L 37160-66

ACC NR: AT6016415

by Yu. P. Arbuzov. Ye. I. Burovaya and L. I. Agapova carried out the corrosion studies, and the investigation of the mechanical properties of the profile PS754-5 was carried out by Ye. I. Kutaytseva and S. M. Ambartsumyan. Orig. art. has: 8 tables and 2 figures.

SUB CODE: 11/ SUBM DATE: 16Sep65/ ORIG REF: 005

Card 2/2 af

L 40750-66   EWP(k)/EWT(m)/T/EWP(w)/EWP(t)/ETI   IJP(c)   JH/JD/HW

ACC NR: AT6024948   (A,N)   SOURCE CODE: UR/2981/66/000/004/0322/0330

AUTHOR: Edel'man, N. M.; Vasil'yeva, N. I.; Starostina, Z. I.

ORG: none

TITLE: Preparation of pressed semifinished products from AD31 alloy

SOURCE: Alyuminiyevyye splavy, no. 4, 1966. Zharoprochnyye i vysokoprochnyye splavy (Heat resistant and high-strength alloys), 322-330

TOPIC TAGS: aluminum alloy property, metal pressing

ABSTRACT: The cause of the formation of macrocrystalline structure in sections of AD31 alloy (composition in %: Cu 0.024, Mg 0.75, Mn 0.05, Fe 0.29, Si 0.42, Zn 0.02, Ti 0.05, bal. aluminum) was studied. The effect of technological factors (pressing temperature, degree of deformation during straightening and heat treatment) on the structure of the sections was determined. It is shown that in order to obtain high-quality sections without roughness (including thin-walled hollow ones of complex configuration), they should be prepared as follows: the temperature of the ingot during pressing should be no less than 480-500 °C, and that of the container, no less than 400-420 °C. The temperature of heating for quenching should be 520 ± 5 °C; the holding time for quenching thin-walled sections should not exceed 15-20 min. The sections should be straightened on stretching machines with a degree of deformation of no more than 4%. The artificial aging of pressed semifinished products should be carried out

Card   1/2

ACC NR: AT6024947   SOURCE CODE: UR/2981/66/000/004/0312/0321

AUTHOR: Edel'man, N. M.; Petrunin, A. M.; Shkrob, V. N.; Starostina, Z. I.;
Gudkov, N. I.

ORG: none

TITLE: Use of AD33 wrought aluminum alloy in the manufacture of large parts
operating under marine conditions

SOURCE: Alyuminiyevyye splavy, no. 4, 1966. Zharoprochnyye i vysokoprochnyye
splavy (Heat-resistant and high-strength alloys), 312-321

TOPIC TAGS: aluminum alloy, high strength alloy, metal property/AD33 aluminum alloy

ABSTRACT: A method of manufacturing large AD33 wrought aluminum-alloy parts has
been developed. The alloy contains 0.83% Mg, 0.63% Si, 0.4% Cu, and 0.2% Cr with
an impurity content of not more than 0.1% Mn, 0.23% Fe, 0.17% Zn and 0.035% Ti.
Machined, round ingots, 570 mm in diameter and 1280 mm long, and 292 mm in diameter
and 740 mm long were forged into disks 820 mm in diameter and 600 mm thick, and 560 mm
in diameter and 375 mm thick, respectively. The disks were solution-heat treated
at 520C, water quenched, and artificially aged at 160C for 17 hr. In this condition
the disks had a tensile strength of 30—35 kg/mm^2, a yield strength of 27—30 kg/mm^2,
and an elongation of 8—12%. Anisotropy of mechanical properties did not exceed 2 kg

Card 1/2

STAROSTINA, Z. M.

Nov 1947

USSR/Geology
     Stratification
     Phosphorous

"Phosphorous-bearing Capacity of the Basalt Strata of the Lower Yuri Stata in the
M. Laba River Basin (Northern Caucasus)," N. V. Rengarten, Z. M. Starostina, Caucasus
Combined Expedition, Soviet for Investigation of Productive Forces, Institute of Geol-
ogical Sciences, Academy of Sciences of the USSR, 3pp, Submitted by Academician D. S.
Belyankin, 5 May 1947

"Dok Ak Nauk" Vol LVIII, No. 4

The lower Yuri deposits of the M. Laba River can be divided into three distinct and
separate lithological strata. The basalt strata is usually of the lowest of the three,
and is most evident in the region of Khut Veriyut. The authors discuss some of the
factors which might explain the reasons for the prosence of phosphorous in these basalt
deposits. Submitted by Academician D. S. Belyakin, 5 May 1947

STAROSTIN, Z. M.

Geology, Stratigraphic-Kuban' Valley

Stratigraphic state of the Jurassic coal-bearing stratum of the Kuban' River. Kuban' River. Dokl. AN SSSR 85 no. 5, 1952.

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

STAROSTINA, Z.M.

Structure of the southeastern area of the Vilyuysk Basin. Izv.
AN SSSR.Ser.geol. 21 no.8:70-77 Ag '56.   (MLRA 9:11)

1. Geologicheskiy institut Akademii nauk SSSR, Moskva.
   (Vilyuysk Basin--Geology)

3(5)   SOV/11-59-7-6/17

AUTHOR: Starostina, Z.M.

TITLE: On the Conditions of Distribution of Siderite Ores
                in the Enclosing Rocks of the Bakal Group of Depo-
                sits (The Southern Urals)

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya geologicheskaya,
                1959, Nr 7, pp 40-59 (USSR)

ABSTRACT: The siderite ores of the Bakal deposit group, chan-
                ging into brown iron ores in the oxidation zones,
                are associated with 5 carbonaceous levels, which,
                alternating with clay-slate levels, form the Bakal
                suite (Upper Proterozoic era). This stratigraphic
                scheme, compiled in 1938 by M.I.Garan', has been
                modified by the author who took into consideration
                the latest results of prospecting drilling conducted
                by Bakal'skaya geologorazvedochnaya partiya (the
                Bakal Geologic Prospecting Party) and the Rudouprav-
Card 1/5   leniye Bakal'skikh mestorozhdeniy (the Mine Directorate

SOV/11-59-7-6/17

On the Conditions of Distribution of Siderite Ores in the Enclosing
Rocks of the Bakal Group of Deposits (The Southern Urals)

of the Bakal Deposits). The author presents the table
1 on which new levels indexed as Vak 1,2,3 etc, and
their correlation with the old stratigraphic scheme
are shown. In principle, the whole Bakal'skaya suite in
the range of the Bakal group of deposits is a single
carbonaceous-schistous stratum changing in the south
into a schistous and in the north - into a carbonaceous
stratum. The author gives a very detailed description
of all levels, of which only the carbonaceous levels
composed of siderites are the ore-bearing ones, though
small lenses of argillaceous siderites are also found
in the schistous levels. The Bakal'skaya suite is covered
by the Zigal'ginskaya suite of different quartzites. Most
geologists adhere to the hypothesis of the sedimenta-
ry origin of siderites, the primary ore in this case
being the ferruginous carbonates. As a result of the

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On the Conditions of Distribution of Siderite Ores in the Enclosing
Rocks of the Bakal Group of Deposits (The Southern Urals)

> transformation of these carbonates, various oxidized
> ores were formed, the difference between them de-
> pending on the degree of oxidation and on the compo-
> sition of primary ferruginous carbonates. According
> to L.M.Miropol'skiy, the Bakal siderites contain
> large quantities of magnesium carbonate and, by their
> chemical composition, are near to sideroplesites and
> pistomesites. Rich siderites are, according to D.S.
>   Belyankin and V.V.Lapin, a compound of ferrous car-
> bonates with the admixture of magnesium, calcium and
> manganese carbonates in a solid solution, i.e. the
> rich siderites are composed of one siderite phase
> and the poor ones -of the siderite and ferruginous-
> dolomitic phases. Other groups of geologists ascribe
> the origin of siderites to the metamatosis of dolo-
> mites and limestones either under the influence of

Card 3/5   vadose and ferruginous solutions or under the influence

SOV/11-59-7-6/17

On the Conditions of Distribution of Siderite Ores in the Enclosing
Rocks of the Bakal Group of Deposits (The Southern Urals)

of thermal ferruginous solutions of hypogenic origin.
As already said, the author adheres to the hypothesis
of sedimentary accumulation of primary ore substances.
According to her, the sedimentation of Bakal siderite
ores occurred in lagoonal or coastal-maritime condi-
tions, but these ores were later deeply metamorphized
during the lengthy fold forming period. The situa-
tion of the Bakal deposits in the cross-section and
in the enclosing rocks proves, according to the author,
their sedimentary origin. These deposits were formed
in the zone of periodical change of conditions favor-
able for the accumulation of argillaceous sediments,
rich in organic substances and of iron and magnesium
containing carbonates with an admixture of finely
grained ferrigenous materials. They were situated
in a zone of transition of carbonate facies in the
north into the terrigenous facies in the south. The

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SOV/11-59-7-6/17

On the Conditions of Distribution of Siderite Ores in the Enclosing
Rocks of the Bakal Group of Deposits (The Southern Urals)

> whole ore-bearing zone, where the Bakal deposits are
> situated, has a north-western course, while the lar-
> gest siderite-bearing facies have a latitudinal orien-
> tation, which is presumably connected with the tec-
> tonic development of the Urals regional depression
> in the zone where this depression joins the Ufa Pla-
> teau. The author mentions the following geologists:
> V.K.Golovchenko, N.V.Grinshteyn, O.P.Sergeyev, A.Ya.
> Panov, Professor A.Ye.Malakhov, Yu.S.Solov'yev, V.A.
> Knyazev, N.A.Ushakov, P.A.Zemyatchenskiy, Ya.V.
> Samoylov, A.N.Zavaritskiy, G.I.Mokshanov, D.V.Nalivkin,
> A.D.Arkhangel'skiy and Yu.A.Davydenko. There are
> 5 diagrams, 1 table, 4 maps and 21 Soviet references.

ASSOCIATION: Geologicheskiy institut AN SSSR, Moskva (the Geological
             Institute of the AS USSR, Moscow)

Card 5/5

STAROSTINA, Z.M.

Siderites of the Bakal region. Izv. AN SSSR. Ser. geol. 25
no.9:117-121 S '60.   (MIRA 13:9)
              (Bakal region--Siderite)

STAROSTINA, Zoya Mikhaylovna; RAABEN, M.Ye. otv.red.;
        CHEPIKOVA, I.M., red.izd-va; YEROFEYEVA, I.M., red.izd-va;
ZUDINA, V.I., tekhn.red.

[Riphean siderite-bearing formation in the western slope
of the Southern Urals] Sideritonosnaia formatsiia refeia
zapadnogo sklona IUzhnogo Urala. Moskva, Izd-va Akad.
nauk SSSR, 1962. 104 p. (Akademiia nauk SSSR.
Geologicheskii institut. Trudy, no.71).   (MIRA 15:11)
        (Ural Mountains—Geology, Stratigraphic)
            (Ural Mountains—Siderite)

STAROSTKA, E.; WECLAWSKI, K.

"Test benches for injection pumps."

p. 17 (Motoryzacja) Vol. 13, no. 1, Jan. 1958
Warsaw, Poland

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,
     April 1958

MEDYANIK, I.A.; STAROSTYUK, A.K.

      Effect of dibazole on conditional reflexes in dogs. Nauk.zap.
L'viv.un. 26:18-39 '54.   (MLRA 9:10)

              (REFLEXES) (DOGS)

MEDYANIK, I.A.; STAROSTYUK, A.K.

Effect of epiohyspasmin on conditional reflexes in dogs. Nauk.
zap.L'viv.un. 26:40-57 '54.

(MLRA 9:10)

(REFLEXES) (DOGS)

STAROSTYUK, A.K.

Nature of cortical reactions in dogs with different types of nervous systems following introduction of epiohispasmin'. Dep. ta pov. L'viv.un. no.6 pt.2:57-58 '55. (MIRA 10:3)
      (Pharmacology) (Nervous system) (Inhibition)

USSR/Human and Animal Physiology (Normal and Pathological).
Metabolism. Nitorgen Metabolism.

Abs Jour   : Ref Zhur - Biol., No 16, 1958, 74546

Author   : Medyanik, I.A., Starostyuk, A.K.

Inst   : Lvov Universtiy.

Orig Pub   : On the Problem of Nervous Regulation of Urea Synthesis in
               Animals of Different Ages.

Orig Pub   : Dopovidi ta povidomlennya. L'vivs'k. un-t, 1957, vip. 7,
               ch. 3, 81-88.

Abstract   : In puppies of differnnt ages and in full grown dogs, the
               content of NH_3, glutamine (G), and urea (U) was determined
               in the blood and urine. In part of the tests the animals
               endured stress when ammonium acetate or different pharmaco-
               logical active substances were introduced in them. The
               content of NH_3 in the blood of the animals increased up to

Card 1/2

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USSR/Human and Animal Physiology (Normal and Pathological).   T-2
       Metabolism. Nitrogen Metabolism.

Abs Jour   : Ref Zhur - Biol., No 16, 1958, 74546

the 20-45 day-old animals and then decreased. The quantity
of G increased up to the 4-month olds. The formation of G
from NH_3 in puppies occured more intensively than in grown
dogs. The introduction of carbocholine decreased the accu-
mulation of G in the blood and U in the urine caused by the
stress with ammonium acetate. The most clearly expressed
strength of urea-forming function of the liver was caused
by carbocholine in 20 day old puppies. The effect of atro-
pin sharply changed these effects depending on the age:
in 16-18 day old puppies atropin had no influence on the
synthesis of U in the liver, in 20-45 day old animals it
inhibited this process, and in later ages (over $1\frac{1}{2}$ months)
strengthened it. Adrenalin stimulated the synthesis of U
in animals of all ages. -- V.I. Rosengart.

Card 2/2

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S/858/62/000/001/004/013
D296/D307

27 и ь<u></u>
ь7 ιьь<u></u>

AUTHORS: Aksenova, G. V., Zrada, O. S., Krugovaya, G. N., Oleynik,
Ya. V., Starostyuk, A. K., Cherkashchenko, L. N. and
Chernogalova, A. G.

TITLE: The influence of radiation upon the phosphorous content
and its metabolism in the brain

SOURCE: L'vov. Universytet. Problemna lyaboratoriya radiobiolo-
hiyi. Biologicheskoye deystviye radiatsii, no. 1, 1962,
30-34

TEXT: Frogs were exposed to total body irradiation of 200r (at
10r/min) from a distance of 16 cm. The brains were then investiga-
ted 2 hrs, and 2, 5, 7 and 11 days after exposure. 4 hours before
decapitation 0.5 ml of aq. $NaH_2P^{32}O_4$ of a dosage of 25 μc per 100 g
weight, was administered by intraperitonal injection. The amount
of acid-soluble P and its metabolism, the phospholipids and the
protein P of the brain were then investigated. Two hours after ex-

Card 1/3

The influence of radiation ...

S/858/62/000/001/004/013
D296/D307

posure, the total P-content in the acid-soluble fraction increased
by 12.8% as compared with the control animals. The inorganic P-
content increased by 11%, the total protein P by 21%, and the con-
tent of phospholipids decreased by 23.7%. These changes were even
more marked after 2 days, when the total acid-soluble P fraction
increased by 27.1%, out of which the inorganic P increased by 31%,
the total protein P by 27.8% and the phospholipid content decreased
by 42%. Six days after exposure, the total acid-soluble P fractions
had increased up to 46.2% and the inorganic P-content by 87%. At
the same time, however, the phospholipid content decreased by 23%
and the content of protein P by 18%. Seven days after exposure the
total acid-soluble P fraction increased by 50% but the total quan-
tity of inorganic phosphate increased by 11.1% compared with the
control animals. The phospholipid content was still decreased by
33% and the total protein P by 30%. 11 days after exposure, the
total acid-soluble P fraction was still increased by 45% out of
which the inorganic P exceeded the values found in the control ani-
mals by 36%, the content of the phospholipids was again increased by

Card 2/3

The influence of radiation ...

S/858/62/000/001/004/013
D296/D307

37% and the content of the total protein P decreased by 39%. Thus the acid-soluble P fraction remained increased throughout the experiment, but the changes in protein P and phospholipids moved in opposite directions. After an initial increase in the protein P level a decrease could be observed, whilst the phospholipids showed an increase. Two hours after exposure, the rate of metabolism, as estimated by the relative specific activity of the fractions, showed changes parallel to those in the P content. After 2 - 5 days, the decrease of the specific activity in all fractions indicated a slowing down of the phosphate metabolism which reverted to its normal level after 8 - 12 days. There are 2 tables.

ASSOCIATION: Kafedra fiziologii cheloveka i zhivotnykh L'vovskogo universiteta (Department of Human and Animal Physiology, L'vov University)

Card 3/3

STAROSTYUK, B.M.

Evaluation of electrical stimulation with sledge induction apparatus.
Vop. fiziol. no.6:148-151 '53.
(MIRA 8:1)
(PHYSIOLOGY, apparatus and instruments,
sledge induction appar., evaluation of electric
stimulation)

L 18827-63   BDS

S/0238/63/009/003/0408/0409

ACCESSION NR: AP3001520

47

AUTHOR: Starostyuk, K. M.

TITLE: Determination of speed of spread of ultrasound waves in organic fluids

SOURCE: Fiziologichny*y zhurnal, v. 9, no. 3, 1963, 408-409

TOPIC TAGS: ultrasound interferometry, blood, plasma, serum

ABSTRACT: After determining that there were no data in the literature on this topic, author decided to accurately determine the ultrasound spread in certain biological fluids, including blood, plasma and serum. He therefore designed a simple interferometer and proceeded to measure the parameters of interest on human bank blood preserved with 5% sodium citrate, using ultrasound pulses of 1 watt per square centimeter. He thus found that the ultrasound pulse waves spread with a velocity of 1670 meters per second in human blood (plus or minus 3.6%) this velocity being somewhat higher than the 1540 meters per second generally measured in human tissues. Orig. art. has: 1 figure.

Card 1/2

L 18827-63

ACCESSION NR: AP3001520

ASSOCIATION: Kafedra fizy*ky* Donets'kogo medy*chnogo insty*tut (Chair of Physics, Donets Medical Institute)

SUBMITTED: 00

SUB CODE: AM

DATE ACQ: 21Jun63

NO REF SOV: 005

ENCL: 00

OTHER: 000

Card 2/2

PECHURO, Solomon Saulovich; RATINOV, V.B., nauchn. red.; STAROSVETOVA, V.G., red.; NESMYSLOVA, L.M., tekhn. red.

[Production of gypsum tiles, blocks, and boards] Proizvodstvo gipsovykh plit, blokov i panelei. Moskva, Proftekhizdat, 1963. 208 p.   (MIRA 16:8)

(Gypsum products)

NIKITIN, Lev Ivanovich; BURKOV, V.I., nauchn. red.; STAROSVETOVA, V.G., red.

[Safety measures at woodworking enterprises] Tekhnika bezopasnosti na derevoobrabatyvaiushchikh predpriiatiiakh. Moskva, Vysshaia shkola, 1964. 185 p.   (MIRA 18:2)

YEVSTYUGOV, Aleksandr Ivanovich, inzh.; POKROVSKIY, Aleksandr
Il'ich, inzh.; KREYNDLIN, L.N., nauchn. red.; STAROSVETOVA,
V.G., red.

[Woodworking operations] Plotnichnye raboty. Moskva, Vysshaia
shkola, 1965. 300 p.
(MIRA 18:4)

TOLSTOY, Mikhail Georgiyevich; KUZIN, B.V., nauchn. red.;
STAROSVETOVA, V.G., red.

[Masonry and furnace work in rural construction] Kamen-
nye i pechnye raboty v sel'skom stroitel'stve. Moskva,
Vysshaia shkola, 1965. 302 p.   (MIRA 18:12)

ZHUKOV, Aleksey Antipovich; SHAPIRO, I.G., nauchn. red.;
STAROSVETOVA, V.G., red.

[Industrial training of plasterers] Proizvodstvennoe
obuchenie shtukaturov. Moskva, Vysshaia shkola, 1965.
99 p.   (MIRA 18:12)

GOSIN, Naum Yakovlevich; ROGOVOY, M.I., nauchn. red.; STAROSVETOVA, V.G., red.

[Manufacture of ceramic building materials] Proizvodstvo keramicheskikh stroitel'nykh materialov. Moskva, Vysshaia shkola, 1965. 221 p.
(MIRA 19:1)

YELUKHIN, N.K., kand. tekhn. nauk; STAROSVITSKIY, O.I., inzh.

Heat transfer and hydraulic resistance in regenerators with
fill packing of the air separation units. Trudy VNIIKIMASH
no.5:36-60 '62.   (MIRA 18:3)

STAROSVETSKIY, V.A., ordinator

Organization of a nurse's work in the otolaryngological department
of a polyclinic. Med. sestra 21 no.2:38-40 F '62. (MIRA 15:3)

1. Iz kafedry bolezney ukha, gorla i nosa Moskovskogo meditsinskogo
stomatologicheskogo instituta i Otorinolaringologicheskoy gorodskoy
bol'nitsy No.50.
                     (NURSES AND NURSING)
                     (OTOLARYNGOLOGY)

AUTHOR: Starosvitskiy, O.I., Engineer   67-58-3-6/18

TITLE: The Utilization of the Heat of Compressed Air for the Gasification
               of Liquid Oxygen (Ispol'zovaniye tepla szhatogo vozdukha dlya
               gazifikatsii zhidkogo kisloroda)

ABSTRACT: By way of an introduction the disadvantages are enumerated which
               must be taken into account when using electric heating in gasifi-
               cation. It is further said that these disadvantages can be avoid-
               ed by using the hot air from the air compressors instead. In the
               oxygen apparatus of the types "AK" and "SK" this heat is taken
               off after the first stage of the compressor. The necessary additi-
               onal device is shown in form of a schematic   drawing and described.
               According to calculations carried out the heat available for
               operation of the gasifying device is amply sufficient. The heat
               conduction system for the heating of the gasifiers which is de-
               scribed in this paper has been in use at the Saksky Chemical Works
               since 1953, and was found to give good results. There are 2 fig-
               ures.

Card 1/1   1. Oxygen (Liquid)--Heating   2. Air compressors--Thermal effects
               3. Heat--Sources

YELUKHIN, N.K., kand.tekhn.nauk; STAROSVITSKIY, S.I., inzh.

Heat transfer and hydraulic resistance in dumped packings of regenerators. Khim.mashinostr. no.5:19-23 S-O '63. (MIRA 16:10)

MOROZOV, A.P.; MININ, V.F., inzh.; SHIFRIN, L.S., inzh.; STAROV, A.F., inzh.;
PUGACH, Ya.Yu., inzh.

Thin-slab reinforced cement roofs in housing construction. Biul. tekh.
inform. 3 no.11:3-6 N '57.   (MIRA 11:1)

1. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury (for
Morozov).
                                   (Roofs, Concrete)

MOROZOV, A.P.; MININ, V.F., inzh.; STAROV, A.F., inzh.; SHIFRIN, L.S., inzh.

First experience of using reinforced cement for roofs in civil construction. Biul. tekh. inform. 3 no.12:13-17 D '57.   (MIRA 11:1)

1. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury (for Morozov).
                              (Roofs, Concrete)

YESHCHENKO, D.D., inzh.; STAROV, A.F., inzh.; SHIFRIN, L.S., inzh.

Vibrated brick panels for apartment houses. Biul.tekh.inform.
po stroi. 5 no.11:7-8 N '59.   (MIRA 13:4)
         (Leningrad--Building blocks)

AID P - 3846

Subject   : USSR/Meteorology

Card 1/1   Pub. 71-a   -   9/35

Author   : Starov, D. K.

Title   : On "vaporization" over the sea surface

Periodical   : Met. 1. gidr.,   6,   35-37,   N/D 1955

Abstract   : The causes for the fog-like vapors appearing over the
                Black Sea in winter are discussed. Detailed research
                on temperature changes of the water and of the air
                done in 1953-1954 is reported. Tables showing time,
                location, temperature, humidity, etc. are included.
                One diagram. One 1938 Russian reference.

Institution : None

Submitted   : No date

SOV/169-60-3-2763

Translation from: Referativnyy zhurnal, Geofizika, 1960, Nr 3, p 108 (USSR)

AUTHOR: Starov, D.K.

TITLE: The Wind Field at Mean Altitudes of Troposphere Over the Black
            Sea

PERIODICAL: Tr. Ukr. n.-i. gidrometeorol. in-ta, 1959, Nr 10, pp 70 - 74

ABSTRACT: Results are presented of the statistical processing of the
            pressure-field topography charts of the 500-mb-surface for
            January, April, July, and October in the period 1952 - 1956.
            The wind field over the Black Sea is characterized by the
            presence of a definite direction of air currents, mostly in
            south-west and west, and besides these, in July and October
            still in north-west directions. Other directions of wind and
            also fields without pressure-gradient constitute a small per-
            centage of the total number of cases. The predominant velo-
Card 1/2   cities of wind amount to 10 - 14 m/sec and exceed 30 m/sec in

SOV/169-60-3-2763

The Wind Field at Mean Altitudes of Troposphere Over the Black Sea

January only. The winds having south-west, west, and north-west directions
are characterized by the highest velocities. The variability of the wind
fields over the Black Sea at altitudes of about 5 km is great; a specific
direction of wind is kept during 2 - 3 days. Brief descriptions of the winds
of various intensities are cited.

A.Z. Chekirda

Card 2/2

STAROV, I. M.

   "Investigation of Some Methods for Intensification of the Operation of Roller Paint-Grinding Machines." Sub 31 May 51, Moscow Inst of Chemical Machine Building

   Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55

S/081/60/000/016/012/012
A006/A001

Translation from: Referativnyy zhurnal, Khimiya, 1960, No. 16, p. 575, # 67708

AUTHORS: Dobrolyubov, G.V., Aristov, L.G., Starov, I.M.

TITLE: Increasing the Efficiency of Rollers When Masticating Nitrile
             Rubbers

PERIODICAL: Opyt raboty prom-sti Sovnarkhoza (Mosk. gor. ekon. adm. r-n), 1958,
             No. 8, pp. 40-44

TEXT: The research for means of improving the efficiency of rollers was
conducted in two directions: 1) by establishing the dependence of the efficiency
of rollers on the weight of the pack; 2) by revealing means of reducing the time
of mechanical mastication of rubber as compared to the effective regulations (20
min). The time of mechanical mastication depends only on the type of rubber. A
reduction in weight of the pack does not accelerate mechanical mastication and
raises considerably the specific electric power consumption required for the drive
motor. Electric power consumption, per time unit of processing, depends only on
the type of rubber and serves to determine the specific consumption of electric
power per unit of the rubber amount. Changes in the power consumed by the motor

Card 1/2

S/081/60/000/016/012/012
A006/A001

Increasing the Efficiency of Rollers When Masticating Nitrile Rubbers

are connected with structural changes occurring in the rubber during mechanical
mastication, which are completed within the first ten minutes of processing; sub-
sequently the mean power required by the electric motor does not vary. The process
of changes in power during the initial processing period is analogous to that of
changes in conditional viscosity, determined on a 10% solution in ethyl-acetate
with a B3 -4 (VZ-4) viscosimeter. The moment of completed mechanical mastication
can be determined by measuring the power consumed by the drive motor. The use of
this method provides for a double increase of the roller efficiency with the
simultaneous reduction of electric power consumption, and makes possible automation
of the mastication process.

V. Glagolev

Translator's note: This is the full translation of the original Russian ab-
stract.

Card 2/2

S/138/60/000/012/004/009
A051/A027

AUTHORS: Starov, I.M., Zil'vestr, Ya.Ya.

TITLE: Certain Criticisms on the Investigation of Methods for Increas-
              ing the Productivity of Rubber Mixers (A Discussion)

PERIODICAL: Kauchuk i rezina, 1960, No.12, pp. 9-12

TEXT: The authors outline the mixing process of thick,particularly
elastic materials not subject to the laws of hydrodynamics,in order to establish the
possibilities of improving the productivity of mixers. The mixture is sub-
jected to the following processes in the mixing chamber: 1) division on the
rib of the lower lock of the chamber, 2) intensive rubbing-in of the loose
materials and mixing of the mass between the rollers and the immobile wall
of the chamber, 3) division by centrifugal force, developed by the combs of
the rollers, which transfers the mixture from one half of the mixing chamber
to the other, 4) transferring by other force factors. It is stressed that
the mechanical work performed and also the electrical power consumed in the
mixing process must be increased. It is assumed that if the mixing regula-
tion exactly corresponds to the given conditions of mixing, then the speci-

Card 1/5

S/138/60/000/012/004/009
A051/A027

Certain Criticisms on the Investigation of Methods for Increasing the Pro-
ductivity of Rubber Mixers (A Discussion)

fic consumption of electric power to a unit weight of a certain mixture can
be considered a constant value. From this assumption the nature and degree
of effect of the rotation rate of the rotors and that of the pressure on the
mechanical work necessary for the mixing process is established. From the
known relationship A=Wt, where A is the electric power consumption, W the
power and t the time, a hyperbolic relationship between the power and the
duration of the cycle of mixing is derived: $t = \frac{A}{W}$. The power (average,
peak) is the product of the rotation moment by the angular speed of the
rotor's rotation: $N = M\omega$. The rotation moment in the general case (average,
peak) is $M = FR$, where F is the force applied to the blades of the rotors
(depends mostly on the density and elasticity of the mixture being processed),
R is the radius to the conditional center of the applied force F, then
$W = FR\omega$. From here it is concluded that at a constant rotation rate ω the
power has a linear relationship to the force F. Under equal conditions the
force F will depend only on the pressure P of the upper lock on the mixture,

Card 2/5

S/138/60/000/012/004/009
A051/A027

Certain Criticisms on the Investigation of Methods for Increasing the Pro-
ductivity of Rubber Mixers (A Discussion)

i.e., the force F up to the complete lowering of the lock will be proportion-
al to the pressure: $F = KP$, then $W = KF\omega$. From the last relationship it is
concluded that at ω = const. the power has a linear relationship to the
pressure on the mixture. With the pressure constant on the mixture, the
power will also have a linear relationship to the rotation rate of the
rollers. The mechanical work needed for the mixing increases both from an
increase in the pressure, as well as from an increase in the rotation rate
of the rotors. The authors point out that most mistakes and misunderstand-
ings arising in the investigation of the mixing process are caused by accept-
ing the values at an elevated pressure of the upper lock on the mixture. It
is further pointed out that the "specific pressure" term applied by most
authors in studying the pressure of the upper lock on the mixture can only
be considered valid when the pressure created on the lock by air is complete-
ly passed onto the mixture. With a decrease in the mixture volume during
the mixing process the effect of the pressure of the upper lock on the
mixing intensity drops. A mistake made by some authors is the assumption

Card 3/5

S/138/60/000/012/004/009
A051/A027

Certain Criticisms on the Investigation of Methods for Increasing the Pro-
ductivity of Rubber Mixers (A Discussion)

that the pressure on the mixture exceeding 1.2 kg/cm^2 does not affect the
mixing process or the power consumed by the rubber-mixer motor. It is sug-
gested measuring the pressure directly on the surface of the lock, which is
in contact with the mixture, using the tensiometric measurement method. The
latter would establish the true value of the upper lock pressure on the
mixture and its effect on the mixing intensity. In Ref.5 mention was made
of the fact that the energy consumed increases with a decrease in the mixing
cycle. This statement is claimed to be unfounded, since the mixing cycle
has no relationship to the energy consumed by the motor. It is explained
that the energy consumed by the motor is determined by the physico-mechani-
cal properties of the mixture and the mixing conditions (i.e., pressure on
the mixture, rotation rate of the rotors). The authors do not recommend
using equipment with asynchronous motors, which can function at low $\cos\varphi$, since
a high-energy motor is needed for starting the rubber mixers. It is recom-
mended using a synchronous motor working at $\cos\varphi = 1$ and improving the $\cos\varphi$

Card 4/5

S/138/60/000/012/004/009
A051/A027/

Certain Criticisms on the Investigation of Methods for Increasing the Pro-
ductivity of Rubber Mixers (A Discussion)

in the industrial grid. The term "reverse method" is mentioned as being
the simultaneous loading of the rubber and all the ingredients into the
mixer. It is claimed that this term, used widely in industry and in the
literature, does not correspond to its application and it is thought that
the term "simultaneous loading" or "successive loading of the mixture in-
gredients into the rubber mixer" would be more appropriate. There are
5 references: 3 Soviet, 2 English.

ASSOCIATION: Moskovskiy institut khimicheskogo mashinostroyeniya
             (Moscow Institute of Chemical Machine Building).

Card 5/5

STAROV, I.M.; SUSHCHENKO, A.A.; ARISTOV, L.G.; ARTEM'YEV, B.N.

Industrial testing of an internal rubber mixer at the type RS No.11
during the high-speed spinning of its rotors. Kauch. i rez. 20
no.1:11-12 Ja '61.   (MIRA 14:3)

1. Moskovskiy institut khimicheskogo machinostroyeniya.
                    (Rubber, Machinery)

STAROV, I.M.; SUSHCHENKO, A.A.; GEL'FREYKH, S.V.

Regularities of changes and calculation of the capacity of a driving
electric motor for a rubber mixer at an increased pressure and
rotation speed of rotors. Kauch. i rez. 20 no.6:19-22 Je '61.
                                                     (MIRA 14:6)

1. Moskovskiy institut khimicheskogo mashinostroyeniya.
                (Rubber machinery)

ZIL'VESTR, Ya.Ya.; STAROV, I.M.

Automatic control of the thickness of rubber sheets on
calenders. Kauch i rez. 20 no.8:20-23 Ag '61.   (MIRA 14:8)

1. Moskovskiy institut khimicheskogo mashinostroyeniya.
   (Rubber, Synthetic) (Automatic control)

ZIL'VESTR, Ya.Ya. [deceased]; STAROV, I.M.

Safety measures in the operation of rollers and calenders
in rubber industry plants. Kauch.i rez. 21 no.5:39-42
My '62.
                                                   (MIRA 15:5)

1. Moskovskiy institut khimicheskogo mashinostroyeniya.
              (Rubber machinery--Safety measures)

STARCV, I.M.; PROSKURNYA, G.P.

Automatic control of fabric tension during its impregnation and coating with rubber mixtures. Trudy MIKHM 27:178-189 '64.

(MIRA 18:8)

PROKURATOV, Aleksey Mikhaylovich; LOZE, Yakov Abramovich; PASHKOV,
    Valentin Nikolayevich; STAROV, Ivan Vasil'yevich; SIDOROV, N.I.,
    inzh., red.; BOBROVA, Ye.N., tekhn.red.

[Use of electric locomotives on long hauling distances; experiment
of the Omsk railroad] Ekspluatatsiia elektrovozov na dlinnykh
tiagovykh plechakh; opyt Omskoi zheleznoi dorogi. Moskva, Vses.
izdatel'sko-poligr.ob"edinenie M-va putei soobshcheniia, 1960.
54 p.   (MIRA 13:9)
            (Electric locomotives)

STAROV, L. A. (Engineer), and STRIZHEVSKAYA, L. G. (Cand. Tech. sciences) (Moscow)

"Welding by fusion of certain combinations of metals" considered the theoretical basis of conditions of appearance of metallic connection between heterogeneous metals. The technology of welding of titanium with other metals was developed.

Report presented at the 1st All-Union Conference on welding of heterogeneous metals, at the Inst of Electric Welding im. Ye. O. Paton, 14-15 June 1963. (Reported in Avtomaticheskaya svarka, Kiev, No. 9, Sept 1963, pp 95-96 author, V. R. Ryabov)

JPRS 24,651   19 May ·64

SIROTIN, Yu.P., kand.sel'skokhoz. nauk; STAROV, M.V., agronom; PRONIN, M.Ye., prof.; KOSTROV, K.A., kand.sel'skokhoz. nauk; KLOCHKOV, A.M., kand. sel'skokhoz. nauk

Fall supplementary fertilizers for winter crops. Zemledelie 25 no.9: 16-34 S '63.
(MIRA 16:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut udobreniy i agro- pochvovedeniya (for Sirotin). 2. Zaveduyushchiy Mikhaylovskim agro- tekhnicheskim touchastkom Stavropol'skogo kraya (for Starov). 3. Voronezhskiy sel'skokhozyaystvennyy institut (for Pronin). 4. Mor- dovskaya gosudarstvennaya sel'skokhozyaystvennaya opytnaya stantsiya (for Kostrov, Klochkov).
                (Wheat—Fertilizers and manures)
                 (Rye—Fertilizers and manures)

STAROV, M.V., agronom

Organic-mineral fertilizers and the yield of winter wheat in Stavropol Territory. Agrobiologiia no.1:18-24   Ja-F '65.   (MIRA 18:4)

1. Mikhaylovskiy agrotekhnicheskiy sortouchastok, Stavropol'skogo kraya.

STAROV, P.

Cotton Growing - Volga-Don Canal Region

Characteristics of cotton irrigation farming in the Volga-Don Canal zone.
Khlopkovodstvo, No. 5, 1952.

Monthly List of Russian Accessions, Library of Congress, October 1952. Unclassified.

1. STAROV, P.

2. USSR (600)

4. Cotton

7. Excessive vegetation in the cotton plant and how to control it. Khlopkovodstvo, no. 12, 1952.

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

BAZILEVSKIY, A.R.; STAROV, R.V.

Temperature control in Bessemer melting by means of a PRK-600 radiation pyrometer. Zav. lab. 31 no.11:1365 '65.

(MIRA 19:1)

1. Yenakiyevskiy metallurgicheskiy zavod.

ALIKAYEV, Vladimir Aver'yanovich, dotsent, kand.veterin.nauk; OMEGOV,
A.P., prof., doktor veterin.nauk; STAROV, T.K., dotsent, kand.
biolog.nauk; USTIMENKO, L.P., red.; PEVZNER, V.I., tekhn.red.

[Course on practical veterinary hygiene] Praktikum po gigiene
sel'skokhoziaistvennykh zhivotnykh. Izd.2., perer. i dop.
Moskva, Gos.izd-vo sel'khoz.lit-ry, 1960.   295 p.

(MIRA 13:11)

(Veterinary hygiene)

STAROV, T. K. ALIKAYEV, V. A., AND ONEGOV, A. P.

"Practikum po gigienen sel'skokhozyaistvennykh zhivotnykh", M. Sel'khozgiz, into, second revised and supplemented edition, 8,500 copies.

Veterinariya, Vol. 38, No. 5 1961

NURLYBAYEV, A.N.; STAROV, V.I.

Petrography of intrusive rocks in ore-bearing sectors of Karatas
and Kokzaboy of the northwestern part of the Lake Balkhash region.
Trudy Inst.geol.nauk AN Kazakh.SSR no.4:12-23 '61.
(MIRA 14:10)

(Balkhash Lake region--Rocks, Igneous)

MONICH, V.K.; STAROV, V.I.; MELIKHOV, V.D.

Comparative study of potassium feldspars from the intrusions
of the Uspenskaya and Karatas-Gul'shadskaya zones. Trudy Inst.
geol.nauk AN Kazakh.SSR 7:293-300 '63.

(MIRA 17:9)

MONTON, v.K. [deceased]; STAROV, V.I.; GOGEL', G.N.

Petrography of intrusions in the central part of the Trans-Ili
Alatau. Trudy Inst. geol. nauk Al Kazakh. SSR 12:74-107 '65.

STAROV, V.I.; SEYTMURATOVA, E.Yu.; KOZLOVSKIY, A.A.

Determining the relative age of nepheline syenites by the method of thermoluminescence. Trudy Inst. geol. nauk AN Kazakh. SSR 12: 129-132 '65.

(MIRA 18:9)

STAROV, V V

N-1

USSR/Cultivable Plants - General Problems.

Abs Jour : Ref Zhur - Biol., No 3, 1958, 10346

Author : Starov, V.V.

Inst :

Title : Growing Irrigated Crops in the Desert.

Orig Pub : Sots. s. Kh. Uzbekistana, 1956, No 9, 58-64

Abstract : A description is given of the results of the experiments conducted by the expedition of the Pasture-amelioration Trust in 1952-1955 on lands, irrigated by artesian wells, of kolkhozes of Kzyl-Kum.

Card 1/1

STAROVA, A.

Milking Machines

Mobile equipment for milking cows on pastures. MTS 12 no. 5, 1952.

Monthly List of Russian Accessions, Library of Congress, August, 1952. UNCLASSIFIED.

BOTOV, Tikhon Grigor'yevich, inzh.; DUBROVSKIY, A.A., red.; STAROVA, A.I., red.; LOGINOVA, Ye.I., tekhn. red.

[Equipment for the rearrangement of soil horizons]Novye orudiia dlia pereraspredeleniia pochvennykh gorizontov. Pod obshchei red. A.A.Dubrovskogo. Moskva, Izd-vo M-va sel'khoz.RSFSR, 1959. 26 p. (Materialy zaochnogo lektoriia po tsiklu "Novoe v mekhani-zatsii sel'skogo khoziaistva," no.13)   (MIRA 16:3)
                    (Agricultural machinery)

L 14504-66   EWT(m)/EWP(v)/T/EWP(t)/EWP(k)/EWP(z)/EWP(b)   IJP(c)   JD/HM/HW

ACC NR: AP6003278   (N)   SOURCE CODE: UR/0135/66/000/001/0004/0007

AUTHOR: Strizhevskaya, L. G. (Candidate of technical sciences); Starova, L. L.
(Engineer)

ORG: none

TITLE: Fusion welding of certain heterogeneous metals

SOURCE: Svarochnoye proizvodstvo, no. 1, 1966, 4-7

TOPIC TAGS: arc welding, electron beam welding, refractory metal, heterogeneous
metal, weld evaluation, sheet metal, weldability

ABSTRACT: As part of research into the welding of heterogeneous metals, the authors
experimented with the welding of sheet (1-2 mm thick) specimens of Fe + Ni, Ni + Pd,
Ni + Cu, Ti + Zr, V + Nb, V + Ta, Nb + Ta. The welding regimes were adapted to the
differences in the physical properties of the metals welded together, primarily as
regards melting point and heat conduction, so that the greater part of the heat from
the heat source was concentrated on the more high-melting or heat-conducting metal.
Welding was performed by either the argon arc or the electron-beam technique. It was
found that the differences in the structure and properties of these metals affect the
nature of the crystallization of welded joints. Cu and Ni, in pure or alloyed form, as
well as Ni and steel, can be satisfactorily welded by the argon arc method, while Ti,

Card 1/2

                              UDC: 621.791:669.15-194

L 14504-66
ACC NR: AP6003278

Zr, Nb, Ta and V in various paired combinations can be satisfactorily welded either by the argon arc or the electron-beam method. For the case of these combinations the weld metal represents mostly a mechanical mixture of solid solutions and has a distinctly heterogeneous structure (with nonuniform etchability and hardness) and consists of α- and β-phases. A metallographic examination confirmed the absence of chemical phases in such welded joints. The greatest difficulties are encountered when welding together the metals with insignificant mutual solubility which form chemical compounds. Such metals, as a rule, belong in mutually remote groups of the periodic table. E.g. Fe (group VIII) + Ti (group IV), Al (group III) + Ti (group IV), Cu (group I) + Ti (group IV), Fe (group VIII) + Nb (group V); the welded joints thus obtained display a pronounced brittleness. Hence for these metals the following welding technique may be recommended: fusion of only one of the two metals being welded (usually the more high-melting metal); in this case electron-beam welding is optimal. Another workable technique in this case is to use an intermediate metal that welds satisfactorily with both of the metals being welded. Orig. art. has: 4 figures, 3 tables.

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

Card 2/2

STAROVA, N. G.

5.3620

77089
SOV/62-59-12-33/43

AUTHORS: Shostakovskiy, M. F., Prilezhayeva, Ye. N., Tsymbal,
L. V., Azovskaya, V. A., Sturova, N. G.

TITLE: Brief Communication, Concerning Addition of Nucleophil-
ic Reagents to α, β-Unsaturated Sulfones in
Presence of "Triton B"

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye khimicheskikh
nauk, 1959, Nr 12, pp 2239-2241 (USSR)

ABSTRACT: Addition of nucleophilic reagents (alcohols, mercap-
tans, hydrogen sulfide, dialkyldithiophosphoric acids,
etc.) to α, β-unsaturated sulfones of various
structures is catalyzed to a great extent by "Triton
B" (benzyltrimethylammonium hydroxide). The addition
reaction starts upon addition of a few drops of "Tri-
ton B" (40-60% aqueous solution, 0.2-0.5% by weight) to
an equimolar mixture of reacting substances. In most
cases the reaction is exothermic (temperature rises up
to 80-100°) and is completed within 2-3 hr with a
nearly quantitative yield. α, β-Unsaturated sulfones,

Card 1/5

having other unsaturated bonds in the molecule (e.g.,
endo- and exovinyl bicycloheptenyl sulfones, obtained
by reaction of cyclopentadiene with divinyl sulfone),
add alcohol or mercaptan under these conditions only
at the unsaturated bond activated by sulfone group:

(endo + exo)   (endo + exo)

Disulfones, having two unsaturated bonds, add two
mercaptan molecules. Table 1 lists the yields and
physical constants of the addition products (eight of
them prepared for the first time) obtained by the authors

Card 2/5

TABLE 1

(illegible degraded table of formulas, yields, b.p., m.p., Found % and Calc % for C, H, S)

(Cont.)
Card 3/5

5.3620

77089
SOV/62-59-12-33/43

AUTHORS: Shostakovskiy, M. P., Prilezhayeva, Ye. N., Tsymbal, L. V., Azovskaya, V. A., Starova, N. G.

TITLE: Brief Communication. Concerning Addition of Nucleophilic Reagents to α,β-Unsaturated Sulfones in Presence of "Triton B"

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye khimicheskikh nauk, 1959, Nr 12, pp 2239-2241 (USSR)

ABSTRACT: Addition of nucleophilic reagents (alcohols, mercaptans, hydrogen sulfide, dialkyldithiophosphoric acids, etc.) to α,β-unsaturated sulfones of various structures is catalyzed to a great extent by "Triton B" (benzyltrimethylammonium hydroxide). The addition reaction starts upon addition of a few drops of "Triton B" (40-60% aqueous solution, 0.2-0.5% by weight) to an equimolar mixture of reacting substances. In most cases the reaction is exothermic (temperature rises up to 80-100°) and is completed within 2-3 hr, with a nearly quantitative yield. α,β-Unsaturated sulfones,

Card 1/5

There is 1 table, and 6 references, 2 Soviet, 1 German, 1 U.K., 2 U.S. The U.K. and U.S. references are: A. H. Ford, Moore, J. Chem. Soc. 1949, 2433; J. L. Szabo, E. T. Stiller, J. Amer. Chem. Soc. 70, 3667 (1948); Ch. D. Hurd, L. L. Gershbein, J. Amer. Chem. Soc. 69, 2328 (1947); R. B. Thompson, J. A. Chenicek, T. Symon, J. Industr. and Engng. Chem., 50, 797 (1958).

ASSOCIATION: N. D. Zelinskiy Institute of Organic Chemistry of the Academy of Sciences, USSR (Institut organicheskoy khimii imeni N. D. Zelinskogo Akademii nauk SSSR)

SUBMITTED: May 4, 1959

Card 5/5

SHOSTAKOVSKIY, M.F.: PRILEZHAYEVA, Ye.N.; TSYMBAL, L.V.;
   TOLCHINSKAYA, R.Ya.; STAROVA, N.G.

Sulfones and sulfoxides. Part 3: Comparative reactivity
of α,β-unsaturated sulfoxides and sulfones to nucleophilic reagents.
Zhur.ob.khim. 31 no.8:2496-2503 Ag '61.   (MIRA 14:8)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.
       (Sulfoxide)   (Sulfone)

K

COUNTRY   : USSR
CATEGORY   : Forestry. Forest Cultures.

ABS. JOUR.   : RZhBiol., No.13 1958, No. 104552

AUTHOR   : Pavlenko, F. A.; Starova, N. V.
INST.   : --
TITLE   : Growing Poplar Seedlings in the Ukraine

ORIG. PUB.   : Lesn. kh-vo, 1958, No. 4, 22-26

ABSTRACT   : No abstract.

Card: 1/1

26

TEODOSIEVSKI, D.; STAROVA, V.

Serofibrous preurisy in infancy (report of a case). God. zborn. med. fak. Skopje 11:261-267 '64.

1. Klinika za detski bolesti pri medicinskiot fakultet, Skopje.

L 00727-66   FSS-2/EWT(1)/EWP(m)/EWA(c)/EWA/ETD-2/FCS(k)/ETC(m)/EWA(1)   WH

ACCESSION NR: AT5013291   UR/3043/65/000/004/0221/0231

AUTHOR: Yeroshin, V. A., Starova, Ye. N.

TITLE: Unidimensional nonstationary real gas flow

SOURCE: Moscow. Universitet. Vychislitel'nyy tsentr. Sbornik rabot, no. 4, 1965. Chislennyye metody v gazovoy dinamike (Numerical methods in gas dynamics), 221-231

TOPIC TAGS: interior ballistics, equilibrium flow, real gas, gas flow, flow analysis, nonsteady flow

ABSTRACT: The attainment of high projection velocities of ballistic projectiles is connected with the generation of flow zones of high-temperature (2000-6000K) and high-pressure (5000-10,000 atm) gases. Under such circumstances the gas differs markedly from the ideal case because of dissociation, ionization, and mixture component interaction. The present paper investigates the influence of equilibrium dissociation on the real gas flow through tubes, using air as the example. The related thermodynamic functions (internal energy, molecular weight, heat capacity) depend on temperature and pressure and the paper utilizes pertinent data as found in tables compiled by the Energeticheskiy institut (Power Institute) of the AN SSSR after approximating them by polynomials. The dissociation influence calculations are carried out using the method of characteristics of the real gas flow through cylindrical tubes. Orig. art. has: 21 formulas, 5 figures, and 2 tables.

Card   1/2

L 00727-66   3

ACCESSION NR: AT5013291

ASSOCIATION: Vychislitel'nyy tsentr, Moskovskiy universitet (Computer Center, Moscow University)

SUBMITTED: 00   ENCL: 00   SUB CODE: MA, ME

NO REF SOV: 004   OTHER: 000

Card 2/2

STAROVA, YE. P., Engineer

"New Low-Alloy High-Speed Steels With Nitrogen." Thesis for degree of Cand Technical Sci. Sub 13 Jun 50, Moscow Mechanics Inst

Summary 71, 4 Sep 52, Dissertations Presented for Degrees in Science and Engineering in Moscow in 1950. From Vechernyaya Moskva. Jan-Dec. 1950.

VORONOV, S.M., obshchiy red.; TELIS, M.Ya., obshchiy red.; STAROVA, Ye.P.,
kand.tekhn.nauk, red.; ZUDAKIN, I.M., tekhn.red.

[Magnesium alloy founding; from materials of a conference of the
All-Union Scientific, Engineering, and Technological Society of
Foundrymen] Lit'e magnievykh splavov; po materialam konferentsii
VNITO liteishchikov. Sbornik statei. Pod obshchei red. S.M.
Voronova i M.IA. Telis. Moskva, Gos.izd-vo obor.promyshl., 1952.
275 p.   (MIRA 13:1)

1. Vsesoyuznoye nauchnoye inzhenerno-tekhnicheskoye obshchestvo
liteyshchikov.
              (Magnesium alloys--Founding)

STAROVA, Ye. P.

Ye. P. Starova, Malolegirovannyye stali s azotom /Low-Alloy Steels with Nitro-gen/, Mashgiz, 3 sheets

    States the results of the author's investigations in seeking a low-alloy, high-speed steel with nitrogen admixture and reduced tungsten content.

    Intended for engineering and technical personnel engaged in metallurgy and instrument production.

SO: U-6472, 23 Nov 1954

LUK'YANOV, V.V.;ABINDER, A.A.;STAROVA, Ye.P.;METREVELI, A.S.

Investigating materials for the production of macaroni matrices.
Izv. vys. ucheb. zav.; pishch. tekh. no. 2:85-89 '58.   (MIRA 11:10)

1. Moskovskiy tekhnologicheskiy institut pishchevoy promyshlennosti,
Kafedra tekhnologii metallov.
                        (Macaroni)
              (Food industry--Equipment and supplies)

66515

SOV/137-59-7-15787

/P. 1120

Translation from: Referativnyy zhurnal, Metallurgiya, 1959, Nr 7, p 227 (USSR)

AUTHOR: Starova, Ye. P.

TITLE: Investigation Into Properties of Low-Alloy High-Speed Steels With and Without Nitrogen

PERIODICAL: Tr. Mosk. tekhnol. in-ta pishch. prom-sti, 1958, Nr 1, pp 154 - 164

ABSTRACT: Investigations were carried out into the effect of N on the properties of low-alloy high-speed steel containing (in %): C 0.64 - 0.66; W 6.2 - 7.2; Cr 4.1 - 4.8; V 1.6 - 2.3; N 0 - 0.32. It was stated that optimum N content in cast steel was 0.3 - 0.35%; after forging and heat-treatment 0.10 - 0.15% N remained in the steel. N-containing low-alloy high-speed steels are less prone to austenitic grain growth, possess a wider hardening temperature range, have higher R_C in tempered and annealed state, and higher red hardness than low-alloy high-speed steels without N. Experimental steels containing (in %): C 0.65; W 7.0; Cr 4.0; V 1.5; N 0.11, had higher cutting properties than P18 steels. It is suggested to start smelting of low-alloy high-speed steel with 7% W, containing N. 8 bibliographical titles.

I.B.

Card 1/1

MALIKOV, K.V.; PISHVANOV, V.L.; SUNTSOV, G.N.; STAROVEROV, A.A.;
OVCHARENKO, V.M.; ANDREYEV, V.I.; MAZIN, B.S.; RUN'KOV, V.I.;
SEMAVIN, P.I.

Using sulfurous mazut in blast furnaces. Stal' 23 no.5:394-397
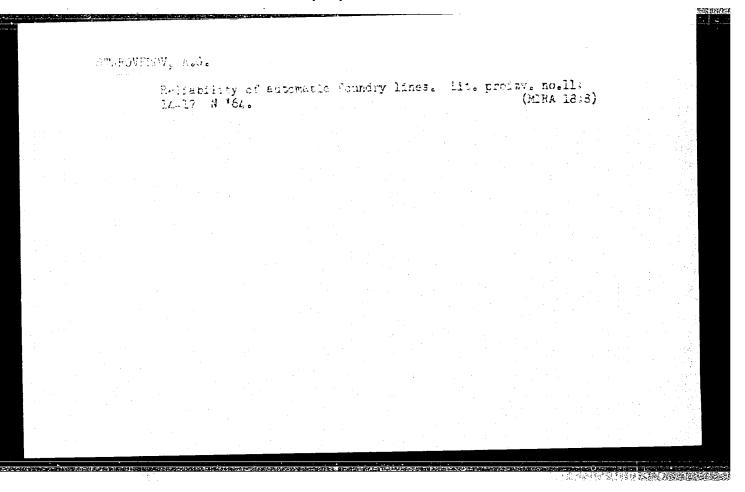My '63.   (MIRA 16:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut metallurgicheskoy
teplotekhniki i Beloretskiy metallurgicheskiy kombinat.
                (Blast furnaces—Equipment and supplies)
                     (Mazut—Analysis)

STAROVEROV, A.G.

Effect of the layout on the reliability and effective capacity of a molding section of an automatic foundry line. Lit. proizv. no.9:19-20 S '64.

(MIRA 18:10)

ANUFRIYEV, N.S.

Reliability of automatic foundry lines. Lit. proizv. no.11:
14-17 N '64.
(MIRA 18:3)

BATKOV, A.M., kand. tekhn. nauk; STAROVEROV, A.N., st. prepod.
TARAKANOVA, L.A., red.

[Automatic control using computers] Avtomaticheskoe
upravlenie s primeneniem vychislitel'nykh mashin. Mo-
skva, Mosk. inzhenerno-fizicheskii in-t. Pt.1. 1964.
199 p.   (MIRA 18:4)

EWT(d)/EWF(1)   Fo-h/Pa-h/Pe-h/Pk-h/Pl-h   IJP(c)   BC

AUTHOR: Aleksandrov, V. M. (Moscow); Batkov, A. M. (Moscow); Staroverov, A. N.
(Moscow); Shchukin, B. A. (Moscow)

TITLE: Investigation of the accuracy of nonlinear, nonstationary systems by means of
the statistical linearization method

TOPIC TAGS: automatic control, nonlinear, nonstationary control system, statistical
linearization method

ABSTRACT: A study is made of a control system whose performance is described by the
system of nonlinear differential equations written in normal vector form

$$\frac{dY(t)}{dt} = F(t, Y) + B(t)f(t),$$

$$Y(0) = C \qquad\qquad (1)$$

where the components of the vector $Y(t)$ represent processes at the output of the
system, components of the vector $f(t)$ represent independent random processes of
white noise type at the input of the system, $F(t, Y)$ is an inertia-free, nonlinear

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L 34944-65

ACCESSION NR: AP5008322   O

transformation vector, C is a vector of normally distributed initial conditions, and B(t) is an m + n matrix of variable coefficients. To determine the accuracy of system (1), the variation in time of the mathematical expectation vector $\overline{Y}(t)$ and the variance vector $\Theta(t)$ of the vector random process Y(t) are sought. It is indicated that this problem has a simple solution when the transformation F(t, Y) is linear. System (1) is written for this case and a system of differential equations is derived from which $\overline{Y}(t)$ and $\Theta(t)$ can be solved. It is shown how, using the method of statistical linearization (approximation of the nonlinear transformation F(t, Y) by a certain form of linear transformation Z(t)), system (1) can be reduced to the form derived for the linear case and how a system of nonlinear differential equations for direct determination of $\overline{Y}(t)$ and $\Theta(t)$ can be constructed which is amenable to solution on a digital computer. It is stressed that the method presented is more economical and has other advantages as compared with the methods presented by other authors. Orig. art. has: 29 formulas.   [LK]

ASSOCIATION: none

SUBMITTED: 20Mar64   ENCL: 00   SUB CODE: IE,MA

NO REF SOV: 003   OTHER: 001   ATD PRESS:3211

Card 2/2

AUTHOR: Aleksandrov, V. M. (Moscow); Batkov, A. M. (Moscow);
Staroverov, A. N. (Moscow); Shchukin, B. A. (Moscow)

TITLE: Determining the mathematical expectation and dispersion of the response
of a multivariable nonlinear time-dependent system by computers

SOURCE: AN SSSR. Izvestiya. Tekhnicheskaya kibernetika, no. 2, 1965, 123-128

TOPIC TAGS: automatic control, automatic control design, automatic control
system, automatic control theory

ABSTRACT: The accuracy is considered of an automatic-control system
describable by these normal differential equations:

$$\frac{dY}{dt} = F(t, Y) + B(t)f, \qquad Y(0) = C, \qquad (1.1)$$

where $Y = (y_i)$ is the column vector (system output); $F(t, Y) = (F_i(t, Y))$ is a
vector nonlinear function; $B(t) = (\beta_{ij})$ is a variable rectangular matrix $(n \times m)$;
$f(t) = (f_j)$ is the column vector representing the disturbance (white noise with
independent components); $Y(0) = C$ is a random vector of initial conditions

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ACCESSION NR: AP5012882

noncorrelated to the disturbance vector. A method is suggested for setting up nonlinear differential equations (2.17) whose solution gives a vector of mathematical expectation and a dispersion matrix of the output signal in time; the output process is assumed to be close to normal. The method is claimed to be simpler in computations than the methods of statistical linearization with succes- sive approximations or canonical random functions. If the nonlinear system (1.1) contains only single-variable nonlinearities, the expectation-and-dispersion equations (2.17) can be integrated on an analog computer. Generally, the method requires the use of a digital computer. For stationary conditions, the right-hand member of (2.17) is equal to zero, and the problem is reduced to solving a set of nonlinear algebraic equations. Orig. art. has: 1 figure and 42 formulas.

ASSOCIATION: none

SUBMITTED: 13Feb64

NO REF SOV: 003

ENCL: 00

OTHER: 002

SUB CODE: DP, IE

Card 2/2

ALEKSANDROV, V.M. (Moskva); BATKOV, A.M. (Moskva); STAROVEROV, A.N. (Moskva);
        SHCHUKIN, B.A. (Moskva)

Study of the accuracy of nonlinear nonstationary systems using
a statistical linearization technique. Avtom. i telem. 26 no.3:
492-499 Mr '65.   (MIRA 18:6)

SEREBRYAKOVA, N.I. (Saratov, ul. Sovetskaya, d.21, kv.22); STAROVEROV, A.T.

Effective surgical treatment of an intrapericardial wound of vena cava inferior. Nov. khir. arkh. no.5:111-112 S-O '60.   (MIRA 14:12)

1. Kafedra fakul'tetskoy khirurgii (zav. - prof. I.M.Popov'yan) Saratovskogo meditsinskogo instituta.
          (VENA CAVA—WOUNDS AND INJURIES)
          (HEART—WOUNDS AND INJURIES)

BOLDIN, K.M. (Yaroslavl'); DROZDOVA, Z.S.; LEVIN, R.I.; VAYSMAN, L.A.
(Kuybyshev-obl.); PODOSINOVSKIY, V.V.(Kazan'); SAYFULLINA, Kh.M.
(Kazan'); EUSYGIN, N.V.(Kazan'); RAZUMOVSKIY, Yu.K.(Leninogrosk);
GEL'FER, G.A., dotsent (Gor'kiy); MAMISH, M.G.(Kazan'); RAFALOVICH,
M.B., dotsent; MEL'NICHUK, S.P., kand.med;nauk; KRAPIVIN, B.V.;
STAROVEROV, A.T. (Saratov); SURIN, V.M.; POROSENKOV, V.S.(Romodanovo,
Mordovskoy ASSR); ANDROSOV, M.D.(Moskva); ZARIPOV, Z.A.(Urussu,
Tatarskoy ASSR); MURAV'YEV, M.F.(Izhevsk); KUZ'MIN, V.I.(Batyrevo,
Chuvashskoy ASSR); SITDYKOV, E.N.(Kazan'); YUDIN, Ya.B.(Novokuznetsk)

Short reports. Kaz.med.zhur. no.4:81-91 Jl-Ag '62.   (MIRA 15:8)
(MEDICINE--ABSTRACTS)

STAROVEROV, A.T. (Saratov, ul. Sovetskaya, d.31a, kv.1); UMNOVA, S.M.

Dynamics of venous pressure during important intrathoracic operations.
Klin.khir. no.6:22-28 Je '62.   (MIRA 16:5)

1. Kafedra fakul'tetskoy khirurgii (zav. - prof. I.M. Popov'yan)
Saratovskogo meditsinskogo instituta.
          (CHEST—SURGERY)   (BLOOD PRESSURE)

STAROVEROV, A.T; (Saratov, Sovetskaya ul., d. 21-a, kv.1);CHERNYSHEV,N.V.

Two cases of avulsion of the upper extremity together with the
scapula. Vest. khir. 91 no.7:76-77 Jl'63   (MIRA 16:12)

1. Iz fakul'tetskoy khirurgicheskoy kliniki (zav. - prof.
I.M.Popov'yan) Saratovskogo meditsinskogo instituta.

VASILEVSKIY, M.N., kand. tekhn. nauk; STOLBUN, M.I., inzh.; KOGAN, E.L., inzh.
STAROVEROV, A.V., inzh.
Control system for a mine hoisting machine with the use of
liquid rheostats. Shakh t. stroi. 8 no.9:17-19 S '64.
(MIRA 17:12)

Giproniselektroshakht.

STAROVEROV, F. M., DOTS.

STROITEL'NYY INSTITUT MOSSOVETA

TEPLOTEKHNICHESKIYE ISSLEDOVANIYA NOVYKH TIPOV NAGREVATEL'NYKH PRIBOROV KONSTRUKTSII ZAVODA IM. VOYKOVA. PAGE 45

SO: SBORNIK ANNOTATSIY NAUCHNO-ISSLEDOVATEL'SKIKH RABOT PO STROITEL'STVU, MOSCOW, 1951

STAROVEROV, P.M., dotsent; BASIN, G.L., inzhener.

Applying the I-d diagram in investigating the operation of venti-
lating systems. Trudy Stroi.inst. Mosgorispolkoma no.4:48-55, '53.
(Ventilation)   (MLRA 8:3)