,
kandidat tekhnicheskikh nauk.

Surface hardened parts subjected to a limited number of repeated
impacts. Trudy MVTU no.66:12-34 '55.   (MLRA 9:8)
    (Metals--Hardening) (Shot peening)

VOLKOV, Yu.A.

Some problems concerning the methods of meteorological
observations in the open sea. Okeanologiia 3 no.4:706-714 '63.
(MIRA 16:11)

1. Institut okeanologii AN SSSR.

VOLKOV, Yu.A.; KIRKIN,M.I., red.; LEONIDOV,P.I., red.; KHUSNUTDINOV,Sh.S.,tekh.red.

[Ways of raising the economic effectiveness of fruit culture; based
on the example of the collective farms of Verkhniy Uslon District
Tatar A.S.S.R.] Puti povysheniia ekonomicheskoi effektivnosti sado-
vodstva; na primerakh kolkhozov Verkhne-Uslonskogo raiona TASSR. Pod
red. M.I.Kurkina. Kazan', Tatarskoe knizhnoe izd-vo, 1960. 53 p.
                                                      (MIRA 14:9)
            (Tatar A.S.S.R.—Fruit culture)

VOLKOV, Yu.A.

Evaluating a modification of the solution of the equation $(z_1, \dots, z_n)$ det $\| z_{ij} \|$ $h(x_1, \dots, x_n)$ depending on changes in the right side of the equation. Vest.LGU 15 no.13:5-14 '60.

(MIRA 13:7)

(Equations)

84910

16.5 600

S/043/60/019/004/013/015XX
C 111/ C 333

AUTHOR: Volkov, Yu. A.

TITLE: Existence of a Convex Polyhedron Realizing a Given
       Polyhedral Metric. I

PERIODICAL: Vestnik Leningradskogo universiteta, Seriya matematiki,
            mekhaniki i astronomii, 1960, Vol. 19, No.4, pp.75-86

TEXT: The author uses the terminology of (Ref.1). He gives a new
proof of the theorem:

Let R be a domain homoemorphic to a disk on a manifold with a
polyhedral metric of nonnegative curvature and let the boundary
L of R have everywhere nonnegative swerve towards R; then R is
isometric to a convex cap.

The proof is based on the following idea from (Ref.4): In order to
construct a closed convex surface with a differential-geometric
metric prescribed on a spherical surface, it is sufficient to
continue this metric from the spherical surface into the interior
of the sphere so that the sphere is transformed into a manifold
which is isometric to a convex body of the Euclidean space. In order
to realize this idea the author uses polyhedra according to A. D.

Card 1/2

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S/043/60/019/004/013/015XX
C 111/ C 333

Existence of a Convex Polyhedron Realizing a Given Polyhedral
Metric. I

Aleksandrov (Ref.1) which satisfy certain special conditions: they
are convex, have a nonnegative curvature, their upper base consists
of triangles, the curvature of the basal plane is positive in all
internal corners, the swerve of the boundary of this basal plane
is positive in all boundary angles, the boundary angles have zero
heights in the polyhedron. 13 lemmata are given before the proof.

There are 6 references: 5 Soviet and 1 German.

Card 2/2

AUTHOR: Aleksandrov, A.D., Volkov, Yu.A.   43-58-13-4/13

TITLE: Theorems of Uniqueness for Surfaces in the Large. IV (Teoremy
             yedinstvennosti dlya poverkhnostey"v tselom. IV)

PERIODICAL: Vestnik Leningradskogo universiteta, Seriya matematiki,
             mekhaniki i astronomii, 1958, Nr 13(3), pp 27-34 (USSR)

ABSTRACT: The paper contains a detailed representation of the results
             partially announced in [Ref 1]. The theorems and their proofs
             correspond to those ones of [Ref 3] . In contradistinction to
             [Ref 3] only Euclidean spaces are considered where the principal
             curvatures are understood in the sense of the relative differential
             geometry. The analogy to the results of [Ref 3] is considerable
             so that the author points to [Ref 3] because of the numerous
             conclusions. One of the conclusions contains a result of Süss
             [Ref 4] .
             There are 4 references, 3 of which are Soviet and 1 German.

SUBMITTED: March 22, 1958

             1. Mathematics   2. Surfaces--Theory

Card 1/1

Volkov, Yu. A.   Agakhanyan, T. M.

"Practical Videoamplifier Circuits on Junction Transistors,"
by T. M. Agakhanyan and Yu. A. Volkov, Radiotekhnika, No 11,
Nov 56, pp 38-44

Practical videoamplifier circuits on junction transistors of the
PlYe, PlI, and PlZh types were built with the purpose of decreasing the
distortions of the pulse fronts.

Calculations and experimental data demonstrated that significant
widening of the pass-band of the amplifiers on crystal transistors was
possible by circuit methods.

For the three types of junction transistors mentioned above, the
possibility was demonstrated of building videoamplifiers with a tran-
sition characteristic build-up time of from 0.1 to one microsecond while
the amplification factor varied from 3 to 1,000.

Sum 1287

VOLKOV, Yu. A.

VOLKOV, Yu. A.: "The existence of a polyhedron with a given evolute". Leningrad, 1955. Leningrad Order of Lenin State U imeni A. A. Zhdanov. (Dissertations for the degree of Candidate of Physicomathematical Sciences.)

SO: Knizhnaya Letopis' No. 50. 10 December 1955. Moscow

VOLKOV, Yu. A.

Transactions of the Third All-union Mathematical Congress, Moscow, Jun-Jul '56,
Trudy '56, V. 1, Sect. Rpts., Izdatel'stvo AN SSSR, Moscow, 1956, 237 pp.

Volkov, Yu. A. (Leningrad). On the Existence of Convex   146
Surfaces With Given Metric.

VOLKOV, Yu.A.

Deformation of convex polyhedral angles. Usp.mat.nauk 11 no.5:209-
210 S-0 '56.   (MLRA 10:2)
        (Angle)   (Polyhedra)

Volkov, Yu.A.

In the present work practical schemes of wideo-amplifiers in which the new dis-
tribution of the current carriers is carried out by means of complete back-
coupling, are described. At first schemes for a one-cascade amplifier are shown.
The chain of back coupling serving the purpose of diminishing distortions on
the impulse fronts in all cases leads to an increase of the temperature stabil-
ity of the scheme. In those cases in which this becomes necessary an additional
temperature compensation may be provided. Backcoupling makes it possible to re-
duce the time of the increase of the transition characteristic of the cascade
considerably. Various oscillograms of the output voltage of the cascade with
backcoupling in the critical and in the oscillating state are mentioned. The
time of the increase of the cascade with backcoupling can be computed according
to the formulae mentioned in the authors'work in Radiotechnika, 11, fasc.9
(1956). By means of the complex backcoupling it is possible to extend the trans-
mission width of the amplifier to the value which exceeds the frequency limit.
In an example mentioned here the utmost frequency limit is nearly double the
frequency limit of the coefficient of the current amplification of the triode.
It is then possible, by means of the complex backcoupling, to improve the im-
pulse front, and besides, backcoupling improves a number of other characteris-

Radiotechnika, 11, fasc. 11, 38-44 (1956) CARD 2 / 3   PA - 1709

tics of the amplifier: Increase of input resistance, increase of stability, reduction of nonlinear distortions, and, consequently, also an increase of the permitted value of the output voltage etc. As the amplification coefficient is usually given, the application of the scheme with complex backcoupling entails the necessity of increasing the number of cascades of the amplifier. Some multi-cascade amplifiers are then described. In this connection the number of cascades and their parameters (type of triode, degree of backcoupling, etc.) which warrant the least possible impulse distortion must be selected. A formula is given according to which it is possible to compute the coefficients of amplification according to voltage for average frequencies. The time of the increase of the transition characteristic of the cascades is reduced with a decrease of backcoupling. However, in the case of low backcoupling a large number of cascades is necessary in order to attain the given amplification. In the case of a given amplification and number of cascades the degree of the backcoupling need not necessarily be the same in all cases. It is advisable to apply a lower degree of backcoupling in the case of the first cascade. The scheme of a two-cascade amplifier and its characteristic are described in form of a diagram. Besides, the oscillograms of the output voltage of the amplifier are shown. - Computations and experiments show that a condiserable broadening of the transmission band of the amplifier is possible on crystalline triodes with the help of this scheme.

Radiotechnika, 11, fasc. 11, 38-44 (1956) CARD 3 / 3   PA - 1709

On flat triodes of home production wideo-amplifiers in which the time needed
for the increase of the transition characteristic is from 0,1 to 1 μF, can be
constructed with a corresponding amplification coefficient of from 3 to 1000.
It may be assumed that in future crystalline triodes in large impulse schemes
will become a serious competition of electron tubes.

INSTITUTION:

16.3500

AUTHOR: Volkov, Yu.A.

TITLE: Bounds for the Difference of Solutions of the Equation $f(z_1,\ldots,z_n)$ det $\| z_{ij} \|$ = $h(x_1,\ldots,x_n)$ in Terms of Difference of the Right Side of the Equation

TEXT: Let $x = (x_1,\ldots, x_n)$, $\zeta = (z_1,\ldots,z_n)$, $z_i = \dfrac{\partial z}{\partial x_i}$, $z_{ij} = \dfrac{\partial^2 z}{\partial x_i \partial x_j}$,

$z = z(x_1,\ldots, x_n)$. Let $h(x) \geq 0$ be defined in a convex domain D of the space of the x ; let $f(\zeta)$ be defined for all ζ , summable on every closed bounded measurable set, and let $m = \inf\limits_{\zeta} f(\zeta)$.

Theorem 1 : Let $z^0(x)$ and $z^1(x)$ be convex solutions of the equation

(1) $f(z_1,\ldots, z_n)$ det $\| z_{ij} \|$ = $h(x_1,\ldots, x_n)$

Card 1/3

Bounds for the Difference of Solutions of the
Equation $f(z_1,...,z_n) \det \| z_{ij} \| =$

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C111/C222

$= h(x_1,...,x_n)$ in Terms of Difference of the Right Side of the Equation

which correspond to the right sides $h = h^0(x)$ and $h = h^1(x)$ and which agree on the boundary Γ of D. Then it holds

$$\max_{x \in D} \left[z^0(x) - z^1(x) \right] \leq \frac{C}{m} \left\{ \sup_{E \subset D} \left[\int_E (h^1 - h^0) dx \right] \right\}^{1/n} \quad ,$$

where E is an arbitrary subset of D and C is a constant depending only on n and D.

Theorem 2 : If $z^1(x)$ and $z^0(x)$ are convex solutions of the equation

(2) $\omega_f (M, z) = \nu (M)$

which correspond to the right sides $\nu^1(M)$ and $\nu^0(M)$ and which agree on the boundary of D, then

$$\max_{x \in D} \left[z^0(x) - z^1(x) \right] \leq \frac{C}{m} \left\{ \sup_{E \subset D} \left[\nu^1(E) - \nu^0(E) \right] \right\}^{1/n} \quad ,$$

Card 2/3

Bounds for the Difference of Solutions of the   S/043/60/000/13/01/016
Equation $f(z_1,\ldots,z_n)\det \| z_{ij} \| = h(x_1,\ldots,x_n)$ C111/C222
in Terms of Difference of the Right Side of the Equation

81243

where E, C are defined as in theorem 1, while $\omega_f(M,z)$ and $\nu(M)$ are the
set functions defined in (Ref. 1) which in the regular case represent the

integrals $\int_M f(\zeta)\det \| z_{ij} \| dx$ and $\int_M h(x)dx$.

There are 3 references : 1 Soviet, 1 American and 1 English.

Card 3/3

VOLKOV, Yu. A.

1-FW

Volkov, Yu. A. On deformations of a convex polyhedral angle. Uspehi Mat. Nauk (N.S.) 11 (1956), no. 5(71), 209–210. (Russian)

Pogorelov, A. V. A new proof of rigidity of convex polyhedra. Uspehi Mat. Nauk (N.S.) 11 (1956), no. 5(71), 207–208. (Russian)

The first paper establishes: Let V, V' be two convex polyhedral angles of more than two faces, which, in the same cyclical order, are pairwise congruent. If e_i, e_i' ($i = 1, \cdots, n > 2$) are the unit vectors from the vertices of V, V' along corresponding edges and θ_i, θ_i' are the dihedral angles of V, V' respectively at e_i, e_i' ($\theta_i = \pi$ or $\theta_i' = \pi$ admitted), then the vector $\sum (\theta_i' - \theta_i) e_i$ is different from 0 and points into the spherical image of V unless V and V' are congruent.

The second paper deduces very simply from this result the following general form of Cauchy's theorem. Two intrinsically isometric convex polyhedra in E^3 are congruent as sets in E^3.   *H. Busemann.*

VOLKOV, A.   Yu. A.

Effect of shot blasting on repeated-impact resistance. N. A. Anuchin and Yu. A. Volkov. *Vestnik Mashinostroeniya* 34, No. 8, 55-8(1951). Notched Mesnager specimens of C 0.10, Cr 0.72, Ni 1.67, Mo 0.22%, and of plain-C steels 0.55% were shot-blasted on the notched side with 1-1.5 mm. chilled iron shot and tested to destruction by repeated impacts ranging between 10.2 and 24.7 kg./sq. cm. The life of samples increased 1.5-3.5 times by the treatment, the alloy steel responding more pronouncedly. Higher impact loads lower, however, both the abs. and relative strength increase caused by shot blasting. The strength increases in this case during the first 2-2.5 min. of blasting and then decreases. Heating destroys the strengthening effect when above 150°.

J. D. Gat

ACC NR: AR7004095 (N) SOURCE CODE: UR/0169/66/000/012/V010/V011

AUTHOR: Zubkovskiy, S. L.; Volkov, Yu. A.

TITLE: Direct measurements of some characteristics of atmospheric turbulence above water

SOURCE: Ref. zh. Geofizika, Abs. 12V71

REF SOURCE: Sb. 2-y Mezhdunar. okeanogr. kongress, 1966. Tezisy dokl. M., Nauka, 1966, 172-173

TOPIC TAGS: atmospheric turbulence, wind velocity, atmospheric temperature, wind profile, ocean dynamics / Black Sea, Mediterranean Sea

ABSTRACT: The results of investigations carried out aboard the ship "Ak. Vavilov" in the Black and Mediterranean Seas in 1964 and 1965 are presented. Equipment from the Institute of Physics of the Atmosphere, previously used for studies on turbulence structure and temperature above a solid underlying surface, was used for measurements and statistical processing of wind velocity pulsations and temperature. The pickups of the devices were located on a floating

Card 1/3   UDC: 551.465.15.

ACC NR: AR7004095

spar buoy at a distance of 50 m from the ship. An acoustic anemometer made it possible to measure the pulsations of the horizontal and vertical wind velocity components, u' and w'; a microthermometer measured temperature pulsation, T'. For all the devices the time constant was of the order of 0.01 sec. The following atmospheric turbulence characteristics were calculated using special electronic equipment: 1) pulsation dispersions $\sigma_u = \sqrt{\overline{u'^2}}$, $\sigma_v = \sqrt{\overline{w'^2}}$, $\sigma_T = \sqrt{\overline{T'^2}}$; 2) vertical heat flows and motion quantities $Q = C_p \rho \overline{W'T'}$, $\tau = -\rho\overline{u'w'}$. ; 3) pulsation energy distribution along the spectrum of wave numbers F_u, (k), F_w, (k), and F_T, (k); 4) mean wind velocity profiles $\bar{u}(z)$ and some mean temperature profiles $\bar{T}(z)$. Measurements of all pulsation characteristics were usually made at an altitude of two above the calm sea surface level, or, in some cases at a 1-m level. The members of the Institute of Oceanology, Academy of Sciences, made measurements of spectral composition and sea intensity along with the atmospheric measurements. From the data obtained, relationships between pulsation characteristics and the averaged characteristics of temperature and wind fields above the agitated sea surface were obtained. In particular, the relationship between the friction rate, $v_* = (\tau/\rho)^{\frac{1}{2}}$,

and the mean wind velocity, $\bar{u}(z)$, was established. The value of v_*, calculat-

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