

MASLOV, N.P., inzh.; TSYPUKHIN, B.A., inzh.; SHUBIN, A.A., inzh.

Some problems of the design of the gear section of asynchronous
micromotors. Elektrotehnika 35 no.12:57-58 D '64. (MIRA 18:4)

DOROFYEV, V.M.; POLUSHKIN, B.V.; TSYRAN, N.I.

Thermal and anaphylactoid edemas in acute radiation sickness.
Vest. AMN SSSR 20 no.9:78-83 '65.

(MIRA 18:11)

1. Institut meditsinskoy radiologii AMN SSSR, Obninsk.

USSR/Farm Animals. Small Horned Cattle

Q-3

Abs Jour : Ref Zhur - Biol., No 11, 1958, No 49982

Author : ~~Tsyrendorzhiev, B. Zh.~~
Inst : Buryat-Mongolian Zoological Institute of Veterinary Sciences
Title : Clinical and Hematological Data in Heifers and Primiparae
when Using Various Diets.

Orig Pub : Tr. Buryat.-Mong. zoovet. in-ta, 1957, vyp. 11, 99-106

Abstract : In order to establish the effects of various diets on the state of health on cows, tests were performed on 2 groups of heifers and primiparae. One group represented the subconcentrate test group and the other the concentrate control group. The animals of the first group were fed 38.4 percent of concentrates and 61.6 percent of hay derived from juicy and green feeds. The second group received 61.3 percent of concentrates and 38.7 percent of the hay. In the animals of the 1st group shedding was completed as follows: in 66 percent of the cows in April, and in 33.4 percent of the cows by the end of May. In the second group shedding was completed

Card : 1/2

USSR/Farm Animals. Small Horned Cattle

Q-3

Abstr Jour : Ref Zhur - Biol., No 11, 1958, No 49982

as follows: in 37.5 percent of the cows by the end of May and in 62.5 percent at the beginning of June. In cows of the 1st group motor functions of the gastrointestinal tract were more marked. In the 1st group the rate of heart contractions and respiratory movements were lower than in the 2nd group. Prolonged plentiful feeding with concentrates caused dystrophic disturbances of the heart. The animal blood of the 1st group contained many lymphocytes, the blood of the animals of the second group contained many neutrophils. A better physiological organic state was noted in the animals of the 1st group.

Card : 2/2

TSYRENDORZHIYEV, B. Zh.
Min Higher Education USSR. Moscow Veterinary Academy. Chair of Clinical
Diagnostics.

TSYRENDORZHIYEV, B. Zh. "The clinical status and blood indications of young
cattle with various types of feeding and housed in stalls." Min Higher Education
USSR. Moscow Veterinary Academy. Chair of Clinical Diagnostics. Moscow, 1956.
(Dissertation for the Degree of Candidate in Veterinary Sciences)

SO: Knizhnaya Letopis', No. 20, 1956

S/169/62/000/010/009/071
D228/D307

AUTHOR: Tsyrendorzhiyev, Ts.Ts.

TITLE: Question of the physical properties of rocks and ores on the territory of Buryatiya

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 10, 1962, 12, abstract 10476 (Kratkiye soobshch. Buryatsk. kompleksn. n.-i. in-ta, no. 2, 1960, 42-45)

TEXT: Data are given about the susceptibility and remanent magnetization, the density, the resistivity, and other physical properties of rocks and ores.
[Abstracter's note: Complete translation]

Card 1/1

OCHIROV, Tsybik Ochirovich; BULNAYEV, Kozima Bairevich; DORZHIYEV,
Vladimir Stepanovich; TURUNKHAYEV, Vladimir Ivanovich;
TSYRENDORZHIYEV, Tsyren Tsyzhipovich; KOSYGIN, Yu.A.,
otv. red.;

[Development of Mesozoic structures in western Trans-
baikalia] Razvitie mezozoiskikh struktur Zapadnogo
Zabaykalia. Ulan-Ude, Buriatskoe kniazhenie izd-vo, 1965.
207 p. (MIRA 18:12)

1. Chlen-korrespondent AN SSSR (for Kosygin).

TSYRENDORZHIYEV, TS.TS.

Tectonic elements in the Lake Baikal region according to
geophysical data. Geol. i geofiz. no.6:60-67 '63. (MIRA 19:1)

1. Buryatskiy kompleksnyy nauchno-issledovatel'skiy institut
Sibirskogo otdeleniya AN SSSR, Ulan-Ude. Submitted February
30, 1962.

USSR / Human and Animal Morphology (Normal and Pathological). Methods and the Technique of Investigation.

S-1

Abs Jour: Ref Zhur-Biol., No. 10, 1958, 45478

Author : Tsyrenko, G. I.

Inst : Not given

Title : Basic Methods of Embalming (According to Data Supplied by Foreign Literature).

Orig Pub: Archiv patologii, 1957, 19, No 2, 79-82.

Abstract: No abstract

Card 1/1

BUYANTUYEV, B.R.; TSYRENOV, B.TS.

Problems in the protection of nature in Buryatia. Kraeved.
sbor. no.6:3-14 '61. (MIRA 15:2)
(Buryat Mongolia--Natural resources)

TSYRENOV, D.TS.; DUBCHENKO, V.I.

Occurrence of Cambrian fauna in sedimentary metamorphic rocks
of the northern Baikal Highland. Dokl.AN SSSR 145 no.2:408-410
Jl '62. (MIRA 15:7)

1. Geologos'yemochnaya ekspeditsiya Buryatskogo geologicheskogo
upravleniya. Predstavleno akademikom D.V.Nalivkinym.
(Baikal Lake region--Geology, Stratigraphic)

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

1ST AND 2ND GROUPS 1ST AND 2ND GROUPS

PROCESSING AND PROPERTIES INDEX

The technical aspects of a highly intensive tower system. S. I. Kaznalschikov and V. I. Izvekoy. J. Chem. Ind. (U. S. S. R.) 10, No. 1, 75 (1939). H. M. Leicester

ASR-51A METALLURGICAL LITERATURE CLASSIFICATION

GROUP DIVISION SECTION

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

TSYREZHAIPOVA, B.TS.

Comparative evaluation of the effectiveness of surgical treatment of traumatic urethral strictures. Urologia. 29 no.2:23-28 Mr-Apr '64.

(MIRA 18:7)

1. Urologicheskaya klinika (zav. - prof. A.Ya. Abramyan) Moskovskogo oblastnogo nauchno-issledovatel'skogo klinicheskogo instituta imeni Vladimirovskogo.

LUKOV, B.N., prof. (Kuybyshev); PETROV, V.I., dotsent (Moskva);
 PAVLENKO, T.M., aspirant (Moskva); YERMOLAYEV, V.G., prof.
 (Leningrad); ADO, A.D., prof.; VOVSI, M.S., prof.;
 YERMOLAYEV, V.G., prof. (Leningrad); KUPRIYANOVA, N.A. (Kazan');
 PETROV, G.I. (Moskva); DOLGOPOLOVA, A.V. (Moskva); SAKHAROV, P.P.,
 prof.; BYKHOVSKIY, Z.Ye., prof.; MIN'KOVSKIY, prof. (Chelyabinsk);
 KHMEI'CHONOK, I.P. (Irkutsk); TEMKIN, Ya.S., prof. (Moskva);
 MIN'KOVSKIY, A.Kh., prof. (Chelyabinsk); MIL'SHTEYN, T.N., doktor
 med.nauk (Leningrad); TRUTNEV, V.K., zasluzhennyy deyatel' nauki,
 prof.; TSYRESHKIN, B.D., kand.med.nauk (Moskva); SOBOL', I.M.,
 prof. (Stavropol'); TURIK, G.M. (Moskva); FRENKEL', M.M. (Moskva);
 MAZO, I.L.; POKRYVALOVA, K.P.; PROSKURYAKOV, S.A., prof.;
 ATKARSKAYA, A.A., prof.; GOL'DFARB, I.V., prof. (Izhevsk);
 PORUBINOVSKAYA, N.M. (Moskva); RUDNEV, G.P., prof.; VOL'FSON, I.Z.,
 prof. (Stalingrad); DOROSHENKO, I.T., prof. (Kalinin);
 ROZENFEL'D, M.O., prof. (Leningrad); SHUL'GA, A.O., prof. (Orenburg);
 MIKHLIN, Ye.G., prof.; TRET'YAKOVA, Z.V. (Moskva); MANUYLOV, Ye.N.,
 prof. (Moskva); DOROSHENKO, I.T., prof. (Kalinin); YERMOLAYEVA, V.G.,
 prof.

Speeches in the discussion. Trudy gos. nauch.-issl. inst. ukha,
 gorla i nosa no.11:79-87,129-146,179-186,233-248,311-333 '59.

(MIRA 15:6)

1. Chlen-korrespondent AMN SSSR (for Ado). 2. Direktor Moskov-
 skogo gosudarstvennogo instituta ukha, gorla i nosa (for Trutnev).
 (OTORHINOLARYNGOLOGY—CONGRESSES)

TSYRETOROV, B.

Growth of cities in the Buryat A.S.S.R. Zhil.-kom. khoz. 9 no.9:10-12
'59. (MIRA 13:2)

1. Ministr kommunal'nogo khozyaystva Buryatskoy ASSR.
(Buryat-Mongolia--City planning)
(Buryat-Mongolia--Municipal services)

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757320011-4

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757320011-4"

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757320011-4

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757320011-4"

TSYRIN, A. A.

5657. Iofinov, S. A., Turbin, B. G. i Tsyryn, A. A. *Makhanizatsiya i elektrifikatsiya sel'skogo khozyaystva. (Ucheb. posobiye dlya agr. tekhnikumov).* Riga, latgosizdat, 1954
608 s. s ill. 23 sm. 5.000 ekz. 12 r 20k. v per. —Bibliogr:s 597.—na latysh. yaz.
(55.954) 631.3/ (016.3)

SO: Knizhnaya, Letopis, Vol. 1, 1955

TSYRIN, A. A.

29201. Vliyaniye porshrevykh kolets na iznos tsilindrov. Sbornik nauch-tekhn. rabot
(leninigr. in-t mekhanizatsii sel. khoz-va), VI, 1949, S. 115-40

SO: Letopis' zhurnal'nykh Statey, Vol. 39, Moskva, 1949

TSYRINA A.

MOZHAYEV, V.N., dotsent, kandidat tekhnicheskikh nauk; LATKIN, A.M.,
redaktor [deceased]; TSYRIN, A.A., redaktor; VODOLAGINA, S.D.,
tekhnicheskii redaktor

[Electric equipment for tractors and automobiles] Elektrooborudovanie
traktorov i avtomobilei. Izd. 3., perer. i dop. Moskva, Gos. izd-vo
selkhoz. lit-ry, 1954. 360 p. (MLRA 7:10)
(Automobiles--Electric equipment)
(Tractors--Electric equipment)

GROKHOL'SKIY, Nikolay Federevich, kandidat tekhnicheskikh nauk; TSYRIN, A.A.,
redakter; CHAPSKIY, O.U., redakter; YODOLAGINA, S.D., tekhnicheskii
redakter.

[Welding in the repair of tractors and farm machines] Svarka pri re-
mente trakterev i sel'skokhoziaistvennykh mashin. Moskva, Gos. izd-vo
sel'khoz. lit-ry, 1956.278 p. (MLRA 9:5)
(Welding) (Agricultural machinery--Repairing)

107
IOFINOV, S.A., kandidat tekhnicheskikh nauk; TSYRIN, A.A., kandidat tekhnicheskikh nauk; LATKIN, A.N. (deceased), redaktor; VODOLAGINA, S.D., tekhnicheskiiy redaktor.

[Use of trucks in agriculture] Eksploatatsiia avtomobilei v sel'skom khoziaistve. Izd. 2-e, ispr. 1 dop. Moskva, Gos. izd-vo selkhoz. lit-ry, 1954. 448 p. [Microfilm] (MLRA 7:11)
(Farm mechanisation) (Motor trucks)

TSYRUL'NIKOV, A.S., dotsent; YEREMIN, I.Ya., inzh.

Degasification of coal in the work zone of a seam. Ugol' Ukr. 7
no.6:22-24 Je '63. (MIRA 16:8)

1. Institut teploenergetiki AN UkrSSR.

TSYSAR', N. V.

Baking properties of the southern Ukraine strong wheats from the
1962 crop. Izv. vys. ucheb. zav.; pishch. tekhn. no. 2:18-20 '64.
(MIRA 17:5)

1. Odesskiy tekhnologicheskii institut imeni Lomonosova,
kafedra tekhnologii zerna.

IOFINCV, Samuil Abramovich, doktor tekhn.nauk; TSYRIN, Arkadiy Alekseyevich,
kand.tekhn.nauk; CHAPSKIY, O.U., red.; BARANOVA, L.G., tekhn.nauk.

[Using trucks in agriculture] Eksploatatsia avtomobilei v sel'-
skom khoziaistve. Izd.3., dop. i perer. Moskva, Gos.izd-vo
sel'khoz.lit-ry, 1960. 408 p. (MIRA 13:5)
(Motortrucks)

ИЗДАНИЕ АРКАДИЯ АЛЕКСЕЕВИЧА

KOZIN, Vladimir Aleksandrovich; TSYRIN, Arkadiy Alekseyevich; CHAPSKIY,
Oleg Ustinovich; LUKIN, O.A., redaktor; MOLODTSOVA, N.G., tekhnicheskii redaktor

[Repair of tractor parts] Remont traktornykh detalei. Moskva, Gos.
izd-vo sel'khoz. lit-ry, 1956. 319 p. (MIRA 10:4)
(Tractors--Repairing)

IOFINOV, Samuil Abramovich; kandidat tekhnicheskikh nauk; TURBIN, Boris Grigor'yevich; kandidat tekhnicheskikh nauk; ~~TSYRIN~~, Arkadiy Alekseyevich, kandidat tekhnicheskikh nauk; CHAPSKIY, O.U., redaktor; VODOLAGINA, S.D., tekhnicheskiiy redaktor.

[Mechanization and electrification of agriculture] Mekhanizatsiya i elektrifikatsiya sel'skogo khoziaistva. Moskva, Gos.izd-vo sel'-khoz. lit-ry, 1956. 544 p. [Microfilm] (MLRA 9:6)
(Farm mechanization) (Electricity in agriculture) (Agricultural machinery)

IOFINOV, Samuil Abramovich, kand.tekhn.nauk; KOCHUROV, Nikolay
Ivanovich, kand.tekhn.nauk; TSYRIN, Arkadiy Alekseyevich,
kand.tekhn.nauk. Prinsipal uchastiye STAL'NOV, P.V., kand.
tekhn.nauk. CHAPSKIY, O.U., red.; CHUNAYEVA, Z.V., tekhn.
red.; BARANOVA, L.G., tekhn.red.

[Farm mechanization and electrification; power utilization in
agriculture] Mekhanizatsiya i elektrifikatsiya sel'skogo
khozisistva; energetika sel'skokhozisistvennogo proizvodstva.
Pod obshchei red. S.A.Iofinova. Leningrad, Gos.izd-vo sel'khoz.
lit-ry, 1960. 383 p. (MIRA 14:2)
(Farm mechanization) (Electricity in agriculture)

ALEKSANDROVSKIY, Nikolay Ivanovich; PRITSKER, Petr Yakovlevich;
RUBINSHTEYN, Sholom Yakovlevich; DRONG, I.I., prof., red.;
TSYRIN, A.A., red.; BARANOVA, L.G., tekhn.red.

["Belarus'" universal tractors] Universal'nye traktory
"Belarus'." Moskva, Izd-vo "Kolps," 1964. 278 p.
(MIRA 17:3)

TSYRIN, A.A.

IOFINOV, S.A.; TSYRIN, A.A.

Collection of scientific works of the Leningrad Agricultural
Institute. Mekh. i elk. sots. sel'khoz. 15 no.2:63 '58. (MIRA 11:5)
(Agricultural research) (Farm mechanization) (MIRA 11:5)

U/5
723.1
.16

TSYRIN, A A

Eksploatatsiya avtomobiley v sel'skom khozyaystve (Use of Trucks in Agriculture)
(By) S. A. Iofinov i A. A. Tsylin. Moskva, Sel'khozdat, 1954.

448 p. illus., diags., tables.

Bibliographical footnotes.

L'VOVSKIY, M.M., inzh.; TSYRKIN, A.T., inzh.

Using the method of powder metallurgy in manufacturing parts.
Mashinostroenie no.4:69-70 J1-Ag '64. (MIRA 17:10)

TSYRKIN, I.Z., inzh.

Dynamic balancing of rotors of TV-2-30-2 generators. *Energetik* 6
no. 1:22-23 Ja. '58. (MIRA 11:8)
(Balancing of machinery)
(Turbogenerators)

OSTROVSKIY, Ya.M., kand.tekhn.nauk; KURKIN, N.F. inzh.; KRYUKOV, A.I.;
TSYRKIN, I.Z., inzh.

Reducing the starting time of boilers and turbines [with summary in
English]. Teploenergetika 5 no.9:34-39 8 '58. (MIRA 11:10)

1. Moskovskoye rayonnoye upravleniye energokhozyaystva.
(Boilers) (Steam turbines)

25(6)

SOV/91-59-5-14/27

AUTHOR: Belyakov, V.M., Technician, and Tsyarkin, I.Z.,
Engineer.

TITLE: Signalization Chart for Measuring of Bearings Vi-
bration by Means of Distance Vibration-Measuring
Instruments (Skhema signalizatsii pri zamerakh
vibratsii podshipnikov distantsionnymi vibroi-
zmeritel'nyimi priborami)

PERIODICAL: Energetik, 1959, Nr 5, pp 25-26 (USSR)

ABSTRACT: This article describes the functioning of a BIP-4
device for measuring the vibration in the bearings,
worked out by TsNIITMASH, provided with bulb signali-
zation. The author recommends to use the three-
wire, two-side signalization scheme shown in Fig 2.
There are 2 circuit diagrams.

Card 1/1

TSYRKIN, I.Z., inzh.; MIKULICH, G.V., inzh.

Remote controlled start and servicing of the steam ejectors of
block-type systems. Energetik 10 no.12:13-14 D '62.

(MIRA 16:1)

(Boilers)

(Remote control)

TSYRKIN, I. Z.

SOV/96-58-8-1/22

AUTHORS: Ostrovskiy, Ya. M., Candidate of Technical Science,
Kurkin, N.P., Kryukov, A.I., Tsyarkin, I.Z., Engineers

TITLE: The Operation of Thermal Power Stations in a System under
Variable Load Conditions (Rabota teplovykh elektrostantsiy
sistemy v usloviyakh peremennykh nagruzok)

PERIODICAL: Teploenergetika, 1958, Nr 8, pp 3-8 (USSR)

ABSTRACT: The load curve of Mosenergo power stations has always exhibited sharp peaks because of the large light industry, domestic and traction loads. Until the Moscow-Kuybyshev transmission line was opened in 1956, the base load was mainly covered by thermal stations, which made up 85% of the installed capacity. Small hydro stations took some of the peaks, and low- and medium-pressure stations were unloaded at off-peak hours. When large imports of power began to be taken from Kuybyshev, the conditions of electricity supply in Moscow and the central regions greatly improved. However, in order to avoid wasting water at Kuybyshev, load had to be taken as uniformly as possible throughout the day to the full capacity of two 400-kV transmission lines. Therefore, the load peaks on the thermal stations became much more marked; moreover,

Card 1/5

SOV/96-58-8-1/22

The Operation of Thermal Power Stations in a System under Variable Load Conditions

it was necessary to keep sets in reserve in case of failure of supply from Kuybyshev. The overall ratio of maximum to minimum load on the steam stations became about 2.4. Many sets and boilers had to be started up to meet the morning peak. Combined heat- and electric-power-supply turbines, which formed about 25% of the total capacity, could only be unloaded to the extent permitted by their heat loads; moreover, some stations had to burn excess gas, particularly in summer when the gas is less used for heating and cooking. Finally, the Cherepet' station, because it uses very-high-pressure sets of high efficiency, was kept on base load as far as possible. Therefore, on many thermal stations, the ratio of maximum to minimum load was up to 5, as indicated by the graph in Fig 1. In some cases stations had to be kept loaded to maintain the voltage in particular districts. When peat was specially plentiful, peat-fired stations were kept running. Load curves of a thermal station containing turbines type VK-100-2, (100 MW) with direct-flow boilers, and turbines VK-35 with drum-type

Card 2/5

SOV/96-58-8-1/22

The Operation of Thermal Power Stations in a System under Variable Load Conditions

boilers, are given in Fig 2, the steam conditions being 60 atm 485°C. Further effects of supplies from Kuybyshev are seen in the following figures for the annual number of hours of utilisation of installed capacity: 1955, 6981; 1956, 6358; 1957, 4507. The reliability and quality of power supply was, however, much improved when power was received from Kuybyshev. Because there was more reserve plant, more attention could be paid to maintenance and reconstruction work and the number of faults was much reduced. Turbines and boilers could then be run for longer periods without stopping, as will be seen from Table 1, which shows, for different years, the number of sets not requiring major overhaul. Some small inefficient turbines were converted to back-pressure operation. The way in which a 17,600-kW Metropolitan-Vickers turbine was reconstructed for back-pressure operation is shown in Fig 4. Curves of the installed capacity and rise in output of high- and super-high-pressure sets are given in Fig 3. The increase in the number of times boilers were started up will be seen from Table 2; tests were accordingly made to cut down the time required to bring turbines and boilers on load. Because of the need to keep sets in running

Card 3/5

SOV/96-58-8-1/22

The Operation of Thermal Power Stations in a System under Variable Load Conditions

reserve, many had to work on very light loads, causing various problems, which are explained. Economy of feed water on high-pressure sets was important. As a result of tests made, the distribution of load between equipment within a given station and between stations was reviewed. It was found that most medium- and high-pressure turbines could be made to work indefinitely at the lightest loads without disconnecting the regenerative heaters. This facilitated taking up load. It was more difficult to run boilers on light load. However, in every case when the Kuybyshev station became disconnected the load was successfully taken up without serious frequency drop. Barring gear was installed on many medium-pressure turbines. Special efforts were made to keep to a minimum the number of sets in running reserve, but the possibilities were limited by the need to maintain voltage in particular parts of the system. Data on the number of starts made in 1955-57, mainly to regulate the system load on suburban stations, are given in Table 3. The amount of fuel

Card 4/5

SOV/96-58-8-1/22

The Operation of Thermal Power Stations in a System under Variable Load Conditions

consumed in starting-up rose from 4000 tons in 1956 to 8000 tons in 1957; hence the importance of making rapid starts. Despite the more severe operating conditions that resulted from the accentuated peaks in the load curve, the power stations operated reliably, the technical and economic efficiencies of the power system as a whole were improved, and the reserve was sufficiently flexible when faults occurred on the Moscow-Kuybyshev transmission line.

Card 5/5

There are 4 figures and 3 tables.

ASSOCIATION: Mosenergo

1. Steam power plants--Performance

SOV/96-58-9-6/21

AUTHORS: Ostrovskiy Ya.M., (Candidate of Technical Science),
Kurkin N.P., Kryukov A.I., and Tsyarkin I.Z. (Engineers)

TITLE: Reducing the Starting-time of Boilers and Turbines
(Sokrashcheniye vremeni puskov kotlov i turbin)

PERIODICAL: Teploenergetika, 1958, Nr 9, pp 34 - 39 (USSR)

ABSTRACT: Until power began to be transmitted from Kuybyshev in 1957 the load curve of stations on the Moscow power system was uniform and so the time required to start up boilers was not of great importance. Now the matter is otherwise, because boilers are started much more often. The boiler starting schedules laid down by the manufacturers are given in Table 1 and are very lengthy; they involve considerable fuel consumption and loss of feed water. A number of special tests were made on boilers with the object of reducing these times. Figs 1 and 2 show respectively graphs of accelerated (1 hour 45 minutes) and normal (3 hours 45 minutes) starts on a boiler type TP-230. In both cases the boiler had been in reserve for about 32 hours. Starting was accelerated by putting two muffle burners on the furnace and connecting two fuel feeders to

Card 1/6

SOV/96-53-9-6/21

Reducing the Starting-time of Boilers and Turbines

the main burners. It was necessary to protect the super-heaters against excessive temperatures, as the ordinary super-heat temperature regulator is not effective during starting. The temperature differences obtained in the drums were practically the same in the two cases. The recommended curve of pressure rise during accelerated starting of a boiler type TP-230 with uniform rate of rise of saturation temperature of about 100°C per hour is given in Fig 3. The shorter starting-time reduced the fuel consumption from 18.5 to 14 tons of conventional fuel. Some of the investigations revealed differences of up to 100°C between the ends of the drum due to the presence of barriers inside it. A device was made to heat up the drum with steam from neighbouring boilers. The starting time of these boilers could then be reduced to 2 hours with a maximum temperature difference of 30°C in the drum. The super-heaters were cooled by condensate injection. The main difficulty was to maintain the super-heated steam temperature within bounds. The simplest method of protecting the super-heaters was to use the mill fan to

Card 2/6

SOV/96-58-9-6/21

Reducing the Starting-time of Boilers and Turbines

blow air into the furnace through windows above the burners and to blow down the super-heater with condensate. A graph of an accelerated start on a high-pressure drum-type boiler burning Moscow Basin coal is given in Fig 4. Firing was commenced with fuel oil. The greatest temperature difference on the drum was 70°C, and the fuel oil consumption was 2.5 tons less than usual. At present a lot of boilers are kept in hot reserve overnight. The best procedure for keeping boilers in hot reserve was sought by tests in which a high-pressure boiler was left connected to the steam main and fired by two fuel-oil nozzles. The draught fans and auxiliary equipment were stopped and the boiler worked on natural draught. A boiler in this condition can be brought on to load very quickly but it is rather wasteful of fuel. Tests were also made with a boiler left connected to the steam mains but unfired. Various measures were taken to retain heat in the boiler which was in reserve for four and a half hours. The steam temperature dropped from 500°C to 390°C but was restored to full temperature in about 15 minutes. Comparative data on thermal losses before improving the thermal insulation

Card 3/6

SOV/96-58-9-6/21

Reducing the Starting-time of Boilers and Turbines

at one power station are given in Table 2. The work showed that a high-pressure boiler can be started up in two hours from the cold and in 45 minutes after being in reserve overnight without risk of damage and with considerable saving of fuel. Some two or three hours before commencing firing a cold boiler it is advisable to fill the drum with hot feed-water, so raising its wall temperature to 90 - 95°C. When the furnaces are forced for purposes of accelerated starting special attention must be paid to heating the screens uniformly; to this end a large number of burners must be used and they should be well distributed around the furnace. Despite earlier work the time required to start up a turbine remained excessive. For instance, according to the works' instructions a turbine type VK-100-2 takes 13.5 hours from the cold and a turbine SVK-150, 50 - 60 hours. Two methods were used to cut the time: accelerated starting with rated steam conditions, but quicker individual operations; and starting the turbine whilst raising steam in the boiler. After many tests made with thermo-couples fitted to turbines it became possible to

Card 4/6

SOV/96-58-9-6/21

Reducing the Starting-time of Boilers and Turbines

regulate the starts by the thermal conditions of the turbine rather than by a fixed time-table. According to the 1956 manufacturers' instructions the time required to start and put on load a turbine VK-100-2 was already cut to $9\frac{1}{2}$ hours. Recent recommendations have cut this time by a further two hours, and the present conditions will be seen from the time chart in Fig 5. During 1957, tests were made on starting turbines in the Moscow power system whilst steam was being raised in the boilers. The circuits used to isolate a boiler-turbine unit are given in Figs 6 and 7. In other tests the turbine was started with steam of reduced temperature and pressure, derived from the normal steam mains. It was found possible to cut the turbine starting times to about half of the former values. Details are given of the starting times required after the turbine had been standing for various periods. It is particularly difficult to start a boiler-turbine set as a unit after standing 5 - 7 hours overnight, because the turbine and boiler cool at different rates. The risk of passing cold steam into a hot turbine can be overcome by first raising the temperature and pressure in the boiler

Card 5/6

SOV/96-58-9-6/21

Reducing the Starting-time of Boilers and Turbines

somewhat. Unit starts with reduced steam conditions are now becoming fairly common. In making accelerated starts the condition of the thermal insulation on the turbine is very important. It should be possible to reduce still further the time required to start up boilers and turbines.

There are 7 figures, 2 tables, no literature references.

ASSOCIATION: MOSENERGO

1. Boilers--Operation
2. Turbines--Operation

Card 6/6

TSYRKIN, Mikhail Isaakovich; KAPITANSKIY, Vil' Moiseyevich; PETROV, P.P.,
kand. tekhn. nauk, retsenzent; RAPOPORT, L.I., kand. tekhn. nauk,
retsenzent; LEVIN, M.I., kand. tekhn. nauk, nauchnyy red.; APTEK-
MAN, M.A., red.; TSAL, R.K., tekhn. red.

[Remote control systems for main marine diesel engines] Sistemy di-
statsionnogo upravleniia glavnymi sudovymi dizeliami. Leningrad,
Gos. soiuznoe izd-vo sudostroit. promyshl., 1961. 245 p.
(Remote control) (Marine diesel engines--Water) (MIRA 14:11)

TSYRKIN, M.Ya. (Armavir)

Determining the trigonometric functions with the help of functional
equations. Mat. pros. no. 6#245-254 '61. (MIRA 15:3)
(Trigonometrical functions)

BFLOV, S.F.; TSYRKIN, S.P.

Recording irrevocable metal losses in enterprises of the nickel
and cobalt industries. Izv. vys. ucheb. zav.: tsvet. met. 8
no.3:179-183 '65. (MIRA 18:9)

1. Leningradskiy gornyy institut, kafedra ekonomiki i organizatsii
gornoy promyshlennosti.

KLIMENKO, V.L.; TSYRKIN, Ye.B.

"Economic aspects of the industry of synthetic materials."
Reviewed by V.L. Klimenko, E.B. Tsykin. *Mim.prom.*
no.9:622-623 Ag '62. (MIRA 15:9)
(Synthetic products)

KLIMENKO, V.L.; TSURKIN, Ye.B.; KHIZHNYAK, V.F.; MASLYANSKIY, G.N.; BURSIAI,
N.R.

Efficiency of the process of the isomerization of gasoline fractions.
Khim. i tekhn. topl. i masel 10 no.7:50-53 JI '65. (MIFA 18:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut neftekhimicheskikh
professov.

KLIMENKO, V.I.; RUDKOVSKIY, D.M.; TSYRATIN, Ye.B.

Production and use of butyl alcohols and butyraldehydes. Khim.prom.
41 no.423-24 Ap '65. (MIRA 18:8)

KLIMENKO, V.L.; TSYRKIN, Ye.B.

"On the economic aspects of the chemical industry of the U.S.S.R."
by N.P.Fedorenko, E.S.Savinskii. Reviewed by V.L.Klimenko, E.B.
TSyrkin. Zhur.VKHO 6 no.5:581-582 '61. (MIRA 14:10)
(Chemical industries) (Fedorenko, N.P.) (Savinskii, E.S.)

KLIMENKO, V.L.; FURS, Ye.Sh.; TSIRKIN, Ye.B.

Optimization of oxo-synthesis. Neftoper. i neftekhim. no.6:29-33
'64. (MIRA 17:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut neftekhim -
cheskikh protsessov.

RUDKOVSKIY, D.I.; BRUNSHTEYN, B.A.; TSYRKIN, Ye.B.

Alcohols of C_{10} - C_{16} oxo synthesis as raw material for the
production of surface-active agents. Khim. prom. 40 no.9:663-
665 S '64.

(MIRA 17:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut neftekhimicheskikh
protssesov.

BRUNSHTEYNS, Boris Anatol'yevich; KLIMENKO, Vladimir Leonidovich;
TSYRKIN, Yefim Borisovich; RUDKOVSKIY, D.M., nauchn.red.;
SEGAL', Z.G., ved.red.; DEM'YANENKO, V.I., tekhn.red.

[Production of alcohols from petroleum and gas] Proizvod-
stvo spirtov iz nefianogo i gazovogo syr'ia. Leningrad,
Izd-vo "Nedra," 1964. 199 p. (MIRA 17:3)

SAZONOV, M.; TSYRKUNOV, I., mekhanik

Improved design of the ZGS grain loader. Muk.-elev. prom. 26 no.10:
18 0'60. (MIRA 13:10)

1. Direktor Rossoshanskogo khlebopriyemnogo punkta Voronezhskoy
oblasti (for Sazonov).
(Grain-handling machinery) (Loading and unloading)

TSYRKUNOV, L.P. (Kiyev)

Skin lesions caused by steol-M, an anticorrosive liquid.
Gig.truda i prof. zab. 6 no.12:44-45 D'62. (MIRA 16:7)

1. Kiyevskiy institut gigiyeny truda i professional'nykh za-
bolevaniy i Kiyevskiy meditsinskiy institut.
(SKIN—WOUNDS AND INJURIES)
(CORROSION AND ANTICORROSIVES)

TSYRKUNOV, L.P.

Dermatitis from methyl bromide used as a herbicide. Vrach.delo
no.9:112-114 S'62. (MIRA 15:8)

1. Kiyevskiy nauchno-issledovatel'skiy institut gigiyeny truda i
professional'nykh zabolevaniy.
(METHANE--TOXICOLOGY) (SKIN--DISEASES)

TSYRKUNOV, L.P.

Study of the sensitivity of the skin of workers to the action
of nickel salts. Vest. dermat. i ven. 36 no.10:27-29 0'62
(MIRA 16:11)

1. Iz Kijevskogo instituta gigiyeny truda i professional'nykh
zabolevaniy (dir. - doktor med. nauk L.I. Medved') i kafedry
kozhenykh bolezney (zav. - prof. I.I. Pototskiy) Kiyevskogo
meditsinskogo instituta.

*

TSYRKUNOV, L.P.

Acrokeratosis verruciformis Hopf. Vest.derm.i ven. 34 no.12:64-
65 '60. (MIRA 14:1)

1. Iz kliniki kozhnykh i venericheskikh bolezney (zav. - dotsent
S.N. Bogdanovich) Kiyevskogo ordena Trudovogo Krasnogo Znameni
meditsinskogo instituta imeni akad. A.A. Bogomol'tsa (dir. -
dotsent V.D. Bratus')

(SKIN--DISEASES)

TSYRKUNOV, L.P.

Experimental study of the sensitizing properties of epoxy resin
hardeners. Vrach.delo no.1:104-107 Ja '63. (MIRA 16:2)

1. Kiyevskiy institut gigiyeny truda i professional'nykh zabo-
levaniy i kafedra kozhnykh bolezney (zav. - prof. I.I. Pototskiy)
Kiyevskogo meditsinskogo instituta.
(EPOXY RESINS--PHYSIOLOGICAL EFFECT)

CHISTYAKOV, F.M.; SUTYRINA, T.M.; PERSTNEV, P.V.; RUMYANTSEV, V.A.,
retsenzent; TSYRLIN, B.L., retsenzent; BEL'KOVICH, A.V.,
red.; GROMOV, A.S., tekhn. red.

[Freon refrigeration turbosystem; installation, construction,
and operation] Freonovyi kholodil'nyi turboagregat; ustroistvo,
montazh, ekspluatatsiia. Moskva, Gos. izd-vo torgovoi lit-ry,
1962. 101 p. (MIRA 15:5)

(Refrigeration and refrigerating machinery)

TSYRLIN, Benjamin Lvovich; KAPLUN, M.S., red.; FURMAN, G.V., tekhn.
red.

[Improvement in the design of ammonia cylinder-block compressors;
scientific report] Usovershenstvovanie konstruksii ammiachnykh
blokkarternykh kompressorov; nauchnoe soobshchenie. Moskva, Gos.
izd-vo tog. lit-ry, 1961. 29 p. (MIRA 15:4)
(Compressors)

BADYL'KES, I.S., prof., doktor tekhn.nauk; BUKHTER, Ye.Z., inzh.;
VEYNBERG, B.S., kand.tekhn.nauk; VOL'SKAYA, L.S., inzh.; GERSH,
S.Ya., prof., doktor tekhn.nauk [deceased]; GUREVICH, Ye.S., inzh.;
DANILOVA, G.N., kand.tekhn.nauk; YEFIMOVA, Ye.V., inzh.; IOFFE,
D.M., kand.tekhn.nauk; KAN, K.D., kand.tekhn.nauk; LAVROVA, V.V.,
inzh.; MEDOVAR, L.Ye., inzh.; ROZENFEL'D, L.M., prof., doktor tekhn.
nauk; TKACHEV, A.G., prof., doktor tekhn.nauk; TSYBLIN, B.L.;
SHUMELISHSKIY, M.G., inzh.; SHCHERBAKOV, V.S., inzh.; YAKOBSON, V.B.,
kand.tekhn.nauk; GOGOLIN, A.A., retsenzent; GUKHMAN, A.A., retsenzent;
KARPOV, A.V., retsenzent; KURYLEV, Ye.S., retsenzent; LIVSHITS, A.B.,
retsenzent; CHISTYAKOV, F.M., retsenzent; SHEYNDLIN, A.Ye., retsen-
zent; SHEMSHEDINOV, G.A., retsenzent; PAVLOV, R.V., spetsred.;
KOBULASHVILI, Sh.N., glavnyy red.; RYUTOV, D.G., zam.glavnogo red.;
GOLOVKIN, N.A., red.; CHIZHOV, G.B., red.; HAZAROV, B.A., glavnyy
red.izd-va; NIKOLAYEVA, N.G., red.; BYDINOVA, S.G., mladshiy red.;
MEDRISH, D.M., tekhn.red.

[Refrigeration engineering; encyclopedic reference book in three
volumes] Kholodil'naya tekhnika; entsiklopedicheskiy spravochnik
v trekh knigakh. Glav.red. Sh.N.Kobulashvili i dr. Leningrad,
Gostorgizdat. Vol.1. [Techniques of the production of artificial
cold] Tekhnika proizvodstva iskusstvennogo kholoda. 1960. 544 p.
(MIRA 13:12)

(Refrigeration and refrigerating machinery)

ALEKSANDROV, S.V.---(continued) Card 2.

1. Vsesoyuznyy institut rasteniyevodstva (for Sechkarev, Lizgunova, Brezhnev, Gazenbush, Meshcherov, Filov, Tkachenko, Kazakova, Krasochkin, Levandovskaya, Shebalina, Syskova, Makasheva, Ivanov, Martynov, Girenko, Ivanova, Shilova). 2. Gribovskaya ovoshchnaya selektsionnaya opytnaya stantsiya; chleny-korrespondenty Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk im. V.I.Lenina (for Alpat'yev, Solov'yeva). 3. Deystvitel'nyy chlen Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk im. V.I.Lenina (for Brezhnev).
(Vegetables--Varieties)

ROZENFEL'D, Lev Markovich, prof., doktor tekhn.nauk; TKACHEV, Anatoliy Georgiyevich, prof., doktor tekhn.nauk; GUREVICH, Yevgeniy Semenovich, inzh.; ONOSOVSKIY, V.V., inzh.; SERDAKOV, G.S., inzh.; TSYRLIN, B.L., inzh.; KALNIN', I.M., inzh.; ROMANOVSKIY, N.V., inzh.; YATSUNOV, I.F., inzh.; DANILOVA, G.N., dotsent; MIKHAL'SKAYA, R.N., inzh.; KARNAUKH, M.S., inzh.; STUKALENKO, A.K., inzh.; IL'IN, A.Ya., inzh.; TSIPERSON, A.L., red.; BABICHEVA, V.V., tekhn.red.

[Examples and designs of refrigerating machines and apparatus]
Primery i raschety kholodil'nykh mashin i apparatov. Moskva, Gos. izd-vo torg.lit-ry, 1960. 237 p. [___Thermodynamic diagrams of the refrigerants used] ___Termodinamicheskie diagrammy rabochikh tel kholodil'nykh mashin. (MIRA 13:9)
(Refrigeration and refrigerating machinery)

PSYRLIN, B. L.

"Investigation of the Discharge Valves of a High Speed Compressor."

Report submitted for the 10th Intl. Refrigeration Congress, Copenhagen,
19 August - 2 September 1959.

TSYRLIN, D.L.

Preparation of superphosphate from finely ground apatite concentrate. *Zhur.prikl.khim.* 33 no.7:1477-1482 J1 '60.
(MIRA 13:7)

(Apatite) (Phosphates)

TSYRLIN, L.E.

Unipolar corona associated with eccentric cylinders. Nauch.-
tekh.inform.biul.LPI no.5:61-66 '58. (MIRA 12:5)
(Corona (Electricity))

TSYRLIN, L.E.

Bipolar currents in gases. Nauch.-tekh.inform.biul.LPI no.5:
67-77 '58. (MIRA 12:5)
(Electric discharges through gases)

L 33410-66 EWT(1) IJP(c)

ACC NR: APG015305 (A, N)

SOURCE CODE: UR/0057/66/036/005/0843/0851

AUTHOR: Tsyrlin, L. E.

ORG: none

TITLE: Method for calculating the electrostatic field of a system of apertures

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 5, 1966, 843-851

TOPIC TAGS: electron optics, electron lens, electrostatic lens, Legendre polynomial, Laplace equation, mathematic method

ABSTRACT: The author describes a technique for calculating approximately the axially symmetric electrostatic field of a system of circular apertures in parallel plane electrodes. The potential at each aperture is expanded in a series of Legendre polynomials of odd degree with the argument $(1 - r^2/a^2)^{1/2}$, where r is the distance from the axis and a is the radius of the aperture. The corresponding potential in the interelectrode regions is calculated and from the boundary conditions a set of linear equations is obtained for the expansion coefficients. The calculations for the case of two identical apertures are discussed in detail and it is shown that the method converges to the correct result in the two limiting cases when the two electrodes are very close together or very far apart. The method is illustrated by calculations for a three aperture lens, and the results obtained by retaining different numbers of

Card 1/2

UDC: 537.212

L 33410-66

ACC NR: AP6015305

terms are tabulated. Advantages of generality and simplicity are claimed for the method. Orig. art. has: 42 formulas, 2 figures, and 2 tables. 0

SUB CODE: 20/

SUBM DATE: 23Apr65/

ORIG REF: 005/

OTH REF: 001

Card 2/2 ULR

GORELIK, I.G. [deceased]; GOKHMAN, Ye.V.; PETROVA, T.D.; TUVSKAYA, N.I.;
ROMANOVA, P.M.; TSYRLIN, L.M., red.; KHUTORSKAYA, Ye.S., red. izd-
va; ISLENT'YEVA, P.G., tekhn. red.

[Ferrous metallurgy in capitalist countries; statistical handbook]
Chernaia metallurgiiia kapitalisticheskikh stran; statisticheskii
spravochnik. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po cherno
i tsvetnoi metallurgii, 1961. 368 p. (MIRA 14:11)

1. Moscow. Tsentral'nyy institut informatsii chernoy metallurgii.
(Iron industry—Statistics) (Steel industry—Statistics)

GROKHOL'SKIY, Nikolay Fedorovich; KOCHERGIN, K.A., kand. tekhn.
nauk, retsenezent; TSYRIN, A.A., kand. tekhn. nauk, red.;
CHFAS, M.A., red.izd-va; DENINA, I.A., red.izd-va;
SHCHETININA, L.V., tekhn. red.

[Reconditioning parts of machines and mechanisms by welding
and building up] Vosstanovlenie detalei mashin i mekhanizmov
svarkoi i naplavoiki. Moskva, Mashgiz, 1962. 274 p.

(MIRA 16:4)

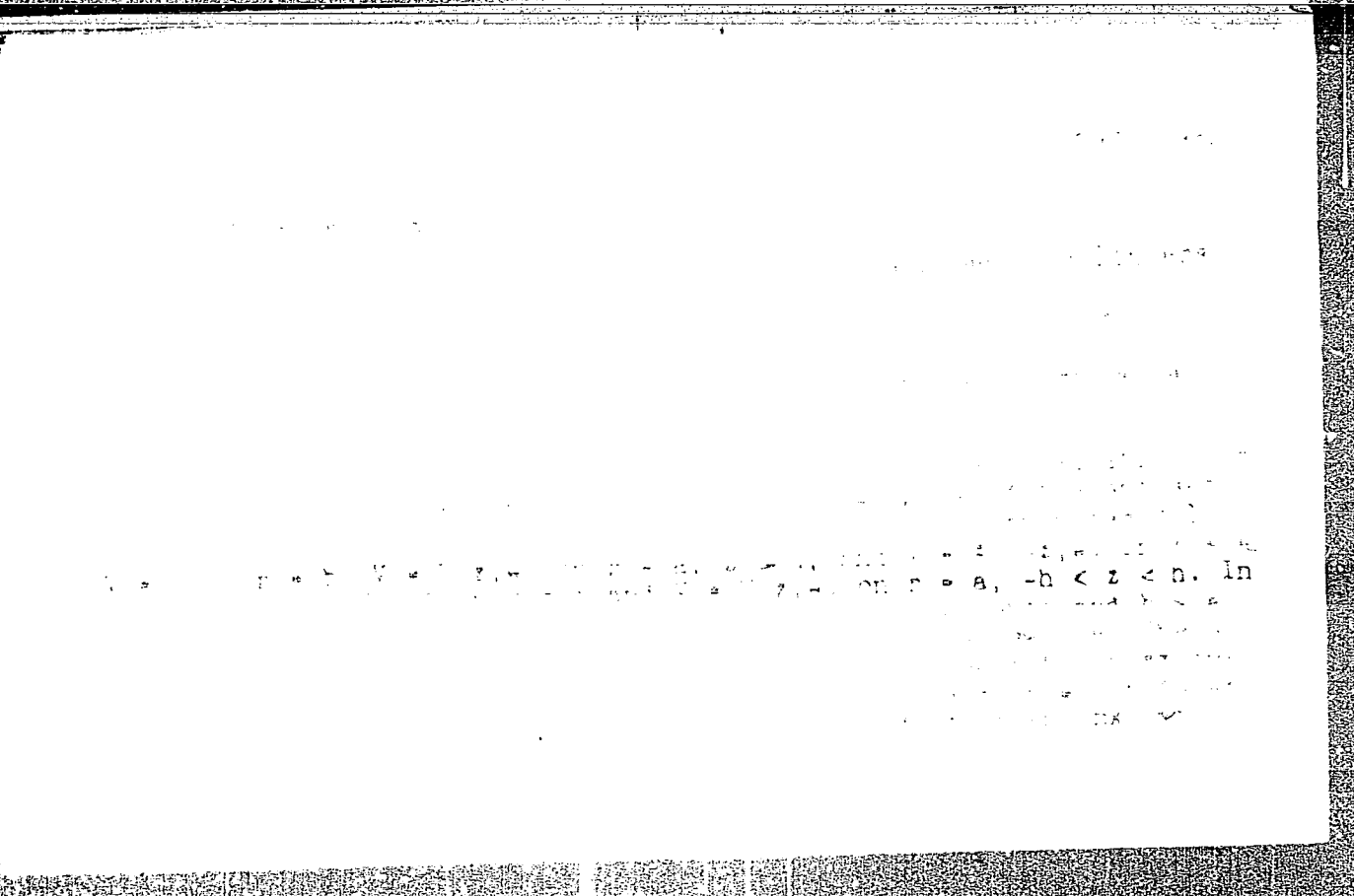
(Machinery--Maintenance and repair)
(Electric welding)

LYUBIN, V.M.; FOMINA, V.I.; TSYRLIN, L.E.

Characteristics of the conductivity and photoconductivity of thin films of the system Se - As in the region of strong electric fields. Dokl. AN SSSR 161 no.2:324-327 M_r '65.

(MIRA 18:4)

1. Submitted October 19, 1964.





TSYRIN, L. YE.

Corona (electricity)

Theory of a corona discharge at direct voltage. Zhur.tekh.fiz. 22, no. 7, 1952.

9. Monthly List of Russian Accessions, Library of Congress, DECEMBER 1952 ~~1953~~ Uncl.

TSYRLIN, L.E.

Charging of a high-resistance layer by a beam of fast electrons
and signal formation in some transmitting tubes. Part 2. A
scanning beam. Radiotekh. i elektron. 8 no.7:1233-1238 J1
'63. (MIRA 16:8)
(Electron tubes) (Television--Picture tubes)

IKHNO, Nikolay Petrovich; ZYRYANOV, Mikhail Yegorovich; TSYRKUNOV,
Grigoriy Artem'yevich; KASHTANOV, F., red.; YERMOLENKO, V.,
tekhn. red.

[Conveying system for the transportation of pece freight]
Konveiernaiia ustanovka dlia transportirovaniia shtuchnykh
gruzov. Minsk, Gos. izd-vo BSSR. Red. proizvodstvennoi lit-
ry, 1961. 52 p. (MIRA 15:2)
(Railroads--Freight) (Conveying machinery)

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757320011-4

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757320011-4"

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757320011-4

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757320011-4"

TSYRLIN, L.E.

Charging of a high-resistance layer by a stream of fast electrons
and signal formation in some camera tubes. Part 1: Stationary
electron beam. Radiotekh. i elektron. 8 no.6:1050-1056 Je '63.
(MIRA 16:7)

(Television) (Electron tubes)

GOKHMAN, Ye.V.; GORELIK, I.G.[deceased]; PETROVA, T.D.; TUVSKAYA,
N.I.; ROMANOVA, P.M.; NARKOTSKAYA, I.V.; TSYRLIN, L.M.,
red.

[Ferrous metallurgy of capitalist countries; a statistical
manual] Chernaya metallurgiya kapitalisticheskikh stran;
statisticheskii spravochnik. [By] E.V.Gokhman i dr. Izd.3.,
dop. Moskva, 1964. 335 p. (MIRA 18:4)

1. Moscow. Tsentral'nyy nauchno-issledovatel'skiy institut
informatsii i tekhniko-ekonomicheskikh issledovaniy chernoy
metallurgii.

TSYRLIN, M.I.; GUREVICH, V.Z.

Automation of the drying of coatings at the Gorkiy Automobile
Plant. Mashinostroitel' no.5:19-20 My '61. (MIRA 14:5)
(Gorkiy—Motor vehicles—Painting)
(Automation)

TSYRLIN, M.I.; ROZNO, L.I.

Reorganization of the section for painting automobile parts. Avt.
prom. no. 1:40-42 Ja '61. (MIRA 14:4)

1. Gor'kovskiy avtozavod.
(Automobiles--Painting)

3-58-6-6/34

AUTHOR: Tsyryn, Z.L., Chief

TITLE: In Cooperation with the Personnel of Vuzes (v sotrudnichestv
s vuzovskimi kollektivami)

PERIODICAL: Vestnik Vysshey Shkoly, 1958, Nr 6, p 27-31 (USSR)

ABSTRACT: Within the next 7 years gross production in the Tatar ASSR should be doubled; the recovery of oil will increase 2.3 times, and the production of electric energy will rise threefold. The production of the Republic's machine plants will double. The manufacturers will be able to fulfil these tasks only in close cooperation with scientists of the higher educational institutions of Kazan'. The author mentions a number of examples characterizing the importance of this cooperation. Thus, the scientists of the Chair of Radiophysics of the Kazan' University (Dotsent I.M. Romanov in charge) have designed a new device for the automatic control of oil wells throughout the vast oil fields of the Tatar ASSR. These devices are now being successfully tested. The scientific workers of the university's Chair of Experimental Physics (Dotsent N.N. Neprimerov, Engineer A.G. Sharagin and others) have designed a set of electronic remote-control devices for surveying the wells and for exact measurement of temperature, pressure, speed and other parameters

Card 1/4

In Cooperation with the Personnel of Vuzes

3-58-6-6/34

of gas-petroleum flow. These devices assist in much more quickly determining methods of preventing the oil wells' paraffinization. Dotsents L.M. Kozlov, N.D. Butovich and others of the Chair of Petroleum and Gas Technology, Kazanskiy khimiko-tekhnologicheskiy institut (Kazan' Chemical-Technological Institute) are developing a method for obtaining market paraffin from the waste received when cleaning the petroleum wells. The quantity of this waste amounts to several tens of thousands of tons per year. Dotsent V.V. Nesmelova is studying the conditions under which the maximum yield of oxidation products can be obtained from the various kinds of paraffin. Another chair of the same institute, headed by Professor N.A. Kholevo, is developing the technology of oil well boring. The Pk-103-1C(20) drilling machine, constructed by the Vsesoyuznyy nauchno-issledovatel'skiy institut geofiziki (All-Union Scientific-Research Institute of Geophysics) and used at present, is not perfected. Speaking of the valuable work performed by the Kazan' scientists to help the machine plants, the author emphasizes the close contact maintained by the members of the Chair of Inorganic Chemistry of the Chemical-Technological Institute headed by Professor G.S. Vozdvizhenskiy and Dotsent N.V. Gud'in. The scientific workers of the university's Chair

Card 2/4

In Cooperation with the Personnel of Vuzes

3-58-6-6/34

of Analytical Chemistry, Dotsent V.F. Goryunov and Assistant A.A. Poppel', working in close cooperation with machine plants, have developed rational methods of analyzing electrolytes and solutions used for anticorrosive treatment. Of the versatile research work performed by the chairs of the Kazan' vuzes, a few are pointed out: manufacturing of heat-resisting plastic materials for various branches of industry; developing of automatic equipment for electroplating; designing a new automatic regulator for reversing current; and the study of anodic oxidation of non-ferrous metals. The author enumerates a number of tasks facing the machine manufacturers and the chemical industry of the Tatar ASSR. On the Zhirokombinat imeni Vakhitova (Fat Combine imeni Vakhitov) it is intended to bring continuous hydrogenation in piles under pressure into use. It is also planned to erect several plants for reprocessing synthetic materials, which are a valuable substitute for edible raw materials and metals (plastic), and save over 30 kg of grain on every 10 liters of synthetic alcohol produced. For many years phosphorus fertilizers (the refuse of gelatin production) have usually been thrown away with canal water. For experimental purposes this refuse was used in agriculture in the Tatar ASSR with positive results. Since

Card 3/4

In Cooperation with the Personnel of Vuzes

3-58-6-6/34

the sovarkhoz intends to erect a special plant for reprocessing this refuse, it will be necessary to establish the technology for manufacturing these phosphoric acid fertilizers.

ASSOCIATION: Tekhnicheskii otdel sovarkhoza Tatarskogo ekonomicheskogo administrativnogo rayona (Technical Section of the Sovarkhoz of the Tatar Economic Administrative Rayon)

Card 4/4

TSYRINA, T.S.

NESTERENKO, P.G.; SHIROKOV, A.Z.; TSYRINA, T.S.

Spore and pollen analysis of lignites of the Dnieper basin. Biol.
MOIP. Otd.geol. 29 no.6:81-92 N-D '54. (MLRA 8:2)
(Dnieper Valley--Pollen, Fossil)(Dnieper Valley--Spores (Bo-
tany), Fossil) (Dnieper Valley--Lignite)

TSYRINA, T. S.

Paleontology

Origin of fossil thorny micro-formations. Dokl. AN SSSR 83 no. 1, 1952

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

TSYRKIN, A.T., inzh.; L'VOVSKIY, M.M., inzh.

Use of ceramic metal parts in the manufacture of diesel loco-
motives. Mashinostroyeniye no. 1:16-17 Ja-F '64. (MIRA 17:7)

OSTROVSKIY, Ya.M., kand. tekhn. nauk.; KURKIN, N.P., inzh.; KRYUKOV, A.I.,
inzh.; TSYRKIN, I.Z., inzh.

Operation of thermal electric power plants under varying load
conditions [with summary in English]. Teploenergetika 5 no. 8:3-8
Ag '58. (MIRA 11:8)

1. Mosenergo.

(Electric power plants)

TSYRKIN, I.Z., inzhener.

The vibration capacity of steam turbine working vanes. Elek.sta.
28 no.8:12-13 Ag '57. (MIRA 10:10)
(Steam turbines)

TSYRKIN, I.Z.

TSYRKIN, I.Z., inzh.

Eliminating damage to working vanes in turbines of the AEG firm.
Elek.sta. 28 no.10:25-27 '57. (MIRA 10:11)
(Turbines)