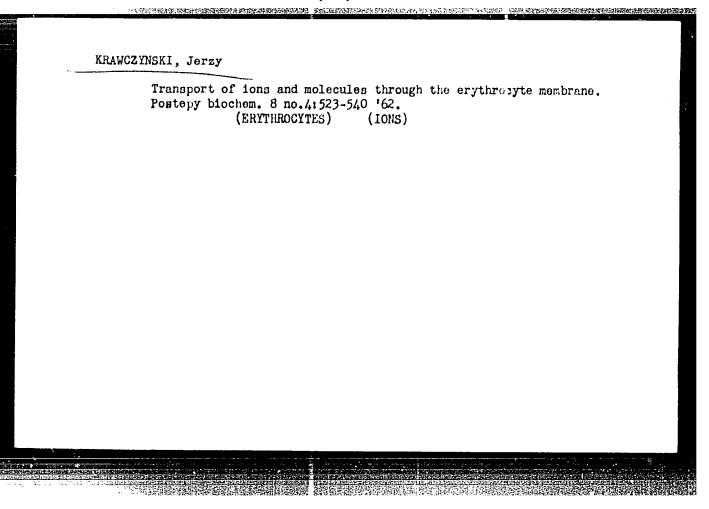
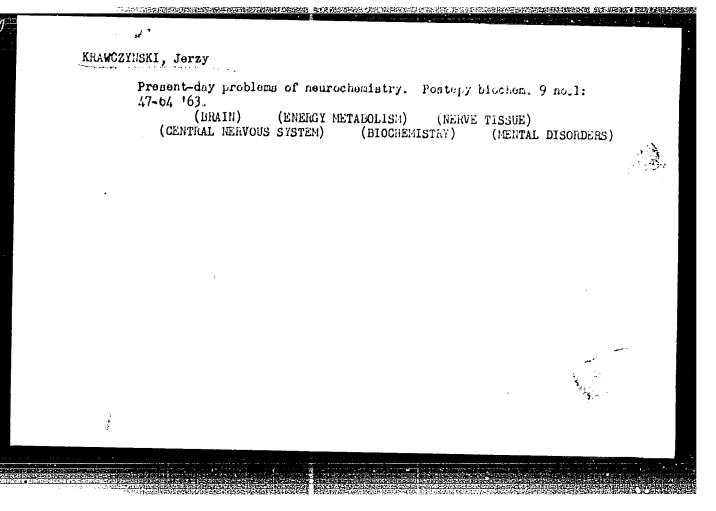
KHAWCZYJSKI, Jarzy; KUJAJA, Romanid; POKORA, Jan; SZYMANSK, Dominik

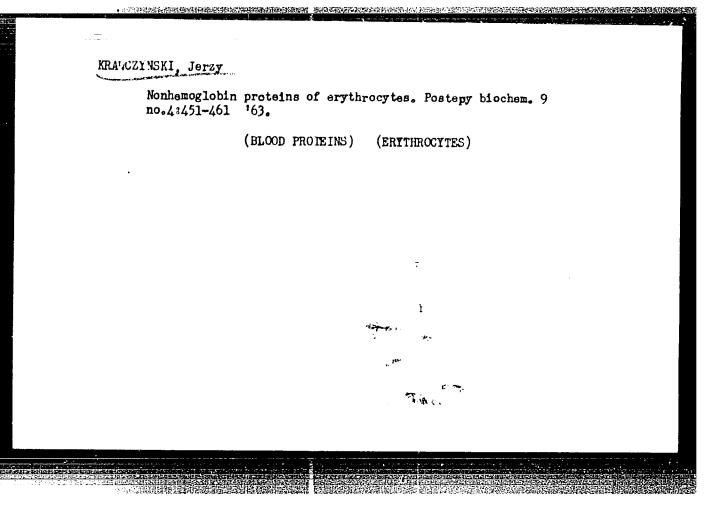
A case of diabetes insipidus treated with chlorothiazide and hydrochlorothiazide. Polski tygod. lek. 16 no.43:1658-1663 23 0 '61.

1. Z II Kliniki Chorob Wewnetrznych A.M. w Lublinie; kierownik: prof. dr A.R. Tuszkiewicz i z Centralaczo Luboratorium Klinicznego PSK Nr 1 w Lublinie; kierowniky: doc. dr J. Krawxzyski.

(DIABETES INSIPIDUS ther) (CHLOROTHIAZIDA ther)







REAL YEAR, agray: Mandalina, Herman, Ann., which is the content of the new important and the content of the new important and the content of the second mandalina, and the content of the second mandalina, and the content of the second mandalina, and the content of the content

KRAWCZYNSKI, J.; ROSHOWSKA, M.; DPEWNCVSKA, I.

CONTROL NOTE PRODUCTION OF THE PROPERTY OF THE

Rivanol fractionation of serum aminotransferaces. Cas. lek. cesk. 104 no.35:956-959 3 S 165.

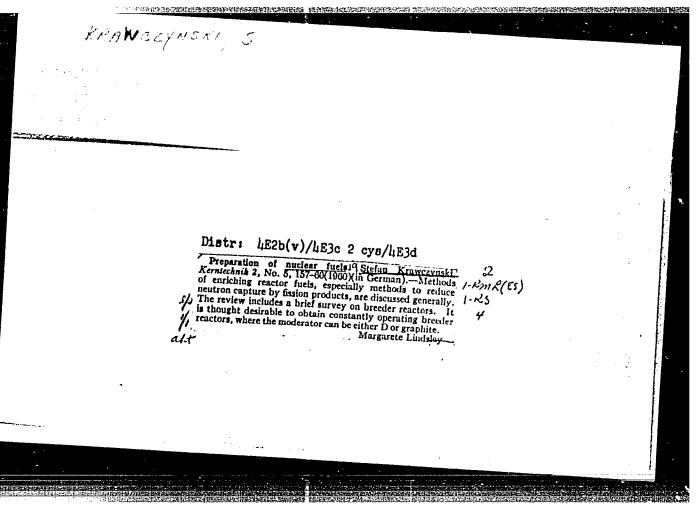
l. Katedra laboratorni diagnostiky Ustavu pro doskolovani lekaru lekarske fakulty ve Varsave (vedouci prof. dr. J. Krawezynski).

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PRANCZYMSKI, R.; RYZKO, H.

The use of high-frequency current for the determination of voltage causing secondary sparking and shocks in lightning arresters. p. 97. (Archimum Elektrotechniki, Vol. 6, No. 1, 1957, Warsaw, Poland)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, No. 8, Aug 1957. Unel.



# KRAWCZENSKI, T.

In Czeshochowa District they are looking for new forms of management.

P. 3, (Rolink Spolodzidlea. Vol. 9, (i.e.lo) no. 8, Feb. 1957, Larszaw, Poland)

Monthl y index of East European Accessions (LC. Vol. 7, no. 2, --- (EFAI)

KRAWET, Antoni, mgr inz.; ZEMLA, Adam, inz.

THE PROPERTY SECRETARY AND ADDRESS OF THE PROPERTY OF THE PROP

Increase of the rotational speed and the rate of control efficiency in sudden cases of unloading turbine generates sets and methods of improving the dynamic properties of the control. Pt.1. Energetyka Pol 16 no.9:Suppl.: Energophaiar 8 no.5:33-36 S 62.

1. Dział Maszyn Przeplywowych, Zaklad Badan i Pomiarow, Warszawa.

THE STORES OF THE STREET WHEN THE STREET SHEET S

SLUSARCZYK, Stanisław, inz.; KRAWET, Antoni, inz.; ZEMLA, Adam, inz.; MICHALOWSKI Teofil, inz.; TOMASZEWSKI, Zbigniew, inz.

Increased disposable power and work economy of LMZ 50 MW power units. Gosp paliw 11 Special issue no.(95):57 Ja '63.

SLUSARCZYK, Stanislaw, inz.; KRAWET, Antoni, inz.; ZEMLA, Adam, inz.; MICHALOWSKI, Teofil, inz.; TOMASZEWSKI, Zbigniew, inz.

Increased disposable power and work economy of IMZ 50 MW power units. Gosp paliw 11 Special issue no.(95):57 Ja'63.

1. Elektrownia Jaworzno II.

THE REPORT OF THE PROPERTY OF

KRAWET, Antoni, mgr inz.; ZEMLA, Adam, inz.

Increase of the rotational speed and the control operation at a sudden unloading of a turbine-generator set and methods of improving the dynamic properties of the control. Pt. 2. Energetyka Pol 16 no.11: Suppl: Energopomiar 8 no.6:42-48 N '62.

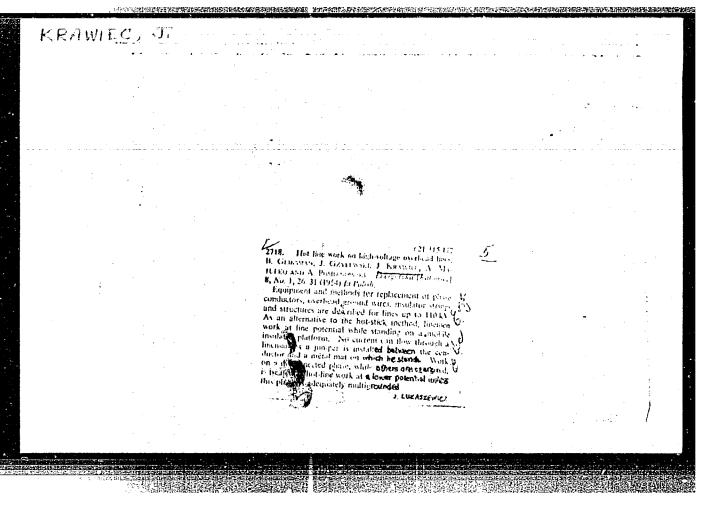
1. Dział Maszyn Przeplywowych, Zaklad Badan i Pomiarow, Warszawa.

Electrical Engineering Abst.
Vol. 57 No. 675
Mar. 1954
Electrical Engineering

621.315.17.004.5

724. [Maintenance] work on energized hr. overhead integration in fig. 1. Testing of insulpion.
head integration in fig. 1. Testing of insulpion.
And Postandown Str. Engineering

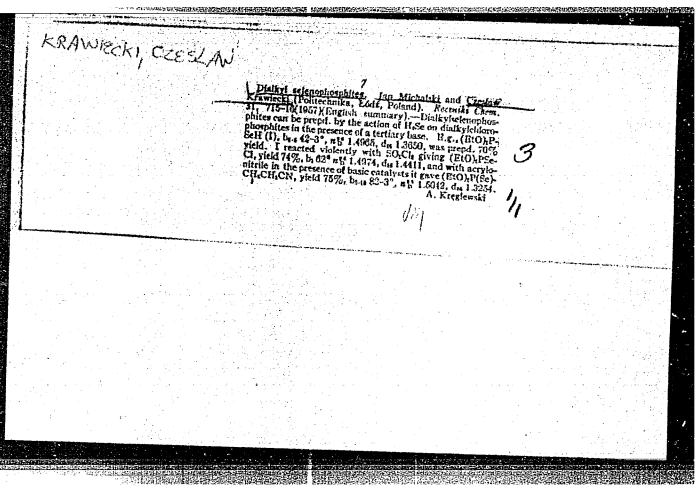
725. [1950] Polish.
A description is given of a few practical methods.
A description is given of a few practical methods.
The received and pin-type insulators, measuring the configuration and pin-type insulators, measuring the configuration of the configuration of the configuration in the configuration in the configuration of the configuration in the configura



OPOLSKI, Antoni (Wroclaw); KRAWIECKA, Jadwiga (Wroclaw)

Additional note to the nomogram for the correcting of star distances for interstellar absorption. Acta astronom 9 no.1:9 159.

KRAWIE	
	VAction of hydrogen suitide on distry chlorophosophies  Michaleki and Armyrcki finst. Yech. Tolinehi Lode, Poland). Com. of 12. (Condon) 1957. 1823-4;  cf. C.A. 50, 10641k.—In the presence of pyridine, (E10),PCi  (I) with 0.5 mole H.S gives (E10), PRO 15. 1879.
	base such as Et.N. I gives III as well as II. I with II in the presence of Et.iv. gives III la good yield but as II. I with II in the
•	III reacts with HeS to give II. III, best 66-8°, reacts oxidized in air to [(RtO),POH and (RtO),PSH, is amide formation when added to a primary amine and car.  boxylic acid mixt.  R. H. Leeppart
and the second section of the section of the second section of the section of the second section of the second section of the sectio	



KRAWIECKI, CZ

### Distr: 4E3d/4E2c(1)

'Organophosphorus compounds 70f sulfur and selenium.

XIII. Action of hydrogen sulfide on dialkyl and diaryl phosphorochloridites. New synthesis of dialkyl and diaryl thiophosphites and tetraalkyl thiopyrophosphites. Cz. Krawiecki and J. Michalski (Inst. Technol., Lodz, Poland).

J. Chem. Soc. 1960, 881-5; cf. CA 50, 10841k; 58, 10832c.—Dialkyl phosphochloridite (0.1 mole) with 0.1 mole tertiary amine in 75 ml. was treated 3 hrs. with 11.8 at 5°, the muxt filtered, and the filtrate distd. to yield dialkyl H thiophosphite (alkyl groups, % yield, b.p./mm., and n19 given). Et (I), 83, 75-6°/14, 1.4608; Pr (II), 67, 100°/13, 1.4620; and Bu, 76, 81-3°/3, 1.4608; SO,Cl, (4.5 g.) in 10 ml. CeHs added dropwise to 6.0 g. II in 30 ml. CeHs at 5° and the mixt. stirred 1 hr. gave 5.0 g. (PrO). PSCl, bts. 113-14°, n19 1.4634. H;S bubbled through 16.1 g. (PhO). PCl and 5.6 g. CeHsN in 50 ml. CeHs 2.5 hrs., the mixt. filtered, and distd. at 70°/0.001 mm. gave 11.5 g. (PhO). PHS, (III), n19 1.5678, dm 1.2191. SO,Cl; (8.2 g.) in 10 ml. CeHs added to 13.5 g. crude III in 50 ml. CeHs at 0° and the mixt. stirred 1 hr. gave 6.1 g. (PhO). PSCl, m. 67°. Hrs. passed slowly into 20.1 g. ethylene phosphorochloridite and 12.5 g. pyridia in 120 ml. CeHs 2.5 hrs. at 5°, the mixt. filtered, and distd. at 55-65°/0.7 mm. gave 12 g. ethylene H thiophosphite, n19 1.5403. Similarly was obtained trimethylene H thiophosphite, bts. 60°, m. 34°. 4-BrCeH. CH<sub>1</sub>OH (15.0 g.) and 17.0 g. PhNEts in 75 ml. CeHs added

to 5.5 g. PCl<sub>4</sub> in 25 ml. C<sub>4</sub>H<sub>4</sub> at 5°, the mixt. stirred 15 min. Addition 15 ml. with H<sub>5</sub>S 5 hrs. at 5° gave 9.0 g. (4-BrC<sub>4</sub>H<sub>4</sub>CH<sub>4</sub>O)r PSCl, m. 84°. Similarly was obtained 60% (4-O<sub>1</sub>NC<sub>4</sub>H<sub>4</sub>-Q) (N<sub>6</sub>M<sub>2</sub>) PSCl, m. 135°. H<sub>4</sub>S (2500 ml.) bubbled into 31.2 g. d (BtO)<sub>1</sub> PCl (IV) and 20.2 g. Et<sub>4</sub>N in 80 ml. C<sub>4</sub>H<sub>4</sub>.1.5 hrs. at 5° gave 10 5 g. I and 7.5 g. ([EtO)<sub>2</sub>P]<sub>3</sub>S (V), b<sub>80</sub> 64·5°. IV (10.2 g.) in 20 ml. C<sub>4</sub>H<sub>4</sub> 2ded dropwise to 16.0 g. I and 11.0 g. Et<sub>4</sub>N in 80 ml. C<sub>4</sub>H<sub>4</sub> 2ded dropwise to 16.0 g. I and 11.0 g. Et<sub>4</sub>N in 80 ml. C<sub>4</sub>H<sub>4</sub> at 20° and the mixt. stirred 45 min. gave 10.5 g. V. V (10 g.) with 2 drops Et<sub>4</sub>N in 40 ml. C<sub>4</sub>H<sub>4</sub> std. 1 hr. with H<sub>5</sub>S at 10° gave 8.0 g. I. H<sub>7</sub>O (0.8 g.) in 100 ml. Et<sub>4</sub>O added to 13.4 g. V and stirred 15 min. gave.9.0 g. mixt. of I and (EtO)<sub>2</sub>POH. Dry O bubbled through 13.5 g. V in 15 ml. C<sub>4</sub>H<sub>4</sub> 2.5 hr. at 70-80° gave 4.5 g. [(EtO)<sub>2</sub>P]<sub>4</sub>O, b<sub>3</sub>.1.60-8°, st<sup>3</sup> 1.4405. XIV. Reaction of organic diselenides with trialkyl phosphites. J. Michalski and J. Wieczorkowski. Ibid. 885-6.—(EtO)<sub>2</sub>P (I), (24.0 g.) added dropwise to 64.8 g. bls(diethoxyphosphinyl) diselenide at 50.5° and the mixt. distd. gave 33 b.g. O<sub>2</sub>O.5c-triethyl, phosphoroselenolate, b<sub>3</sub> at 39-41°, b<sub>11</sub> 130-1°, st<sup>3</sup> 1.4708, and 42.2 g. tetraethyl selenopyrophosphate, b<sub>3</sub> at 87-8°, st<sup>3</sup> 1.4650. Ph.Sc<sub>2</sub> (30 g.) and 30 g. I heated slowly, then kept at 190-210° 15 min. and distd. gave 22 g. EttScPh, b<sub>3</sub> 85-6°, and 27.4 g. O<sub>2</sub>O-diethyl Sc-Ph phosphoroselenolate, b<sub>3</sub> 4 100°, st<sup>3</sup> 1.5235.

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TO THE TRANSPORT OF THE PROPERTY OF THE PROPER

BRZEZINSKI, A.; KRAWIECKI, J.

A Polish national conference of cast-iron foundrymen in Stalowa Wola. Przegl odlew 12 no.7:222 Jl :62.

THE PROPERTY OF THE PROPERTY O

KRAMIECOMA, A.; KHOZYHJKA, I.; GOLOMIN, S.

Vascular plant of the Opava Mountains. Prace botan no.1:3142 'e3 [publ. '64].

### KRAWIECOWA, Aniela

Stanisław Kulczynski, a Polish botanist. Nauka Pol 9 no.4:83-90 O-D '61.

1. Katedra Morfologii i Systematyki Roslin, Uniwersytet Wroclawski.

# "Atlas of descriptive morphology of higher plants. (Illustrated organography of vascular plants)" by A.A.Fedorow, M.E. Kirpicnikov, Z.T.Artiuszenko. Reviewed by Aniela Krawiecowa. Wiadom botan 7 no.1:86-87 '63.

ORLOWSKA, Krystyna; KRAWOWSKA, Ludwika; SZYMANSKA, Damuta

Case of reticulosarcoma. Polski tygod. lek. 10 no.3:84-87 17 Jan 55.

1. Z III Kliniki Chorob Wewnetrsmych AMW: kierownik: prof. dr J. Wegierko i z Zakladu Anatomii Patologicznej AMW; kierownik: prof. dr L.Paszkiewicz. (SARCOMA, RETICULUM CELL,

disseminated, case report)

Effect of hemodialysis on the antibody titer in the blood serum in cases of acute renal failure after blood transfusion. Poznan. tow. przyjaciol nauk wydz. lek. 21 no.2:167-177 '61.

(BLOOD TRANSFUSION compl.) (KIDNET ARTIFICIAL)

(ACUTE RENAL FAILURE ther) (BLOOD GROUPS)

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### KRAYANEK, I.I.

Using tonsillectomy in preventing rheumatism in children. Sov. zdrav. Kir. no.2:18-19 Mr-Ap 162. (MIRA 15:5)

1. Iz kliniki detskikh bolezney (zav. - prof. B.F.Shagan) na baze Frunzenskoy gorodskoy ob"yedinnenoy detskoy bol'nitsy No.1 (glavnyy vrach - T.I.L'vova).

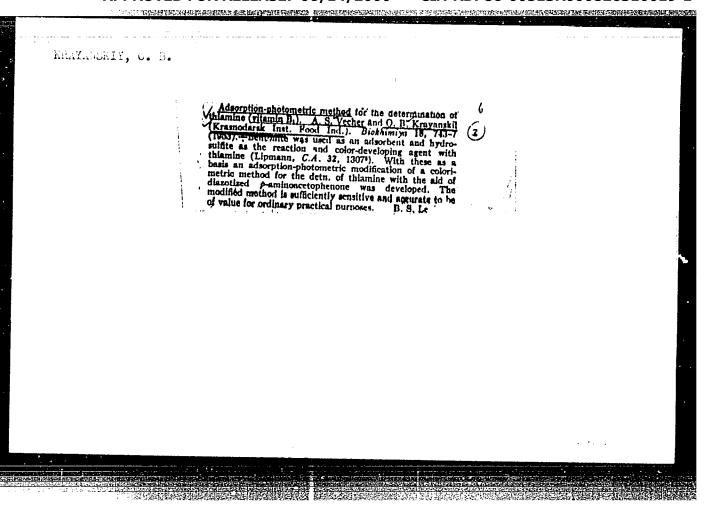
(TONSILS-SURGERY)

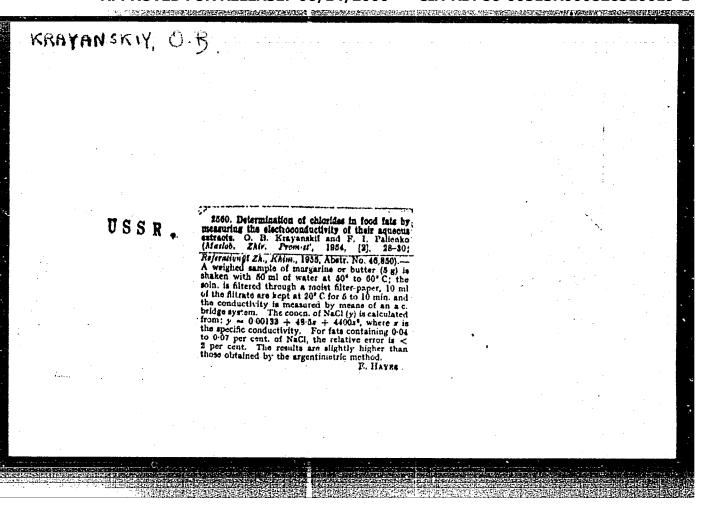
(RIEUMATIC FEVER)

KRAYAMOKIKOB.

Chemical Abst. Vol. 48 No. 8 Apr. 25, 1954 Biological Chemistry The bloenergy potential of plastide in plant cells. A. S. Vecher and O. B. Krayanskil (Inst. Pood Ind., Krasnodar). Biokhimiya 18, 452-55(1953).—Biocnergy potential is defined as the total of thermodynamic potentials of the various processes occurring in the plastids. The combustion heat of the isolated plastids was compared with that of the tissues of the whole plant in alfalfa, spinach, carrots, and squash. The energy content of plastids was found to be higher than that of the tissue of the whole plant. In comparing the two, consideration must be given to the fact that in dry alfalfa plastid wt. is 25%, in spinach 20, in carrots 5, and in squash 10. The ether-extractable fraction of the plastids has a very high combustion value. The spinach chloroplast lipide substances reach a heat of 8480 cal./g., of which carotene and \(\theta\)-ionone reach a heat of 8480 cal./g. of which carotene and \(\theta\)-ionone reach a correspondingly heats of 9855 and 9042 cal./g. The substances remaining in the plastids after ether and alc. extn. still have a heat of combustion considerably higher than that of other plant tissues,

Chair Phyp. + Coiloid Chey -





KKAYAUSKIY, C.B.

Category: USSR / Thysical Chemistry - Surface phenomena. Adscription.

Chromatography. Ion exchange.

B-13

Abs Jour: Referat Zhur-Khimiya, No 9, 1957, 30197

Author : Krayanskiy O. B.

Inst : Krasnodar Institute of the Food Industry

Title : The Correlation Between Heat of Wetting and Bleaching Properties

of Bentonites

Orig Pub: Tr. Krasncdarsk. in-ta pisheh. prom-sti, 1956, No 13, 41-45

Abstract: In a specially constructed isothermal calorimeter was measured the heat of wetting (Q), by benzene, of acid-activated bentonite (B), which had been previously concentrated by removal of low-dispersion fractions. It is shown that after treatment of B with acids, especially at the boil, Q decreases while the adsorption activity of B increases. It is also shown that the lower the Q, the higher is the heat of wetting of B by water. The conclusion is reached that Q provides a better characteristic of the adsorption properties of bentonites

than the degree of decolorization.

Card : 1/1

-14-

KRAYANSKIY, EB.

USSR/ Laboratory Equipment. Apparatuses, Their Theory, Construction and Application.

I

Abs Jour: Referat. Zhur.-Khimiya, No. 8, 1957, 27357.

Author: O.B. Krayanskiy.

Inst : Krasnodar Institute of Food Industry.

Title : Isothermic Calorimeter for Determination of Heat of Wetting.

Orig Pub: Tr. Krasnodarsk. in-ta pishch. prom-sti, k956, vyp. 13, 47 - 50.

Abstract: A calorimeter for the determination of the wet-

ting heat of bentonites with benzene and water in the range of 25.0 to 3.0 cal per g with an accuracy of 0.1 cal per g was constructed. The methods of preparation of the adsorbent and of the treatment of the results are described.

Card 1/1

FRAYAMSKIY, (.B., Gend Chem Sci-(dire) "-deorption properties of dest functions" bendonites depending on their to them. .d the composition of except age cutions." Notocheriment, 1950. 16 pp (lin of Nigher Education MSER. Novoc erhand transmit Labor Red Demar Polytect Inst in S. Crebhonikiche), 130 copies (NI, NI-20, 103)

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- 27

KRAYANSKIY, O.B.; RUDOMANOVA, I.F.; LATAYEVA, D.N.

Photometric determination of pentoses in hydrolysates. Izv. vys. ucheb.zav.; pishch.tekh. no.6:150-153 '61. (MIRA 15:2)

KRAYANSKIY, O.B.; LATAYEVA, D.N.; RUDOMANOVA, I.F.
Using the paper chromatography method for the quantitative

determining of sugars in pentose and hexose hydrolyzates.

Izv.vys.ucheb.zav.; pishch.tekh. no.1:149-152 '63. (MIRA 16:3)

 Krasnodarskiy institut pishchevoy promyshlennosti, kafedra fizicheskoy i kolloidnoy khimii.
 (Paper chromatography) (Sugars--Analysis) (Hydrolysis)

A great event in the life of the White Russiar people. Vestsi
AH RSSR no.4:3-19 J1-Ag '54. (MIRA 8:9)
(White Russia--World War, 1939-1945) (Mizsk--History)

A transformed territory. Vsem.prof.dvizh. no.11:38-40 N '62.

(Rhodope Mountain region-Social conditions)

ZHIVOTOVSKIY, A.I., kand.tekhn.nauk; KRAYCHIK, A.B., inzh.

Galculation and design of oscillators and amplifiers for ultrahigh frequencies. Izv.LETI no.25:3-15 '53.

(Oscillators, Electron-tube)

(Amplifiers, Electron-tube)

mandin, t. h.,

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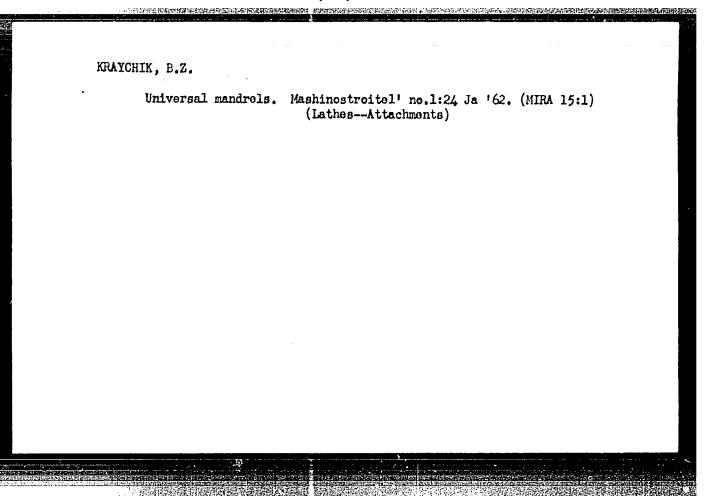
A. R. Projektk, in a paper "Addition of lower in "ransed thems on the Decimeter Wave Hand" discussed a method based on a connection in parallel of emission tubes into a general cavity oscillatins circuit.

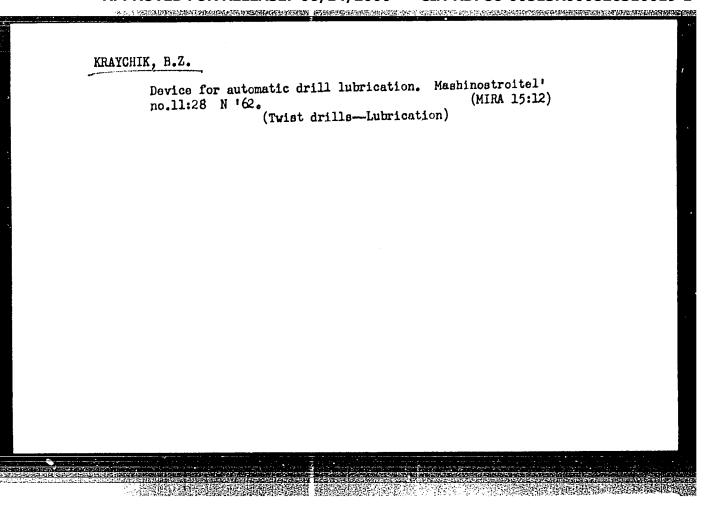
Presented at the Eleventh Scientific and Technical Session of the Leningrad Section VTMRIE (Scientific and Technical Society for Madio and Electricity) Ireni A. S. Popov, dedicated to the celebration of Radio Day, Leningrad, 16-21; Apr 56.

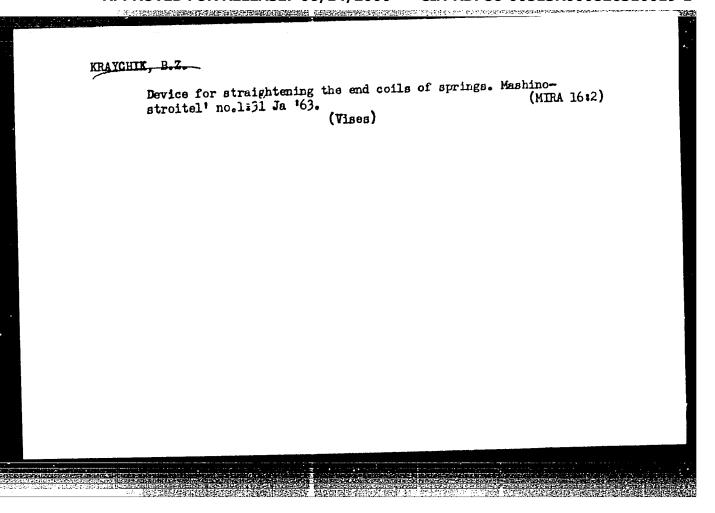
(Radiotekhnika, No. 7, 1956.)

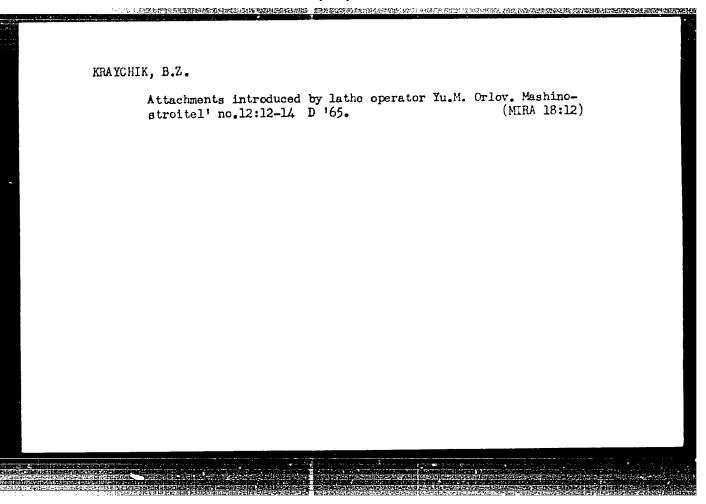
VASIL'YEVA, Valentina Petrovna; GORSKIY, Aleksandr Ivanovich;
KAZARINOV, Yuriy Mikhaylovich; KOLOMENSKIY, Yuriy
Aleksandrovich; KRAYCHIK, Aron Borisovich; KUDRYAVTSEV,
Dmitriy Vasil'yevich; MARMUZOV, Grigoriy Vasil'yevich;
PESTOV, Yuriy Konstantinovich; TOLOKONNIKOV, Sergey
Vasil'yevich; TOLSTYAKOV, Vladimir Sergeyevich;
ZHEREBTSOV, I.P., red.; SOBOLEVA, Ye.M., tekhn. red.

[Design of radio pulse system components] Raschet elementov impul'snykh radiotekhnicheskikh ustroistv [By] V.P.Vasil'eva i dr. Pod red. IU.M.Kazarinova. Moskva, Gosenergoizdat, 1963. 429 p. (MIRA 16:7) (Radio) (Pulse techniques (Electronics))









KRAYCHIK, L.; ETINGER, V.

"Technology and aesthetics" by V. Beletskaia. Reviewed by L. Kraichik, V. Etinger. Sots. trud 7 no.10:152-154 0 '62.

(Factories-Design and construction)
(Beletskaia, V.)

KRAYCEIK, H. F.

USSR/Engineering Melding, Seam Steel Alloys

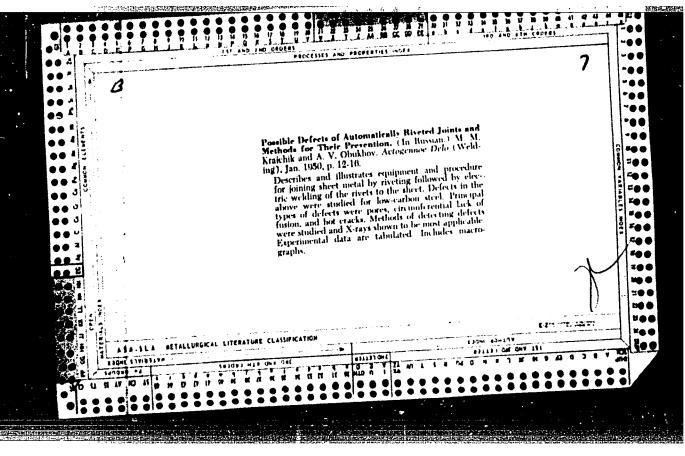
ar 49

"Testing Automatic, One-Pass, Plash Welding of SKhI2 Steel Using a Flux Film," A. V. Obukhov, Engr. M. M. Kraychik, Tsl HING, 6 pp

"Avtorennoye Delo" No 4

In automatic, one-pass, flash welding of SKhL2 steel, weakest spot is seam, exact spot where crystallites are joined. This is reflected in reduced deformation capacity of welded joint. All welded constructions using SKhL2 steel should be highly tempered.

PA 43/49T34



KRAYCHIK, M. M., Engr

PA 167T 7

USSR/Metals - Welding, Testing

Oct 50

"Investigation of the Influence of Individual Defects on the Mechanical Properties of Joints With Electric Rivets," Engineers M. M. Kraychik, A. V. Obukhov, Cen Sci Res Inst, Min of Transp

"Avtogen Delo" No 10, pp 24-26

Tested defective and good-quality electric rivets for static shear, impact shear, and repeated shear. Hot cracks in joints with electric rivets always dangerous and rejectable defects. Lack of circular penetration had no bad effect on strength of joint but not acceptable because of destructive effect on joint under operational conditions.

167T87

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<del>·</del>		USSR/Metals - Testing	
	175	"Acceleration of Fatigue Tests," M. M. Kray-chik, All-Union Sci Res Inst of RR Transp	
	166	"Zavod Lab" vol XVI, No 7, pp 894	
		possibility of speedin ertain cases and illu he conducted comparat	
		and tested simultaneously. Sample	Zi SELA
		166T75	
		USSR/Metals - Testing (Contd) Jul 50	
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KRAYCHIF, M. M., OBUKHOV, A. V.

Electric Welding

Effects of different elements in the strength of spot welds. Vest. mash. 31 no. 10, 1951.

9. Monthly List of Russian Accessions, Library of Congress, September, 1953; Unclassified.

N)	steel. Establishes that welding with electivet, giving practically similar strength indexes, shows considerably lower tendency to hardening of weld core and adjacent zone of thermal influence and therefore does not require any subsequent tempering, which is obligatory for majority of alloy steels and carbon steels with higher than 0.2% C after resistance spot welding.	"Avtogen Delo" No 10, pp 7-10 Compares 2 methods of welding: elec resist- ance spot welding and elec arc welding under flux with elec rivets. Steels used in expts were: NL-2 -0.12% C, 0.50% Ma, 0.41% S1, 0.44% Cu, 0.52% Cr, 0.51% N1, and St 3 carbon 0.44% Cu, 0.52% Cr, 0.51% N2, and St 3 carbon 231750	USSR/Metallurgy - Welding, Methods Oct 52 "Strength of Spots and Electric Rivets in Welding ML-2 and St 3 Steels," A. V. Obukhov, Engr, M. M. Kraychik, Cand Tech Sci, Ye. A. Greyl', Engr, TSMIIMPS (Cen Sci Res Railroad Inst, Min of Transp)
231750	T CBT TO	O B W T I	P. 4 25

### KRAYCHIK, M.M.

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Fatigue strength and hardening of welded joints made of low-carbon and low-alloy steel. Avtom.svar.6 no.3:24-36 My-Je '53. (MLRA 7:5)

1. Vsesoyuznyy tsentral'nyy nauchno-issledovatel'skiy institut Ministerstva putey soobshcheniya. (Steel alloys) (Electric welding)

La sala and the control of the contr

KRASOVSKIY, A.I., kandidat tekhnicheskikh nauk; KRAYCHIK, M.M., kandidat teknicheskikh nauk; IN'SHAKOV, N.N., kandidat tekhnicheskikh nauk.

Low-carbon, Bessemer steel and its use for welded structures. Avtog.delo 24 ho.5:1-6 My 153. (MLRA 6:5)

1. Vsesoyuznyy tsentral'nyy nauchno-issledovatel'skiy institut Ministerstva putey soobshcheniya. (Steel, Structural)

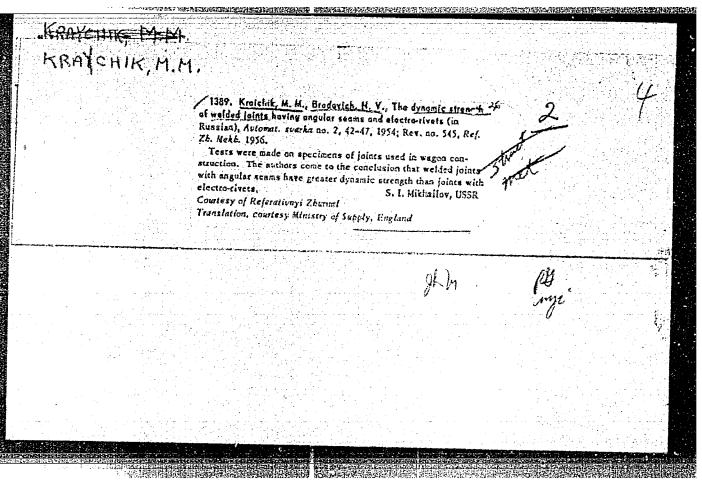
学。1915年,191

OBUKHOV, A.V., inzhener; KRAYCHIK, M.M., kandidat tekhnicheskikh nauk; GREYL', Ye.A., inzhener.

Fatigue resistance of multiple-projection welded joints made of low-carbon steel and possibilities for increasing the resistance. Vest.mash. 33 no.11: 81-84 N '53. (MLRA 6:12)

1. Vsesoyuznyy tsentral'nyy nauchno-issledovatel'skiy institut Ministerstva putey soobshcheniya. (Metals--Fatigue)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000826310019-1"



RRAYCHIK, M.M.; PASHKOV, N.V.

Some problems of the effect of cold hardening upon the strength of welded joints. Avtom.svar.7 no.6(39):19-25 N-D '54.

1. TSNII MPS (MIRA 8:2)

(Welding)(Metals--Hardening)

Kraichik,			
USSR/Miscells	meou	machine construction	
Card 1/1			
Authors		Kraichik, M. M., Cand. in Tech. Sciences; and Krasovskiy, A. I., Cand in Tech. Sciences (Central Scientific-Research Institute of the Ministry of the Building Industry)	l <b>.</b>
Title	:	The strength of welded joints of low-alloy and low-carbon steels	
Periodical	:	Vest. mash. 34/3, 63-64, Mar/1954	
Abstract	:	Joints made of low-alloy and low-carbon steels by electric-are weldi were subjected to comparative research. They were tested for static impact and vibration loads. Results showed that the joints of the low-alloy steel take a greater bending angle, but little difference was found in the durability under impact. Tests were also run on the effect of aging. Three Russian references, latest 1951. Graphs; tables.	,
Institution	<b>:</b>	******	
Submitted	:	••••••	

KRAYCHIK, M.M., kandidat tekhnicheskikh nauk

Methods of increasing the dynamic strength of welded joints in building and repairing railrond cars. Trudy "SNII MPS no.95: 5-46 '54.

(Railroads--Cars—Welding)

(Railroads--Cars—Welding)

ERAYCHIK, M.M., kandidat tekhnicheskikh nauk

Technology of electric rivet welding under a layer of flux.

Trudy TSNII MPS no.95:47-83 '54. (MLRA 8:6)

(Railroads--Cars--Welding)

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KRAYCHIK, M.M., kandidat tekhnicheskikh nauk; OBUKHOV, A.V., inzhener

The strength of spot welded joints used in railroad car construction. Trudy TSNII MPS no.95:84-131 '54'. (MLRA 8:6) (Railroads--Gars--Welding)

AID P - 4819

: USSR/Engineering Subject

Pub. 107-a - 5/13 Card 1/1

: Kraychik, M. M. and N. V. Pashkov Authors

Investigation of the weldability of the 25L steel Title

Svar. proizv., 3, 17-20, Mr 1956 Periodical

The authors investigated the weldability of 25L steel, Abstract

which is widely used in parts for rolling stock and is repaired by welding whenever possible. The UONI-13/55 electrode used in welding procedure was found to provide the needed strength and cold brittleness of this steel. Four tables, 5 graphs and 1 photo, several GOST standards and 1 Russian (1951) reference.

Institution: All-Union Central Scientific Research Institute of the

Ministry of Railways.

Submitted : No date

> CIA-RDP86-00513R000826310019-1" APPROVED FOR RELEASE: 06/14/2000

KRAYCHIK, M.M.; SHKOL'NIK, L.M.; MAYSNER, B.A.

Method for fatigue bending tests on weldments. Zer leb

Method for fatigue bending tests on weldments. Zav. lab. 22 no.12:1472-1479 '56. (MLRA 10:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zheleznodorozhnogo transporta.

(Metals--Testing) (Welding--Testing)

Strength of welded joints made of improved bessemer steel. Trudy
TSNII MPS no.116:99-109 56. (MLRA 9:11)
(Steel-Welding)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000826310019-1"

KRAYCHIK, M.M., kandidat tekhnicheskikh nauk.

Strength of welded joints in low-alloy steels. Trudy TSHII MPS no.116:209-234 \*56. (MLRA 9:11)

(Steel, Structural--Welding)

307-135-58-2-5/18

AUTHORS: -Kraychik, K.M. and Ratner, R.S., Candidates of Technical

Sciences

THE PROPERTY OF THE PROPERTY O

TITLE: Vibration Strength of Weld Joints of Low-Alloy and Low-Carbon Steel (O vibratsionnoy prochnosti svarnykh soyedi-

neniy iz nizkolegirovannykh i malouglerodistykh staley)

Svarochnoye proizvodstvo, 1958, Nr 2, pp 18 - 22 (USSR) PERIODICAL:

Information is presented on experimental investigations ABSTRACT:

carried out in order to reveal the effect of the vibration load cycle on the strength of weld joints in low-alloy and low-carbon steel. Equal strength 'imits of low-alloy and low-carbon steel with a high stress concentration were observed in cycles approaching symmetry and were maintained in cycles with positive asymmetry. Difference in fatigue limits increased in proportion to increasing asymmetry of cycles in the case of a slight stress concentration and of a marked o -difference for the base metal, where the advantage of low-alloy steel prevails with increasing asym-

metry of the cycle. There are 3 tables, 3 diagrams, 4 Card 1/2

Vibration Strength of Weld Joints in Low-Alloy and Low-Carbon Steel

photos, 2 graphs and 7 references, 5 of which are Soviet and 2 English

ASSOCIATIONS: Tanii MPS and Moskovskiy transportno-ekonomicheskiy institut (Moscow Institute of Transport Economics)

Card 2/2 l. Welded joints--Vibration

AUTHOR: Kraychik, M.M., Candidate of Technical Sciences 135-58-7-8/20

TITLE: On Methods of Evaluating Toughness and Cold Brittleness in Zones Adjacent to Weld Joints (O metodike otsenki udarnoy

vyazkosti i khladnolomkosti okoloshovnoy zony svarnogo soye-

dineniya)

PERIODICAL: Svarochnoye proizvodstvo, 1958, Nr 7, pp 27-29 (USSR)

ABSTRACT: The expediency of evaluating the toughness of weld joints, according to results of experiments carried out on (GOST 6906-

54) standard and T-specimens, is discussed and the following conclusions are made: 1) a comparison of test results has shown that the standard and the T-joint specimens give different results; 2) the standard specimens show different cold brittleness of low-alloy steel and low-carbon rimming steel in weldadjacent zones, while T-specimens do not reveal any such difference; 3) T-speciments, which resemble the real structure

joints, reflect better the real work of a structure. The article is published for discussion and the author thanks Frofessor N.P. Shchapov, Doctor of Technical Sciences, for his

valuable advice on this subject.

There are 2 tables, 2 photos, 1 schematic drawing and 5 Soviet

Card 1/2 references.

> CIA-RDP86-00513R000826310019-1" APPROVED FOR RELEASE: 06/14/2000

135-58-7-8/20

On Methods of Evaluating Toughness and Cold Brittleness in Cones Adjacent to Weld Joints

ASSOCIATION: TSNII MPS

1. Welded joints---Mechanical properties

Card 2/2

807-135-58-11-3/21

AUTHORS: Kraychik, M.M., Candidate of Technical Sciences and Pashkov,

N.V., Technician

TITLE: Methods of Determining Toughness and Cold Brittleness of Weld

Joints in Manual and Semi-Automatic Welding (O metodike opredeleniya udarnoy vyazkosti i khladnolomkosti shvov, vypolnen-

nykh ruchnoy i poluavtomaticheskoy svarkoy)

PERIODICAL: Sverochnoye proizvodstvo, 1958, Nr 11, pp 7-10 (USSE)

ABSTRACT: Tests on the toughness and cold-brittleness of multi-layer

welded seams were carried out with specimens having a notch in the lowest layer, which was not affected by thermal treatment. It was stated that the toughness and cold-brittleness of the weld joint depend on the location of the notch, i.e. whether this notch is situated in the lowest layer, which was not affected by heat, or in a layer affected by heat. This lowest layer serves to determine cold-brittleness of the weld joint. Specimens with a horizontal or vertical notch have similar toughness and cold-brittleness. It is recommended to use specimens with vertical notches for toughness tests of

Card 1/2 manually or semi-automatically welded joints. Fracture tests

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SOV-135-58-11-3/21

Methods of Determining Toughness and Cold Brittleness of Weld Joints in Manual and Semi-Automatic Welding

of specimens reveal the thickness of the layer, unaffected by heat, by its larger grain size.

There are 3 tables, 1 graph, 1 diagram, 1 photo and 3 Soviet references.

ASSOCIATION: TSNII MPS

1. Welded joints--- Properties 2. Welded joints--- Test results

Card 2/2

ERAYCHIK, M.M., kand.tekhn.nauk

Investigating weldability of low-alloy steels to be used in namnfacturing railroad cars. Trudy TSNII MPS no.164:73-117
'58. (MIRA 12:2)

(Steel, Structural-Welding-Testing)

25(1); 25(6)

PHASE I BOOK EXPLOITATION

。 1914年中的国家,国际经济的中国政策中国国际的国际中国政策的国家。 1914年中国大学的国际,1914年中国大学的国际中国大学的国际,1914年中国大学的大学的工作,1914年中国大学的工作,191

sov/3575

- Vinogradov, Yu.G., Ye.A. Greyl', M.M. Kraychik, and V.B. Shlyapin
- Metody issledovaniya kachestva svarki (Methods of Quality Control of Welded Joints), Moscow, Transzheldorizdat, 1959. 132 p. 1,200 copies printed. (Series: Vsesoyuznyy nauchno-issledo-vatel'skiy institut zheleznodorozhnogo transporta. Trudy, vyp. 175)
- Ed. (Title page): V.B. Shlyapin, Candidate of Technical Sciences; Ed. (Inside book): A.V. Popov, Engineer; Tech. Ed.: P.A. Khitrov.
- PURPOSE: This book is intended for technical and scientific personnel concerned with the welding of various parts and structures.
- COVERAGE: The book deals with welding defects and their detection, as well as with mechanical testing and metallographic investigation of welded joints. There are 28 references, all Soviet.

Card 1/3

Methods of Quality (Cont.) SOV/3 TABLE OF CONTENTS:	575
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II. Detection of Flaws in Welded Joints 1. Visual inspection of welds 2. Inspection of welds for leaks 3. Inspection by drill probes 4. Inspection by X rays and gamma rays 5. Dye-penetrant method of inspection 6. Ultrasonic inspection 7. Magnetic inspection	9 10 12 13 32 34 37
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AVAILABLE: Library of Congress Card 3/3	VK/Jb 4-12-60

18(7) 309/135-59-6-5/20

MANOR: Kraychik, M. M., Candidate of Technical sciences

Will: Weld Joints Characteristics of 10 Kh G H Steel

MCDICAL: Sverochnoye Proizvodstvo, 1959, Nr 6, pp 16-19 (USSR)

The author describes the investigation of two kinds of melted 10 Kh G N Steel in plates of 12 m. One of them

has been melted (Nr 2502) from Khalilovo-cast iron, and the second (Nr 2508) from a normal iron and with a loying elements (Table 1). Moreover, the stacks 13T 3 and 09 G 2, investigated before, have been tooted once again. The melting was corried out the algebraic and the melting was corried out the algebraic and the second out the second out to the second out the second out the second out to the second out the second out the second out to the second out the second o

The melting was carried out by electrode wirse of a small C-hydrate percentage of the kind Jv-6.3, under the flux AN-348A. The definition of the percussive roughness is given in Table 2. The nonograms are given accor-

ding to that of N. H. Rykalin Ref 4. The results (Fig 1, Table 2) render it possible to state that the reaction of 10 Kh. G N steel on the influence of welding

is quite satisfactory. The statistical firmness of weld joints of 10 Kh G N steel is shown in Table 3. The re-

Joints of 10 km 6 W steel 18 Shown in Thole 3. The 10-0 rd 1/3 sults of the percussive investigations of welder second

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Wold Joints Characteristics of 10 Km G N Steel

30V/135-59-6-5/20

at 10 Kh G N Steel are represented in Table 4. The investigations of firmness of welded seams, regarding crystallization-fissure forming, have been carried out for 3 types (II, III and VI) which are recommended by GOST project. The model for type II was the already known T-beam model of the Institute for Electro-Welding imeni E. O. Paton (Institut elektrosvarki imeni E. O. Patona). Model III consisted of 2 plates with a diameter of 250  $\times$  110  $\times$  12 mm. Model VI had 2 plates with diameter of 12 x 120 x 120 mm. The investigations on model VI have been carried out in the laboratories NII under the direction of Kolodnaya, Engineer. Table 5 represents the analysis of the accomplished investigations (the critic speeds of deformation in mm/min). The author states that 10 Kh G N steel belongs to the kind of steels easily welded. Moreover, the weld joints have a good capacity for deforming and a good percussive toughness. 10 Kh G N steel is a little better than M S t 3 steel. UONI - 13/55 electrodes are recommended for welding. There are 5 tables, 3

Card 2/3

Weld Characteristics of 10 Km G N Steel

JUV/135-5y-6-5/20

graphs, 1 diagram and 5 Soviet references.

ABBOOLATION: TSNII MPS

Card 3/3

18(5)AUTHOR: SOV/125-12-2-0/14

Kraychik, M.M., and Shlyapin, V.B.

TITLE:

The Search for a Method of Repairing Crack Lamage Using One-Sided Welding (Izyskaniye sposoba vosstanovleniya povrezhdennogo treshchinoy mesta pri odnostoronney svarke)

PERIODICAL:

Avtomaticheskaya svarka, 1959, Vol 12, Nr 2, pp 71-75

THE SECTION OF THE PROPERTY OF

ABSTRACT:

Various parts can often be welded from only one side if cracks are found in them (e.g. the frame of rail trucks, etc.). In these cases a method of cutting out the crack is needed which would ensure the greatest heating of the damaged section and would reduce to a minimum the nonfusing of the edges, 4 types of experiment are illustrated by different methods: & using machinery, 1 using electric-arc smelting of the channel, and the fourth using a through-cut (either by machinery, electric-arc or gas smelting). It was found that a Y-shared crack can only be satisfactorily removed by using an electric are in the vertical position, because otherwise great uneven-

Card 1/3

The Search for a Method of Repairing Crack Lamage Using One-Sided Welding

ness results, no matter what electrodes are used. results were obtained when the edges of the cut had axes forming an angle of 40-600, clearance between the edges being 4-5 mm. Detailed recommendations are made to this end. It was found that the main reason for the formation of cracks when welding in the remaining lining was high sulphur content which was up to 0.16%. When cutting a lining made of St3 with a phosphorus and sulphur content in accordance with GOST 280-50, no cracks appeared. The article then describes fatigue tests on 3 series of girders to compare their resistance to vibration. Each girder was welded with differently cut edges. Their fatigue life is shown in a table. The conclusions are that of 3 types of one-sided cutting (triangular and trapezoidal by mechanical methods, and arc-smelting) preference should be given to mechanical cutting with an opening angle of not less than 80°. Secondly when welding a lining in situ, as a rule the edges are fully heated. In production conditions preparation of cracks

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Card 2/3

The Search for a Method of Repairing Crack Damage Using One-Sided Welding

should be done by a gas-oxygen cut. Thirdly the girders which have the longest fatigue life are those in which cracks are welded on the remaining lining. There are 3 illustrations, 2 tables and 1 Soviet reference.

ASSOCIATION: TSNII MPS SSSR

SUBMITTED: May 12, 1958

Card 3/3

KRAYCHIK, M.M., kand.tekhn.nauk; YEMEL'YANOV, N.P., kand.tekhn.nauk;

Maksimov, V.N., inzh.

Methods of reducing residual stresses in wheel rims after spot welding of the rolled iron. Vest.TSNII MPS 18 no.1:35-38 F '59.

(Car wheels--Welding)

(MIRA 12:3)

BOYCHEVSKIY, O.G., kand.tekhn.nauk; VOLOKHVYANSKAYA, B.S., kand.tekhn.
nauk; KRAYCHIK, M.M., kand.tekhn.nauk

Causes of destruction in freight car truss rods. Vest.TSNII
MPS 18 no.2:47-51 Mr 159.

(Railroads--Freight cars)

(Steel, Structural--Testing)

KRAYCHIK, M.M., kand. tekhn. nauk; SHLYAPIN, V.B., kand. tekhn. nauk

Causes of damages occuring in the truckframe of the TE3 diesel
locomotive and remedy measures. Vest. TSNII MPS 18 no.5:28-31 Ag

(Diesel locomotives)

#### CIA-RDP86-00513R000826310019-1 "APPROVED FOR RELEASE: 06/14/2000

\$/135/60/000/008/002/010 A006/A002

AUTHORS:

Kraychik, Candidate of Technical Sciences, Pashkov, N.V., Technician

TITLE:

The Estimation of the Proneness to Brittle Failure of Structural Steel From Its Reaction to Electrode Burnings

PERIODICAL:

Svarochnoye proizvodstvo, 1960, No. 8, pp. 6-9

TEXT: It is practically impossible to prevent welded structures from accidental electrode burnings; the estimation of the proneness of steel to burnings must be considered as one of the characteristics in the weldability of steel. A method was developed to estimate the sensitivity of steel to electrode burnings, determined from the critical temperature of brittleness which was established by a series of impact tests on specimens of  $12 \times 8 \times 55$  mm with a notch in the form of an electrode burning. The burning was produced by contacting the steel surface rapidly with an uncoated ordinary steel electrode of 3 mm in diameter (100 amp d-c of reverse polarity). The burning results of tests carried out with burnt and standard notched specimens are given in Table 2. The tests with standard notched specimens were made by E.S. Volokhvyanskaya, Candidate of Technical Sciences. It was established that electrode burnings may be successfully used for evaluating

Card 1/3

S/135/60/000/008/002/010

The Estimation of the Proneness to Brittle Failure of Structural Steel From Its

the proneness to brittleness of steels having very thin surface-strengtheded layers (formed by vibro-hardfacing, cold hardening and other forms of surface treatment) for which the existing method of applying notches is unsuitable. The sensitivity to burning of "10/5H" (10KhGN), "09 7 2" (09G2) and "//+.3" (MSt.3) steel was low (after appropriate heat treatment); "14[2" (14G2) and all the investigated MSt.3 melts which were not heat treated, were highly sensitive to electrode burning. The critical temperature of brittleness obtained for notched and burnt specimens was equal. To reveal the causes of this similar effect, metallographic investigations were made. Data obtained permit the hypothesis that the burning produces on the metal surface a zone of reduced ductility down to a depth of 0.7 mm which is equal for all the steels investigated and corresponds to a standard notch by its effect on the critical temperature of brittleness. The properties of this notch do practically not vary within the micro-hardness limits obtained on the microsections of various steels. The notch sensitivity of these steels is determined by the properties of the metal that was not affected by burning. It is also possible that the roughness of the macrorelief of the burning intensifies the notch effect. The equal value of the critical temperature of

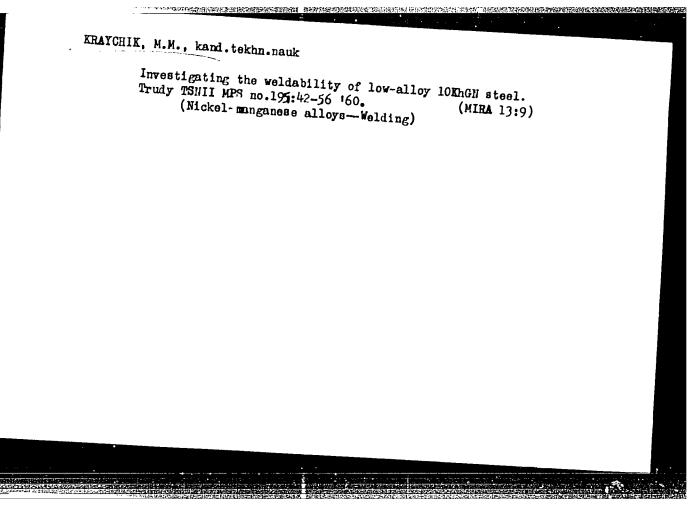
S/135/60/000/008/002/010

The Estimation of the Proneness to Brittle Failure of Structural Steel From Its Reaction to Electrode Burnings

brittleness for burnt and notched specimens is insofar important, as many scientists consider that the presence of electrode burnings in low carbon steel does not present any danger, while it is beyond any doubt that the presence of notches as stress concentrators is inadmissible in the structures. However, the similar value obtained can not be applied to all structural steels until more data for other steel grades have been gathered. In the meantime the sensitivity of steel to electrode burnings can be only determined from results obtained by tests with burnt specimens. It is recommended to eliminate the harmful effect of burnings by grinding the spot to a depth of not less than 0.7 mm. There are 3 tables, 5 figures and 4 references: 3 Soviet and 1 English.

ASSOCIATION: TENII MPS

Card 3/3



\$/124/62/000/001/044/046 D237/D304

AUTHORS:

Kraychik, M. M., and Ratner, R. S.

TITLE:

Fatigue limit and methods of its improvement in

welded joints in low-alloy steel

PERIODICAL:

Referativnyy zhurnal, Mekhanika, no. 1, 1962. 53, abstract 1V468 (Tr. Vses. n.-1, in-ta zh. d. transp., 1960, no. 195, 146-161)

Reference data are quoted of the dependence of the magnitude of the fatigue limit on the coefficients of asymmetry of cycles for welded joints of the steels CT.37 (St. 37) and CT.52 (St. 52). Details are given of the authors investigation of the welded H beam and diagrams of fatigue limits of welded joints in the steels of type M and McT 3 (Mst. 3) versus the magnitude of average stresses. Experimental data are compared with the results of analytical constructions by the method of B. N. Duchinskiy and others. It is shown that in investigating

Card 1/2

Fatigue limit and ...

S/124/62/000/001/044/046 D237/D304

welded constructions when the stressed state is rigid, fatigue limit of articles made of the low-alloy steel can be higher than that for low-carbon steels, while in less rigid state they are approximately equal. It was found experimentally that after the hammering of joints, their fatigue limit rises by 80% for the corner welds and by 50% for the butt welds for the constructions to both low-carbon and low-alloy steels. Abstracter's note:

Card 2/2

1.2300 1573

<sup>3</sup>99999 26014 S/135/61/000/008/003/011 A006/A101

AUTHORS:

Kraychik, M.M., Candidate of Technical Sciences, Maksimov, V.N.,

TITLE:

The nature of weld joint failure depending on temperature

PERIODICAL:

Svarochnoye proizvodstvo, no. 8, 1961, 9 - 10

The nature of failure in welded structures serves to determine the TEXT: causes. Therefore a comparative evaluation of the impact strength of welded Joints at - 40 to + 20°C was made on M(T.3 (MSt.3) and 09 2 (09G2) steel specimens. The chemical composition and mechanical properties of the steels are given in a table. The tests proved that the nature of failure for different specimens is of an impact-fatigue type at room and negative temperatures (-10°C), the initial cracks arise in spots with greatest local stresses, as e.g. the border of the face weld. At lower temperatures (-40°C) the steel becomes sensitive to brittle failure; MSt.3 steel, e.g. mainly in the section adjacent to the face weld end and the angle formed by the face weld end and the edge of the strap. It is concluded that the nature of break of a weld (the seat of the crack and the trajectory of its expansion) are not only determined by the shape and dimensions

The nature of weld joint failure ...

**聖秀聖** 26014 S/135/61/000/008/003/011 A006/A101

of the structure and the maximum magnitude of actual stresses, but also by the properties of the steel and the temperature at which the failure occurred. There are 2 tables, 3 figures and 3 Soviet-bloc references.

ASSOCIATION: TSNII MPS

Card 2/2

KRAYCHIK, M.M., kand.tekhn.nauk; TSKIPURISHVILI, V.B., kand.tekhn.nauk
Analyzing the causes of damage in welded locomotive structures
at low operating stresses. Vest. TSHII MPS 20 no.4:28-31 161.

(Locomotives--Construction) (Metals-Fatigue)

。1990年的新疆中部的特别的美国中国的特别的特别的一种,我们们的基础的影响的特别的自己的影响。1990年的特别的一种特别的最后的特别的基础的基础的基础的数据的

SHCHAPOV, N.P., doktor tekhn.nauk, prof.; KRASOVSKIY, A.I., kand.tekhn.nauk; VOLOKHVYANSKAYA, E.S., kand.tekhn.nauk; KRAYCHIK, M.M., kand.tokhn.nauk; MAKSIMOV, V.N., inzh.; KCTIL'NIKOV, V.L., inzh.; KUZNETSOV, V.A., inzh.

Properties and the weldability of St. 3kp steel with a high arsenic content. Svar. proizv. no.2:1-7 F 162. (MIRA 15:2)

(Steel alloys—Welding)

Investigating the weldability of converter steel. Svar.proixv.
no.ll:4-7 N '62. (MIRA 15:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zheleznodorozhnogo transporta Ministerstva putey soobshcheniya.

(Steel-Welding)

5/135/63/000/004/002/012 A006/A101

AUTHORS:

Kraychik, M. M., Candidate of Technical Sciences, Maksimov, V. N.,

Engineer

TITLE:

The effect of individual factors upon the resistance to brittle

failure of welded structures

CHARLES OF THE SECTION OF THE SECTIO

PERIODICAL: Svarochnoye proizvodstvo, no. 4, 1963, 6 - 9

The authors studied the problem of brittle failure in welded joints TEXT: at low temperatures (-42 to -45°C) and under impact load. The tests were made with a welded low-carbon sheet-steel double T-rail of box-shaped section, having a crack-shaped notch. To reveal the effect of the sequence of applying the seams, a crack-shaped noten. To reveal the effect of the sequences, predetermining the presence or the rails were welded with different sequences, predetermining the presence or absence of reactive stresses in the notch zone. Welding was performed with CMM-5 electrodes, 5 mm in diameter for angular welds, and 4 mm in diameter, to apply the first layer in butt welds. The rails were cooled down and subjected to impact tests on a single-pendulum YKM (UKM) ram. Some rails were tested 2 - 3 weeks after welding, another portion after one year. It was found that 2 - 3 weeks after welding the resistance to brittle failure of rails with reactive stresses was Card 1/2

The effect of individual factors upon the ...

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450 kg/cm<sup>2</sup>, independent of the notch depth (4 - 6 mm) against 1,470 and 3,260 kg kg/cm² in rails without reactive stresses. The brittle failure resistance increased after one year from 450 to 2,130 kg/cm² and from 1,470 to 3,160 kg/cm² respectively. This increase in brittle failure resistance is determined by the sensitivity to brittle failure in the notch. In rails with maximum, medium and least sensitivity to brittle failure this increase was 370, 114 and 0% respectively. These changes in the weld metal of the notch, revealed within one year, may be caused by one or several factors, such as stress relaxation, aging, or rediffusion of hydrogen. To reveal the decisive factor, further investigations should be car-

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AUTHOR:

Kraychik, M. M., Candidate of Technical Sciences

TITLE:

A Conference on cold brittleness of steel and the resistance of

welded structures to brittle failure

PERIODICAL: Svarochnoye proizvodstvo, no. 4, 1963, 44 - 45

TEXT: The Conference took place in Leningrad from December 11 - 14 and was attended by representatives of 23 organizations from Moscow, Leningrad, Kiyev and other cities. Professor N. O. Okerblom, held an introductory report on the importance of the problems submitted for national economy. The Conference then heard the following reports: A. V. Stepanov, Physico-Technical Institute imeni A. F. Ioffe, on the physical nature of brittle failure; B. S. Kasatkin, Institute of Electric Welding imeni Ye. O. Paton, on "Micromechanism of brittle failure in low-carbon steel"; N. N. Davidenkova, and V. D. Yaroshevich, Physico-Technical Institute imeni A. F. Ioffe, on "The effect of the nature of strained state upon brittle strength"; M. Kh. Shorshorov, IMET imeni Baykov, on "Inhibited failure of steel and titanium alloys and the strength of welded structures"; N. N. In'shakov,

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TsNII MPS, on "Sensitivity of cast carbon and low-alloy steels to notches of different sharpness during impact and tensile tests of large C-shaped specimens"; B. P. Alentov and A. V. Noskin on "The part of some factors in the formation of brittle failure sensitivity in structural steels"; N. P. Shchapov and E. S. Volokhvyanskaya (TsNII MPS) on "Comparison of low-alloy manganese steels with close manganese and different carbon content"; and "Comparative evaluation of brittle failure sensitivity in converter and open-hearth steel"; R. A. Tyagunova and K. V. Popov, Angarsk Institute of Petroleum- and Carbon-Chemical Synthesis, on "Cold brittleness of converter steels"; V. F. Zubarev, Zhdanov Metallurgical Institute, on "Cold brittleness of low-carbon arsenous steel produced on Kerch deposit ore base"; T. A. Konstantinova, Kommunarsk Metallurgical Plant, on "The effect of heat treatment upon toughness and mechanical aging of sheet steel, intended for gas pipes"; V. A. Makurin, NII of Bridges, on "Resistance to brittle failure of some low-alloy steel grades"; Yu. N. Maslova, Zhdanov Heavy Machinebuilding Plant, on "The effect of chromium, manganese and heat treatment conditions upon cold brittleness of cast chrome-nickel-manganese-molybdenum steel"; M. Ya. Shashin, North-West Polytechnic Correspondence Institute, on "Increased failure resistance in repeated impacts when strengthening treatment is used"; K. V. Popov, V. F. Zakharov, V. G. Savitskiy, Angarsk Institute of Petroleum and Card 2/4

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Carbon-Chemical Synthesis, on "Investigating localization of plastic deformation in connection with the problem of cold brittleness"; "Simulation investigations of cold brittleness"; "Analysis of some characteristic cases of cold brittleness in welded structures"; "On the calculation of strength by taking into account cold brittleness"; N. O. Okerblom on "The resistance of welded structures to brittle failure"; Ya. B. Fridman, T. K. Zilova, B. A. Drozdovskiy, B. A. Novosel'tseva (Moscow) on "Strength and sensitivity to cracks in sheet materials"; P. O. Pashkova, Volgograd Mechanical Engineering Institute, on "Spontaneous failure in deformation of solid bodies"; G. V. Zhemchuzhnikova, IES imeni Ye. O. Paton, on "The problem of determining the resistance of steel to the propagation of brittle cracks"; S. I. Aleksandrov, Leningrad, on "The evaluation of cold brittleness of building steel from results of tests with large notched plates"; A. S. Rakhmanov and L. S. Livshits, VNIIST Moscow, on "Evaluating the brittleness of container and pipe metal"; M. M. Kraychik, V. L. Kotel'nikov and V. N. Maksimov, TsNII MPS, on "Evaluating that proneness of steel to brittle failure under the effect of welding"; "The effect of various factors upon brittle failure of welded structures of rolling stock; L. A. Kopel man, LPI imeni Kalinin, in Leningrad, on the results of theoretical investigations of the effect of residual stresses upon the proneness

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A Conference on cold brittleness of...

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of low-carbon steel to brittle failure at low levels of medium stresses from external loads; I. A. Razov, Leningrad, on basic methods in evaluating the proneness of steels to cold brittleness, applied in the USSR and abroad; A. Z. Khazanova, Gidrostal'proyekt, Leningrad, on the use of steels in projected hydromechanical equipment; V. K. Chukreyev, Institute of Geography, AS USSR, on "The evaluation of thermal conditions in the North-East territory of the USSR for the operation of machines and mechanisms": The Conference established the basic directives of further research. The next Conference on cold brittleness problems will be held in Kiyev in 1964.

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KRAYCHIK, M.M., kand.tekhn.nauk; KOTEL'NIKOV, V.L., inzh.

Weldability of converter steel and the development of methods of investigation. Trudy TSNII MPS no.252:54-83 '63. (MIRA 16:8) (Steel-Welding)