"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

KRUGLOV, I.N., kand. tekhn. nauk (Moskva)

New equipment for field testing of engineering properties of soils. Prom. stroi. 36 no.12:32-34 D '58. (MIRA 12:1)
(Soil mechanics)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

KRUGLOV, I.N.

Filtration capacity and deformations due to loads and to the lowering of the water table in loess and loesslike soils in the southeastern part of the Ukraine. Osn., fund.i mekh.grun. 2 no.3: 10-12 '60. (MIRA 13:7)

(Ukraine--Loess)
(Soil mechanics)
(Water, Underground)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

KRUGLOV, I.N.

Physical, chemical, and mineralogical properties of loess soils of the southeastern patt of the Ukraine. [Trudy] MIIOSP no.42:44-60 '60. (MIRA 13:6)
(Ukraine--Loess) (Soil mechanics)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

KRUGLOV, K.I., gornyy inzh.

Moving dumper. Gor. zhur. no.10:70-71 O '63.
(MIRA 16:11)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

KRUGLOV, L.

Sorcerers from Gorki. NTO 4 no.5:45-47 My '62. (MIRA 15:5)
(Gorki Leninskie--Agricultural experiment station)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

KRUGLOV, L.

On unbeaten tracks. NTO 5 no.2[illegible] F '63. (MIRA 16:3)
(High pressure research)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

KRUGLOV, L.

"Excellent track" is the motto of Anton Il'iutchik's crew.
Transp.stroi. 14 no.12:33-34 D '64.
(MIRA 19:1)

1. Spetsial'nyy korrespondent zhurnala "Transportnoye stroitel'stvo".

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

KRUGLOV, L. (Kondopoga, Karel'skoy ASSR)

Birth of a great Kondopoga. NTO 5 no.7:39-41 Jl '63. (MIRA 16:8)

1. Spetsial'nyy korrespondent zhurnala "Nauchno-tekhnicheskiye obshchestva SSSR."
(Kondopoga—Paper industry)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

KRUGLOV, I.A.

Preliminary data on the current regime in fishing areas off the western coast of Africa (Conakry, Takoradi). Okeanologiia 4 no.5:922-923 '64 (MIRA 18:1)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

KRUGLOV, L.L.

Kenya as a Military-Colonial and Strategic Base of Imperialism During 1946-1960.

The following dissertations were defended in the African Institute.
Candidate of Historical Sciences.

Vestnik Akad Nauk, No. 4, 1963, pp.119-145

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

KRUGLOV, L.M., assistant.

On the work of the elastic supports of the boiler for Series L locomotives. Trudy RIIZHT no.17:60-71 '53. (MLRA 9:6)
(Locomotive boilers)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

KRUGLOV, L. M.

KRUGLOV, L. M- "Investigation of the Relative Displacements of the Frame and Boiler of a Locomotive." Leningrad Order of Lenin Inst of Engineers of Railway Transport imeni Academician V. N. Obraztsov, Leningrad, 1955 (Dissertations For Degree of Candidate of Technical Sciences)

SO: Knizhnaya Letopis' No. 26, June 1955, Moscow

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

KHUGLOV, L.M., inzh.

Role of interframe fastenings in lessening longitudinal displacements between steam locomotive frames and boilers. Trudy RIIZHT no.21:267-285 '58. (MIRA 11:6)
(Locomotives)

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

KRUGLOV, L.M.

True friends of a plant. NTO 4 no.10:18-19 O '62.
(MIRA 15:9)

1. Spetsial'nyy korrespondent zhurnala "Nauchno-tekhnicheskiye obshchestva SSSR".
(Kolomna—Diesel locomotives—Technological innovations)

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

L 4022-66 EWT(d)/EWT(l)/EWT(m)/EWP(w)/EWP(v)/T/EWP(t)/EWP(k)/EWA(h)/EWA(c)
ACCESSION NR: AP5022258 IJP(c) UR/0363/65/001/007/1090/1097
JD/HM/EM/AT 537.311.33+546.3

AUTHOR: Krasulin, Yu. L.; Ivanov, V. D.; Kruglov, L. M.

TITLE: Role of dislocations in the formation of joints during pressure welding with heating of the metal and semiconductor

SOURCE: AN SSSR, Izvestiya. Neorganicheskiye materialy, v. 1, no. 7, 1965, 1090-1097

TOPIC TAGS: pressure welding, crystal dislocation, semiconductor device

ABSTRACT: Metal conductors were welded to silicon single crystals onto which a pyrex plunger was pressed to simulate pressure welding. It is found that during pressure welding involving the heating of the metal conductors with the semiconductor, dislocations are formed on the surface of the semiconductor in the area of its contact with the metal. Chemical bonds between the metal and the semiconductor are formed at points where the dislocations emerge to the surface of the semiconductor. The number of dislocations formed in the surface layer of the semiconductor depends on the welding parameters: temperature, pressure, and duration. At low temperatures and short durations lasting less than the incubation period, the weld joint between metal conductors and semiconductors is

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L 4022-66
ACCESSION NR: AP5022258

formed owing to adhesive forces (van der Waals and mechanical bonding). Orig. art. has: 6 figures.

ASSOCIATION: none

SUBMITTED: 22Mar65 ENCL: 00 SUB CODE: MM, SS

NO REF SOV: 013 OTHER: 006

Card 2/2

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

KRUGLOV, L. S.

USSR /Chemical Technology. Chemical Products and Their Application I-14

Water treatment. Sewage water.

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 31739

Author : Kruglov L.S.

Title : Conversion of a Conventional Rapid Filter of an Operating Station into a Filter of the AKKh System.

Orig Pub: Vodosnabzheniye i san. tekhnika, 1956, No 10, 15-16

Abstract: Two variants are described. According to the 1-st, conversion of the filter is effected without distrubing the existing drainage system and gravel-sand filling. The slitted vinyl-plastic pipes of the top drainage system of AKKh are disposed in

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

USSR /Chemical Technology. Chemical Products and Their Application I-14

Water treatment. Sewage water.

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 31739

the sand, at the 191.70 mark, increasing at the same time the edges of the distribution troughs up to the 193.05 mark. The procedure reduces the amount of work by 50%. According to the 2-nd variant the pipes of the bottom distributing system are replaced, with removal and subsequent re-charging of the supporting layers of gravel and sand. Filters converted by either variant yield practically the same results in operation.

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KRUGLOV, L.V.

Bridges according to her designs. Transp. stroi. 14 no.3:32-34 Mr '64. (MIRA 17:6)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5"

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KRUGLOV, L.V.

They built the Volga-Baltic Sea Waterway. Transp. stroi. 14 no.6:29-32 Je '64. (MIRA 18:2)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

Kruglov, V. G. Cand. Tech. Sci.

Dissertation: "Investigation of the processes of charging the working medium in the cylinder of a high-speed two-stroke diesel engine."
6 Jun 49

Moscow Order of the Labor Red Banner Higher Technical School imeni

CO Vecherniaya Moskva
Sum 71

Bauman.

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

1. KRUGLOV, M. G.

2. USSR (600)

4. Pressure Gages

7. Device for measuring alternating low pressure. Vest. mash. 32 no. 10, 1952.

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

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

FRUDKIN, I. S.

Sovetskaia tekhnika na stroikakh kommunizma [Soviet technology in the construction projects of communism]. Simferopol, Krymizdat, 1953. 100 p.

SO: Monthly List of Russian Accessions, Vol. 6 No. 5, August 1953

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

ORLIN, A.S., doktor tekhnicheskikh nauk; KRUGLOV, M.G., kandudat tekhnicheskikh nauk; MIZERNYUK, G.N., kandidat tekhnicheskikh nauk.

Methods of investigating gas exchange processes in two-stroke engines. [Trudy] MVTU no.35:31-39 '55. (MIRA 9:7)
(Gas and oil engines)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

ORLIN, A.S., doktor tekhnicheskikh nauk; KRUGLOV, M.G., kandidat tekhnicheskikh nauk; MIZERNYUK, G.N., kandidat tekhnicheskikh nauk.

Indicator diagrams for compression-ignition two-stroke engines having variable parameters during admission and exhaust. [Trudy] MVTU no.35:40-45 '55. (Indicators for gas and oil engines) (MLRA 9:7)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

KRUGLOV, M.G., kandidat tekhnicheskikh nauk.

Gas exchange processes in two-stroke engines at varying pressures during admission and exhaust. [Trudy] MVTU no.35:46-54 '55. (Gas and oil engines) (MIRA 9:7)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

KRUGLOV, M.G., kandidat tekhnicheskikh nauk.

Parameter determination of similar two-stroke engines. [Trudy] MVTU no.35:55-63 '55. (MIRA 9:7)
(Gas and oil engines)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

KRUGLOV, M.G., kandidat tekhnicheskikh nauk.

Effect of unsteady gas flow on gas exchange processes in two-stroke engines. [Trudy] MVTU no.35:64-79 '55. (MLRA 9:7)
(Gas and oil engines)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

KRUGLOV, Mikhail Georgiyevich; OL'YAK, Valentin Dmitriyevich; ORLIN, A.S., professor, redaktor; MALASHKIN, O.M., inzhener, retsenzent; LEUTA, V.I., inzhener, redaktor izdatel'stva; RUDENSKIY, Ya.V., tekhnicheskiy redaktor

[Tractor engines] Traktornye dvigateli. Pod red. A.S.Orlina, Kiev, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1956. 325 p.
(Tractors--Engines) (MLRA 10:1)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

124-1957-2-1831

Translation from Referativnyy zhurnal, Mekhanika, 1957, Nr 2, p 53 (USSR)

AUTHOR Kruglov, M.G.

TITLE On the Effect of a Nonstationary Gas Flow on the Scavenging Process in a Two-stroke Engine (O vliyanii neustanovivshegosya techeniya gazov na protsessy gazoobmena v dvukhtaktnom dvigatele)

PERIODICAL V sb.: Dvigateli vnutrennego sgoraniya, Moscow, Mashingiz, 1955, pp 64-79

ABSTRACT In the opinion of the Author, the simplified formulas proposed by him may be used in certain instances in the analysis of the scavenging process in a two-stroke engine for the purpose of determining the gas pressure in the engine cylinder.

V.P.Abrukov

1. Gas flow--Properties 2. Internal combustion engines--Performance 3. Mathematics--Applications

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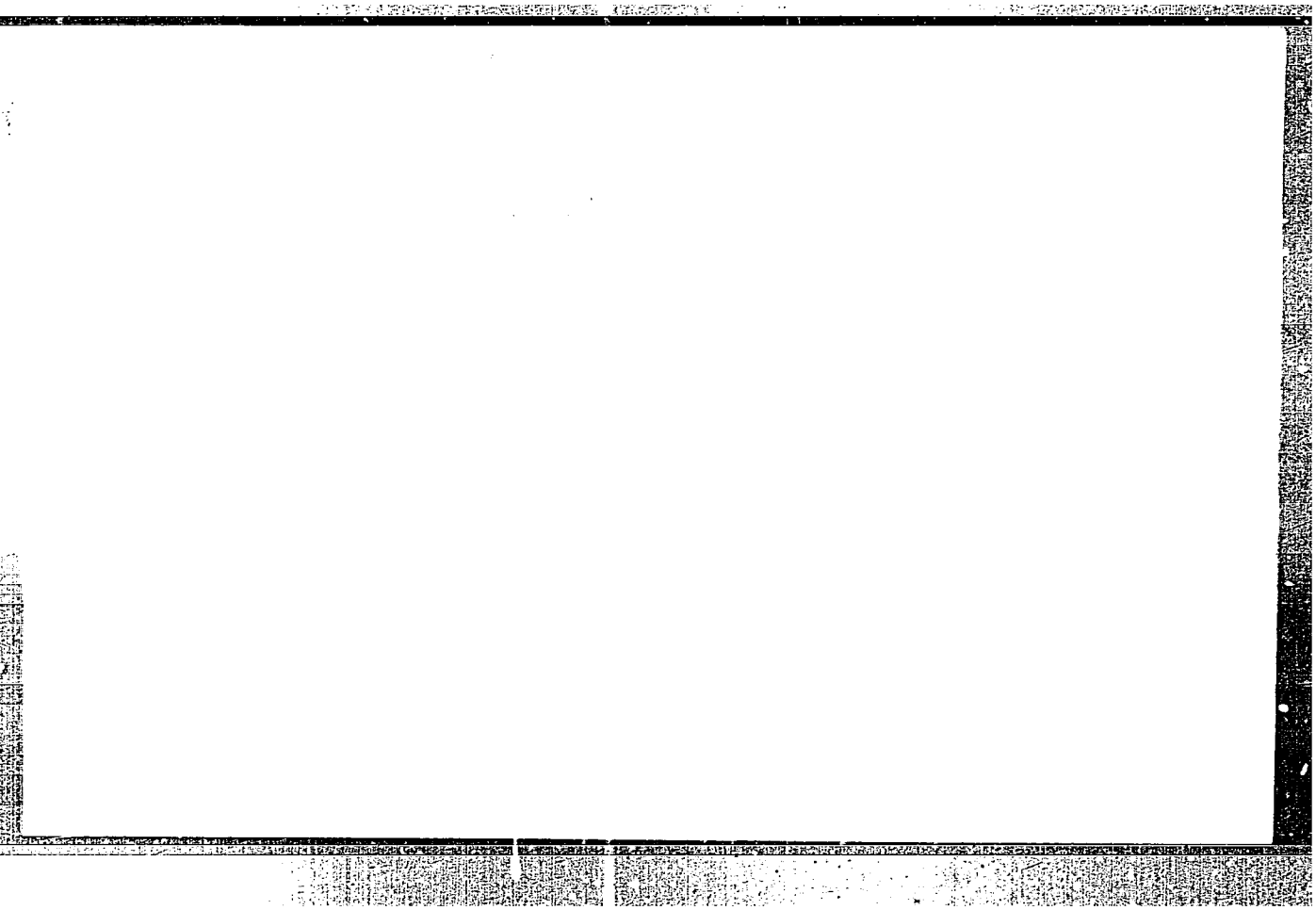

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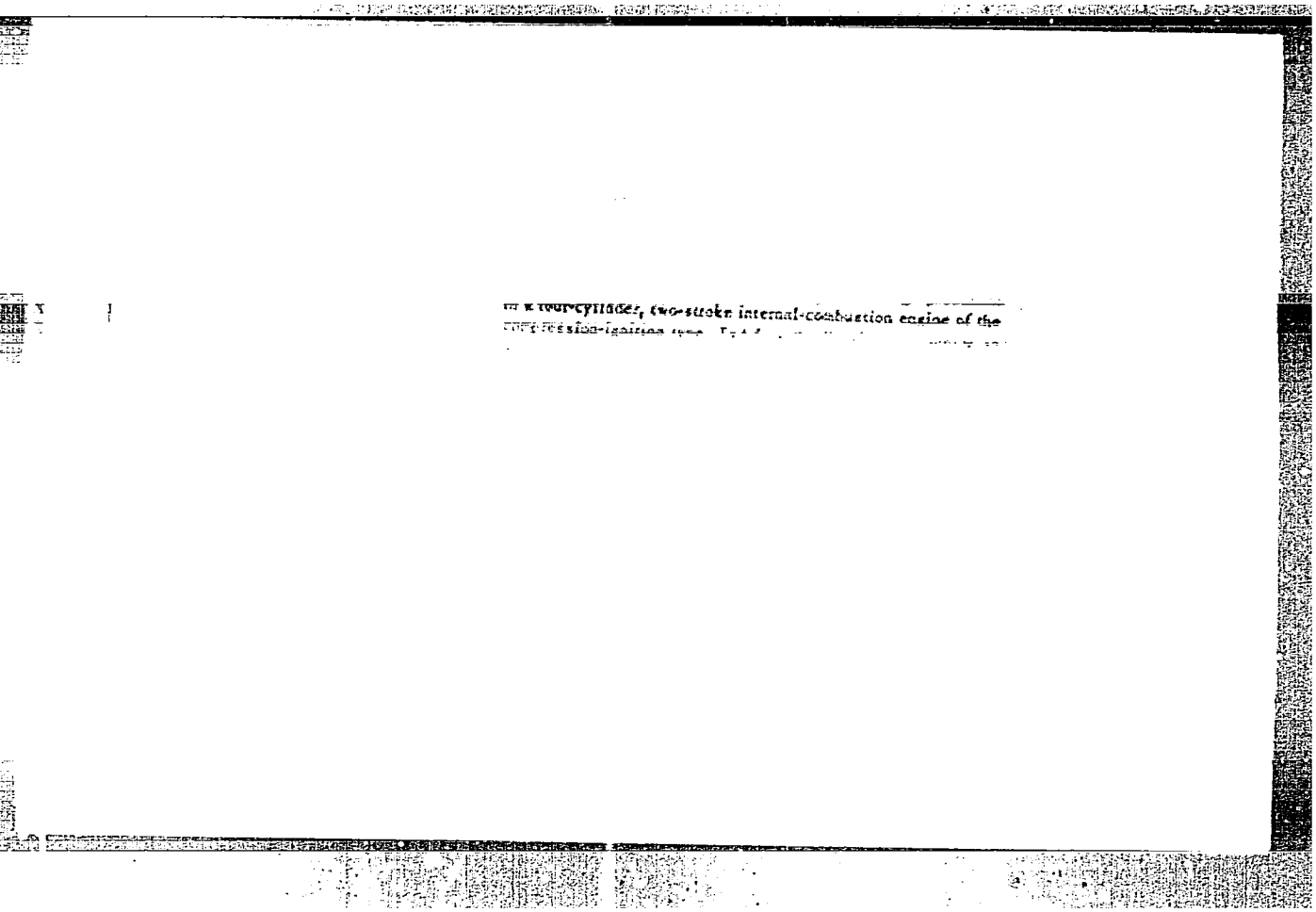

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PHASE I BOOK EXPLOITATION 326

Orlin, Andrey Sergeyevich; Vyrubov, Dmitriy Nikolayevich, Kalish, German Georgiyevich; Kruglov, Mikhail Georgiyevich; Leonov, Oleg Borisovich, Lebedev, Sergey Yevgen'yevich; Librovich, Bronislav Genrikhovich; Chursin,Mikhail Mikhailovich

Dvigateli vnutrennego sgoraniya. t.1: Rabochiye protsessy v dvigatelyakh i ikh agregatakh (Internal Combustion Engines. v. 1: Working Processes in Engines and Their Units) 2d ed., rev. and enl. Moscow, Mashgiz, 1957. 396 p.

Ed.: (title page): Orlin, A.S , Professor; Reviewer: Mel'kumov,T.M.; Ed. (inside book): Yegorkina, L.I., Engineer; Tech. Ed.: Tikhanov, A.Ya.; Managing Ed. for Literature on Automobile, Tractor and Agricultural Machine-building(Mashgiz): Bauman, I.M.

PURPOSE: This book is written as a textbook for students of institutions of higher learning specializing in internal combustion engines, automobiles, tractors, marine engines and locomotives.

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

Internal Combustion Engines. v.1: Working Processes (Cont.) 326

COVERAGE: The authors give a brief historical survey of internal combustion engine development in the USSR and mentions the names of the principal designers and engine types built from 1901 to the present. Theoretical bases of contemporary engine cycles, combustion, intake, supercharging processes, fuel supply and engine control are discussed. The influences of the operational and design factors on the work of the engine are analyzed. Problems of power, efficiency, carburetion, transportation engine characteristics, and the bases of mixture formation in compression ignition engines and gas engines are discussed.

This book is a revised and enlarged edition of Dvigateli vnutrennego sgoraniya (Internal Combustion engines) Vol. I (Mashgiz, 1951). Particularly extensive revisions were made on Chapters III, V and IX. Chapters IV and VII have been rewritten. Chapters I and VII were written by Orlin, A.S.; Chapters II and IV by Vyrubov, D.N.; Chapter III by Vyrubov, D.N. and Leonov, O.B.; Chapter V by Vyrubov, D.N. (Sections 1-7),

Card 2/11

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

Kruglov, M.G. (Section 12), Leonov, O.B. (Section 13) and Chursin, M.M. (Sections 8-11); Chapter VI by Kruglov, M.G. and Leonov, O.B.; Chapters VIII and IX by Kruglov, M.G.; Chapter X by Leonov, O.B.; Chapters XI, XII and XIII by Kalish, G.G. In the preparation of Chapters II, III and V the studies of Lebedev, S. Ye. and Librovich, B.G. were used, and in the preparation of Chapter IX the work of Kalish, G.G. There are 31 references: 28 are Soviet, 2 English and 1 German.

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

KRUGLOV, M.G., kand.tekhn.nauk

High-speed two-stroke engines with loop scavenging. Avt.i trakt. prom. no.8:40-43 Ag '57. (MIRA 10:12)
(Austria--Automobiles--Engines)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

KHUGLOV, M.G., kandidat tekhnicheskikh nauk, dotsent.

Two-cycle internal-combustion engines. Vest.mash. 37 no.6:8-16 Je '57. (MLRA 10:7)

(Gas and oil engines)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

ORLIN, Andrey Sergeyevich; [illegible], Mikhail Georgiyevich; KORCHAGIN, M.I., kand. tekhn.nauk, retsenzent; POPOV, A.A., kand. tekhn. nauk, red.; BASHENTSYAN, A.A., inzh., red. izd-va; EL'KIND, V.D., tekhn. red.

[Heavy-duty two-stroke marine diesels] Sudovye dvukhtaktnye dizeli bol'shoi moshchnosti. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1958. 95 p. (MIRA 11:10)
(Marine diesel engines)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

SOV/122-58-6-6/37

AUTHORS: Kruglov, M.G., Candidate of Technical Sciences, Docent; and Yeganyan, Yu.L., Engineer

TITLE: Investigation of Loop Scavenging of a Two-stroke Engine by means of a Running Single-cycle model (Issledovaniye petlevoy produvki dvukhtaktnogo dvigatelya na dinamicheskoy odnotsiklovoy modeli)

PERIODICAL: Vestnik Mashinostroyeniya, 1958, nr 6, pp 22-25 (USSR)

ABSTRACT: Loop-scavenging tests were carried out with the help of a model test rig provided with a special device, electromagnetically controlled, for the additional feeding of air into the cylinder when the piston passes through the upper dead point. The cylinder pressures were detected by a barium-titanate transmitter, the pressures in the exhaust manifold, by a capacity transmitter. The degree of mixing was measured by gas analysis after scavenging with carbon dioxide. Eight models with different designs of the scavenging ports were tested at 1 000 rpm at scavenging pressures between 1.06 and 1.2 kg/cm^2. Figure 2 shows the cross-sectional area of the scavenging and exhaust ports plotted against the crank angle. All but the eighth model have the same maximum cross-sectional areas. The scavenging air consumption, the residual gas coefficient

Card1/2

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

Investigation of Loop Scavenging of a Two-stroke Engine by means of a Running Single-cycle Model

and the charging coefficient are plotted against the scavenging air pressure in Figures 4, 6 and 7. The residual gas coefficient is plotted against the excess scavenging air coefficient in Figure 5. The residual gas coefficient and the charging coefficient are plotted against the speed in Figures 8 and 9 for model Nrs 5 and 8, chosen as the most suitable designs. The main factors describing the scavenging process for these two models are compared in a table, either at the same scavenging air flow or at the same scavenging air pressure. Model Nr 8 appears superior by virtue of a higher scavenging efficiency and a higher charging coefficient. There are 9 figures and 1 table.

Card 2/2 1. Internal combustion engines--Analysis 2. Interal combustion engines--Test methods

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

ORLIN, A.S., doktor tekhn. nauk; KRUGLOV, M.G., kand. tekhn. nauk.

Development of two-cycle marine and locomotive diesel engines. [Trudy] MVTU no.76:5-24 '58. (MIRA 11:5)
(Marine diesel engines) (Diesel locomotives)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

KRUGLOV, M.G., kand. tekhn. nauk; YEGANYAN, Yu.L., inzh.

Dynamic single-cycle model engines used in studying the gas exchange in two-cycle engines. [Trudy] MVTU no.83:116-132 '58. (MIRA 11:6)
(Gas and oil engines)

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YEGANYAN, Yu.L.; KRUGLOV, M.G.

Investigating loop scavenging of tractor-type two-cycle diesel engines. Nauch.dokl.vys.shkoly; mash. i prib. no.1:6-17 '59. (MIRA 12:8)

(Diesel engines--Testing)

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12(2) SOV/113-59-6-11/21

AUTHOR: Kruglov, M.G., Candidate of Technical Sciences

TITLE: The Scavenging Coefficient of Two-Stroke Engines With External Fuel Carburation

PERIODICAL: Avtomobil'naya promyshlennost', 1959, Nr 6, pp 31-32(USSR)

ABSTRACT: The author presents the formula for estimating the scavenging factor and the amount of fuel mixtures lost in the exhaust, and the amount of combustion products. He derives the following equation for determining the scavenging factor;

$$\varphi = 1 + \mu_0 \left(\frac{CO_2^{\uparrow}}{CO_2^{v}} - 1 \right)$$

where φ is the scavenging coefficient and μ_0 is the chemical coefficient of molecular change. However the use of this formula in practice is connected with certain difficulties since with the

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The Scavenging Coefficient of Two-Stroke Engines With External Fuel Carburation

conventional gas analysis and gas analyzers the volume content of dry gases is determined in a sample. For this reason the author presents the following formula;

$$\varphi = 1 + \lambda_0 \left(\frac{CO_2^{T'}}{CO_2^{V'}} - 1 \right) \left(1 - \frac{0{,}5H}{\lambda_0 M_1} \right)$$

where $CO_2^{T'}$ and $CO_2^{V'}$ are the volume components of carbon dioxide in the dry combustion products and in the exhaust gases, H is the weight portion of hydrogen in the fuel. These two formulae can be used both for determining the scavenging coefficient φ in gas engines with external and internal carburation and in compression ignition engines. However it is pointless to use them for determining φ in compression ignition engines and gas

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The Scavenging Coefficient of Two-Stroke Engines With External Fuel Carburation

engines with internal carburation as in these cases it is necessary to know the coefficient of the air surplus upon combustion (α). If it is known, then φ can be determined by using the results of measuring the fuel and air consumption. There is 1 diagram.

ASSOCIATION: MVTU imeni Baumana (MVTU imeni Bauman)

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KRUGLOV, M.G.

PHASE I BOOK EXPLOITATION SOV/4188

Alekseyev, Valentin Petrovich, Nikolay Ivanovich Kostygov, Mikhail Georgiyevich Kruglov, Aleksey Nikolayevich Krylov, Oleg Borisovich Leonov, and Georgiy Nikolayevich Mizernyuk

Dvigateli vnutrennego sgoraniya; opisatel'nyy kurs (Internal Combustion Engines; Descriptive Course) Moscow, Mashgiz, 1960. 451 p. 15,000 copies printed.

Ed. (Title page): A. S. Orlin, Professor; Ed. (Inside book): L. I. Yegorkina; Managing Ed. for Literature on Automotive, Tractor, and Agricultural Machine Building: I. M. Bauman, Engineer; Tech. Eds.: B. I. Model' and T. F. Sokolova.

PURPOSE: This textbook is intended for students at machine-building schools of higher education, and for personnel engaged in the production and operation of internal-combustion engines.

COVERAGE: The book describes the construction and operation of all the main types of reciprocating internal-combustion engines, and of individual

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systems and mechanisms used in them. The book corresponds to the program of the course on "Internal-Combustion Engines" at the Moscow Higher Technical Institute imeni N. Ye. Bauman. V. P. Alekseyev wrote chapters V and VI; N. I. Kostygov, the introduction, section 2 of chapter I, and chapters II, III and IV; M. G. Kruglov, chapter VII (except sections 40 and 42), section 57 of chapter X, and chapters XII and XIII; A.N. Krylov, chapter VIII, and sections 40 and 42 of chapter VII; O. B. Leonov, section 1 of chapter I, and chapter IX; G. N. Mizernyuk, chapters X (except section 57) and XI. The authors thank Professor D. N. Vyrubov. There are 38 references: 35 Soviet, 2 English and 1 French.

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

ORLIN, Andrey Sergeyevich; KRUGLOV, Mikhail Georgiyevich; KHANIN, N.S., kand. tekhn. nauk, retsenzent; YEGORKINA, L.I., inzh., red.; TIKHANOV, A.Ya., tekhn. red.; MODEL', B.I., tekhn. red.

[Two-cycle interval-combustion engines] Dvukhtaktnye dvigateli vnutrennego sgoraniia. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1960. 555 p. (MIRA 14:8)
(Gas and oil engines)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

ORLIN, A.S., prof., doktor tekhn.nauk; KRUGLOV, M.G., kand.tekhn.nauk

Gas exchange processes in medium and low powered two-cycle engines. Izv.vys.ucheb.zav.; mashinostr. no.9:155-162 '60. (MIRA 13:11)

1. Moskovskoye vysshoye tekhnicheskoye uchilishche im. Baumana.

(Gas and oil engines)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

ORLIN, A.S.; KRUGLOV, M.G.; YENGANYAN, Yu.L.

Investigating the gas exchange in two-cycle diesel engines with loop scavenging. Trakt.i sel'khozmash. 30 no.2:5-8 F '60. (MIRA 13:5)

(Diesel engines)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

KRUGLOV, M.G., kand.tekhn.nauk

Determining the gas temperature in the cylinder of an internal combustion engine at the beginning of the exhaust cycle. Energomashinostroenie 7 no.11:45-47 N '61. (MIRA 14:11)
(Gas and oil engines--Cylinders)

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KRUGLOV, M.G., kand.tekhn.nauk; KOZLOV, N.P., inzh.

Using models in investigating gas exchange in a two-stroke engine. Vest.mash. 41 no.11:15-21 N '61. (MIRA 14:11)
(Diesel engines--Testing)

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KRUGLOV, M.G.; KOZLOV, N.P.

Simulation of gas exchange processes in two-cycle engines. Trudy MIIT no.139:244-254 '61. (MIRA 16:4)

1. Moskovskoye vyssheye tekhnicheskoye uchilishche imeni Baumana.
(Gas and oil engines) (Thermodynamics)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

ORLIN, A.S., prof.; VYRUBOV, D.N.; ALEKSEYEV, V.P.; KALISH, G.G.; KOSTYGOV, N.I.; KRUGLOV, M.G.; KRUTOV, V.I.; MIZERNYUK, G.N.; ROGANOV, S.G.; STEPANOV, Yu.A., prof., retsenzent; YEGORKINA, L.I., red. izd-va; SOKOLOVA, T.F., tekhn. red.

[Internal combustion engines]Dvigateli vnutrennego sgoraniia. Pod red.A.S.Orlina. Moskva, Mashgiz. Vol.3. [Systems, regulation, automatic control]Sistemy. Regulirovanie. Avtomatizatsiia. 1962. 307 p. (MIRA 16:1)
(Gas and oil engines) (Automatic control)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

ORLIN, A.S., prof.; VYRUBOV, D.N.; KRUGLOV, M.G.; ROGANOV, S.G.; SIMAKOV, F.F.; CHURSIN, M.M.; GALANOVA, M.S., red.izd-va; SOKOLOVA, T.F., tekhn. red.

[Internal combustion engines]Dvigateli vnutrennego sgoraniia. Pod red. A.S.Orlina. Moskva, Mashgiz. Vol.2.[Design and construction]Konstruktsiia i raschet. Izd.2., perer. i dop. 1962. 379 p. (MIRA 15:11)
(Gas and oil engines—Design)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

KRUGLOV, M.G., kand.tekhn.nauk, dotsent

Equation of gas discharge in case of a flow in criterional form. Izv.vys.ucheb.zav.; mashinostr. no.2:142-146 '62. (MIRA 15:5)

1. Moskovskoye vysshoye tekhnicheskoye uchilishche im. N. E. Baumana.

(Gas dynamics)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5"

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KRUGLOV, M.G., kand.tekhn.nauk

Actual air excess ratio during combustion in diesel engines. Izv.vys.ucheb.zav.; mashinostr. no.4:167-170 '62. (MIRA 15:7)

1. Moskovskoye vysshoye tekhnicheskoye uchilishche imeni Baumana.

(Diesel engines--Combustion)

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

KRUGLOV, M.G., kand.tekhn.nauk TSZIN' GO-SYAN [Chin Kuo-hsiang]

Effect of the design of distribution members on the gas exchange processes in a two-stroke diesel with loop scavenging. Energomashinostroenie 8 no.1:15-20 Ja '62. (MIRA 15:3)
(Diesel engines—Testing)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

KRUGLOV, M.G., dotsent; KOZLOV, N.P., starshiy prepodavatel'

Using models in investigating gas exchange in two-cycle engines. Izv.vys.ucheb.zav.; mashinostr. no.5:101-111 '62. (MIRA 15:10)

1. Moskovskoye vysshoye tekhnicheskoye uchilishche imeni Baumana.
(Gas and oil engines—Testing)

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

KRUGLOV, M.G., kand.tekhn.nauk, dotsent; KOZLOV, N.P., inzh.; IVIN, V.I., inzh.

Problems in designing a two-cycle tractor engine with a loop scavenging. Izv.vys.ucheb.zav.; mashinostr. no.5:124-129 '62. (MIRA 15:10)

1. Moskovskoye vysshoye tekhnicheskoye uchilische imeni Baumana.
(Tractors—Engines)

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

KRUGLOV, M.G.

Determining the temperature of working medium in the cylinder of a motor-vehicle diesel engine. Avt.prom. 28 no.11:4-6 N '62. (MIRA 16:1)

1. Moskovskoye vysshaye tekhnicheskoye uchilishche imeni Baumana.

(Motor vehicles—Engines)
(Thermometry)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

KRUGLOV, M. G., kand. tekhn. nauk

Generalized expression of filling and feeding coefficients for internal combustion engines and volumetric compressors. Vest. mashinostr. 42 no.12:28-29 D '62. (MIRA 16:1)

(Gas and oil engines—Fuel systems)
(Compressors)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

KRUGLOV, M.G.; KHAYLOV, M.A., doktor tekhn. nauk, retsenzent; GALANOVA, M.S., inzh., red.; SOKOLOVA, T.F., tekhn.red.

[Thermodynamics and gas dynamics of two-cycle internal combustion engines; gas exchange processes] Termodinamika i gazodinamika dvukhtaktnykh dvigatelei vnutrennego sgoraniia; protsessy gasoobmena. Moskva, Mashgiz, 1963. 271 p. (MIRA 16:9)

(Internal combustion engines)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

KRUGLOV, M.G., kand.tekhn.nauk; IVIN, V.I., inzh.

Effect of the power loss component on the performance of a two-cycle diesel engine with network blow-out. Energomashinostroenie 9 no.2:16-20 F '63. (MIRA 16:3)
(Diesel engines)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

ORLIN, A.S., doktor tekhn.nauk, prof., zasluzhennyy deyatel' nauki i tekhniki; KRUGLOV, M.G., kand.tekhn.nauk

Prospects for using a two-cycle diesel engine with loop scavenging. Energomashinostroenie 9 no.4:26-28, 42 Ap '63. (MIRA 16:5)
(Diesel engines) (Tractors)

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KRUGLOV, M.G., kand.tekhn.nauk

Hydrodynamic characteristics of a two-stroke engine.
Vest.mashinostr. 43 no.2:28-30 F '63. (MIRA 16:3)
(Gas and oil engines)

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KRUGLOV, M.G., kand.tekhn.nauk; YEGOROV, Ya.A., inzh.; DMITRIYEV, V.P., inzh.

Improving the apparatus for testing engines. Trakt. i sel'khozmash. 33 no.5:18-20 My '63. (MIRA 16:10)

1. Moskovskoye vysshoye tekhnicheskoye uchilishche im. Baumana.

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

KRUGLOV, M.G., doktor tekhn.nauk,prof.; DMITRIYEV, V.P., aspirant

Effect of exhaust pipe diameter on gas-exchange indices and performance of a two-cycle engine. Izv.vys.ucheb.zav.; mashinostr. no. 12:158-166 '63. (MIRA 17:9)

1. Moskovskoye vysshaye tekhnicheskoye uchilishche imeni Baumana.

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

KRUGLOV, M.G., kand.tekhn.nauk; DMITRIY.V, V.P., aspirant; YEGOROV, Ya.A., aspirant

Improving the economic efficiency of an engine with a power-driven supercharger operating with partial loads. Izv.vys.ucheb.zav.; mashinostr. no.8:205-211 '63. (MIRA 16:11)

1. Moskovskoye vysshoye tekhnicheskoye uchilishche imeni Baumana.

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KRUGLOV, M.G., kand. tekhn. nauk

Some problems in the gas dynamics and thermodynamics of gas exchange in two-cycle engines. Izv. vys. ucheb. zav.; mashinostr. no.2:177-194 '63. (MIRA 16:8)

1. Moskovskoye vysshoye tekhnicheskoye uchilishche imeni Baumana.

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

KRUGLOV, M.G., doktor tekhn. nauk; YEGOROV, Ya.A., inzh.

Determining available energy of exhaust gases by the diagram of pressure changes in the outlet pipe. Vest. mashinostr. 43 no.12:17-21 D '63. (MIRA 17:8)

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

MORGULIS, P.S.; PERFILOV, V.G.; KRUGLOV, M.G., doktor tekhn. nauk, prof., red.

[Turbochargers for diesel locomotive engines] Turbokompressory teplovoznykh dvigatelei. Moskva, Mashinostroenie, 1965. 146 p. (MIRA 18:7)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

KRUGLOV, M.G., doktor tekhn.nauk; YEGOROV, Ya.A., kand.tekhn.nauk

Effect of the exhaust system on the performance of a high-speed two-stroke diesel engine with loop scavenging in case of a combined supercharging. Vest.mashinostr. 45 no.8:33-37 Ag '65. (MIRA 18:12)

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KRUGLOV, M.G., doktor tekhn. nauk; DMITRIYEV, V.P., kand. tekhn. nauk

Design of gas-distribution units for two-cycle internal combustion engines. Izv. vys. ucheb. zav.; mashinostr. no.5:123-130 '65. (MIRA 18:11)

1. Moskovskoye vysshoye tekhnicheskoye uchilishche im. Baumana.

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27104-66 EWT(d)/EWT(l)/EWT(m)/EWP(f)/T-2 WW

ACC NR: AP6017405 SOURCE CODE: UR/0122/65/000/008/0033/0037

AUTHOR: Kruglov, M. G. (Doctor of technical sciences); Yegorov, Ya. A. (Candidate of technical sciences)

47
B

ORG: none

TITLE: Effect of the exhaust system on the operation of a high-speed two-cycle diesel engine with loop scavenging for the case of combination supercharging

SOURCE: Vestnik mashinostroyeniya, no. 8, 1965, 33-37

TOPIC TAGS: diesel engine, supercharged engine, engine exhaust system, engine turbine system, turbine compressor, turbine

ABSTRACT: The authors propose a theoretical and experimental method for selecting the optimum dimensions for the exhaust system of a diesel engine with a combination supercharging system. An equation is given for power balance on the turbocompressor shaft, and formulas are derived for calculating the coefficients which appear in this equation for the available power of the exhaust gases, the power transmitted to the piston by the exhaust gases during gas exchange, the available power of the scavenging air, losses in the exhaust system, turbine efficiency and compressor power demand. The proposed theoretical method is experimentally checked by studying the operation of a two-cycle V-4

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27104-66

ACC NR: AP6017405

diesel engine with loop scavenging (D = 130 mm, S = 140 mm) under combination supercharging conditions. The data show that a pulse turbine with an efficiency of 0.82-0.84 and a compressor with an efficiency of 0.72-0.74 may be used to produce a mean supercharge in a high-speed two-cycle engine with loop scavenging and increase the power by 45-50% at g_e = 0.175-0.180 kg/ef hp-hr. Orig. art. has: 5 figures and 12 formulas. [JPRS]

SUB CODE: 13 / SUBM DATE: none / ORIG REF: 004

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

ACC NR: AP7005229 (A, N) SOURCE CODE: UR/0145/66/000/009/0087/0091

AUTHOR: Kruglov, M. G. (Doctor of technical sciences, Professor); Yegorov, Ya. A. (Candidate of technical sciences)

ORG: MVTU im. N. E. Bauman

TITLE: Energy distribution in the exhaust stroke of a two-cycle engine

SOURCE: IVUZ. Mashinostroyeniye, no. 9, 1966, 87-91

TOPIC TAGS: diesel engine, gas turbine, kinetic energy, exhaust gas dynamics

ABSTRACT: The article is a report on experimental research done at the Moscow Technical College on the effect which the cross sectional area of the exhaust manifolds in the 4D 13/14 two-cycle loop-scavenged diesel has on the energy distribution in the exhaust stroke with regard to losses. The length of the manifold was held constant at 600 mm and diameters of 80, 67 and 50 mm were studied. The engine had two exhaust manifolds, each joining two cylinders. A stroboscopic MAI-2 indicator was used for measuring the static and overall pressures of the exhaust gases in two cross sections of the manifold. The results show that up to 40% of the total available power is in the form of kinetic energy when the exhaust gases are moving at high velocities. This fact should be taken into account when evaluating the energy potentialities of a gas turbine. The time relationship of the gas velocity should be taken into account when

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ACC NR: AP7005229

calculating the kinetic energy since considerable errors are introduced if the average velocity is used (the results may be more than 30% lower than the true values). Heat losses through the walls of the exhaust manifolds are insignificant, reaching no more than 4% of the total available energy of the gases in the cases considered by the authors. On the other hand, hydraulic losses reach 20% of the available energy. Methods are given for determining the energy components, and it is shown that hydraulic losses may be determined with sufficient accuracy for practical purposes from the average flow parameters as in the case of steady-state motion of an incompressible fluid. Orig. art. has: 4 figures, 2 formulas.

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APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

ACC NR: AP7006678 (N) SOURCE CODE: UR/0145/66/000/010/0078/0081

AUTHOR: Kruglov, M. G. (Doctor of technical sciences); Ivin, V. I. (Candidate of technical sciences)

ORG: MVTU im. N. E. Bauman

TITLE: Use of a model for studying gas exchange, supercharging and vapor mixing conditions in a combination two-cycle high-power diesel

SOURCE: IVUZ. Mashinostroyeniye, no. 10, 1966, 78-81

TOPIC TAGS: diesel engine, engine fuel system, dimensional analysis, model scaling

ABSTRACT: The article is a report on work being done at the Moscow Technical College im. Bauman on theoretical problems involved in designing the gas-air channel in a high-power diesel engine. The methods of dimensional analysis are used for determining the parameters of a model suitable for this study and the properties of the scavenging agent applicable to the given model. Dimensionless formulas are derived for finding the necessary viscosity of the scavenging agent according to conditions of similarity. Recommendations are given for pressure compensation where the viscosity of the scavenging agent does not conform to the given model. The operating principle of the model is set forth briefly together with the experimental procedure. Orig. art. has: 4 formulas.

SUB CODE: 21/ SUBM DATE: 15Feb66/ ORIG REF: 002/

Card 1/1

UDC: 621.436

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KRUGLOV, M.S.

Rare form of tuberculous ostetitis. Zdrav. Belor. 5 no.3:66 Mr '59.
(BONES--TUBERCULOSIS) (MIRA 12:7)

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

KRUGLOV, M.S., polkovnik meditsinskoy sluzhby

Interfunctional relations of the digestive organs of the abdominal cavity in chronic appendicitis. Zdrav.Bel. 8 no.7:24-25 Jl '62. (MIRA 15:11)

(APPENDICITIS) (DIGESTIVE ORGANS)

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

NIKISHINA, Ye.F., kand.biologicheskikh nauk; KLUGLOV, N.

Atheistic education in zoology lessons in the sixth grade. Biol. v shkole no.1:22-23 Ja-F '62. (MIRA 15:1)

1. Smolenskiy pedagogicheskiy institut.
(ATHEISM—STUDY AND TEACHING)

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

KRUGLOV, N.A. (Vitebsk).

Three new experiments in electricity. Fiz.v shkole 7 no.3:50-52 '53.
(MLRA 6:11)
(Electricity--Experiments)

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

Kruglov, N. A.

Kruglov, N. A. --"Influence of Analgesic Substances on the Lability and Certain Other Functional Characteristics of the Nervous Center." Leningrad Medical Inst imeni Academician I. P. Pavlov, Chair of Pharmacology, Leningrad, 1955 (Dissertation for Degree of Doctor of Medical Sciences.)

SO: Knizhnaya Letopis', No. 23, Moscow, Jun 55, pp 87-104

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

KRUGLOV, N.A.

Effect of analgesics on the lability of a nerve center. Farm. i toks. 20 no.1:7-13 Ja-F '57. (MLRA 10:7)

1. Kafedra farmakologii (zav. - deystvitel'nyy chlen AMN SSSR prof. V.V.Zakusov) 1-go Leningradskogo meditsinskogo instituta imeni akad. I.P.Pavlova.

(NERVOUS SYSTEM, effect of drugs on,
analgesics, on rhythmic activity of flexor center during afferent stimulation (Rus))
(ANALGESICS, effects,
on flexor nerve center with afferent stimulation (Rus))

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

Country : USSR
Category : Human and Animal Physiology. T
The Nervous System. General Problems.
Abs. Jour. : Ref Zhur-Biol., No 23, 19[illegible], 106759

Author : Kruglov, N. A.
Institut. : -
Title : The Effects of Morphine, Promedol, Fiandon, and Promedol upon the Speed of Chain Tibial Flow in Nerve Centers.
Orig. Pub. : Farmakol. i toksikologiya., 1957, 20, No 3, 9-14

Abstract : As fibular nerves of decerebrated cats were irritated by single inductions, and no phenadon (0.25 mg/kg) and promedol (0.[illegible] mg/kg) were administered, latent periods of the semitendinosus* electric responses became longer (up to 0.5-1.5 sec). As the same small doses of these preparations were repeated, an average increase of up to 3-5 sec followed. This increase proved to be maximal and occurred after the following doses of analgesics were introduced: 3-5 mg/kg of

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*muscles

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

Country : USSR
Category : Human and Animal Physiology. T
The Nervous System. General Problems.
Abs. Jour. : Ref Zhur-Biol., No 23, 19[illegible], 106759

Author :
Institut. :
Title :

Orig Pub. :

Abstract : (cont) morphine and tecodine, 1-2 mg/kg of phenadon, and 2-4 mg/kg of promedol. In individual central elements, large doses of these preparations produced complete termination of conductivity. Apparently, the disruption of interneural transmission attained with analgesics is related to decreased lability of nerve cells in centers. -- S. I. Nikolina

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

USSR / Pharmacology, Toxicology, Analgesics. V

Abs Jour : Ref Zhur - Biol., No 20, 1958, No 94183

Author : Kruglov, N. A.
Inst : Not given
Title : Antagonism of N-Allylnormorphine and Daphthazole with Respect to Morphine.

Orig Pub : Farmakol. i toksikologiya, 1957, 20, No. 6, 40-46.

Abstract : N-allylnormorphine (I) in doses (2.5 - 5 mg/kg in tests on rats has an analgesic effect, which is not intensified with the increase of the doses. In 2.5 mg/kg doses and up, I lowers the analgesic effect of morphine (II). In the tests on rabbits intravenous injection of 5 - 10 mg/kg of I does not affect the respiration; 1 - 2 mg/kg recuperates and prevents the depressing effect

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710020-5

USSR / Pharmacology, Toxicology, Analgesics. V

Abs Jour : Ref Zhur - Biol., No 20, 1958, No 94183

of 10-20 mg/kg of II on respiration, while 2.5 and 5 mg/kg weakens the obstipational effect of II. I blocks the effect of II on respiration more strongly than its anaesthetic effect. 2,4-diamino-5-phenylthiazole (Daphtazol; III) in doses of 20 - 30 mg/kg increases the reflex excitability of the rabbits and stimulates respiration. 50 - 100 mg/kg manifested a toxic effect. III stimulates respiration, which is depressed by II, but in lesser degree than I. III does not weaken, but rather intensifies the analgesic effect of II on rats. DL_{50} III in mice builds up to 270 mg/kg hypodermically. In 50 mg/kg dose, III lowers DL_{50} II from 630 to 340 mg/kg. -- Ye. N. Guseva.

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KRUGLOV, N.A.

The effect of aminazine and mepazine on the central transmission of excitation in certain motor reflexes [with summary in English]. Farm. i toks. 21 no.1:34-38 Ja-F '58. (MIRA 11:4)

1. Laboratoriya chastnoy farmakologii (zav.-deystvitel'nyy chlen AMN SSSR prof. V.V. Zakusov) Instituta farmakologii i khimioterapii AMN SSSR.

(AUTONOMIC DRUGS, effects
10-(N-methyl-3-piperidylmethyl)-phenothiazine on central transm. of motor reflexes in cats (Rus)
(CHLORPROMAZINE, effects
on central transm. of motor reflexes in cats (Rus)
(CENTRAL NERVOUS SYSTEM, physiology
transm. of motor reflexes in cats, eff. of chlorpromazine & 10-(N-methyl-3-piperidylmethyl)-phenothiazine (Rus)

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