KORNIKOV, N.A.

Jarosite from the Kola Peninsula. Mat.po min.Kol'.poluost.
1:121-126 '59.   (MIRA 15:2)
            (Kola Peninsula--Jarosite)

ROSTOVTSEV, N.; DOBRYNIN, P.; TIKHOMIROV, V.; LOGACHEV, A.; SHAKUN, V.;
    GRUDEV, D.; KUDRYAVTSEV, P.; MALEYEV, M.; SOKOV, N.; KORNIKOV, V.;
    TOLOKONNIKOV, A.; PUSTOVALOV, A.; RED'KIN, A.; BLOMKVIST, M.;
    PETROV, N.; SHUBSKIY, I.; SEMENOV, S.; POPOV, G.; BRODOV, K.;
    KORENEV, P.

    Professor M.N. IAkovlev; obituary. Zhivotnovodstvo 19 no.12:90
    D '57.   (MIRA 10:12)
              (IAkovlev, Mitrofan Nikolaevich, 1878-1957)

KORNIKOV, Yu.G.

Development of automation and telemechanics in the gas industry.
Avtomatyka no.3:21-31 '57.   (MIRA 10:10)

1. Institut vikoristannya gasu Akademii nauk URSR.
              (Gas industries)   (Automatic control)

KORNIKOV, Yu. G.

PHASE I BOOK EXPLOITATION   SOV/4526

POKROVSKIY, V.M.; DIBINSKIY, V.G.; KORNILAYEV, A.N.

Effective use of intrafarm pipelines for subsequent pumping of
different petroleum products. Trudy VNII NP no.5:137-147 '56.
(MLRA 9:8)

(Petroleum--Pipelines)

KORNILAYEV, A.N.
AKDROMENKOV, A.A.; ZASLAVSKIY, Yu.S.; VARGIN, A.A.; KORNILAYEV, A.N.; LAPIN,
V.P.

Controlling consecutive pumping of petroleum and petroleum products
through pipelines by use of gamma-densitometer. Neft. khoz. 35 no.12:
60-61 D '57.   (MIRA 11:2)
                    (Petroleum--Transportation)
                    (Gamma rays--Industrial application)

KONDUKOV, N.B.; KORNILAYEV, A.N.; SKACHKO, I.M.; AKHROMENKOV, A.A.;
    KRUGLOV, A.S.

Studying the parameters of the motion of particles in a pseudo-
fluidized bed by the radioisotope method. Inzh.-fiz. zhur. 6 no.7:
13-18 Jl '63.   (MIRA 16:9)

1. Institut khimicheskogo mashinostroyeniya, Moskva i Institut
neftyanoy promyshlennosti, Moskva.
        (Fluidization) (Radioactive tracers)

EWP(m)/EWP(t)/EWP(b)   Peb   DIAAP   JD

Kondukov, N. B.; Kornilayev, A. N.; Akhromenkov, A. A.; Skachko, I. M.;

parameters of particle motion ... ... the radio-
Particle kinematics

...erno-fizicheskiy zhurnal, no. 2, 1964,

particle motion,fluid mechanics, chemical labelling. radioisotope

This paper presents an analysis of the results of an experiment de-
scribed in a paper by the authors (Inzhenerno-fizicheskiy journal, No. 2,
... is given showing the paths of the particles ... the vertical, and
sections in a mono-dispersion fluidized bed. The velocity components
... in the bed are obtained. A discussion is given of the errors in
fig. art. has: 8 graphs.

APR 1 1961

Institut po pererabotke nefti, Moscow (Institute of Petroleum Processing); Institut khimicheskogo mashinostroyeniya, Moscow (Institute of Machine Building)

ENCL: N   NP, MS

OTHER: XO2

KORNILAYEV, G. P.

Kornilayev, G. P.

"The Tactics of Surgical Treatment of Inguinal and Pelvic Hernias Based on Clinical Data." Bashkir State Medical Inst imeni 15th Anniversary VLKSM. Ufa, 1955. (Dissertation for the Degree of Candidate in Medical Science.)

So: Knizhnaya letopis', No. 27, 2 July 1955

KRYLOV, A.P.; KORNILAYEV, V.N.

Determining oil losses in reservoir D_1 of the Tuymazy region depending on well spacing. Nauch.-tekh.sbor. po dob.nefti. no. 14:25-30 '61.

(MIRA 17:6)

BRYKINA, M.M.; GATTENBERGER, Yu.P.; KORNILAYEV, V.N.; MIKHAYLOVSKIY, N.K.;
    POLIKARPOVA, R.V.; RYBIN, F.S.

Improving methods for the field and geological study of oil reservoir
rocks in order to monitor and control development. Nauch.-tekh. sbor.
po dob. nefti no.22:76-79 '64.   (MIRA 17:9)

1. Vsesoyuznyy neftegazovyy nauchno-issledovatel'skiy institut.

BURDAKOVA, Ye.A.: VEDERNIKOVA, N.A.; KORNILAYEVA, N.P.

Antidepressive action of transamine; preliminary report. Zhur.
nevr. i psikh. 62 no.12:1813-1814'62   (MIRA 16:11)

1. Kafedra psikhiatrii (zav. - prof. A.S. Poznanskiy) Bashkir-
skogo meditsinskogo instituta i Bashkirskaya respublikanskaya
psikhonevrologicheskaya bol'nitsa (glavnyy vrach P.O.Akopyan),
Ufa.

KOZOCHKINA, Yelena Dmitriyevna; SHEVTSOV, N.S., prof., red.;
    KORNILENKO, V.S., red.; GEORGIYEVA, G.I., tekhn.red.

[Struggle of the Communist Party to build a second coal
reserve in the Soviet Union] Bor'ba Kommunisticheskoi
partii za sozdanie vtoroi ugol'noi bazy Sovetskogo Soiuza.
Izd-vo Mosk.univ., 1959. 36 p.   (MIRA 12:6)
        (Kuznetsk Basin--Coal mines and mining)

KLYUYEVA, K.A.; IVANOV, K.Ye., doktor geogr.nauk, red.; KORNILENKO, V.S.,
red.; ZARKH, I.M., tekhn.red.

[Effect of swamps in the drainage basin on annual distribution of
streamflow in rivers of the White Russian S.S.R.] Vliianie zabo-
lochennosti vodosborov na vnutrigodovoe raspredelenie stoka rek
BSSR. Pod red. K.E.Ivanova. Moskva, Gidrometeor.izd-vo, 1959.
233 p. [___ Graphs] ___ Grafiki.   (MIRA 13:6)
        (White Russia--Rivers)   (Swamps)

BLINOV, L.K., nauchnyy sotrudnik; TSURIKOVA, L.K., nauchnyy sotrudnik;
PAKHOMOVA, A.S., nauchnyy sotrudnik; SOPACH, E.D., nauchnyy
sotrudnik. Prinimali uchastiye: PONSOV, A.G.; KALASHNIKOVA,
V.V.; KIRILLOVA, Ye.P.; LOS', B.M.; LEBEDEVA, G.V.; KORNILENKO,
V.S., red.; ZEMTSOVA, T.Ye., tekhn.red.

[Manual of marine hydrochemical investigations for hydro-
meteorological observatories and marine hydrometeorological
stations] Rukovodstvo po morskim gidrokhimicheskim issledo-
vaniiam; dlia gidrometeorologicheskikh observatorii i morskikh
gidrometeorologicheskikh stantsii. Pod red. L.K.Blinova. Moskva,
Gidrometeor.izd-vo (otd-nie), 1959. 255 p.

(MIRA 14:6)

1. Moscow. Gosudarstvennyy okeanograficheskiy institut. 2. Labo-
ratoriya khimii morya Gosudarstvennogo okeanograficheskogo
instituta (for Blinov, TSurikova, Pakhomova, Sopach).
(Water—Analysis)

PAKHOMOV, Leonid Afanas'yevich; PINUS, Naum Zinov'yevich; SHMETER,
Solomon Moiseyevich; KORNILENKO, V.S., red.; ZARKH, I.M.,
tekhn.red.

[Aeorological research on the variability of the atmospheric
refraction coefficient for ultrashort radio waves] Aerologi-
cheskie issledovaniia izmenchivosti koeffitsienta prelomleniia
atmosfery dlia ul'trakorotkikh radiovoln. Moskva, Gidrometeor.
izd-vo, 1960. 101 p.   (MIRA 14:1)
(Microwaves)   (Refraction)

KLYUKIN, Nikolay Konstantinovich; SOKOLOV, I.F., red.; KORNILENKO, V.S.,
    red.; YERSHOVA, T.S., tekhn.red.

[Climatic survey of the northeastern part of the U.S.S.R.]
Klimaticheskii ocherk Severo-Vostoka SSSR. Pod red. I.F.Sokolova.
Moskva, Gidrometeor.izd-vo, 1960. 116 p.   (MIRA 13:11)
    (Yakutia--Climate)   (Magadan Province--Climate)

DMITRIYEVA, Nataliya Georgiyevna; LEVIN, A.G., otv.red.; PIOTROVICH, V.V.,
    otv.red.; KORNILENKO, V.S., red.; ZARKH, I.M., tekhn.red.

[Elements of water economy and runoff forecast in the Amur Basin]
Elementy vlagooborota i prognoz stoka v Priamur'e. Moskva, Gidro-
meteor.izd-vo, 1960. 210 p.   (MIRA 14:1)
            (Amur Valley--Runoff)

SHULYAKOVSKIY, Lev Gertsovich; SAGATOVSKIY, N.V., otv.red.; KORNILENKO,
    V.S., red.; ZARKH, I.M., tekhn.red.

[Beginning of ice formation and freezing of rivers, lakes, and
reservoirs; calculations for prognostic purposes] Poiavlenie
l'da i nachalo ledostava na rekakh, ozerakh i vodokhranilishchakh;
raschety dlia tselei prognozov. Moskva, Gidrometeor.izd-vo, 1960.
215 p.   (MIRA 13:11)
              (Ice on rivers, lakes, etc.)

KORNILIN, N.V.

Raise street construction to a high engineering level. Zhil-kom.
khoz. 11 no.5:10-11 My '61.
(MIRA 14:7)

1. Glavnyy inzhener dorozhno-stroitel'nogo tresta, g. Yaroslavl'.
(Yaroslavl--Road construction)

Kornilin, V.V.

KORNILIN, V.V., inzhener; KLODIN, V.O., inzhener.

Building an all-welded bridge. Avt.dor. 20 no.6:13-15 Je '57.
(MIRA 10:10)

(Kustanay Province--Bridges, Iron and steel) (Electric welding)

KORNILIN, V.V.,inzh.; KLODIN, V.O.,inzh.

Replacing small spans without removing rails. Transp.stroi.
8 no.12:30 D '58. (MIRA 12:1)
(Railroad bridges--Maintenance and repair)

KORNILKOV, V. N.: *Cand* Master Tech Sci (diss) -- "The excavation of barriers around shafts under the conditions of the Chelyabinsk basin". Sverdlovsk, 1958. 15 pp (Min Higher Educ USSR, Sverdlovsk Mining Inst im V. V. Vakhrushev), 100 copies

(KL, No 6, 1959, 133)

KORNILKOV, V.N., inzh.

Determination of cost parameters for haulage and hoisting in Chelya-
binsk Basin mines. Izv.vys.ucheb.zav.; gor.zhur. no.7:29-33 '58.
(MIRA 12:3)

1. Sverdlovskiy gornyy institut.
(Chelyabinsk Basin--Mine haulage--Costs)
(Mine hoisting--Costs)

KORNILOV, A., inzh.; PAVLOV, V., inzh.

Machine manufacture of reinforced and mesh-reinforced concrete products. Na stroi. Ros. no.11:28-29 N '61. (MIRA 16:7)
(Precast concrete)

ANTYKOV, A.Ya., dots.; STOMOREV, A.Ya., st. prepod.; KORNILOV, A.,
nauchn. red.; GORA, G., red.

[Soils of Stavropol Territory] Pochvy Stavropol'skogo kraia.
Stavropol, Stavropol'skoe knizhnoe izd-vo, 1964. 51 p.
(MIRA 18:8)

1. Kafedra pochvovedeniya i agrokhimii Stavropol'skogo sel'-
skokhozyaystvennogo instituta (for Antykov, Stomorev).

KORNILOV, A.A.; KOSTINA, V.S.

Optimal area of pea leaves for the achievement of large crops.
Fiziol. rast. 12 no.3:551-553 My-Je '65.   (MIRA 18:10)

1. Kafedra rasteniyevodstva Stavropol'skogo sel'skokhozyayst-
vennogo instituta.

AUTHOR: Kornilov, A.A., Mechanic   91-58-6-8/39

TITLE: On the Defects of the "Sampo" 400 h.p. Locomobile (O de-
             fektakh lokomobilya "Sampo" 400 l.s.)

PERIODICAL: Energetik, 1958, Nr 6, pp 10 - 11 (USSR)

ABSTRACT: The locomobile boiler was found to be incorrectly mounted on
             its supports, leading to vibration and the emergence of con-
             tinuous cracks. The cracks were welded up and the attachment
             of the boiler to its supports strengthened by tightly-affixed
             cover plates which were then welded to the boiler. Welded con-
             necting plates were then in turn welded to the support clamps.
             There is 1 figure.

AVAILABLE: Library cf Congress

Card 1/1   1. Boilers-Maintenance   2. Boilers-Vibration

SOV/128-59-5-10/35

18(5)

AUTHOR: Kornilov, A.A. Engineer and Oreshkin, V.D.,
Canditate of Technical Sciences

TITLE: Forced Cooling of large-size Iron Castings in Individual and Small Series Production

PERIODICAL: Liteynoye Proizvodstvo, 1959, Nr 5, pp 19-21 (USSR)

ABSTRACT: In the machine tool factory imenii Voroshilov at Minsk, a new method for faster cooling of large size castings has been worked out. The special feature of this method is a caisson (Fig. 1) of 7200 x 300 x approx. 1000 mm, the bottom of which is made of fireproof bricks or cement. The castings which have to be cooled are put in in a checkered manner not surpassing the height of 150 mm. These pieces are covered with iron sheets of 3 mm thickness. By means of a ventilator, air is blown through in a longitudinal direction. Various examples are given, e.g. the bench of a large planing machine (24 tons) (see Fig. 2) which is put into the cooling device with a temperature of 320 - 350 $^\circ$C. The time

Card 1/2

SOV/128-59-5-10/35

Forced Cooling of large-size Iron Castings in Individual and Small Series.

of cooling is shortened from 7 to 2 days. Fig. (3) shows the frame (9.7 tons) of the planing machine, initial temperature is 200 - 280°C., the cooling time shortened from 3 to 1,5 days. Similar examples are shown in Fig. (4) and (5). There are 5 diagrams

Card 2/2

KORNILOV, A. A., REPKIN, V. D., VARTSUKOV, G. V. and CHESHIN, V. D.

"Investigation of Forced Cooling of Castings in Sand Moulds"

report presented at the 7th Conference on the Interaction of the Casting Mould
and the Casting, sponsored by the Inst. of Mechanical Engineering, Acad. Sci.
USSR, 25-28 January 1961.

ORESHKIN, V.D.; REPKIN, V.D.; KORNILOV, A.A.

Nomogram for determining the cooling time of large casts under conditions of accelerated cooling. Izv. Sib. otd. AN SSSR. no. 11:137-142 '61.
(MIRA 15:1)

1. Khimiko-metallurgicheskiy institut Sibirskogo otdeleniya AN SSSR, Novosibirsk.
(Founding)

ROMANOVA, I.S., kand.med.nauk; URSOVA, L.G., kand.med.nauk; KORNILOV,
        A.A.,kand.med.nauk

        Cases of a combination of hypertension and tumor of the brain
        with mental disorders. Trudy 1-go MMI 21:273-284'63.
                                                        (MIRA 16:9)

        1. Kafedra psikhiatrii (zav. - prof. V.M.Banshchikov) 1-go
        Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M.
        Sechenova.
                (HYPERTENSION)   (BRAIN--TUMORS)   (PSYCHOSES)

LISTVIN, I.A.; CHACHIN, V.P., red.; KORNILOV, A.A., prof., doktor
sel'khoz. nauk, red.

[Recommendations of a scientific industrial conference for
erosion control in Stavropol Territory] Rekomendatsii na-
uchno-proizvodstvennoi konferentsii po bor'be s eroziei
pochv na Stavropol'e. Stavropol.'-kraevoi, 1962. 14 p.
(MIRA 17:4)

1. Nauchno-tekhnicheskoye obshchestvo sel'skogo khozyaystva.
Stavropol'skoye krayevoye pravleniye. Agronomicheskaya sektsi-
ya. 2. Predsedatel' krayevogo pravleniye Nauchno-tekhniche-
skogo obshchestva sel'skogo khozyaystva (for Chachin).
3. Zamestitel' predsedatelya krayevogo pravleniya Nauchno-
tekhnicheskogo obshchestva sel'skogo khozyaystva (for
Listvin). 4. Stavropol'skiy sel'skokhozyaystvennyy institut
i predsedatel' agronomicheskoy sektsii pravleniya Nauchno-
tekhnicheskogo obshchestva sel'skogo khozyaystva (for
Kornilov).

KORNILOV, A. A.

27804. KORNILOV, A. A. — Utochnit' ponyatiye "Sort". Selektsiya i semenovodstvo, 1949, No. 9 S. 26-28

SO: Letopis' Zhurnal'nykh Statey, Vol. 37, 1949

KURILOV, A. A.

36318

O sortovom rayonirovanii travosmesey. Sov Agronomiya, 1949, No. 11, s. 65-69

SO: Letopis' Zhurnal'aykh Statey, No. 49, 1949

CTRSPL   Vol. 5-No. 1   Jan. 1952

Kornilov, A.A. (Karaganda Agricultural Experimental Station), The size of leaves as an indication of the conditional development of wheat, 787-90

Akademiya Nauk, S.S.S R., Doklady   Vol. 78, No. 4 -1951

OTRSPL   No. 43

Kornilov, A.A. (Karagandinsk Agricultural Experimental Station), The influence of the leaf
size on the formation of the spike in some types of wheat, 1033-6

Akademiya Nauk S.S.S.R.,   Doklady   Vol. 79 No. 6 , (ͻ͵ ͹

KORNILOV, A. A.

Oats

Fast-ripening Dolina oats GK-16 Sel. 1 sem., 19, No. 2, 1952

9. **Monthly List of Russian Accessions**, Library of Congress, __June 1952__ 1958. Unclassified.

KORNILOV, A. A.

Wheat

Selection of large-spiked hard wheat of high productivity. Sel. i sem. 19 no. 3, 1952

9. **Monthly List of Russian Accessions**, Library of Congress, June 1952 1953/ Unclassified.

1. KOR:.ILOV, A. A.

2. USSR (600)

4. Botany - Physiology

7. Predominant task in the field of plant physiology. Sel. i sem. 19 No. 11, 1952.

9. **Monthly List of Russian Accessions**, Library of Congress, ___February___ 1953, Unclassified.

KORNILOV, A-A.

KORNILOV, A.A.   and   VERTEMETSKAYA, V.V.

Propagation of "esparcete" in dry steppe regions and role of club-shaped bacteria.

Mikr biologiya. vol. 21, p.423. 1952.

KORNILOV, A. A.; VERSHLETSKAYA, V. V.

Sainfoin

Penetration of sainfoin into arid steppe regions and the role of nodule bacteria.
Mikrobioligiia 21, No. 4, 1952.

9. **Monthly List of Russian Accessions**, Library of Congress, November 1953? Unclassified.

KORNILOV, A.A.; OPARIN, A.I., akademik,

Completion of the light developmental stage of wheat. Dokl.AN SSSR 92 no.1: 173-176 S '53.

(MLRA 6:8)

1. Akademiya nauk SSSR (for Oparin).

(Wheat)

KORNILOV, Aleksandr Aleksandrovich

Karaganda Agricultural Experimental Station, Academic degree
of Doctor of Agricultural Sciences, base on his defense, 26
March 1954, in the Council of the Omsk Agricultural Inst imeni
Kirov, of his dissertation entitled: "Directed Culture of the
Hybrids of spring wheat and oats in the light stage as a method
of selection".

Academic degree and/or title: Doctor of Sciences

SO: Decisions of VAK, List no. 9, 16 April 55, Byulleten' MVO SSSR, No. 14,
Jul 56, Moscow, pp 4-22, Uncl. JPRS/NY-429

KORNILOV, Aleksandr Aleksandrovich.

[Millet; biology, breeding, seed growing, cultivation] Proso,
biologiia, selektsiia, semenovodstvo, agrotekhnika. Moskva, Gos.
izd-vo selkhoz.lit-ry, 1957.   255 p.   (MIRA 10:12)
(Millet)

Country   : USSR
CATEGORY   : Cultivated Plants. Grains.   M

ABS. JOUR.   : RZBiol., No. 21   1958, No.   95921

AUTHOR   : Kornilov, A.A.
INST.   : AS USSR
TITLE   : Control of Growth and Development Tempos as
                 a Means of Boosting the Productivity of Grain
                 Crops

ORIG. PUB.   : V sb.: Biol. osnovy oroshayem. zemled. M.,
                 AN SSSR, 1957, 449-463

ABSTRACT   : Karaganda Agricultural Experimental Station
                 conducted in 1946-1954 field and vegetation
                 tests with wheat and millet to study the
                 effect of a prolonged photoperiod on the
                 productivity of the plants and to find out
                 methods of controlling growth and develop-
                 ment rates in the plants. As control means,
                 one used shade and additional illumination
                 (in hothouses), side-dressing the plants with
                 different fertilizers during various phases

CARD: 1/2

COUNTRY   :
CATEGORY   :
                                                    M

ABS. JOUR. : RZBiol., No.21,   1958, No. 95921

AUTHOR   :
INST.   :
TITLE   :

ORIG. PUB. :

ABSTRACT   : of development, the application of irriga-
             tion, the use of hybrid plants and selection.
             An analysis is given of record crops and
             the results of the variety testing of millet
             in 1952-1953 and of wheat in 1953-1954. The
             bibliography lists 20 titles.--V.S. Shmal'ko

CARD: 2/2

                        15

AUTHOR   KORNILOV, A.A.,
TITLE   Resistance to Cold and Hardening of Zea Maize Plants.   20-5-56/60
          (Morozostoykost' i zakalka rasteniy kukuruzy -Russian)
PERIODICAL Doklady Akadem. Nauk SSSR, 1957, Vol 114, Nr 5, pp 1116-1119 (U.S.S.R.)

ABSTRACT   In publications on plant cultivation it is usually pointed out that
          maize, as a warmth-loving plant, is injured by frost of -2 and -3°C,
          and withers. In this connection cases were observed in which some
          types of maize could stand late frost of 4,4°C in the leaf-phase
          3-5. In Sibiria maize in field culture allegedly stood frost of
          -7°C. In the laboratory of the station mentioned below ("A:") the
          author performed numerous tests with different types of maize and
          the results make it possible to make proposals for a selection of
          maize with regard to resistance to cold. The boxes with plants in the
          leaf -phase 3-6 were frozen through one or more times for 3-4 hours
          in a special closed room or in an open place accessible to north
          and east winds. The test results were examined after a 2-3 days'
          stay of the plants in a warm room. The completely uninjured plants
          and those with one frozen leaf constituted the group of un-injured
          plants; those with 2-3 frozen leaves were considered injured; among
          the withered plants the author counted those who had lost their tur-
          gor after thawing or whose parts above the earth withered, indepen-
Card 1/3 dent of the fact whether they later on sprouted or not. At -4° and
          -5°C there existed two sharply separated groups: those withered and
          those almost completely intact. Border cases rarely occurred. 1o ty-

Resistance to Cold and Hardening of Zea Maize Plants. 20-5-56/60

pes of various selection stations were tested.Tab.1 shows that maize plants in the leaf-phase 4 are less resistant than in leaf-phase 2-3. Further tests were made with hardened plants.Great differen-ce among the types were observed with regard to cold tolerance.But the differences within one individual type between the hardened plants and those exposed to frost immediately from the greenhouse were much greater.Among the latter hardly any were able to stand frost of -4°C,namely from 8 to 34%. These results agree with the wide-spread opinion that maize freezes up at temperatures below -3°C. In a closed room they stood up to the same cold of -4°C much better than in the open and in wind.Analyses of hardened plants confirmed the opinion that the hardening of winter crop is connected.with a raised sugar content.The author then tested the plants,which had been hardened at -4°C, at -5°C.Paft of them stood this temperature fairly long,especially in calm without a north or northeast wind. This resistance must be distinguished clearly from the cases which occurred in Siritia: at late frost of -5° and -6°C all maize plants withered,the leaflets became black and lay on the earth.Later on the plants again sprouted and normally concluded the vegetation pe-riod.If the seed stuck in the earth sufficiently deep,the plants e-ven sprouted again after a cold of -7°C.This ability must not be mis-taken for the relative resistance to cold,since it is due to a con-siderable store of foodstuff in the endosperm.

Card 2/3

KORNILOV, A.A., doktor sel'skokhoz.nauk

Sainfoin Onobrychis arenaria in nonrotating fields and in forage crop rotations of the arid steppe. Zemledelie 7 no.10:67-69 O '59.

(MIRA 13:1)

1. Stavropol'skiy sel'skokhosyaystvennyy institut.
(Sainfoin)

KORNILOV, Aleksandr Aleksandrovich, doktor sel'khoz. nauk, prof.;KOREYSHO,
Ye.G., red.; DEYEVA, V.M., tekhn. red.

[Millet] Proso. Moskva, Gos.izd-vo sel'khoz. lit-ry, 1960. 243 p.

(Millet)   (MIRA 14:6)

KORNILOV, A.

More than one hundred apprentices. Stroitel' no.8:18 Ag '60.
(Isaev, Sergei Aleksandrovich)   (MIRA 13:8)

KORNILOV, A.A.

Course of hypertonic psychoses in the light of a late catam-
nesis. Trudy 1-go MMI 21:184-191'63.   (MIRA 16:9)

1. Kafedra psikhiatrii (zav. - prof. V.M.Banshchikov) 1-go
Moskovskogo ordena Lenina meditsinskogo instituta imeni
Sechenova.
            (PSYCHOSES)   (HYPERTENSION)

KORNILOV, A.A.

Sustaining therapy for patients after recovery from hypertonic psy-
choses. Trudy 1-go MMI 25:249-252 '63.
(MIRA 17:12)

1. Kafedra psikhiatrii 1-go Moskovskogo ordena Lenina meditsinskogo
instituta imeni I.M.Sechenova (zav. kafedroy prof. V.M.Banshchikov).

KORNILOV, A.I., doktor sel'skokhoz. nauk

Ties between scientific institutions and production. Zemledelie 27
no.11:6-11 N '65.

(MIRA 18:10)

1. Stavropol'skiy sel'skokhoz. institut.

VEDERNIKOV, V.A.; KAZANTSEV, Yu.M.; KORNILOV, A.D.; KHILKOV, V.A.

Negative serological reaction in patients with syphilis treated
with bicillin-1. Vest.derm.i ven. 34 no.6:42-43 '60.

(MIRA 13:12)

1. Iz kafedry kozhnykh i venericheskikh bolezney (zav. - prof.
V.A. Vedernikov) Arkhangel'skogo meditsinskogo instituta.
         (SYPHILIS)   (PENICILLIN)

KORNILOV, Aleksandr Ivanovich; MININ, V.F.[deceased]; ZINOV'YEV,
    Anatoliy Yakovlevich; ZAGRYADSKIY, Vasiliy Ivanovich;
    KALININ, O.V., red.; FREGER, D.F., red. izd-va; BELOGUROVA,
    I.A., tekhn. red.

[Mesh-reinforced concrete roofs for industrial buildings;
experience of the "Orgtekhstroi" Trust and Trust No.44 of the
Administration of Construction of the Leningrad National
Economic Council]Armotsementnye pokrytiia dlia promyshlennykh
zdanii; iz opyta raboty tresta "Orgtekhstroi" i tresta No.44
Upravleniia stroitel'stva Lensovnarkhoza. Leningrad, 1962.
16 p. (Leningradskii dom nauchno-tekhnicheskoi propagandy. Ob-
men peredovym opytom. Seriia: "Stroitel'naia promyshlennost',"
no.5)   (MIRA 15:8)
    (Roofing, Concrete) (Industrial buildings)

KORNILOV, A. I.

"Spectrophotometric Study of Solar Spots." Cand Phys-Math Sci, State Astronomical Inst imeni Shternberg, Moscow, 1954. (RZhAstr, Mar 55)

So: Sum. No 670, 29 Sept 55 - Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (15)

KORNILOV, A.I.

Possible systematic error in determining the excitation tempera-
ture by means of "the curve of increase". Soob.GAISH   no.100:
65-71 '57.

(Astrophysics)   (MIRA 12:1)

KORNILOV, A.I.

Remarks on the energy of oscillators for Fe I spectrum lines measured with an a.c. arc. Soob.GAISH no.107:3-15 '60.

(Spectrum, Solar) (Oscillators, Electric)   (MIRA 14:3)

3.1540

78027
SOV/33-37-1-27/31

AUTHOR: Kornilov, A. I.

TITLE: Concerning the Influence of Sunspot Magnetic Fields
             on the Curve of Growth

PERIODICAL: Astronomicheskiy zhurnal, 1960, Vol 37, Nr 1,
             pp. 182-184 (USSR)

ABSTRACT: Several authors have investigated this problem:
             Bruggencate and Klüber (1939), J. Warwick (1953
             and 1955), Hubenet (1954). The present author
             obtained his observational material in 1953 at
             the Kuchino Astrophysical Observatory near Moscow,
             when a large sunspot was present. He constructs
             his curves of growth with the lines of VI and FeI,
             and follows the method of Warwick. For the parameter
             of magnetic splitting the author chooses the quantity:

             $$\frac{1}{2}\left[\,\overline{\Delta\ (Mg)}\,\right]$$

Card 1/2   which can be expressed as a function of Lande's factors

Concerning the Influence of Sunspot Magnetic   78027
Fields on the Curve of Growth   SOV/33-37-1-27/31

and of the quantum numbers of the upper and lower
levels. Two graphs show that there is no dependence
of the equivalent width on the parameter of magnetic
splitting. The scattering of the points is ascribed
to errors of the oscillator strengths, and the rise of
the curve of growth is attributed to microturbulence.
There are 2 figures; and 12 references, 3 Soviet,
4 German, 2 French, 1 Japanese, 2 U.S. The U.S.
references are: J. Warwick, J. Astron., 58, Nr 1216,
48, 1953; Ch. Moore, Atomic Energy States, Circ. Nat.
Bur. St., 467, 1949, 1952.

ASSOCIATION: Sternberg State Astronomical Institute (Gos. astronom-
               icheskiy in-t imeni P. K. Shternberga)

SUBMITTED: January 27, 1959

Card 2/2

3.15 26

41277

S/035/62/000/010/025/128
A001/A101

AUTHORS: Kornilov, A. I., Kozhevnikov, N. I.

TITLE: Polarization of radiation and instrumental contour of a spec-
trograph

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 10, 1962, 46,
abstract 10A335 ("Soobshch. Gos. astron. in-ta imeni P. K. Shtern-
berga", 1961, no. 117, 15 - 20)

TEXT: The authors consider theoretically the profile of a diffraction
image of the spectral line; in summation of oscillations in the focal plane
of the spectrograph, not only phases but also polarization of oscillations
of light are taken into account. Incident light is assumed to be plane-polar-
ized, parallel and perpendicular to the spectrograph slit. Diffraction is con-
sidered only on the diaphragm of the prism or the grating. The calculation re-
sults are presented in graphs showing distribution of amplitude and intensity
as a function of diffraction angle for aperture ratios of the spectrograph
0.75 - 0.0; this dependence proves to be insignificant. Since the amplitudes

Card 1/2

Polarization of radiation and...

S/035/62/000/010/025/128
A001/A101

of polarized components coincide for small aperture ratios, the authors con-
clude that, in experimental determination of a diffraction profile of the
slit image, differentiating of light bundles with different polarization is
not necessary. A necessity in separation may arise only in cases of spectro-
graph cameras with aperture ratio ≥ 1. There are 5 references.

Ye. Makarova

[Abstracter's note: Complete translation]

Card 2/2

S/623/61/000/117/002/002
E032/E414

AUTHOR: Kornilov, A.I.

TITLE: A spectrophotometric study of sunspots

SOURCE: Moscow. Universitet. Gosudarstvennyy astronomicheskiy
             institut. Soobshcheniya. no.117, 1961, 27-56

TEXT: The sunspot spectra used in this study were obtained with
the solar spectrograph of the Kuchinskaya astrofizicheskaya
observatoriya (Kuchino Astrophysical Observatory) GAISh, which has
a dispersion of 1.66 Å/mm in the second order.   Altogether 187
photographs of the spectra were obtained, out of which 2 plates
with 5 spectra of a sunspot observed on July 14, 1953 were
selected for analysis (4230 to 4580 Å).   The sunspot was
located at a distance of 0.36 $R_\odot$ from the centre of the disc and
its size was 40".   Growth curves were plotted for the lines V I,
Ti I, Ti II, Fe I and Fe II.   Analysis of the growth curves was
based on the assumption that the distribution of atoms over the
energy states is of the Boltzmann type.   It was found that the
average excitation temperature for the above sunspot was 3850°K
and that the number of Fe I and V I atoms in the layer in which
Card 1/2

Card 2/2

SATALKIN, A.V., doktor tekhn.nauk; SENCHENKO, B.A., kand.tekhn.nauk;
    KOMOKHOV, P.G.; KORNILOV, A.I., inzh.; PAVLOV, V.N., inzh.

Concrete mixes for mold rolling and vibration mold rolling.
Trudy NIIZHB no.33:271-291 '64.

(MIRA 18:2)

1. Leningradskiy institut inzhenerov zheleznodorozhnogo trans-
porta (for Satalkin, Senchenko, Komokhov). 2. Orgtekhstroy
Leningradskogo soveta narodnogo khozyaystva (for Kornilov, Pavlov).

KORNILOV, A.I., inzh.; PAVLOV, V.N., inzh.

Multiple-unit procedure in preparing thin-walled reinforced con-
crete and mesh-reinforced concrete elements for industrial
buildings. Trudy NIIZHB no.33:259-270 '64.

(MIRA 18:2)

1. Trest "Gortekhstroy", Leningradskiy sovet narodnogo khozyaystva.

BOGATYREV, Viktor Vladimirovich; KORNILOV, A.M., red.; MATVEYEV, G.I.,
    tekhn.red.

[Flood control for reservoir areas of large hydroelectric
power stations] Inzhenernaia zashchita v zonakh vodokhranilishch
krupnykh gidroelektrostantsii. Moskva, Gos. energ. izd-vo, 1958.
179 p.
                                                (MIRA 12:1)
        (Hydraulic engineering)   (Reservoirs)

DANCHEV, V. I.; KORNILOV, A.M.; NEYMYSHEV, M.V.; OL'KHA, V.V.;
PROSHLYAKOV, B.K.; STRELYANOV, N.P.; SYTNIKOV, M.P.

Uranium mineralization in carbonate sedimentary rocks.
Geol.rud.mestorozh. no.6:27-38 N-D '59. (MIRA 13:7)
(Uranium ores)

ERISTOV, V.S., red.; KORNILOV, A.M., red.; VORONIN, K.P., tekhn.red.

[Design and construction of high dams; materials of the conference on high dams] Proektirovanie i stroitel'stvo vysokikh plotin; po materialam soveshchaniia po vysokim plotinam. Pod obshchei red. V.S.Eristova. Moskva, Gos.energ.izd-vo, 1960. 196 p.

(MIRA 13:6)

1. Nauchno-tekhnicheskoye obshchestvo stroitel'noy industrii SSSR. 2. Chlen-korrespondent Akademii stroitel'stva i arkhitektury SSSR ; Tekhnicheskoye upravleniye Ministerstva stroitel'stva elektrostantsiy SSSR (for Eristov).
(Dams)

DOMANSKIY, Vitaliy Yefimovich; prof.; KORNILOV, A.M., red.; BORUNOV,
N.I., tekhn.red.

[Construction of the Mingechaur complex of hydroelectric
structures; Mingechaur and Varvarovka Hydroelectric Centers]
Stroitel'stvo Mingechaurskogo kompleksa gidrotekhnicheskikh
sooruzhenii; Mingechaurskii i Varvarinskii gidrouzly. Moskva,
Gos.energ.izd-vo, 1960. 207 p.   (MIRA 14:1)
        (Mingechaur Hydroelectric Power Station)
        (Varvarovka Hydroelectric Power Station)

KUPERMAN, V.L., inzh.; OBREZKOV, S.S., inzh.; ERISTOV, V.S., red.;
BOBRITSKIY, M.M., inzh., red.; MOSTKOV, V.M., inzh.,
red.; ROZANOV, K.A., inzh., red.; TAYCHER, S.I., inzh.,
red.; KORNILOV, A.M., red.; LARIONOV, G.Ye., tekhn.red.

[Design and construction of hydraulic tunnels and under-
ground hydroelectric power stations] Proektirovanie i so-
oruzhenie gidrotekhnicheskikh tunnelei i podzemnykh GES;
materialy soveshchaniia. Moskva, Gosenergoizdat, 1963.
231 p.   (MIRA 16:10)

1. Chlen-korrespondent Akademii stroitel'stva i arkhi-
tektury SSSR (for Eristov).
            (Hydroelectric power stations)

RABOTNOV, B.A., inzh.; KORNILOV, A.M., inzh.

Efficient use of welding equipment. [Trudy]LMZ no.11:114-118 '64.
(MIRA 17:12)

KORNILOV, A.N., kapita meditsinskoy sluzhby

Motor function of the gastrointestinal tarct in radiation sickness.
Voen.-med. zhur. no.3:19-25 Mr '56.
(ALIMENTARY CANAL) (RADIATION SICKNESS) (MLRA 9:9)

KORNILOV, A.N., kand.meditsinskikh nauk

Use of some simple physiological tests for the hygenic evaluation
of air pollution by industrial wastes. Gig. i san. 25 no.4:107-108
Ap '60.
(MIRA 13:8)

1. Iz Instituta radiatsionnoy gigiyeny Ministerstva zdravookhraneniya
RSFSR.

(ORSK—AIR—POLLUTION)

KORNILOV, A.N., Cand Chem Sci — (diss)"Determination of the temperature of boron oxide formation." Mos, 1959. 11 pp (Mos State U im M.V. Lomonosov. Chemical Faculty. Thermal Laboratory im V.F.Luginin). 150 copies Bibliography at end of text (KL, 40-59, 102)

28(5)

AUTHORS: Vostroknutov, N. G., Kornilov, A. N., Gal'chenko, G. L.,
             Skuratov, S. M. and Timofeyev, B. I.

SOV/76-33-8-35/39

TITLE: Arrangement for Measuring the Work of Alternating Current in
             Calorimetry

ABSTRACT: For determining the heats of reaction taking place at higher
             rates with high temperatures, a calorimeter bomb with an
             electric furnace is usually used. Since, however, the resistance
             of the furnace greatly increases within a short time, the
             determination of the work of the current becomes very diffi-
             cult if the amperage and voltage change in wide ranges. Ref-
             erence 1 recommends in such cases to use a precision watt-
             meter, but fails to give any data regarding the pattern or
             the method of measurement to be used. Now an arrangement for
             measuring the work of the electric current in the furnace
             of a calorimeter bomb under the above circumstances is des-
             cribed. The wiring diagram (Fig 1) consists, in the main,
             of an active-current meter (I) and a reactance-current meter
             (II). For (I), a single-phase alternating current meter of
             the W EI 55 (Siemens) type for 5 a and 120 v is used. In recent

Card 1/2

Arrangement for Measuring the Work of Alternating Current in Calorimetry

SOV/76-33-8-35/39

times, however, this instrument was replaced by a current meter of the V-3 type designed by N. G. Vostroknutov, VNIIK (Moscow) in order to raise the measurement accuracy. A current meter specially made for the requirements of (II) (Ref 2) was built at the otdeleniye elektricheskikh izmereniy VNIIK (Moskva) (Department of Electrical Measurements of the VNIIK (Moscow)). The measurement principle, the current meter calibration (Table), and the use of the arrangement in calorimetry are described, and the corresponding calculation equations are given. There are 1 figure, 1 table, and 3 references, 2 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

SUBMITTED: January 27, 1959

Card 2/2

5(2,4)

SOV/20-127-5-23/58

AUTHORS: Gal'chenko, G. L., Kornilov, A. N., Timofeyev, B. I.,
Skuratov, S. M.

TITLE: The Standard Enthalpy of Boron Oxide Formation

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 127, Nr 5,
pp 1016 - 1018 (USSR)

ABSTRACT: The enthalpy of B_2O_3 mentioned in the title is a fundamental quantity in the thermochemistry of the boron compounds. Its determination is connected with considerable experimental difficulties. Due to this fact the values mentioned in publications (Refs 1-13) do not agree (-270-368 kcal/mol). No reliable value may be chosen from it since in part of the papers (Refs 1-9) the errors caused by the side processes cannot be detected whereas in the other part of these papers data lack permitting the utilization of the obtained results. In the present paper a report is made on an experimental determination of the mentioned quantity by 3 independent methods which (within the limit of measuring errors) led to one and the same result. 1) C o m b u s t i o n   o f   b o -
r o n   in o x y g e n , 2) D i r e c t   de t e r m i n a -

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The Standard Enthalpy of Boron Oxide Formation

SOV/20-127-5-23/58

tion of the heat of formation of boron nit-
ride and the computation of the ΔH^0_{form}
of B_2O_3 by using a reliably determined
value of the combustion heat of boron
nitride (Ref 18). 3) Direct determination
of the heat of formation of BCl_3 and the com-
putation of ΔH^0_{form} of B_2O_3 by using reliably deter-
mined heat values for the BCl_3 hydroly-
sis (Ref 19), and the B_2O_3 dissolution (Ref 20)
as well as the H_2O formation and of the HCl
solution corresponding to the concen-
tration (Ref 14). The above mentioned agreement of the re-
sults obtained according to the methods 1-3 proves that consid-
erable systematical errors have been avoided in each of the de-
terminations. There are 22 references.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova
(Moscow State University imeni M. V. Lomonosov)

PRESENTED: April 7, 1959, by V. N. Kondrat'yev, Academician

SUBMITTED: April 4, 1959

Card 2/2

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84211
S/078/60/005/010/001/021
B004/B067

AUTHORS: Gal'chenko, G. L., Kornilov, A. N., Skuratov, S. M.

TITLE: Combustion Heat of Boron

PERIODICAL: Zhurnal neorganicheskoy khimii, 1960, Vol. 5, No. 10,
              pp. 2141-2147

TEXT: The authors discuss the strong spread of the values of the
standard formation enthalpy of B_2O_3 hitherto published (Refs. 1-9). The
combustion of boron in the presence of organic substances leads to
uncontrollable side reactions and, hence, to unreliable values.
Therefore, the authors determined the formation enthalpy of B_2O_3 by three
methods. In this paper, they describe the combustion of boron in oxygen.
Boron contained in a quartz bowl was heated to $1000^\circ C$ in a bomb
calorimeter (Fig.) at 7 atm oxygen pressure by means of a small electric
furnace. The authors explain the calculation of the heat generated by the
electric furnace by means of the empirical equation

$$Q_{el} = (a/r) \int_{t_0}^{t} V^2 dt + b \quad (1).$$

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Combustion Heat of Boron

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The constants a and b were determined; r denotes the resistance of the heating element, V its voltage. The integral $\int V^2 dt$ was calculated for the time intervals t = 10 sec and t = 180 ± 0.2 sec (time of switching off) by means of the trapeze method. V was measured every 10 - 15 sec by means of a Disselhorst potentiometer and M-21 (M-21) mirror galvanometer. As is shown in Table 1, the values obtained for Q_e from equation (1) are in good agreement with the experimental data. For determining the enthalpy 0.17 - 0.25 boron were weighed into the bomb. After its combustion, the increase in weight of the weighed-in portion was determined in dry air, and the small portion of evaporated boron oxide was dissolved and titrated by washing the bomb (Table 2). Attempts of extracting B_2O_3 from the reaction mass by means of water and of determining it titrimetrically led to low values (Table 3). Extraction remains incomplete. Due to the short duration of action of the high temperature, amorphous boron and vitreous boron oxide are assumed as final products and calculated under these conditions: $\Delta H_{form} B_2O_3$ glass = -298.7 ± 1.8 kcal/mole. There are 1 figure, 3 tables, and 16 references: 3 Soviet, 8 US, 1 British, 1 French, and 3 German.

Card 2/3

Combustion Heat of Boron

84211
S/078/60/005/010/001/021
B004/B067

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov). Termokhimicheskaya laboratoriya im. V. F. Luginina (Laboratory of Thermochemistry imeni V. F. Luginin)

SUBMITTED: August 21, 1959

Card 3/3

85621

S/078/60/005/012/002/016
B017/B064

//, /3 00

AUTHORS: Gal'chenko, G. L., Kornilov, A. N., Skuratov, S. M.

TITLE: Determination of the Formation Enthalpy of Boron Nitride

PERIODICAL: Zhurnal neorganicheskoy khimii, 1960, Vol. 5, No. 12,
               pp. 2651-2654

TEXT: The formation heat of boron nitride was determined in a calori-
metric bomb heated by a small electric furnace. Amorphous high-purity
boron (O: 0.23%, H: 0.12%, N: 0.005%, and Ca, Mg, and Cu totaling $\sim$0.01%)
was used as initial material. For the experiments, nitrogen was freed
from oxygen, and dried. A table lists the results of determining the re-
action heat between boron and nitrogen. The formation enthalpy of hexa-
gonal boron nitride from crystalline boron and gaseous nitrogen was
calculated, and the following values were determined:
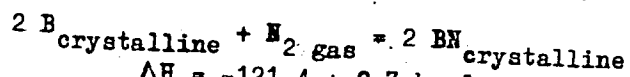$$\Delta H^0_{formation} {}_{BN \, crystalline} = -60.7 \pm 0.3_4 \text{ kcal/mole.}$$
The formation enthalpy of boron oxide was determined by the following
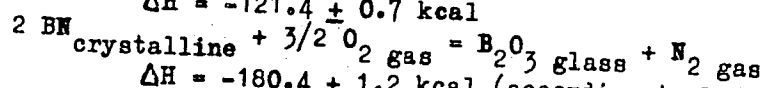thermochemical equations:

Card 1/2

85621

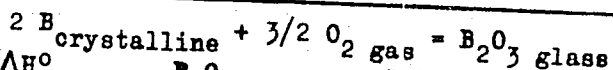Determination of the Formation Enthalpy
of Boron Nitride

S/078/60/005/012/002/016
B017/B064

$$2 B_{crystalline} + N_{2\ gas} = 2 BN_{crystalline}$$
$$\Delta H = -121.4 \pm 0.7 \text{ kcal}$$
$$2 BN_{crystalline} + 3/2\ O_{2\ gas} = B_2O_3\ glass + N_{2\ gas}$$
$$\Delta H = -180.4 \pm 1.2 \text{ kcal (according to Ref. 5)}$$

$$2 B_{crystalline} + 3/2\ O_{2\ gas} = B_2O_3\ glass$$
$$\Delta H^o_{formation\ B_2O_3\ glass} = -301.8 \pm 1.4 \text{ kcal/mole.}$$

This value is in agreement with published values (Refs. 6, 12, and 13).
There are 1 figure, 1 table, and 13 references: 4 Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova
(Moscow State University imeni M. V. Lomonosov). Termo-
khimicheskaya laboratoriya im. V. F. Luginina (Thermo-
chemical Laboratory imeni V. F. Luginin)

SUBMITTED: August 21, 1959

Card 2/2

S/193/60/000/008/010/018
A004/A001

AUTHORS: Kornilov, A. N., Mikhaylov, A. K.

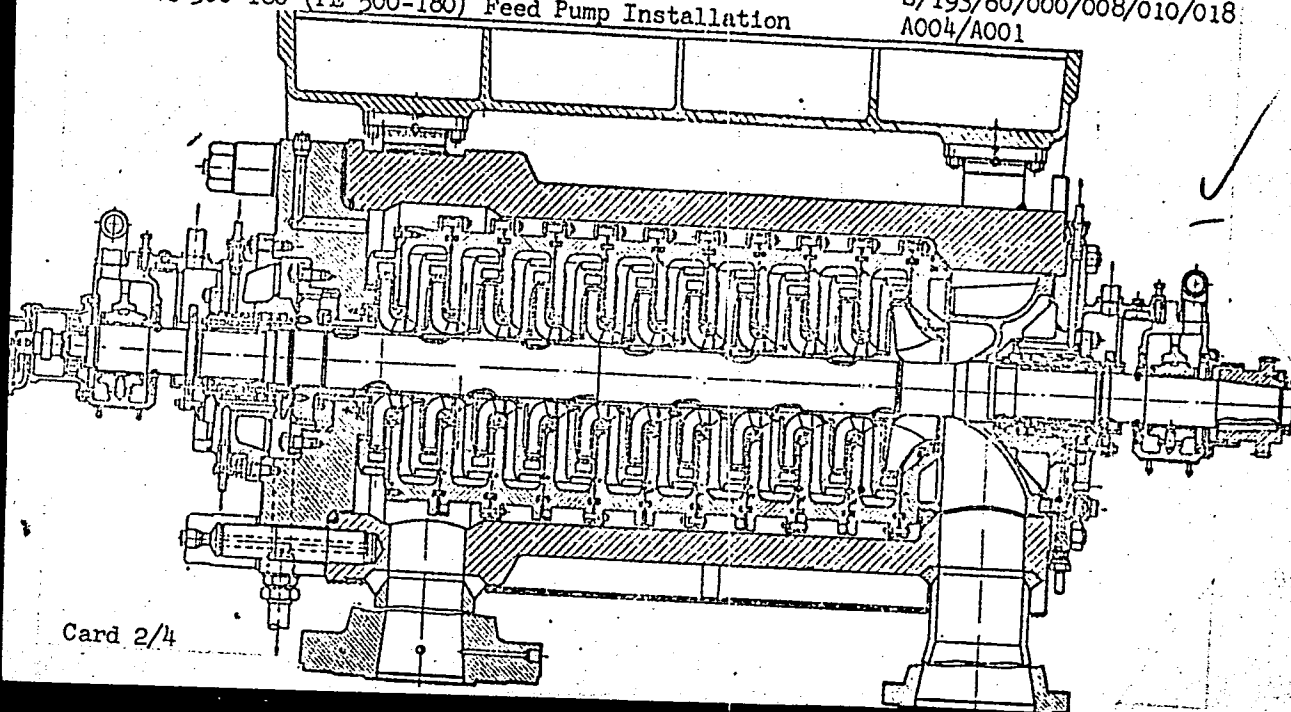TITLE: The ПЭ500-180 (PE 500-180) Feed Pump Installation

PERIODICAL: Byulleten' tekhniko-ekonomicheskoy informatsii, 1960, No.8, pp. 37-40

TEXT: The Vsesoyuznyy nauchno-issledovatel'skiy institut gidromachinostro-
yeniya (All-Union Scientific Research Institute of Hydraulic Machinery), VIGM,
together with the spetsial'noye konstruktorskoye byuro pitatel'nykh nasosov
(Special Design Office of Feed Pumps), SKB PN, and the Sumskiy nasosnyy zavod
(Sumy Pump Plant) have developed in 1959 the PE 500-180 feed pump installation
intended for the feed of boilers with a pressure of 140 atm, the boilers being
installed in high-power thermal power stations. The installation is composed of
the pump, the ATM-3500-2 electromotor, the МГ-65Х2 (MG-65 X 2) hydraulic coupling,
a check valve with automatic by-pass, lubrication installation and instrumentation
system (KIP). The illustration shows a longitudinal section of the feed pump
which is a double-housing structure of the section type. The outer housing is a
forged steel cylinder, while the inner housing is an assembled structure with
vertical joints, composed of 11 stages and guiding devices of the blade type.

Card 1/4

The ПЭ 500-180 (PE 500-180) Feed Pump Installation   S/193/60/000/008/010/018
                                                          A004/A001

Card 2/4

The ПЭ 500-180 (PE 500-180) Feed Pump Installation

The section seams are built up with austenite steel, the guiding devices and im-
pellers are made of 2X13 (2Kh13) grade steel, while the delivery parts are made
of heat-treated stainless steel. The pump ends are sealed with soft packings.
The stuffing-box sockets and the internal hollow of the stuffing-box jacket of the
end seals are cooled by a cold condensate of less than 40°C. The individual
lubrication system of the pump installation consists of the following units:
screw-type ВНД-25 (VNL-25) oil pump mounted on the electromotor of the installa-
tion; start-reserve screw-type ЭВН-25 (EVN-25 oil pump driven by an a-c electro-
motor; gear-type РЗ-3 (RZ-3) oil feed pump with a-c electromotor; two МО-25X4
(MO-25 X 4) oil coolers, oil filter with a filtering area of 1.5 m^2 and 2.8 m^3
capacity oil tank. The pump installation is equipped with automatic control
devices, protection, checking and signalling devices. The protection device
prevents damage to the installation in the case of an oil-pressure drop, or if the
critical magnitude of axial shift of the pump rotor is reached, or in case of a
pressure increase in the delivery chamber of the hydraulic base, superheating of
the bearings or increased vibration of the pump bearings. The installation is
controlled from the main thermal panel of the boiler-turbine block. The following
technical specifications of the PE 500-180 feed pump installation are given:
1) feed pump: output - 500 m^3/hour; pressure in the suction pipe - 6.7 kg/cm^2;

Card 3/4

KORNILOV, A.N.

The 2Kh-6E and KhTr-4/100 pumps for chemical industries. Biul.
tekh.-ekon.inform. no.9:22-25 '61.   (MIRA 14:9)
                         (Pumping machinery)

38108

/P. //5-2
21. 2/00

S/020/62/144/002/020/028
B101/B144

AUTHORS: Kornilov, A. N., Leonidov, V. Ya., and Skuratov, S. M.

TITLE: Standard heats of formation of niobium pentoxide and
             tantalum pentoxide

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 144, no. 2, 1962, 355-358

TEXT: As the data hitherto published for the heats of formation of
Nb_2O_5 and Ta_2O_5 diverge greatly, the heat of combustion, $-\Delta U_B$ ($24.3^\circ C$),
of high-purity Nb and Ta in O_2 was determined calorimetrically after the
content of impurities in the metal samples had been determined at two
laboratories, and their effect was taken into account in calculating
$-\Delta U_B$. (I) The content of impurities (% by weight) in niobium preparation
1 was 0.03 0; 0.03 N; 0.004 H; 0.02 C; 0.30 Ta; 0.09 Fe; 0.12 Ti; and
0.06 Si. In niobium preparation 2, it was 0.01_5 0; 0.01 N; 0.005 C;
1.27 Ta; 0.07 Fe; 0.12 Ti; and 0.04 Si. The maximum contents of Al, Mg,
Mo, Mn, Ni, P, Pb, and Sn did not exceed 0.01% of each. Combustion took
place in high-purity O_2 at 30 atm. The effect of moisture was ignored
Card 1/3

Standard heats of formation of ...

when determining the resulting β-Nb_2O_5. In calculating $-\Delta U_B$ $(24.3^{\circ}C)$, the effect of impurities was considered on the assumption that: (1) O, N, H, and C react with Nb to form Nb_2O_5, NbN, NbH, and NbC, respectively, while the remaining impurities do not react with Nb; (2) none of the impurities reacts with Nb. The relevant corrections were within the experimental errors. It was found that $-\Delta U_B$ $(24.3^{\circ}C)$ = 2432.0 $\pm$ 2.0 cal/g of Nb. Hence, ΔH°_{298} β-Nb_2O_5 = -453.5 $\pm$ 0.4 kcal/mole. (II) Tantalum preparation 1 contained the following impurities (% by weight): $6 \cdot 10^{-3}$ O; $1 \cdot 10^{-2}$ N; $3 \cdot 10^{-4}$ H; $2 \cdot 10^{-2}$ C; 0.12 Nb; 0.11 Ti; $3 \cdot 10^{-2}$ Fe; $< 4 \cdot 10^{-3}$ Si; $4 \cdot 10^{-2}$ W; and $1 \cdot 10^{-2}$ Mo. Tantalum preparation 2 contained $4 \cdot 10^{-3}$ O; $2 \cdot 10^{-3}$ N; $1 \cdot 10^{-3}$ H; $5 \cdot 10^{-3}$ C; 0.80 Nb; $< 5 \cdot 10^{-3}$ Ti; $< 2 \cdot 10^{-3}$ Fe; $< 3 \cdot 10^{-3}$ Si; $< 1 \cdot 10^{-2}$ W; and $< 1 \cdot 10^{-2}$ Mo. In each sample, the content of Al, Ni, and Mg was $< 1 \cdot 10^{-3}$. In sample 1, the content of Pb, Bi, Sn, Sb, and Cd was $< 1 \cdot 10^{-3}$, and in sample 2, it was $< 1 \cdot 10^{-4}$. In sample 2, the content of S and P was $< 2 \cdot 10^{-3}$. Combustion took place in O_2 at 10 atm.

Card 2/3

Standard heats of formation of ...

The resulting α-Ta_2O_5 and the -ΔU_B (24.3°C) were determined in the same way as for Nb_2O_5. The following values were found: -ΔU_B (24.3°C) = 1347.8 ± 1.0 cal/g Ta; ΔH^o_{298} α-Ta_2O_5 = -489.3 ± 0.4 kcal/mole. There are 2 tables. The most important English-language reference is: G. L. Humphrey, J. Am. Chem. Soc., 76, 978 (1954).

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Card 3/3

KORNILOV, A.N.; LEONIDOV, V.Ya.; SKURATOV, S.M.

Standard heats of formation of niobium and tantalum pentoxides.
Dokl.AN SSSR 144 no.2:355-258 My '62.   (MIRA 15:5)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
Predstavleno akademikom V.I.Spitsynym.
 (Niobium oxides)   (Tantalum oxides)   (Heat of formation)

BERNATOVICH, K.S., inzh.; ZAYTSEV, Ye.A., inzh.; KORNILOV, A.N.;
MEYERZON, I.M.

The SM-897 unit for making soil-cement blocks. Stroi.i dor.
mash. 7 no.10:28-30 O '62. (MIRA 15:11)
(Soil cement)

KORNILOV, A. N.; LEONIDOV, V. Ya.; SKURATOV, S. M.

Standard heats of formation of the higher carbides of niobium
and tantalum. Vest. Mosk. un. Ser. 2: Khim. 16 [i.e.17], no.6:
48-50 N-D '62.   (MIRA 16:1)

1. Kafedra fizicheskoy khimii Moskovskogo universiteta.

(Niobium carbide)   (Tantalum carbide)
(Heat of formation)

KORNILOV, A.N.

On the theory of calorimetric experiment. Part 1. Zhur.fiz.khim. 37
no.10:2296-2298 O '63.   (MIRA 17:2)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova i Termo-
khimicheskaya laboratoriya imeni V.F. Luginina.

KORNILOV, A.N.

Contribution to the theory of the calorimetric experiment. Part 2.
Zhur. fiz. khim. 37 no.11:2542-2545 N'63.   (MIRA 17:2)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

KORNILOV, A.N.; ZAYKIN, I.D.; MARTYNOV, Yu.A.; SKURATOV, S.M.

Dosage of the electrical energy supplied to the calorimeter
bomb for ignition of substances. Zhur. fiz. khim. 37 no.11:
2606-2608 N'63.   (MIRA 17:2)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.