

73-1-21/26

AUTHOR: Vdovichenko, V. T., Galenko, N. P. and Sarashvili, I. G.

TITLE: Investigations of Methane Oxidation in Molten Metal Chloride Salts. (Issledovaniye Khlorirovaniya Metana v Rasplavakh Soley Khloridov Metallov.)

PERIODICAL: Ukrainskiy Khimicheskii Zhurnal, 1957, Vol. 23, No.1, pp. 110 - 116 (USSR).

ABSTRACT: Optimal conditions for this process were found to be: temperatures of 450° C, gas velocity of 30 l/hour and an oxygen: chlorine ratio of 0.68 - 0.85. The quantity of active chlorine at optimum process conditions is 60 - 64 vol.%. Under conditions of direct chlorination of methane in a solution of KCl - ZnCl<sub>2</sub> - CuCl<sub>2</sub>, about 85 - 90 mol.% consists of methyl chloride, 9 - 14% methylene chloride, 2 - 5% chloroform and a negligible amount of tetravalent C. Previously published work on the chlorination process of methane is reviewed briefly (viz. Refs. 1 - 4). Details of the laboratory equipment used for this experiment and an illustration of the same are given. Highest yields were obtained at a temperature of 60° C (graph 2), the highest yield (according to the gas velocity) at 30 l/hour. Experimental data on the chlorination of methane in melts are tabulated. There

Card 1/2

75-1-21/26

Investigations of Methane Oxidation in Molten Metal Chloride Salts.  
are 4 graphs, 1 table, 6 references, 3 of which are  
Slavic.

SUBMITTED: August, 22, 1956.

ASSOCIATION: Gas Utilization Institute, Academy of Sciences,  
Ukrainian S.S.R. (Institut Ispol'zovaniya Gaza AN USSR.)

AVAILABLE: Library of Congress

Card 2/2

VDOVICHENKO, V.T.

Gasification of heavy liquid fuels. Trudy Inst. isp. gaza AN URSS  
3:31-45 '55. (MIRA 9:9)

(Liquid fuels) (Gas producers)

YDOVICHENKO, V.T.

Producing high-calorie gas from heavy liquid fuel. Visnyk AN URSS  
26 no.10:60-63 0 '55. (MIRA 9:1)  
(Gas manufacture and works)

PROSHKIN, A.A.; VDOVICHENKO, V.T.; GALENKO, N.P.; GLUKHOMANYUK, A.M.;  
KOVKA, B.M.

Production of carbon tetrachloride. Gaz.prom. 6 no.8:31-34 '61.  
(MIRA 14:10)

(Carbon tetrachloride)

SOV/8C-32-2-19/56

AUTHORS: Vdovichenko, V.T., Galenko, N.P., Larionov, A.V.

TITLE: Conversion of Methane by Sulfuric Anhydride to Carbon Bisulfide (Konversiya metana sernistym angidridom do serougleroda)

PERIODICAL: Zhurnal prikladnoy khimii, 1959, Vol XXXII, Nr 2, pp 347-350 (USSR)

ABSTRACT: The interaction of methane with sulfuric anhydride for the production of carbon bisulfide has been studied in the apparatus presented in Figure 1. As catalysts were tried: aluminum gel and bentonite clay, pumice, silica gel "KSK" soaked in various salts. The most active catalyst is pumice treated with lead acetate. The most favorable temperature is 900°C for pumice and 800°C for bentonite. The change of the ration  $CH_4 : SO_2$  from 0.5 to 3 increases the yield of  $CS_2$  from 0.3 to 1 g per

Card 1/2

SOV/80-32-2-19-56

Conversion of Methane by Sulfuric Anhydride to Carbon Disulfide

1 liter SO<sub>2</sub>.

There are 3 tables, 1 graph, 1 diagram, and 10 references,  
5 of which are Soviet, 4 English, and 1 German.

SUBMITTED: August 15, 1957

Card 2/2

KYUNTSEL', A.A.; VDOVICHENKO, Ye.Ya., POPOV, P.A.

R.B.Shneerova; obituary. Vop.kur., fizioter.i lech.fiz.kul't. 27  
no.2:190 Mr-Ap '62. (MIRA 15:11)  
(SHNEEROVA, RAISA BORISOVNA, 1888-1961)



GALUSHKO, V.P.; VDOVIKO, Ye.A.

Cathodic reduction of bismuth oxide. Zhur.prikl.khim. 38  
no.11:2487-2490 N '65. (MIRA 18:12)

1. Dnepropetrovskiy gosudarstvennyy universitet imeni 300  
letiya vossoyedineniya Ukrainy s Rossiyey. Submitted  
February 29, 1964.

*VDOVIN, A.*  
VDOVIN, A.

Estimating costs of moving structures. Sel'.stroj. 10 no.7:20-22  
J1'55. (MLRA 8:10)

1. Nachal'nik Saratovskogo otdela podgotovki vodokhranilishcha  
"Stalingradgidrostroya  
(Moving of buildings, Bridges, etc..)

VDOVIN, A.A.

"Plant physiology with fundamentals of microbiology" by P.A. Genkel'. Reviewed by A.A.Vdovin. Bot.zhur. 45 no.1:154-156 Ja '60. (MIRA 13:5)

1. Orenburgskiy gosudarstvennyy pedagogicheskiy institut im. V.P.Chkalova.  
(Plant physiology) (Genkel', P.A.)

VDOVIN, A.A.; SHVAL'B, V.P.

Study of switching circuits in group selection operation using  
a statistical testing technique and an electronic digital  
computer. Probl.pered.inform. no.11:77-87 '62. (MIRA 16:1)  
(Switching theory) (Electric networks)  
(Electronic digital computers)

VDOVIN, A. L. Cand Agr Sci -- (diss) "Agrometeorological substantiation of  
snow retention in left-bank <sup>mountains</sup> ~~slopes~~ of Bashkiriya." Ufa, 1959. 17 pp  
(Min of Agr USSR. Bashkir Agr Inst), 150 copies (KL, 52-59, 123)

VDOVIN, A. L.

Cand Agr Sci - (diss) "Agrometeorological basis of snow retention in the left-bank rayons of Bashkiria." Ufa, 1961. 24 pp; (Ministry of Agriculture RSFSR, Bashkiria Agr Inst); 150 copies; price not given; list of author's works on pp 23-24 (12 entries); (KL, 7-61 sup, 250)

VDOVIN, A.V., inzh.

Service life of frogs should be doubled. Put' i put.khoz.5  
no.2:14-15 F '61. (MIRA 14:3)

(Railroads—Switches)

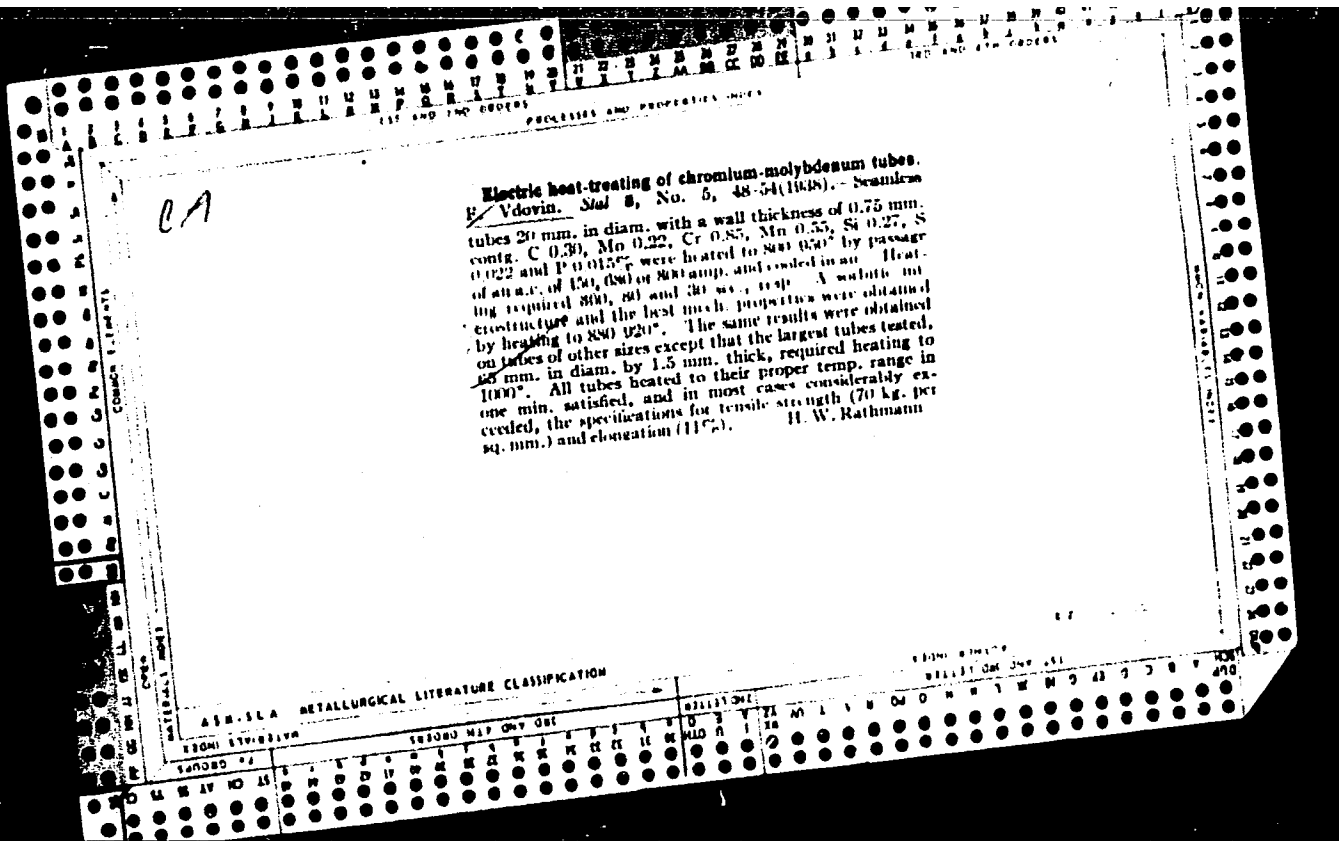
VDOVIN, B. Ye.

Electric Transformers

Rate of drying of transformers in a vacuum.  
Elek. sta, 23, No. 4, 1952  
Inzh.

SO: Monthly List of Russian Accessions, Library of Congress, \_\_\_\_\_ 1953, Uncl.





VDOVIN, B. Ye.

AID P - 2964

Subject : USSR/Electricity  
Card 1/1 Pub. 29 - 14/35  
Author : Vdovin, B. Ye., Eng.  
Title : ~~Changing the ventilation scheme of the exciter~~  
Periodical : Energetik, 5, 19, My 1955  
Abstract : The author briefly describes the change **introduced** in the circulating ventilation of an exciter. Two drawings.  
Institution : None  
Submitted : No date

ZAYTSEV, I.F.; VDOVIN, D.I.; GNEDOV, N.P.; BLAGOV, I.S.; ZIMASKOV, V.A.;  
KOTKIN, A.M.; ~~LEKHTSIYER~~, I.S.; MIROSHNIKOV, V.G.; OSYKIN, V.T.

Separator for dressing lump material. Gor. zhur no.4:76 Ap '63.  
(MIRA 16:4)

(Separators (Machines))

VDOVIN, D.I.; ULITIN, V.G.

Using the VIRS apparatus in the remote control of conveyers.  
Biul.tekh.-ekon.inform. no.1:3-5 '60. (MIRA 13:5)  
(Mine haulage) (Remote control)

10

5

PROCESSING AND PROPERTY INDEX

**Electric Heat Treatment of Chromium-Molybdenum Steel Tubes.**  
 F. Vdovin. (Stal, 1938, No. 5, pp. 48-54). (In Russian). Working with steel containing 0.85% of chromium, 0.22% of molybdenum and 0.30% of carbon, the author, after developing suitable equipment, studied the possibility of normalising cold-drawn tubes using the heat generated by the passage through them of a sufficiently strong electric current which was supplied from a step-down transformer. The effects of different combinations of current value, time and temperature (up to 950° C.) on the mechanical properties and micro structure are reported. The optimum conditions for the size of tube used in the experiments (1 m. x 20 mm. x 0.75 mm.) were found to be a heating time of 1 min., using a current in the secondary circuit of 690 amp. which produced a temperature of 880-920° C. Alternatively, the tube could be heat-treated for 30 sec. at the same temperature using a current of 800 amp. The investigation was then extended to tubes of different dimensions and it included a study of the variations in the mechanical properties of the material at different places along the tubes. Finally, it was shown by mechanical tests, microscopic and X-ray examinations that the electrical method of heat treatment was also perfectly suitable for purposes of intermediate annealing during the cold-drawing of these alloy steel tubes.

METALLURGICAL LITERATURE CLASSIFICATION

ASB 51 A

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

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**\*Experiments on Electrothermal Treatment of Thin-Walled [Chromium Molybdenum] Tubes.** Ts. N. Rafalovich and F. N. Vlovin (*Tsvinn i Praktika Metallurgii*, 1938, (9), 64-72; *C. Abstr.*, 1937, 31, 322). [In Russian.] The chromium-molybdenum tubes were treated by passing an electric current through them. The best mechanical properties and microstructure are obtained by heating for 1 minute at 900°-920° C.—S. G.

ASU-554 METALLURGICAL LITERATURE CLASSIFICATION

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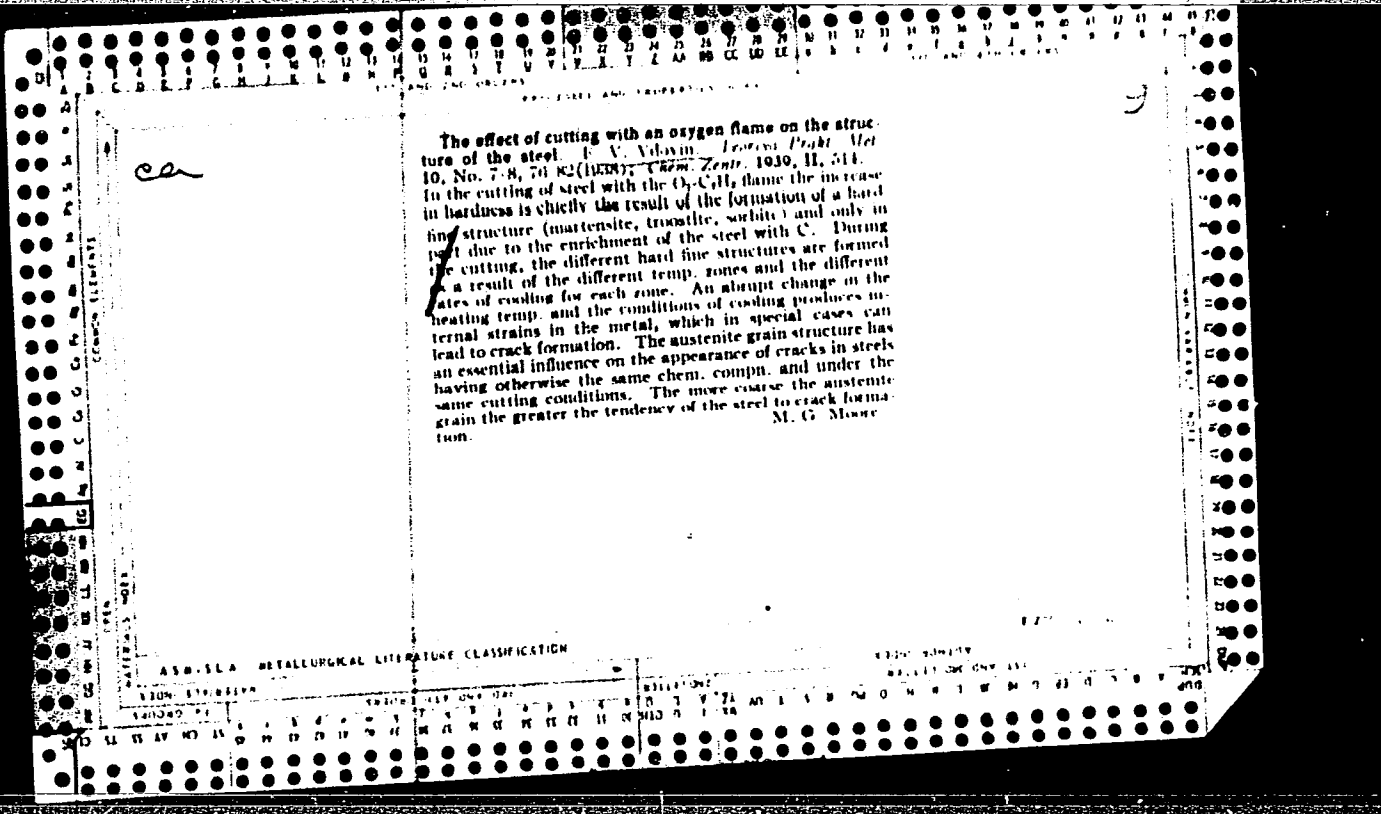
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REVISED AND CORRECTED 1954

Experiments on electrothermal treatment of thin walled tubes. Ts. N. Rafakovich and P. N. Vihvín. *Trudy i Prakh. Met.* 1936, No. 9, 64-73.—The Cr:Al<sub>2</sub>O<sub>3</sub> tubes were treated by passing an elec. current through them. Best mech. properties and microstructure are obtained by heating for 1 min. at 900-920°. B. Z. Kamich

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MATERIAL INDEX  
 ASIA 314 METALLURGICAL LITERATURE CLASSIFICATION  
 24000 24000 24000 24000  
 24000 24000 24000 24000





Effect of carbon and molybdenum on the isothermal transformation of austenite. F. V. Ylovin and E. P. Akimova. *Teoriya i Praktika Metallurgii* 1938, No. 10, 53-9; *Khim. Referat. Zhur.* 2, No. 5, 78-9 (1939). - For details of the transformation of austenite the magnetometric method gave the same results as did the study of the microstructures of tempered alloys. In steels contg. 0.5-1.1% of C and 1.0-8% Mo the temp. region of the max. stability of austenite is lower than that of plain C steels. Increase of the content of Mo from 1.0 to 8.0% increases the stability of austenite only at temps. of tempering so high that all its components pass into the solid soln. Increase of the C content from 0.5 to 1.1% with a given content of Mo increases the stability of austenite in the same manner as in Mo-free steels. W. R. H.

ASB-314 METALLURGICAL LITERATURE CLASSIFICATION

GROUP	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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S/137/63/000/001/017/019  
A006/A101

AUTHORS: Vdovin, F. V., Pishohik, N. S.

TITLE: Mechanical and heat treatment of 3M 531 (EI531) steel during the production of hot-rolled pipes

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 1, 1963, 95 - 96, abstract 11575 (In collection: "Proiz-vo trub", no. 7, Khar'kov, Metallurgizdat, 1962, 128 - 138)

TEXT: The investigation was made with tapered heat-resistant EI531 steel specimens. The steel composition is in %: C 0.08 - 0.12, Mn 0.4 - 0.7, Si 0.4 - 0.7, Cr 2.1 - 2.6, V 0.2 - 0.35, Mo 0.5 - 0.7, Nb 0.5 - 0.8, Ti  $\leq$  0.1, Cu  $\leq$  0.25, Ni  $\leq$  0.30, S  $\leq$  0.030, P  $\leq$  0.030. The tapered specimens were rolled on a two-high mill with 0 to 50% deformation degree and at 850 - 1,200°C temperatures (every 50°C). From the data obtained by measuring  $a_k$ , it follows that the maximum  $a_k = 7.8 \text{ kg/cm}^2$  is attained at 1,000°C rolling temperature and about 50% reduction. A further increase of the rolling temperature reduces the  $a_k$  values. The rolled tapers were then subjected to heat treatment under the following <sup>4</sup>

Card 1/2

Mechanical and heat treatment of...

S/137/63/000/001/017/019  
A006/A101

conditions: 1) tempering at 850°C; 2) quenching from 1,070°C and tempering at 850°C; 3) complex heat treatment - multiple heating over the Ac<sub>3</sub> point and the Chernov "v" point; 4) heat treatment with very high initial heating (up to 1,250°C). It was established that the heating temperature for rolling EI531 steel (at > 50% reduction) should not exceed 1,200°C. Maximum final deformations and the final temperature of rolling as high as 950 - 1,050°C, secure an increase of a<sub>k</sub> by a factor of several dozens, as compared with a<sub>k</sub> of the initial blank, and eliminate fully the crystalline fracture. To obtain optimum a<sub>k</sub> values, it is recommended to conduct tempering at a temperature below Ac<sub>1</sub> or to perform heat treatment where the initial heating exceeds the temperature of the Chernov "v" point.

A. Babayeva

[Abstracter's note: Complete translation]

Card 2/2

SOV/137-59-1-1499

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 1, p 199 (USSR)

AUTHORS: Vdovin, F. V., Pishchik, N. S., Kovalevskiy, A. I.

TITLE: Determination of Notch Toughness of Wedge-shaped Specimens After Rolling (Opredeleniye udarnoy vyazkosti v klinovykh obraztsakh posle prokatki)

PERIODICAL: Byul. nauchno-tekhn. inform. Vses. n.-i. trubnyy in-t, 1958, Nr 4-5, pp 183-186

ABSTRACT: A description of a method whereby the  $a_k$  value of alloyed steels may be determined as a function of the degree of reduction and of the temperature of rolling with the aid of a small number of specimens (S). Wedge-shaped S's, 105-115 mm long, 20 mm wide, and with ends 16 and 10 mm high, were cut from the pipe being investigated. The S's were notched on both sides at 10-mm intervals, their thickness being measured at the same time. They were then rolled at a given temperature in a two-high rolling mill to a thickness of 10 mm. The degree of reduction of one S was increased in consecutive steps from 0 to 50%. Longitudinal S's, 4.5 x 6.0-mm in cross section, were cut from the wedge-shaped S's after the latter had

Card 1/2

SOV/137-59-1-1499

Determination of Notch Toughness of Wedge-shaped Specimens (cont.)

been rolled into strips. 10 staggered cuts, each 1 mm deep, were made on the narrow faces of the S's at points where the notches had been previously located. S's thus prepared were mounted in a vertical position in the vise of a pendulum impact-testing machine, the cut being on the same level as the top surfaces of the jaws and on the side which would be subjected to tension. The pendulum strikes the free end of the S; the amount of energy corresponding to the rise of the pendulum after fracture of the S was marked off on an Izod scale. The results of the test are presented in the form of curves on triaxial diagrams. The results of tests carried out on EI-531 steel are presented as a function of the temperatures of rolling, from 800 to 1200° in increments of 100°, and of the degree of reduction of the steel (in the untempered state and after tempering at 850°) ranging from 0 to 50%. The method described is recommended for laboratory applications in studying novel grades of steels and alloys.

L. G.

Card 2/2

VIRWIN, F.V., kond. tekhn. nauk: fiziol. i.A., Inzh.

Effect of oversteering on the degree of impact strength of 12Kh1MF  
type steel at high temperatures. arxiv. 1969 no. 17:11-12 '64.  
(MIRA 17:11)

S/123/61/000/011/015/034  
A004/A101

AUTHORS: Pishik, N. S.; Vdovin, F. V.; Chukmasov, A. S.; Bernshteyn, M. M.

TITLE: Investigating centrifugal castings from 1X13H18B2B (1Kh13N18V2B) steel for the production of particularly thin-walled tubes

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 11, 1961, 66, abstract 11B511 (V sb. "Proiz-vo trub" no. 3, Khar'kov, 1960, 123-130)

TEXT: The authors investigated the microstructure of 1Kh13N18V1B steel specimens in the cast and heat-treated state. To check the quality of hot-rolled 89 x 6.5 mm tubes from this steel after heat treatment, their mechanical properties were determined, the macro- and microstructure analyzed and the intercrystalline corrosion tested. The obtained results confirm the possibility of producing especially thin-walled tubes (25 x 1 and 19.5 x 0.2 mm) from 1Kh13N18V1B steel blanks cast by the centrifugal method. There are 3 figures and 3 references. ✓

N. Il'ina

[Abstracter's note: Complete translation]

Card 1/1

SOV/137-58-11-23475

Translation from: Referativnyy zhurnal. Metallurgiya, 1958, Nr 11, p 233 (USSR)

AUTHOR: Vdovin, F. V.

TITLE: Mechanical Characteristics of the Upset Ends of Drill Pipes (Mekhanicheskiye svoystva vysazhennykh kontsov buril'nykh trub)

PERIODICAL: Byul. nauchno-tekhn. inform. Vses. n. -i. trubnyy in-t, 1958, Nr 4-5, pp 165-173

ABSTRACT: The effects of various factors on the mechanical properties of the material of the upset ends of drill pipes were investigated on pipes which had not yet been threaded. The investigation dealt with the mechanical properties of the following: a) Rolled tubular stock 170 mm in diameter from 25 smeltings; b) pipes manufactured from above stock, and c) the upset ends of the pipes. For purposes of comparison, investigations were also carried out on pipes made from cast stock from 7 smeltings. It was established that the  $\sigma_b$  and  $\sigma_s$  values of the pipes are somewhat lower, and the  $\delta$  and  $\psi$  values somewhat higher than in the case of rolled stock. Compared with the body of the pipe, specimens taken from the upset ends exhibited lower  $\sigma_b$  and  $\sigma_s$  values and considerably smaller values of  $\delta$ ,  $\psi$ , and  $a_k$ .

Card 1/2



SOV/137-58-11-23475

Mechanical Characteristics of the Upset Ends of Drill Pipes

A decrease in plastic properties of specimens taken from the upset ends of the pipes is a consequence of the bending of the fibers in the upset ends at an angle  $>45^{\circ}$  with respect to the axis of the pipe. Mechanical properties of drill pipes manufactured from cast stock virtually do not differ from those of pipes manufactured from rolled stock.

N. K.

Card 2/2

ACCESSION NR: AR4041596

S/0137/64/000/005/D042/D042

SOURCE: Ref. zh. Metallurgiya, Abs. 5D253

AUTHOR: Vdovin, F. V.; Burnos, V. A.

TITLE: Determination of mechanical properties of ribbed pipes

CITED SOURCE: Sb. Proiz-vo trub. Vy\*p. 10. M., Metallurgizdat, 1963, 110-113

TOPIC TAGS: pipe, ribbed pipe, mechanical property

TRANSLATION: Investigation of mechanical properties of ribbed pipes showed the following: Magnitudes of temporary resistance,  $\sigma_s$  and  $\sigma_b$  are changed and depend on form of samples, method of bracing them in clamps of machine and speed of extension during test. In long samples of conditions the yield point is lower (~12%), and

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ACCESSION NR: AR4041596

higher ( $\sim 6\%$ ) than in short. During test of branch extensions on plugs, values of conditional yield point are increased by 16%, and  $\delta$  - by  $\sim 12\%$  as compared with test of branch extensions with flattened ends. Change of values of mechanical characteristics is explained by different relative speeds of extension of long and short samples by different course of processes of deformation during test of samples on plugs and with flattened ends. Observed influence of different parameters during carrying out of tensile tests of ribbed pipes demanded creation of single method of checking their mechanical properties for the purpose of obtaining comparable results of determinations. Method of test developed by us specifies use of the volume method of determination of area of transverse section of pipes, as guaranteeing the least errors of calculations. For obtaining comparable results of tests, definite geometric dimensions of samples are recommended (working and calculating length, etc.) in accordance with assortment of pipes. Use of metallic plugs during bracing of samples in grips of test machines and observance of speed characteristic of deformation is obligatory in process of checking the properties of ribbed pipes.

SUB CODE: MM

ENCL:00

Card 2/2

137-58-4-7207

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 4, p 127 (USSR)

AUTHORS: Fomichev, I. A. , Vdovin, F. V. , Kravchenko, A. G. , Pishchik, N. S.

TITLE: Manufacture of Tubes From Austenitic 1Kh14N14V2M (EI-257) Steel [ Proizvodstvo trub iz austenitnoy stali 1Kh14N14V2M (EI-257) ]

PERIODICAL: Byul. nauchno-tekhn. inform. Vses. n.-i. trubnyy in-t, 1957, Nr 3, pp 5-16

ABSTRACT: Tubes of 1Kh14N14V2M are designed for use for re-heaters and manifolds of boilers operating under high and superhigh steam parameters. This steel (S) is a S of the austenitic class and is highly heat-resistant. The effects of temperature and degree of reduction on the plasticity of the S were investigated, and experiments were conducted in rolling the tubes on an automatic 400 mill. Forged hollow and solid blanks with machined surfaces were employed. Plasticity was determined by torsion testing, by testing for pierceability, and for tension in a single plane (this last method was employed for the first time and makes it possible to determine the relationship between the temperature and plasticity, under

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137-58-4-7207

Manufacture of Tubes From Austenitic 1Kh14Ni4V2M (EI-257) Steel

conditions of stress similar to those of the real stresses existing during piercing, and, consequently, the optimum temperature for the working of the S). The design of the apparatus for testing for plane tension is appended and described. An analysis of the results of the torsion, plane tension, piercing, and micro-structure tests is presented. This shows that piercing of the blank should best be performed in the 1200-1225°C temperature interval. The results of tests for pierceability and high-temperature torsion show that as the length of time the metal is held for purposes of heating increases, the plasticity of the S drops. After obtaining the results of laboratory investigation, rolling of tubes of 219x27 mm dimensions was performed successfully both from hollow and from solid blanks. Solid blanks are recommended as being economically advantageous.

I. M.

1. Steel tubes--Manufacture
2. Steel tubes--Material

Card 2/2

~~VDOVIN, F.V.~~, kand. tekhn. nauk; SEMENOV, O.A., kand. tekhn. nauk; PISHCHIK,  
N.S., inzh.

Manufacturing cold rolled pipes of low-plastic ferritic steels.  
Bul. TSNIICEM no.22:33-38 '57. (MIRA 11:5)  
(Pipe, Steel)

VDOVIN, F.V., kand.tekhn.nauk

Effect of certain parameters of the upsetting process on  
the quality of pipe ends. Trudy NTO Chern.met. 15:93-104  
'59. (MIRA 13:7)

(Forging) (Pipe flanges)

VDOVIN, F.V., kand.tekhn.nauk; PISHCHIK, N.S., inzh.; KOVALEVSKIY, A.I., inzh.

Determining the toughness of rolled taper specimen. Biul.nauch.-  
tekhn.inform.VNITI no.4/5:183-186 '58. (MIRA 15:1)  
(Steel--Testing)



VDOVIN, F.V., kand.tekhn.nauk

Engineering properties of upset ends of drilling pipes. Biul.nauch.-  
tekh.inform.VNITI no.4/5:165-173 '58. (MIRA 15:1)  
(Oil fields--Equipment and supplies)

ZIL'BERSHTEYN, L.I., kand. tekhn. nauk; VDOVIN, F.V., kand. tekhn. nauk; PATRICHIN,  
Ye.P., inzh., KOSYS, A.A., inzh.

Development of technically founded standards for the technological  
testing of electrically welded pipe. proizv. trub no.10:66-70 '63.  
(MIRA 17:10)

VDOVIN, F.V., kand. tekhn. nauk; BURNOS, V.A., inzh.

Determining the mechanical properties of ribbed pipe. Proizv.  
trub. no.10:110-113 '63. (MIRA 17:10)

VDOVIN, G., slesar'-sborshchik

The force of total participation. Sov. profsoiuzy 16 no.18:20-21  
S '60. (MIRA 13:10)

1. Stankostroitel'nyy zavod imeni Ordzhonikidze.  
(Machinery industry--Technological innovations)

VDOVIN, I., tehnolog

Reconstruction of the starting apparatus of pneumatic hammers.  
Mor.flot 19 no.6:32 Ja '59. (MIRA 12:9)

1. Tekhnicheskiy otdel zavoda imeni Parizhskoy Kommuny.  
(Pneumatic tools)  
(Ships--Maintenance and repair)

VDOVIN, I.

"Regional studies" no.1, 1957. Reviewed by I. Vdovin. Izv.Vses.  
geog.ob-va 90 no.5:487-489 S-O '58. (MIRA 11:11)  
(Magadan Province--Russian periodicals)

VDOVIN, I.

"Over mountains and tundras of the Chukchi National Area" by  
S.V. Obruchev. Reviewed by I. Vdovin. Izv. Vses. geog. ob-va 90  
no.6:557-558 N-D '58. (MIRA 11:12)  
(Chukchi National Area)

AUTHOR: Vdovin, I.

SOV/12-90-6-14/23

TITLE: Reviews (Retsenzii)

PERIODICAL: Izvestiya vsesoyuznogo geograficheskogo obshchestva, 1958,  
Vol 90, Nr 6, pp 557 - 558 (USSR)

ABSTRACT: The author gives a review of the book "Rogorami i tundram  
Chukotki - The Mountains and Tundras of Chukotka" by S.  
V. Obruchev, published by the Gosudarstvennoye izdatel'stvo  
geograficheskoy literatury (State Publishing Office of Geo-  
graphical Literature). The author describes an expedition  
which took place in 1934-1935 to the Chaun district (Chaun-  
kiy rayon) of the Chukotka region.

Card 1/1



VDOVIN, I., tehnolog

Building up bearing nibs using red copper. Rech. transp. 20  
no. 2:48-49 F '61. (MIRA 14:2)

1. Bakinskiy sudoremontnyy zavod imeni Parizhskoy Kommuny.  
(Bearings (Machinery))

VDOVIN, I.S.

Commercial relations between the populations of Northeastern Siberia  
and Alaska to the beginning of the 20th century. Let. Sev. 4:117-127  
'64. (MIRA 18:3)

VDOVIN, I. S.

"Iz istorii otnosheniy chukchey i eskimosov Alyaski."

report submitted for 7th Intl Cong, Anthropological & Ethnological Sciences,  
Moscow, 3-10 Aug 64.

VDOVIN, K.D., inzh.

Coal outbursts in mines of the "Sulyuktinskiy" and Kyzyl-Kiya  
deposits. [Trudy] VNIMI no.49:242-250 '62. (MIRA 17:4)

1. Shakhta No.2/4 rudoupravleniya Sulyuktaugol'.

VDOVIN, I. V.

"The Direct and Inverse Problems of the Attraction Potential of an Elliptical Cylinder." Cand Geol-Min Sci, Dnepropetrovsk Mining Inst, Dnepropetrovsk, 1954. (RZhMat, Apr 55).

SO: Sum. No. 704, 2 Nov 55 - Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (16).

BERKOVICH, M.Ya.; SPIVAK, A.I.; KORNOGOV, A.P.; FILIMONOV, N.M.;  
POPOV, A.N.; VDOVIN, K.I.; ALEKSEYEV, L.A.; POSPELOV, V.P.

Some problems of gas drilling. Izv.vys.ucheb. zav.;neft' i gas  
5 no.5:29-34 '62. (MIRA 16:5)

1. Ufimskiy neftyanoy institut.  
(Oil well drilling)

BERKOVICH, M.Ya.; KORNONOGOV, A.P.; VDOVIN, K.I.; ALEKSEYEV, L.A.

Theoretical possibility of cold air drilling in eastern oil regions.  
Izv. vys. ucheb. zav.; neft' i gaz 4 no.5:39-46 '61. (MIRA 15:2)

1. Ufimskiy neftyanoy institut.  
(Bashkiria--Oil well drilling)

VIDVIN, L.A.; LUBEGIN, A.S.

Drilling of holes in glass. Energetik. 13 no.2:16 P '65.

(MIRA 18:6)



BERKOVICH, M.Ya.; SPIVAK, A.I.; KORNONOGOV, A.P.; YDOVIN, K.I.; ALEKSEYEV,  
L.A.; POPOV, A.N.; FILIMONOV, H.M.; POSPELOV, V.P.

Studying the power requirements for breaking rocks by rolling  
cutter bits. Izv.vys.ucheb.zav.; neft' i gaz 5 no.8:43-49 '62.

(MIRA 17:3)

1. Ufinskiy neftyanoy institut.

ZHDANOV, M.M.; KOSTRYUKOV, G.V.; ASFANDIYAROV, Kh.A.; MAKSUTOV, R.A.;  
KONDAKOV, A.N.; TURUSOV, V.M.; SILIN, V.A.; PILYUTSKIY, O.V.;  
SHELDYBAYEV, B.F.; PETROV, A.A.; SMIRNOV, Yu.S.; KOLESNIKOV,  
A.Ye.; DROZDOV, I.P.; IVANTSOV, O.M.; TSYGANOV, B.Ya.;  
KORNONOGOV, A.P.; VDOVIN, K.I.; ALEKSEYEV, L.A.; GAYDUKOV, D.T.;  
LIPONESKIY, A.Ya.; DANYUSHEVSKIY, V.S.; VEDISHCHEV, I.A.;  
ALEKSEYEV, L.G.; KRASYUK, A.D.; IVANOV, G.A.

Author's communications. Neft. i gaz. prom. no.2:67-68

Ap-Je '64.

(MIRA 17:9)

VDOVIN, L.Kh., red.; FLORINSKIY, S.V., tekhn.red.

[List of wholesale prices for checking and measuring instruments, regulators and other items of the "Energometallurgprom" trust. Effective on 1 January 1949] Preiskurant optovykh tsen na kontrol'no-izmeritel'nye pribory, regulatory i prochie izdelia tresta "Energometallurgprom." Vveden v deistvie s 1 ianvaria 1949 g. Moskva, Gos. nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1948. 30 p. (MIRA 11:6)

1. Russia (1923- U.S.S.R.) Ministerstvo metallurgicheskoy promyshlennosti.

(Measuring instruments--Prices)

(Machinery--Prices)

ARLYUK, B.I.; TELYATNIKOV, G.V.; YUZHANINOV, I.A., rukovoditel' raboty;  
Prinimali uchastiye: KOROLEVA, A.A.; VDOVIN, L.V.

Material carried away from a fluidized bed. TSvet. met. 36  
no.7:48-51 J1 '63. (MIRA 16:8)  
(Fluidization) (Fly ash)

VDOVIN, M.M.

New technique for lifting fully assembled signal masts. Geod.  
i kart. no.2:27-34 F '64. (MIRA 17:3)

VDOVIN, M.M.

Building compound signal towers in the Novosibirsk aerial geodetic  
enterprise. Geod.1 kart. no.7:37-44 S '56. (MIRA 9:11)  
(Novosibirsk--Surveying)

VDOVIN, M.Ye.

General automatic control of electric filters. Tsement 29  
no. 17-19 S-0 '63. (MIRA 16:11)

1. Rizhskiy tsementno-shifernyy zavod.

VDOVIN, N.

112-3-6066

Translation from: Referativnyy Zhurnal, Elektrotehnika, 1957,  
Nr 3, p. 147 (USSR)

AUTHORS: Vdovin, N., Firsov, S.

TITLE: Feeding of the Carbon-feed Electric Motors of the  
K T-1 [Motion Picture Projector] in A-C Supplying  
the Arc Lamp (Pitaniye elektrodvigateley podachi  
ugley K T-1 pri pitanii dugi peremennym tokom)

PERIODICAL: Kinomekhanik, 1956, Nr 3, pp. 37-38

ABSTRACT: It is well known that the arc lamp of the K T-1  
motion picture projector is designed for d-c operation.  
When the lamp is operated on alternating current,  
automatic carbon feed is impossible. The proposed  
system includes a selenium rectifier for insuring  
automatic operation of the arc lamp. B.S.T.

Card 1/1



VDOVIN, N.

Fire in a flour mill combine. Pozh.delo 7 no.3:17 Mr '61.  
(MIRA 14:5)

1. Nachal'nik otдела Upravleniya pozharney okhrany Saratovskogo  
oblispolkoma.  
(Flour mills--Fires and fire prevention)

\*

YDOVIN, N.

We economise materials. Streitl' no.2:20 F '57. (MIRA 10:3)

1. Nachal'nik planovogo otdela Upravleniya No.82 tresta Mossetdel-  
stroy-2. (Building)

LITVINENKO, V.; SKRYPKA, K.; TURCHIN, I.; SKVORTSOVA, A.; BOYKO, A.;  
VDOVIN, P.

Noncontractual relations between the wholesale and retail trade.  
Sov. torg. 36 no.1:33-37 Ja '63. (MIRA 16:2)

1. Direktor Bogodukhovskogo smeshtorga (for Litvinenko).
2. Upravlyayushchiy L'vovskoy bazoy "Ukroptgalantereya" (for Skrypka).
3. Glavnyy tovaroved Krymskoy bazy "Ukropttekstil'torga" (for Turchin).
4. Upravlyayushchaya Krymskoy bazoy "Ukroptgalanterei" (for Skvortsova).
5. Glavnyy tovaroved Krymskoy bazoy "Ukroptgalanterei" (for Boyko).
6. Upravlyayushchiy respublikansoy bazoy "Moldgalantereya" (for Vdovin).  
(Ukraine—Commerce)

VDOVIN, P., inzhener-polkovnik.

Independent work for pilots in practical aerodynamics. Vest.  
Vozd.Fl. 34 no.12:55-58 D '51. (MIRA 8:3)  
(Aerodynamics--Study and teaching)

VDOVIN, P.Ye., inzh.; OKHTEMENKO, L.V., inzh.

System for cleaning and drying transformer insulating oil. Prom.  
energ. 18 no.8:22-26 Ag '63. (MIRA 16:9)  
(Insulating oil) (Electric transformers)

VDOVIN, R.A.; VOLKOV, Ya.I., inzh. (Leningrad); TITOV, G.Ye.; KANIN, A.B.

Improving the quality of switches. Pat' i put. khoz. no.8:18-19  
Ag '59. (MIRA 13:3)

1. Starshiy dorozhnyy master Moskovskoy distantzii puti Severnoy dorogi  
(for Titov). 2. Starshiy dorozhnyy master, stantsiya Polotsk, Belorusskoy  
dorogi (for Kanin). (Railroads--Switches)

PYATNITSKIY, A.A., kand. tekhn. nauk; VDOVIN, R.M., inzh.

Using the running-down method for finding power losses for  
bubbling in reducing gears. Mashinostroenie no.3:111-115  
My-Je '63. (MIRA 16:7)

1. Kiyevskiy politekhnicheskij institut.  
(Gearing)

VDOVIN, S. S.

Device for detecting short-circuited loops in transformer  
coils. Izv. tekhn. no. 10:47-48 0 '62. (MIRA 15:10)

(Electric transformers--Testing)



VDOVIN, S.S.

Thermal conditions of a high-power pulse transformer. Izv.  
vys. ucheb. zav.; prib. 8 no.2:138-141 '65. (MIRA 18:5)

VDOVIN, S.S.

Comparison of the parameters of various circuits of pulse  
power transformers. Radiotekhnika 20 no.9:72-76 S '65.  
(MIRA 18:9)

1. Deystvitel'nyy chlen Nauchno-tehnicheskogo obshchestva  
radiotekhniki i elektrosvyazi imeni A.S. Popova.

VDOVIN, Vitaliy Aleksandrovich; ZAYONCHKOVSKIY, P.A., prof., otv.red.;  
~~DMITRIYEV, Yu., red.-izd.-va;~~ TELEGINA, T., tekhn.red.

[The Peasant Land Bank, 1883 - 1895) Krest'ianskii pozemel'nyi  
bank, 1883-1895 gg. Gosfinizdat, 1959. 106 p. (MIRA 12:12)  
(Agricultural credit)

ACCESSION NR: AR4015665

S/0081/63/000/021/0343/0343

SOURCE: RZh. Khimiya, Abs. 21M122

AUTHOR: Teterin, P. K.; Vdovin, V. F.; Kozlov, G. B.

TITLE: Selection of glass fluxes for hot pressing of steels and alloys

CITED SOURCE: Steklo. Inform. materialy\* Gos. n.-i. in-ta stekla, no. 1 (118), 1963, 57-61

TOPIC TAGS: glass flux, hot pressing glass flux, steel pressing flux, alloy pressing flux, flux identification, high temperature flux property

ABSTRACT: Universal glass fluxes for pressing steels at any temperature are not available. The authors suggest that the best flux to use in pressing steels and alloys for millable blanks is a glass which exhibits the properties of 185V glass at 1150C at the temperature of pressing in a container. Glass flux exhibiting the properties of glass 269 at 1150C at discharge temperature can be used when pressing steel and alloys for glass collars. To insure proper use of glass fluxes in hot pressing, each manufactured lot of glass should be tagged with a rating plate in the form of a viscosity-temperature graph. Authors' summary.

Card 1/1 DATE ACQ: 09Dec63

SUB CODE: ML, MA

ENCL: 00

LUDENSKIY, I.M.; KOLPOVSKIY, N.M.; VDOVIN, V.F.; LAMIN, A.B.

Analysis and design of shapes for hard alloy drawing dies.  
Stal' 22 no.12:1095-1099 D '62. (MIRA 15:12)

1. Truboprokatnyy zavod im. Lenina.  
(Drawing (Metalwork)—Equipment and supplies)

VDOVIN, V.I.

Submerged metal box used in mortar work. Rats. i izobr. predl. v  
stroj. no.5:64-65 '58. (MIRA 11:6)

1.Glavnyy mekhanik stroitel'nogo uchastka, Moskva.  
(Mortar) (Building machinery)

VDOVIN, V.L., inzh.

Technology of the buildup welding of propeller shafts.  
Sudostroenie 30 no.5:51-52 My '64. (MIRA 17:6)

VDOVIN, Vasilii Aleksandrovich; SEPPING, N.G., red.; KARAS', V.D.,  
~~comm. 190.~~

[Kirensk and Kirensk District] Kirensk i Kirenskii raion.  
Irkutsk, Irkutskoe knizhnoe izd-vo, 1959. 95 p. (MIRA 12:9)  
(Kirensk District)



ACC NR: AP7002746 (N) SOURCE CODE: UR/0383/66/000/006/0022/0025

AUTHOR: Vdovin, V.P. (Candidate of technical sciences)

ORG: none

TITLE: Selection of glass lubricants for hot extrusion

SOURCE: Metallurgicheskaya i gornorudnaya promyshlennost', no. 6, 1966, 22-25

TOPIC TAGS: metal extrusion, glass lubricant, ~~metal extrusion glass~~  
~~lubricant property~~, powdered glass

ABSTRACT: Several glass lubricants of medium and low viscosity, developed by the State Glass Institute, have been tested to determine the minimum viscosity which would ensure the lowest friction coefficient and the lowest extrusion force. The experiments were carried out on a vertical hydraulic press of 7850 kn with 1Kh18N9T steel bars 32 and 25 mm in diameter extruded from round billets 77 mm in diameter and 180 mm long at 1100—1200C. It was found that the minimum extrusion force corresponds to a glass pad viscosity of 10 to 13 n·sec/m<sup>2</sup>. The optimal viscosity of glass powder was found to be 20 n·sec/m<sup>2</sup>. It was also found that the viscosity of glass lubricant decreases with increased temperature of extrusion. On the basis of experiments, a graph for selecting glass lubricant was plotted (see Fig. 1). Lines a—a and b—b represent constant viscosities

Card 1/2

UDC: 621.984.5

ACC NR: AP7002746

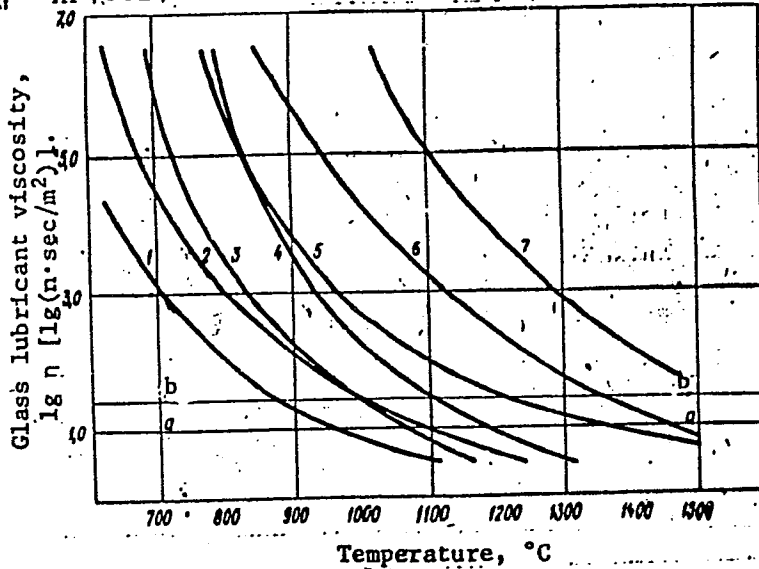


Fig. 1. Graph for selecting glass lubricants

10 and 20 n·sec/m<sup>2</sup>, respectively. Curves 1-7 represent viscosities of various glasses at different temperatures. The points of intersection of these lines indicate the temperature at which a given type of glass has the best antifriction properties. [TD]

SUB CODE: // 13 / SUBM DATE: none / ATD PRESS: 5114  
Card 2/2

VDOVIN, V.L.; NEDOSPASOV, A.V.

Current instability of a positive column in a magnetic field.  
Zhur.tekh.fiz. 32 no.7:817-822 J1 '62. (MIRA 15:8)  
(Plasma (Ionized gases)) (Magnetic fields)

38230  
S/057/62/032/007/004/013  
B104/B102

26.2311  
AUTHORS: Vdovin, V. L., and Nedospasov, A. V.

TITLE: Current instability of a positive column in a magnetic field

PERIODICAL: Zhurnal tekhnicheskoy fiziki, v. 32, no. 7, 1962, 817-822

TEXT: B. B. Kadomtsev and A. V. Nedospasov (J. Nucl. Energy, part C, Plasma Physica, 1, 230, 1960) showed that an instability of the form  $f(r)\exp(i(m\psi + kz - \omega t))$  was established in the positive column of a gas discharge subjected to a sufficiently strong, longitudinal magnetic field, and that an azimuthal electric field was generated. A particle drift toward the wall is observed. The critical pressures for the appearance of these instabilities when discharges occur in He, H<sub>2</sub>, Ne, Ar, Hg are calculated in the present paper on the basis of Nedospasov's theory and are compared with experimental data. It is shown that the instabilities discovered by F. C. Hoh and B. Lehnert (Report IIIb, 25, on the Fourth Intern. Conf. on Ionisation Phenomena in Gases. Uppsala, 1959;

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Current instability of a positive ...

S/057/62/032/007/004/013  
B104/B102

Physics of Fluids, 3, no. 4, 600, 1960) can be described by the method here suggested. There are 6 figures.

SUBMITTED: June 13, 1961

Card 2/2

I 11884-66 EWT(1)/ETC(F)/EPF(n)-2/EWG(m) IJP(c) AT  
ACC NR: AP5028016 SOURCE CODE: UR/0386/65/002/008/0369/0372

AUTHOR: Vdovin, V. L. 64

ORG: none

TITLE: Convective instability of a plasma which is not uniform along the magnetic field

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, Pla'ma v redaktsiyu. (Prilozheniye), v. 2, no. 8, 1965, 369-372

TOPIC TAGS: plasma instability, electron motion, plasma diffusion

ABSTRACT: The author shows analytically that a weakly ionized plasma is subject to an inherent instability resulting from the presence of an axial density gradient, such as is produced in the case of free diffusion of charged particles from a source to the side walls of the chamber. The analysis is based on solving the differential equations for the electron velocity with ion diffusion neglected. The instability growth increment is calculated for two cases of practical interest--strong magnetic field and decaying plasma. The results show that the instability of a plasma which is not uniform along the magnetic field agrees well with the experimental data on the diffusion in a sufficiently broad range of experiments. Author is sincerely grateful to B. B. Kadomtsev for discussions and criticism, and to A. V. Nedopasov, V. D. Rusanov, and D. A. Frank-Kamenetskiy for valuable discussions. Orig. art. has: 3 formulas.

SUB CODE: 20/ SUBM DATE: 10Aug65/ ORIG REF: 002/ OTH REF: 001

Card 1/1

L 22410-66 EWT(1)/EPF(n)-2/EWG(m) IJP(c) AT  
ACC NR: AP6007953 SOURCE CODE: UR/0089/66/020/002/0143/0149

AUTHORS: Vdovin, V. L.; Podgorny, I. M.; Rusanov, V. D. 52

ORG: none B

TITLE: Effect of <sup>21,44,55</sup>plasma density on the results of spectroscopic determination of the electron temperature.

SOURCE: Atomnaya energiya, v. 20, no. 2, 1966, 148-149  
<sup>21,44,55</sup>

TOPIC TAGS: plasma density, plasma electron temperature, spectral line, helium plasma, hydrogen plasma

ABSTRACT: In view of the fact that the values of the electron temperature determined from the excitation functions of various helium lines are not uniquely defined, and are influenced by secondary processes such as the pressure of the neutral helium and the density of the plasma electrons, the authors have undertaken a comparison of the electron temperature as determined with two pairs of lines (4922, 4713, and 5047, 4713 Å) with one another, and also with the results

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UDC: 533.9

2

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ACC NR: AP6007953

of probe measurements. The experiments were made essentially in a helium plasma of high frequency discharge in a magnetic field, in a pressure interval  $3 - 10 \mu$ . The generator frequency was 25 Mc, and the active power fed into the plasma reached 4 kw. The ratio of the spectral-line intensity was determined with a monochromator with photomultiplier. The main measurements were made with a double electric probe that could be displaced radially in the chamber. The plasma density was determined with probe measurements using a Fabry-Perot interferometer operating at 8 mm wavelength. At electron densities  $\sim 10^{12} \text{ cm}^{-3}$  the temperatures obtained by optical measurements using the 4922 and 4713 Å pair exceed by a factor of more than two the results of the probe measurements. The results coincide at  $\sim 3 \times 10^{11} \text{ cm}^{-3}$ . The temperature determined optically for the 5047 and 4713 Å lines is approximately half the temperature obtained with probe measurements at a density  $n_e > 6 \times 10^{11} \text{ cm}^{-3}$ . At lower concentrations the results agree well. Measurements in hydrogen show

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L 22410-66  
ACC NR: AP6007953

better agreement. It is concluded therefore that the method used to determine the electron temperature from the relative intensity of the helium lines, in the form used in many experiments, can lead to appreciable errors. Orig. art. has: 1 figure

SUB CODE: 20/ SUBM DATE: 01Sep65/ ORIG REF: 002/ OTH REF: 003

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3/3 *llw*

L 22192-66 EPF(n)-2/EWT(1)/ETC(f)/EWG(m) IJP(c) AT

ACC NR: AP6004915

SOURCE CODE: UR/0056/66/050/001/0039/0045

AUTHOR: Vdovin, V. L.; Rusanov, V. D.; Frank-Kamenetskiy, D. A.

80  
77  
8

ORG: none

TITLE: Investigation of nonpotential drift waves in a stationary magnetoacoustic plasma 21, 44-55

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 50, no. 1, 1966, 39-45

TOPIC TAGS: magnetoactive plasma, magnetoacoustic effect, turbulent plasma, hydrogen plasma, electron temperature, electron density, acoustic noise, drift mobility

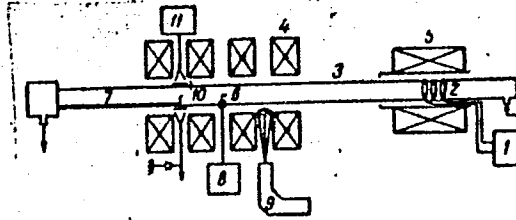
ABSTRACT: The purpose of the investigation was to check on the theoretically predicted excitation of solenoidal (nonpotential) drift fluctuations in an inhomogeneous plasma. To this end, the authors investigated magnetic noise in a setup in which the plasma is produced by the magnetoacoustic method in a glass tube situated in a fixed magnetic field (Fig. 1). The plasma flowed continuously along the axis into the measured volume and the magnetic field varied from 700 to 2500 oe. The measurements were made on hydrogen plasma in the pressure range  $1 \times 10^{-3}$ -- $5 \times 10^{-3}$  mm Hg. The rf power introduced into the discharge was 4 kw. In this pressure range the electron temperature varies from 4 to 10 ev. The electron density at the

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ACC NR: AF6004915

Fig. 1. Diagram of experimental apparatus: 1 - rf generator, 2 - rf coil, 3 - glass tube, 4 - main magnetic field coil, 5 - auxiliary magnetic field coil, 6 - radially movable electric probe, 7 - longitudinally movable electric probe, 8 - spectrum analyzer, 9 - monochromator, 10 - Fabry-Perot interferometer, 11 - signal generator.



center of the chamber was  $5 \times 10^{11}$ -- $5 \times 10^{12} \text{ cm}^{-3}$ . Two diagnostic techniques were used in these experiments, determination of the electron density with a double electric probe and a microwave Fabry-Perot interferometer operating at 8 mm, and determination of the electron temperature by double electric probes and by an optical method. Measurements were made of the spatial distributions of the field components, of the dependence of the frequency on the magnetic field, and of the phase relationships of the oscillations. Two types of magnetic noise were observed. One was a strong solenoidal noise (approximately 0.05 oe) with fundamental frequency of the order of 100 kcs. Its spectrum had a high harmonic content, with most of the noise power concentrated in the harmonics at low pressures. The dependence of this noise on the plasma parameters was investigated and the results are discussed from

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ACC NR: AP6004915

the point of view of possible excitation of Alfvén drift waves in the inhomogeneous plasma. In addition to the magnetic noise, intense potential electric fluctuations were observed, similar to those investigated in detail elsewhere (Yadernyy sintez [Nuclear Fusion], 1966, in press). It is deduced that the magnetic fluctuations observed in the present investigation are not a component of the potential fluctuation investigated earlier. The high frequency noise observed in the experiments (3--5 Mcs) is of magnetoacoustic nature, but its excitation is not yet clear. The authors thank Ye. K. Zavoyskiy and L. I. Rudakov for valuable comments and V. Sannikov for help in the experiments. Orig. art. has: 7 figures and 1 formula.

SUB CODE: 20/    SUBM DATE: 02Aug65/    ORIG REF: 005/    OTH REF: 003

Card 3/3 nst

VDOVIN, V. M.

## USSR/Chemistry - Synthesis

Card 1/1            Pub. 40 - 24/27

Authors        :    Petrov, A. D.; Sadykhzade, S. I.; and Vdovin, V. M.

Title            :    Reaction of MgBr-vinylethynyl with triphenylhalide silanes

Periodical     :    Izv. AN SSSR. Otd. khim. nauk 1, 181-182, Jan-Feb 1955

Abstract       :    Brief report is presented on the established differences in the synthesis and reactivity of  $(C_6H_5)_3SiCl$  and  $(C_6H_5)_3CCl$ . The existing reactivity differences are explained by the different electron density of bonds with the Cl of the silicones and carbonium radicals as well as by the spatial hindrances in the formation of the ion silicone. Six references: 3 USA and 3 USSR (1933-1954).

Institution    :    Acad. of Sc., USSR, The N. D. Zelinskiy Inst. of Organ. Chem.

Submitted     :    July 22, 1954

**"APPROVED FOR RELEASE: 08/31/2001**

**CIA-RDP86-00513R001859210017-7**

**APPROVED FOR RELEASE: 08/31/2001**

**CIA-RDP86-00513R001859210017-7"**

PETROV, A.D.; MIRONOV, Y.F.; VDOVIN, V.M.

Synthesis and properties of the  $\alpha$ -cyanisopropoxysilanes. Izv.  
AN SSSR Otd.khim.nauk 86 no.6:1122-1124 My '55. (MLRA 9:4)

1. Institut organicheskoy khimii imeni N.D.Zelinskogo Akademii  
nauk SSSR. (Silane)

*Vdovin, V. M.*

USSR/ Chemistry - Synthesis methods

Card 1/1 Pub. 22 -27/60

Authors : Petrov, A. D. Memb. Corresp., Acad. of Sc., USSR, Sadykh-Zade, S. I.;  
and Vdovin, V. M.

Title : Synthesis and reactions of beta-trichlorosilylpropionitrile

Periodical : Dok. AN SSSR 100/4. 711-714. Feb 1, 1955

Abstract : A direct method is described for the synthesis of beta-trichlorosilylpropionitrile ( $\text{Cl}_3\text{SiCH}_2 \cdot \text{CH}_2 \cdot \text{CN}$ ) from beta-chloropropionitrile passing through a Si-Cd alloy at  $370^\circ$ . The synthesis of this compound - an analogue of ethyltrichlorosilane with the nitrile group in beta-position relative to Si - has uncovered simple ways of obtaining its different poly - and monomeric derivatives. The reaction of beta-trichlorosilylpropionitrile with other silicon halide compounds is discussed. Six references: 3 USA, 2 USSR and 1 English (1945-1954).

Institution : .....

Submitted : July 10, 1954



VDOVIN, V.M.

USSR/Organic Chemistry - Synthetic Organic Chemistry

E-2

Abs Jour : Referat Zhur - Khimiya, No 2, 1957, 4464

Author : Petrov, A.D., Mironov, V.F., Vdovin, V.M., Sadykh-Zade, S.I.

Inst : Academy of Sciences USSR *Inst. Organic Chem im N.D. Zelinskiy*

Title : Cyanethylation of Silicochloroform

Orig Pub : Izv. AN SSSR, Otd. khim. n., 1956, No 2, 256-257

Abstract : It is shown that on heating for 4 hours at 160-170° and 20 atmospheres in the presence of Raney nickel,  $\text{HSiCl}_3$  is added to  $\text{CH}_2=\text{CHCN}$  (I), to give  $\text{Cl}_3\text{SiCH}_2\text{CH}_2\text{CN}$  (II)

(BP 79-82°/10 mm, MP 32-33°) with a yield of 12.2%.  $\text{HSi}(\text{CH}_3)\text{Cl}_2$ , under the same conditions, is added to I,

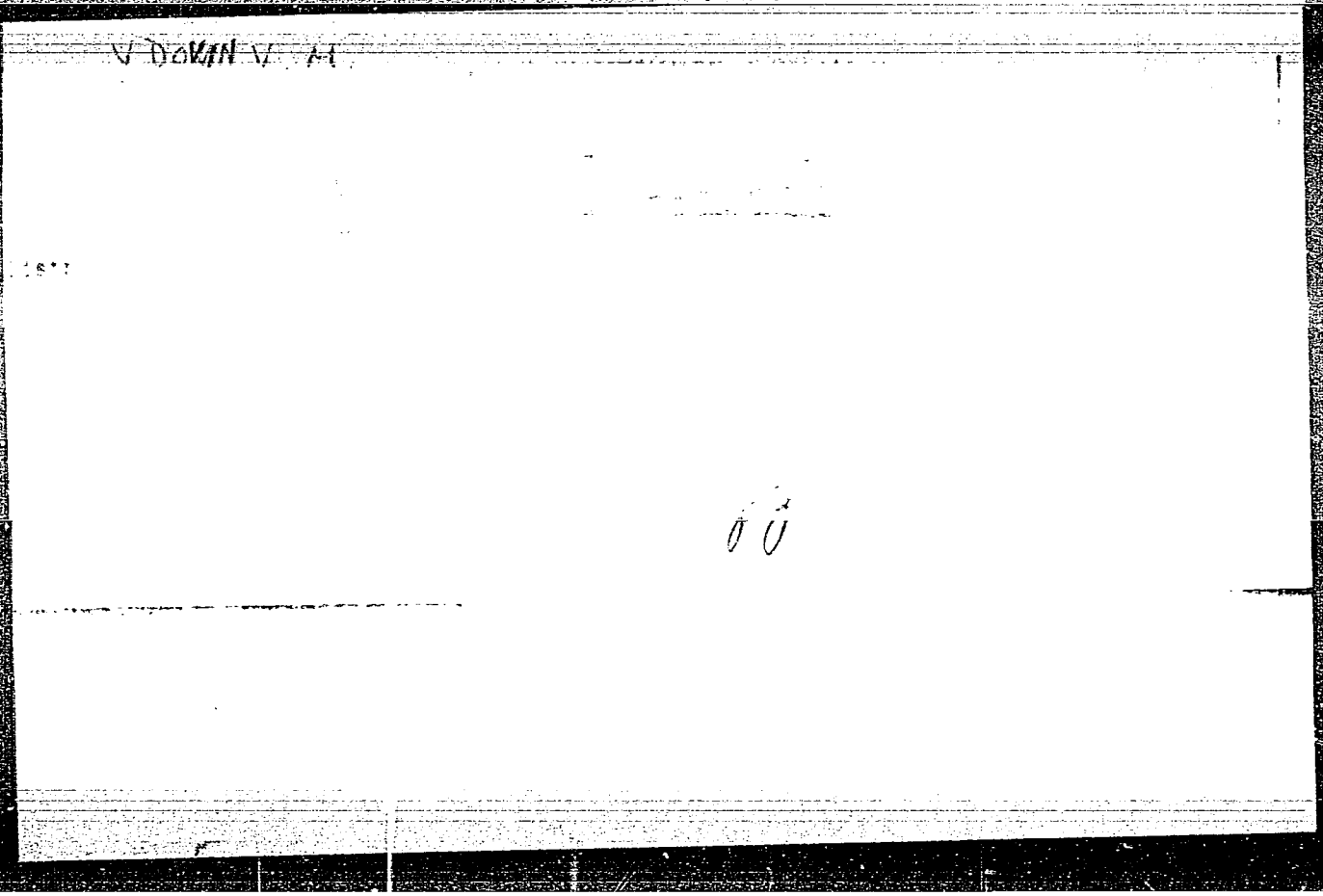
but pure  $\text{Cl}_2(\text{CH}_3)\text{SiCH}_2\text{CH}_2\text{CN}$  could not be isolated. On

interaction of II with  $\text{CH}_3\text{MgI}$  was obtained

Card 1/2

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VDOVIN, V. M., Cand Chem Sci -- (diss) "Synthesis and transformations of silicon-containing nitriles." Mos, 1957. 10 pp (Acad Sci USSR, Inst of Organic Chem im N. D. Zelinskiy), 110 copies (KL, 52-57, 103)



VDovin V.M.

AUTHORS: Petrov, A.D., Vdovin, V.M. 62-12-13/20

TITLE: Cyanogen Ethylation of Methyl- and Ethyl Dichlorosilanes  
(Tsianetilirovaniye metil- i etildikhlorosilanov)

PERIODICAL: Izvestiya AN SSSR Otdeleniye Khimicheskikh Nauk, 1957, Nr 12,  
pp. 1490-1491 (USSR)

ABSTRACT: In this paper the authors tell in what manner they obtained  $\text{CH}_3\text{SiCl}_2(\text{CH}_2\text{CH}_2\text{CN})$  and  $\text{C}_2\text{H}_5\text{SiCl}_2(\text{CH}_2\text{CH}_2\text{CN})$ . In the reaction the equivalent quantities of acrylonitrile and of the alkyl dichlorosilanes were utilized (with the catalyst  $\text{C}_5\text{H}_5\text{N}$ ) in the acetonitrile solution. The reaction was carried out in the autoclave at  $160-170^\circ\text{C}$ . The structure of the methyl- and alkyl-dichlorosilylpropionitriles was confirmed by titration. With pyridine as a catalyst synthesis was carried out of:  $\beta$ -methyl-dichlorosilylpropionitrile and  $\beta$ -alkyl-dichlorosilylpropionitrile. There are 7 references, 2 of which are Slavic.

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