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E073/E535

On the Problem of Intercrystallite Corrosion of Austenitic, Cr-Ni Steels Containing 24% Cr and 19% Ni

grain boundaries may drop below the passivation level in the surface layer as a result of rejection of chromium carbides, which provides a basis for intercrystallite corrosion of this steel. This disproves the theory of intercrystallite corrosion being due to internal stresses, not only for the here investigated steel but also for the steel 1Cr18Ni9Ti(Nb), for which it was proved earlier (Refs 1 and 2) that artificially generated segregates at the grain boundaries are chromium carbides $Cr_{23}C_6$ and not titanium or niobium carbides. J. Philibert and H. Bizouard (Ref 15) have established directly by means of X-ray spectral analysis a drop in the chromium content of austenite during rejection of chromium carbides in stainless steels. They used a micro-analyser with an electron probe (Ref 16) which permits making an accurate quantitative analysis and a local identification of the structural lattice

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within a volume of 1 cubic micron. Such local analysis proved unequivocally the fact that the grain boundaries of stainless steel are impoverished in chromium in the neighbourhood of rejected carbides. This study was carried out at the State Research Institute for the Protection of Materials, G. V. Akimov, Prague, jointly with the United Steel Works in Kladno and the State Research Institute for Materials and Technology, Prague. There are 6 figures, 6 tables and 17 references, 6 of which are Czech, 1 Soviet, 2 German, 2 French and 6 English.

ASSOCIATIONS: SVÚOM, Prague (Číhal), Modřanské strojirny (Modřany Engineering Works) (Gröbner), SVÚMT, Prague (Ježek) and SONP Kladno (Pospíšil)

SUBMITTED: February 24, 1960

Card 5/5

18.7100

JEZEK, J

18.1130

81877
S/129/60/000/08/004/009
E073/E135

AUTHORS: Čihal, Vl., (Candidate of Technical Sciences), and
Ježek, J., (Doctor of Technical Sciences)

TITLE: Structure and Distribution of Secondary Phases in
Stainless Austenitic Steels ✓

PERIODICAL: Metallovedeniye i termicheskaya obrabotka metallov,
1960, No 8, pp 17-19 (+ 2 plates)

ABSTRACT: The authors studied the morphology, structure and distribution of rejected phases in stainless steels, using X-ray and electron diffraction methods. In the experiments two titanium stabilized steels with Cr content of about 18% and Ni content of about 9.5% with Ti:C ratios of about 10:1 and 4:1, and one non-stabilized steel with a lower carbon content were chosen. The chemical compositions of the three steels are given in Table 1. All the steels were subjected to the same heat treatment, consisting of heating for one hour at 1250 °C followed by quenching in water and tempering for durations of 5 minutes to 72 hours at temperatures between 550 and 850 °C. The results of the work have shown that the rejection of chromium carbide takes place at first in the form of two-dimensional dendrites which grow to certain
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critical dimensions and then become transformed into more stable and crystallographically more perfect shapes. The rejection of thermodynamically more stable titanium carbide takes place at high temperatures due to the low diffusion speed of the titanium. The character of the titanium carbides differs from that of chromium carbides and the TiC rejections in the structure of titanium-stabilized steels consist of very highly dispersed particles of steel which can only be detected by means of electron microscope techniques. Fig 10 shows a photo of the dispersed rejections from one of the steels (X 12 000). An electron diffraction pattern of the same rejections is reproduced in Fig 11.

There are 11 figures, 2 tables and 8 references: 4 German, 3 Czech and 1 Soviet.

ASSOCIATION: Výzkumný ústav ochramu materiálu G.V. Akimova
(Institute for the Protection of Materials imeni
"G.V. Akimov") and Státní výzkumný ústav
materiálu a technologie, Praha (Research Institute
for Materials and Technology, Prague)

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X

85191

18.1150

Z/034/60/000/011/004/009
E073/E335

AUTHORS: Koutský, Jaroslav, Candidate of Technical Sciences,
Engineer and Jezek, Jaroslav, Doctor of Natural Sciences

TITLE: On the Problem of Precipitation of Laves Phases in
Modified 12% Chromium Steels ✓

PERIODICAL: Hutnické listy, 1960, No. 11, pp. 864 - 867

TEXT: In the first part of the paper earlier published results of the authors and their team (Refs. 1-5) are summarised on the study of the structural stability of low-carbon 12% chromium steels alloyed with W, Mo, Co and V and intended for high-temperature application; discrepancies between the results obtained in this work and the results obtained by J. Kehsin-Kuo (Ref. 6) are discussed in some detail and it is stated that detailed Soviet results confirm the results obtained by the team of the authors of this paper. The main difference between the results consists of the fact that Kehsin-Kuo has not detected in any of the investigated cases the intermetallic phase Fe_2W .

The fact that Laves phases were detected in Czech steels and were not detected in the steels investigated by Kehsin-Kuo

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12% Chromium Steels

is explained by Čadek (Ref. 9), primarily by the presence of V, pointing out the low value of the atomic ratios W:C and Mo:C in Czech steels. According to him, the condition for precipitation of Laves phases in Mo steels is that the Mo:C ratio should be above 5. The authors of this paper do not agree with the view of Čadek; they have proved the presence of the Laves phase Fe_2W in

a Czech vanadium-free steel (3D - Table 1). They believe that even in Co-containing steels which have a homogeneous structure in the heat-treated state, the presence of V is not a necessary condition for the precipitation of the Laves phase but Co probably has a catalytic effect on separating out Fe_2W in the case

of a W:C ratio which is less than the critical value. For verifying these views, the authors have carried out experiments with two melts, one a 12% Cr-Mo steel and the other a 12% Cr-Co-W steel with the following chemical compositions:

Steel M - C 0.20%, Si 0.47%, Mn 0.48%, P 0.018%, S 0.030%,
Cr 11.9%, Ni 0.42%, Mo 1.84%;

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12% Chromium Steels

Steel C - C 0.28%, Si 0.25%, Mn 0.16%, P 0.010%, S 0.029%,
Cr 11.56%, Ni 0.17%, W 3.42%, Co 5.50%.

The steels were smelted in a 40 kg induction furnace, cast into
ingots which were then annealed and forged into 14 x 14 mm rods
and heat-treated by quenching from 1 050 °C in oil, followed by
tempering from 770 °C (Steel M) and 670 °C (Steel C) with cooling
in air. After this heat treatment a number of specimens were
subsequently annealed at 650, 700 and 800 °C for durations of
100, 500 and 1 500 hours. Investigations were carried out by
optical and electron microscope studies and analysis of the
precipitates. Microstructural and X-ray analysis of the specimens
led to the following conclusions.

1) Even in the absence of V precipitation of the Laves phase
 Fe_2W can occur in 12% Cr-Mo steels with a low atomic Mo:C ratio,
in which the microstructure in the heat-treated state is
heterogeneous. This supports the view of the authors that in
such cases concentration differences between the ferritic and

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austenitic (sorbite) phases have a decisive importance.

2) In the case of 12% Cr-W steels, which have a high Co content and a homogeneous structure in the heat-treated state, precipitation of the Laves phase Fe_2W may occur in the case of low atomic W:C ratios, even in the absence of V; this confirms the view of the authors that in such a case the separation of the intermetallide Fe_2W may be due to the catalytic effect of

Co. Acknowledgments are expressed to J. Neid for his cooperation in X-ray structural analysis and to Engineer P. Schier (Metallurgical Institute, CSAV) for his assistance in the work with the electron microscope. There are 4 figures, 6 tables and 9 references: 6 Czech, 2 English and 1 Soviet. X

ASSOCIATIONS: ZVIL, Pilsen and SVÚMT, Prague

SUBMITTED: July 27, 1960

Card 4/4

18 1151

24647

Z/034/61/000/009/001/002
E073/E535

AUTHORS: Čížek, Lubomír, Candidate of Science Engineer,
Ježek, Jaroslav, Doctor of Natural Sciences and
Vobořil, Josef, Engineer

TITLE: Influence of structural changes on the mechanical
properties of hardenable creep resisting
35Ni-15Cr-3W-Ti, Al steel

PERIODICAL: Hutnické listy, 1961, No.9, pp.637-645

TEXT: The properties of the steel Poldi AKRN were
discussed in earlier work (Ref.1: J. Vodsed'álek and L. Čížek,
Strojírénství 9 (1959) No.6, p.439), where it was stated that, due
to its excellent anti-creep and relaxation properties, it is
suitable for extensive use for machine parts operating at 650 to
675°C and up to 700°C for less mechanically stressed components.
The development of this steel has reached a stage when it can be
used for blades of steam turbines. Due to its exceptionally high
resistance to relaxation, it is one of the best steels for bolts.
In later work (Ref.2: L.Čížek: Candidate dissertation, SVÚMT, Prague
and Ref.3: J. Vobořil: Candidate dissertation, SVÚMT, Prague)
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attention was paid to structural changes which occur in this material during heat treatment and in operation. The composition of the steel is 35% Ni, 15% Cr and 3% W; hardenability is achieved by adding about 1.5% Ti and also Al. Equilibrium diagrams for this type of steel are not available. The structural conditions in this steel can be judged only on the basis of simplified ternary diagrams Ni-Cr-Ti, Ni-Cr-Al, Ni-Ti-Al and pseudo-ternary diagrams Ni-Cr-Ti-Al plotted by Taylor and Floyd for Nimonic type alloys. The steel under consideration differs from these alloys inasmuch as a part of the chromium and a larger part of the nickel is substituted by iron with a small quantity of W. It could be anticipated that for the steel AKRN the structural relations are similar to those pertaining to Ni-Cr-Ti-Al Nimonic type alloys. This means that, in addition to the γ -solid solution matrix, the phase γ' with the basic composition Ni_3Al with a face-centered cubic lattice may be present, the parameter of which differs only slightly from that of the γ -solid solution. This phase is capable of dissolving titanium and about 3/5ths of the Al atoms can be substituted by Ti atoms. This substitution increases the

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difference between the lattice parameters of the γ' and the γ phases, which has a favourable influence on the resistance to creep of the alloy after hardening. It was found that the longest time to fracture is obtained for specimens subjected to solution annealing at 1150°C for two hours. After rapid cooling from this temperature, a saturated γ -solid solution is obtained which contains TiC carbides that did not dissolve during the annealing. The steel has a low hardness, strength and yield point and a high elongation, contraction and impact strength. The second stage of heat treatment is precipitation annealing, during which considerable changes occur in the hardness, depending on the temperature and duration of this annealing. Fig.1 shows the hardening curves of a heat containing 2.15% Ti (hardness H_B vs. annealing time, hours); the solution annealing was effected at 1150°C for two hours, followed by quenching in water. The maximum hardness for this heat was 320 H_B . Fig.2 shows the hardening curves of alloys with various titanium contents after a precipitation hardening time of 10 hours (hardness H_B vs. temperature, °C; solution annealing same as for Fig.1^B). Fig.3

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shows the strength and yield point of a heat with 2.15% Ti (σ_{kt} , σ_{pt} , kg/mm^2 vs. annealing time, hours; solution annealing same as σ_{pt} in previous figures). It can be seen that as a result of the precipitation hardening the hardness increases from 62 to 108 kg/mm^2 and the yield point from 25 to 70 kg/mm^2 . The maxima roughly correspond to the maxima of the hardness curves. The elongation and contraction decrease in accordance with increasing strength. Over-ageing, which occurs after 100 hours at 700°C, is characterized by the yield point not decreasing further and the contraction increasing. The position is similar for ageing at 800°C. The impact strength decreases at all temperatures from the very beginning of the precipitation annealing and its initial decrease will be the higher the higher the annealing temperature. This decrease shows that there are local reactions at the grain boundaries. Detailed information is given on the structural changes after precipitation hardening. The individual phases were investigated by X-ray analysis using monochromatic CrK α radiation. Analysis of the finest phases were made with electron diffraction methods on particles caught on the extraction replicas.

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In some cases electron diffraction analysis of fine particles was carried out directly at the surface of the metallographic specimens. These investigations revealed several processes in the structure, namely, precipitation of chromium carbides at the grain boundaries, precipitation of fibrous titanium carbide, precipitation of intermetallic compounds. Interesting recrystallization phenomena were observed if ageing at 800°C extended over a long period. A K-structure was detected by means of differential thermal analysis. During the first period of the precipitation hardening, when the hardness, strength and yield point increase, no change can be detected in the structure even by electron microscopes with a resolution power of about 100 Å. The main hardening effect is attributed to the precipitation of the γ' -phase - $\text{Ni}_3(\text{Al}, \text{Ti})$. It was found difficult to determine the importance of $\text{Ti}(\text{C}, \text{N})$ precipitate in the hardening process but no particular role is attributed to it. The hardening process continues during operation and the maximum hardness is achieved sooner or later, depending on the temperature and the titanium content. In addition to the hardness, the strength and

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yield point also increase. At an operating temperature of 650°C the steel under investigation maintains a maximum hardness, strength and yield point without any appreciable change in the elongation and contraction for over 10000 hrs Fig.14 shows the properties of this steel as a function of the annealing time at 650°C. Hardness H_B (top graph), σ , kg/mm² (second graph), ψ and δ_{10} in % (third graph), R, mkg/cm² (bottom graph), all as functions of the annealing time, hours. Each of the graphs contains information on the solution annealing ("ROZPOUSTĚCÍ ZÍHANÍ - solution annealing; hod - hours; VODA - water). There is a slight drop in the impact strength, indicating structural changes at this temperature (650°C), i.e. primarily continuing precipitation at the grain boundaries. At higher temperatures over-ageing occurs which results in reduced resistance to strain; at 700°C a drop in hardness occurred after 100 hours. Over-heating, following by precipitation hardening without solution annealing, reduces the service life as compared to material which has not been over-heated. The results lead to the following conclusions:

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Structural and mechanical tests indicate that hardening of this steel is primarily due to precipitation of the γ' -phase, the composition of which is $Ni_3(Ti,Al)$. The second intermetallic phase η of the composition Ni_3Ti appears in the structure during the advanced stage of over-ageing and its occurrence does not manifest itself on the curves expressing resistance to deformation. In the early stages of precipitation, particles of fibrous carbide appear, for instance, the carbonitride $Ti(C,N)$ which precipitates primarily in titanium enriched zones. At the grain boundaries local precipitation of the chromium carbide Cr_7C_3 will occur. Tests with over-heated specimens again confirmed the fact that high hardness of hardenable alloys does not guarantee a high resistance to creep. Over-heated specimens, which were again hardened without solution annealing, reached a hardness equal to those of specimens which had been over-heated but their creep strength was low, since, as a result of this process, the solid solution matrix was impoverished of its hardening component. Due to its high structural stability, this steel is suitable for components intended to operate at about $650^\circ C$. Acknowledgments are expressed to Engineer P. Schier, Card 7/10

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Metallurgical Institute, ČSAV and to J. Sevcíkova who assisted with the electron microscopy work. There are 16 figures, 1 table and 26 references: 17 Soviet-bloc and 9 non-Soviet-bloc. The four latest English-language references read as follows:

A. Taylor, J. Metals 8, 1956, No.10, p.1353; A. Taylor, Ibid, 9, 1957, No.1, p.72; W. Betteridge: The Nimonic Alloys, London, 1959, p.24; H.J. Beattie and F.L. Ver Snyder, Nature 178, 1956, July, p.208.

ASSOCIATION: Státní výzkumný ústav materiálu a technologie, Praha
(State Research Institute for Materials and
Technology, Prague)

SUBMITTED: November 29, 1960

Card 8/10

TYKVA, Jaroslav, inž. § JEZEK, Jaroslav, RNDr.

Magnetic separation of electrolytically isolated phases. Hut listy 16
no.1:53-56 Ja '61.

L. Státní výzkumný ústav materialu a technologie, Praha.

CIZEK, Lubomir, inz., C.Sc.; JEZEK, Jaroslav, RNDr.; VOBORIL, Josef, inz.

Effect of structural changes on mechanical properties of the hardenable creep-resisting 35Ni-15Cr-3W-Ti,Al steel. Hut listy 16 no.9:637-645 S '61.

1. Statni vyzkumny ustav materialu a technologie, Praha.

MASIN, A.; JEZEK, J.; BAKALIKOVA, O.

About the nature of surface martensite. Acta techn Hung 32 no.1/2:
261-266 '61. (EEAI 10:5)

1. Staatliches Forschungsinstitut für Material und Technolgia, Praha
(for Jezek)
(Martensite)

34845
S/129/62/000/005/006/009
E021/E335

18.7500

AUTHORS: Koutsky, J., Candidate of Technical Sciences and
Ježek, J., Doctor

TITLE: Precipitation of Laves phases in steels with 12% Cr

PERIODICAL: Metallovedeniye i termicheskaya obrabotka metallov,
no. 3, 1962, 29 - 33 + 1 plate

TEXT: Steels of the percentual composition given in
Table 1 were investigated. With the exception of steels 1A
and 4E, all the samples after refining had a heterogeneous
structure consisting of sorbite and δ -ferrite. Precipitation
of Laves phases was observed in the δ -ferrite region. The
results obtained were compared with those of Kehsin Kuo
(Ref. 4 - Journal Iron Steel Inst., v.185, 1957) and the
following conclusions were drawn. Precipitation of the Laves
phase Fe_2Mo in steels containing 12% chromium and additions of
molybdenum with a low atomic ratio Mo:C and having a hetero-
geneous microstructure can occur even in the absence of vanadium.
The different concentrations in the ferrite and in the austenite

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(sorbite) have the deciding influence. Precipitation of the Laves phase Fe_2W can occur even in the absence of vanadium in steels containing 12% chromium and additions of tungsten and cobalt and having in the refined state a sorbitic structure (with low atomic ratio $W:C$). It is assumed that in this case cobalt has a catalytic effect on the precipitation of the intermetallic compound Fe_2W . The phase Fe_2Mo is less stable than the phase Fe_2W . There are 6 tables.

ASSOCIATIONS: Zavody imeni Lenina (Works imeni Lenin), Plzeň, Gosudarstvennyy issledovatel'skiy institut materialov i tekhnologii, Praga (State Research Institute for Materials and Technology, Prague)

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X

G/014/62/000/004/005/006
D030/D109

AUTHORS: Vobořil, J., Engineer, and Ježek, J., Doctor (Prague)

TITLE: The influence of certain elements on the structure formation during separation of high-temperature chrome-nickel alloys

PERIODICAL: Schweisstechnik, no. 4, 1962, 186

TEXT: Modern long-life, high-temperature alloys contain small additions of titanium and aluminum besides a high content of nickel, chromium, and, if necessary, cobalt and iron. Other elements frequently used, such as W, Mo, Zr, Mn, Si, B, C, may influence the formation of various phases, in particular the aging processes.

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35625
Z/046/62/000/001/006/007
D007/D102

18.1151

AUTHORS: Vobořil, J., Engineer, and Ježek, J., Doctor of Natural Sciences, Candidate of Sciences

TITLE: The influence of some elements on structural phenomena in hardenable high-temperature NiCr-base alloys

PERIODICAL: Zváračský sborník, vol. II, no. 1, 1962, 127-153

TEXT: The influence of titanium and aluminum additions on hardenable, high-temperature, NiCr-base alloys was studied to provide a better understanding of the behavior at design operating conditions of currently used materials, and to facilitate the development of new materials. Studied were the AKRN and AKNC alloys in which the Ti and Al contents were varied. Optical and electron microscopy; X-ray and electron structural analyses; differential thermal analysis; conductivity, volume and hardness measurements were employed. Results: The decomposition of oversaturated Ni-base solid solutions occurs in two stages: In the range of 100-300°C, the so-called low-temperature decomposition, characterized by the formation of a superstructure, takes place; in the range of 600-700°C, there

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JEZEK, Jaroslav, RNDr., C.Sc.; VOBORIL, Josef, inz.

Methods of making thin foils for examining the structure of metals by the electron microscope. Hut listy 17 no.10:720-724 0 '62.

1. Hutnický ústav, Československá akademie věd, Praha (for Jezek). 2. Státní výzkumný ústav materiálu a technologie, Praha (for Voboril).

ACCESSION NR: AP3000089

Z/0034/63/000/005/0342/0349

AUTHOR: Cihal, Vladimir (Assistant Professor, Engineer, C.Sc., Prague);
Jezek, Jaroslav, (Dr. of natural sciences, C.Sc.)

TITLE: Changes occurring in stabilized austenitic steels at high temperatures

SOURCE: Hutnicke listy, no. 5, 1963, 342-349

TOPIC TAGS: formation of carbides of Cb, Ti; influence of high temperature; influence of annealing; intergranular corrosion of stainless steels

ABSTRACT: The present article continues the work described by the authors previously (Hutnicke Listy, no. 5, 1956, 151-154 and 264-288; no. 12, 1958, 446 and 1092-1098). Studies of structural changes during annealing of stabilized austenitic stainless steels revealed the following: stable carbides of Ti and Cb are dissolved during heating to very

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ACCESSION NR: AP3000089

high temperatures and are precipitated upon cooling causing decrease in strength and elasticity, and start a tendency towards intercrystalline corrosion after having been heated to the critical temperature range of 500 to 800C. The intercrystalline corrosion is connected mainly with a precipitation of chrome carbide of the type $M_{23}C_6$ sub 6 at the edges of the grains, or in some cases by the carbide M_6C sub 6 C. At temperatures of 650 to 850C thin fibers of carbides or carbonitrides of Ti and Cb are formed. The content of delta ferrite in steel structure increases with the increase of the stabilizing metals content and with the increase of the dissolving temperature. The brittleness of steel heated above 750C is due to change of ferrite delta to sigma below 800C. Steels with a high Cb content form Fe sub 2 Cb and Cb carbide at 750 to 950C. The carbide of the type M_6C sub 6 C precipitated during heating of steels with high Cb content was identified as carbide of Fe, Cb or Fe, Cb, Cr. Fe sub 2 Cb dissolves at 1000C, while the carbide (Fe, Cb) sub 6 C dissolves above 1200C. The 2 substances mentioned above cause the loss of plasticity of Cb stabilized steels between 700 and 900C. "The study was made in collaboration with the SVUOM, the Jutnický ústav CSAV (Metallurgical Institute) at Prague, the SONP, and the SVUMT at Prague; the authors thank all

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ACCESSION NR: AP3000089

those concerned for their help in its execution." Orig. art. has 14
figs., 7 tables.

ASSOCIATION: Statni vyzkumny ustav ochrany materialu G. V. Alimova,
Prague (State Research Institute of Materials Protection); Vyzkumny
ustav uslechtilych oceli (Research Institute for Stainless Steel), Prague

SUBMITTED: 00	DATE ACQ: 17Jun63	ENCL: 00
SUB CODE: 00	NR REF SOV: 015	OTHER: 016

Card 3/3

JEZEK, Jaroslav, RNDr., C.Sc.; VOBORIL, Josef, inz.

Effect of the residual austenite transformation and vanadium carbide precipitation on the development of the high-speed steel secondary hardness. Hut listy 18 no.3:196-199 Mr '63.

1. Hutnický ústav, Československá akademie věd, Praha (for Jezek).
2. Státní výzkumný ústav materiálu a technologie, Praha (for Voboril).

L 770-64

ACCESSION NR: AP3005720

Z/0032/63/013/007/0497/0498

AUTHOR: Jezek, J.; Hemzal, K. *B

TITLE: Snizeni vstupni ztraty do potrubí (Reduction of input losses in pipelines)

SOURCE: Strojirenstvi, v. 13, no. 7, 1963, 497-498

TOPIC TAGS: Pipeline, input losses, pipe connection, pipe shape.

ABSTRACT: Article describes a simple design for intake of a pipeline which is joined to the output cross section of a tank's efflux opening. This design reduces losses up to 20% in comparison with rectangular, sharp-edged openings. The new design has been verified experimentally. Orig. art. has: 9 figures.

ASSOCIATION: CVUT Prague (Czechoslovak Technical University)

SUBMITTED: OO

DATE ACQ: 14Aug63

ENCL: OO

SUB CODE: AI, SD

NO REF SOV: OOL

OTHER: OC2

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CIHAL, Vladimir, doc., inz., ScC.; JEZEK, Jaroslav, RNDr., ScC.

Changes in austenitic stabilized steel at elevated temperatures.
Hut listy 18 no.5:342-349 My '63.

1. Statni vyzkumny ustav ochrany materialu G.V. Akimova, Praha
(for Cihal). 2. Vyzkumny ustav uslechtilych oceli, Praha (for
Jezek).

ACCESSION NR: AP3011676

0/0029/63/000/010/0606/0614

AUTHOR: Jezek, Jaroslav and Voboril, Josef

TITLE: Effect of some additions on structural changes in Ni-Cr- base
age-hardened high-temperature alloys

SOURCE: Neue Hutte, no. 10, 1963, 606-614

TOPIC TAGS: Ni-Cr alloy, age-hardened alloy, high-temperature alloy, Nimonic
AKRN, AKNC, alloy structure, solution annealing, precipitation annealing

ABSTRACT: High-temperature alloys contain in addition to large parts of
nickel and chrome or iron and cobalt also smaller amounts of elements greatly
affecting their structure, primarily titanium and aluminum, but also B, C,
Si, Mn, Zr, Mo and W. Base material for our examinations was the steel AKRN,
which differs from alloys of the Nimonic type in that part of the chrome and
nickel is replaced by iron and wolfram. These substitutions have no significant
effect on structure or quality. Table 1 gives the composition of the alloys
examined. For a temporary estimate of all possible phases it can thus be

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expected that structural changes in the alloys examined will be analog. This means that in addition to the basic solid solution γ there may also be present the phase γ' of the composition Ni_3Al ; this phase dissolves titanium. The mobility of atoms affecting the structural stability depends on a high melting point of the alloy. The elements of the transitional group Cr, Fe, Co, Ni are the main components of the base mass; of these, nickel with a surface-centered grid is most important. The examined alloys fall into two groups: those having an AKRN base with only the titanium and aluminum contents changed, and those based on AKNC (Nimonic 80). Fig. 1 shows all examined alloys. Structural changes were examined by metal and electron-microscopy, X-ray and electron-structure analysis, and thermic analysis after the samples had been annealed in solution at 1,050, 1,150, 1,200, and 1,300°C and quenched in water; they were hardened at 600, 650, 700, 750, 800, and 850°C for from 1 to 2,000 hours (in some cases to 5,000 hours). Metallographic samples were pre-polished with emery paper, polished with alumina 1 or 2, in some cases electrolytically in 35% alcoholic HNO_3 solution. Gaugerisation was either electrolytic (10% chromic

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ACCESSION NR: AP3011676

acid) or chemical (92% HCL, 3% HNO₃, 5% H₂SO₄), the latter with better results. If an oxide film appears it can be removed with 5% hydrochloric acid or, in case of high titanium content, with a 1 : 1 : 1 solution of nitric acid, hydrofluoric acid and water. The collodion extract impression was used with the electron microscope. Some phases were identified by X-ray structure analysis, using monochromatic rays CrK α , especially on precipitation obtained by electrolytic isolation. Electron diffraction of the extract impression was used for analyzing very fine precipitation; in extremely fine cases this analysis was performed on the surface of the sample. Results of the examination of these agehardenable high-temperature materials, type 35Ni-15Cr and Nimonic 80, indicate that the hardening of these materials is connected with a precipitation of the γ' phase (Ni₃(Al,Ti)) and the η phase (Ni₃Ti). Fibrous titanium carbides appear during the early stage of the precipitation in the structure of the 35Ni-15Cr materials. A local precipitation of chrome carbide occurs at the grain boundaries. Raising the solution temperature above the dissolving limit of the hardening phases causes an increase of titanium in the solution and thereby a much earlier precipitation of titanium-rich phases. In higher stages of the precipitation annealing recrystallization occurs, resulting in a laminar mixture of two

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balanced phases γ and η . In addition to the hardening phases, the phases η , σ , and the heretofore unknown phase N (on which a structure analysis was performed) were observed in alloys with a high aluminum content. Depending on the aluminum content of the alloy, particles of the γ' phase may be globular or cubic. The examinations were conducted by the Government Research Institute for Material and Technology, Prague, to study the behavior of known materials under plant conditions and to determine further development of similar materials. Orig. art. has: 17 figures and 3 tables.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 04Nov63

ENCL: 02

SUB CODE: MA, ML

NO REF SOV: 004

OTHER: 018

Card 4/6

ACCESSION NR: AP4041520

Z/0065/64/000/003/0257/0288

AUTHOR: Koutsky, Jaroslav (Koutskiy, Yaroslav); Jezek, Jaroslav (Yezhek, Yaroslav); Jandos, Frantisek (Yandosh, Frantishek); Barackova, Lydie (Barachkova, Lidiya)

TITLE: The heat resistance of 12% Cr steels with tungsten, molybdenum, and vanadium

SOURCE: Kovove materialy, no. 3, 1964, 257-288

TOPIC TAGS: heat resistant chromium steel, twelve percent chromium steel, modified chromium steel, heat resistant steel

ABSTRACT: Twenty-seven heats of modified 12% Cr steel containing 0.20% C, 10.82-13.09% Cr, 0.25-9.38% Mo, 1.04-15.32% W, and 0.12-1.11% V were investigated in order to determine the effect of prolonged (up to 5000 hr) aging at 550-650C on its structure and mechanical properties. The following phases were identified in the steels studied: $M_{23}C_6$, M_6C , V_4C carbides, M_2X carbonitride and intermetallic Laves phases: Fe_2Mo , Fe_2W . Molybdenum and vanadium were found to increase the notch toughness of the tempered steels. The notch

Card 1/2

TOPIC TAGS: long time annealing, sorbitic structure, Laves phase precipitation, ferrite decomposition, creep, high temperature strength

ABSTRACT: The authors introduce the results of a study on the structural stability of δ ferrite in Cr12W2V type steel containing in addition a small amount of Ni and Ti. While in long-time annealing of steel specimens at 550-650°C precipitation of Laves-phase took place in the sorbitic structure only, and no precipitation was observed inside δ ferrite grains, there was an extensive decomposition of ferrite in the specimens subjected to creep at 600°C. It was shown by electron microscopy, chemically, and by x-ray photography that this precipitation can also be consid-

ACCESSION NR: AP5005405

2

tween the high-temperature strength and the properties of the γ phase and to consider the presence of δ ferrite in the structure as advantageous to high-temperature strength. Orig. art. has: 5 tables and 17 diagrams.

ASSOCIATION: Vyzkumny ustav LZ, Pizen (LZ Research Institute); CSAV Ustav vlastnosti kovu, pobočka Praha (CSAV Research Institute for Study of Metal Properties, Prague Branch)

WFP(e)/WFP(t)/ETI IJP(c) JD/JG/AT/WH

ACC NR: AP6027707

SOURCE CODE: CZ/0034/66/000/001/0070/0070

AUTHOR: Jezek, J. (Doctor of natural sciences; Candidate of sciences); Kastanek, O.
(Engineer); Krumpolc, V.

ORG: none

TITLE: Cutting steels, mainly for cast tools

SOURCE: Hutnicke listy, no. 1, 1966, 70

TOPIC TAGS: tool steel, metal cutting, grain structure

ABSTRACT: The article is an abstract of Czechoslovak Patent Appli-
cation No Class 40b, 15/00, PV 2807-65, dated 29 April 65. The
invention covers a method by which the network of eutectic carbides
is disrupted by the addition of 0.2 to 10 weight % of Ti, Zr, Nb,
or Ta, or a mixture of any of these. In this steel vanadium is
either completely or in part replaced by metals of the 4th and 5th
group; this fosters the formation of primary carbides. This in-
creases the suitability of the steels for cutting, and a fine grain
structure is maintained in the final product. [JPRS: 34,519]

SUB CODE: 11, 13 / SUBM DATE: 29Apr65

Card 1/1 *FV*

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L 34909-66 EWP(t)/ETI/EWP(k) IJP(c) JD/HW

ACC NR: AP6026591

SOURCE CODE: CZ/0034/66/000/002/0108/0112

AUTHOR: Jezek, Jaroslav--Yezhek, I. (Doctor of natural sciences; Candidate of sciences); Raineshova, Jaroslava--Raineshova, I. 37
8

ORG: Institute of Metal Properties, CSAV, Prague (Ustav vlastnosti kovu CSAV)

TITLE: Workability of Ti stabilized NiCr stainless steels 4

SOURCE: Hutnicke listy, no. 2, 1966, 108-112

TOPIC TAGS: metal deformation, stainless steel, metal rolling, steel impurity, ferrite

ABSTRACT: The influence of the ratios Ti : C, and (Cr+Mo) : Ni on the amount of ferrites, and on the proportion of rejects occurring during the rolling of plates was investigated in 30 heats. Heats containing more than 5% of ferrites showed surface defects; high content of ferrites appears to be the major cause of reduced workability, even if it is not the only one. The effect of the dissolving of TiC carbides upon the precipitation of Cr carbides in coherent layers along the grain boundaries of ferrites resulting in defects that appear during rolling is described. Orig. art. has: 11 figures and 2 tables [JPRS: 34,779]

Card 1/1 7/95

UDC: 669-122: 669.14.018.8
0716 5286

KLEN, Rudolf . Technicka spoluprace: HUSEK, Z.; JEZEK, K.

Activities of the Collecting Center for human milk at the
Tissue Bank of the Faculty Hospital, Regional Institute
of National Health at Hradec Kralove. Sborn. ved. prac. lek.
fak. Karlov. Univ. 8 no.3:321-329 ' 65.

JEZEK, K.

JAROLIM, G.; JEZEK, K. "Scientific-technical competition of the Ministry of Fuel and Power to solve problems connected with the general plan of the Ostrava-Karvina mines." Uhlí, Praha, Vol 3, No 4, Apr. 1953, p. 126

SO: Eastern European Accessions List, Vol 3, No 10, Oct 1954, Lib. of Congress

FABIAN, Jan, inz.; SMUTNY, Frantisek, inz.; ROSMUS, Jan, inz.; DEYL,
Zdenek, inz. CSc.; JEZEK, Karel, PhDr.

Discussion on Vladimir Horejsi's article "Use of high-fre-
quency energy in food sublimation drying. Prum potravin 15
no.2:69-71 F '64

JEZEK, L.; LAITNER, J.; SCHWARZER, J.

AGRICULTURE

PERIODICAL: SBORNIA RADA ZEMEDELSKA EKONOMIKA, VOL.32 , no. 3, Mar. 1959

Jezek, L.; Laitner, J.; Schwarzer, J. Some problems concerning the economic aspect of feeding rations. p. 177.

Monthly List of East European Accessions, (EEAI), LC, Vol. 8, no. 5,
May 1959, Unclass.

SHON, A.; JEZEK, L.; PEKNY, J.

The UPS general positioner. Zvaranie 13 no. 4:106-109 Ap '64.

1. Vyvojove stredisko, Opravny zemedelskych stroju National Enterprise, Prague.

JEZEK, Ladislav

Performance of technical standards in operating a single machine
with fixed running time. Podn org 18 no.5:210-211 My '64.

1. State Commission of Investment Construction.

SHON, A.; PEKNY, J.; KOZAK, J., inz.; JEZEK, L.

Equipment for CO₂-shielded surfacing of worn tractor parts.
Zvaranie 13 no.3:78-82 Mr '64.

1. Vyvojove Stredisko, Opravny zemedelskych stroju National
Enterprise, Prague, zavod Ol Vinor.

KALINA, J.; JEZEK, M.

Buras in infants. Acta chir. orthop. scand. 1964, 32
542-546 D ' 64

I. Chirurgické oddelení Krajské nemocnice a polikliniky
v Ostravě (vedoucí doc. dr. K. Týpoveký, BSc.)

JEZEK, Miroslav, MUDr.

Silicones in the local therapy of burns. Voj. zdrav. listy 34
no.3:132-133 Je '65.

1. Krajska nemocnice s poliklinikou v Ostrave chirurgiske
oddeleni (prednosta doc. dr. K. Tycovsky, CSc.).

CZECHOSLOVAKIA

Epidemiology

CZ/0067/66/000/004/0247/0252

AUTHOR: Jezeek, P.

ORG: Clinic of Infectious Diseases, School of Medicine, UJEvP,
Brno-Bohunice (Klinika infekcnich chorob lekarske fakulty, UJEvP)

TITLE: Tick-borne encephalitis in the Brno region. I. Evaluation
of some epidemiological data.

SOURCE: Ceskoslovenska epidemiologie, mikrobiologie, imunologie,
no. 4, 1966, 247-252

TOPIC TAGS: epidemiology, tick, encephalitis, infection area,
disease control

ABSTRACT:

Some epidemiological data are presented which were obtained
by a target case history investigation of 365 patients suf-
fering from virologically confirmed tick-borne encephalitis
and treated during 1960-1964 at the Clinic for Infectious
Diseases in Brno. Most of the patients were in the 20-30-
yr-old age group and the peak of the epidemic was at the
end of June and in July. In 7.1 percent of the patients

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it was possible to eliminate the possibility of a tick attack or infection through goat milk almost completely. Eighty-five percent of the patients were infected during a stay at a center of infection, most during their vacations. Only 5.7% were linked to the place of infection through their profession or by their way of life. Those infected in recreational areas of the immediate vicinity of Brno amounted to 53.7%. The paper discusses the practical consequences of these findings in planning preventive measures. [WA-50; CBE No. 11]

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- 13 -

SABACKA, M.; JEZEK, P.; KUTALKOVA, O.; TOVAREK, J.

Proteolytic activity in epidemic hepatitis. Cas. Lek. Cesk. 100 no.49:
1545-1548 8 D '61.

1. Infekcni oddeleni fakultni nemocnice v Brne-Bohunicich, prednosta
doc. MUDr. V. Houbal. III vnitřni klinika fakultni nemocnice v Brne,
prednosta prof. MUDr. et PhDr. J. Pojer.

(PROTEASES blood) (HEPATITIS INFECTIOUS blood)

ACC NR: AP6026992 (A) SOURCE CODE: CZ/0067/66/000/004/0247/0252

AUTHOR: Jezek, P.

ORG: Clinic of Infectious Diseases, School of Medicine, UJEvP,
Brno-Bohunice (Klinika infekcnich chorob lebarske fakulty, UJEvP)

TITLE: Tick-borne encephalitis in the Brno region. I. Evaluation
of some epidemiological data

SOURCE: Ceskoslovenska epidemiologie, mikrobiologie, imunologie,
no. 4, 1966, 247-252

TOPIC TAGS: epidemiology, tick, encephalitis, infection area,
DISEASE CONTROL

ABSTRACT:

Some epidemiological data are presented which were obtained by a target case history investigation of 365 patients suffering from virologically confirmed tick-borne encephalitis and treated during 1960—1964 at the Clinic for Infectious Diseases in Brno. Most of the patients were in the 20—30-yr-old age group and the peak of the epidemic was at the end of June and in July. In 7.1 percent of the patients it was possible to eliminate the possibility of a tick attack or infection through goat milk almost completely.

Card 1/2

ACC NR: AP6026992

Eighty-five percent of the patients were infected during a stay at a center of infection, most during their vacations. Only 5.7% were linked to the place of infection through their profession or by their way of life. Those infected in recreational areas of the immediate vicinity of Brno amounted to 53.7%. The paper discusses the practical consequences of these findings in planning preventive measures. [WA-50; CBE No. 11]

SUB CODE: 06/ SUBM DATE: 09Jul65/ ORIG REF: 020/ OTH REF: 008/
[WA-50; CBE No. 11]

Card 2/2

JEZEK, P.

10 (continued)
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11. The treatment of the above information is similar to that of the information in the above paragraph, but the information is not classified as such because it is not of a nature which would be of substantial value to the enemy.

12. The information is of a nature which would be of substantial value to the enemy if it were disseminated to the enemy.

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3
POJER, J., Prof. Dr; MALINOVSKA, V; JEZEK, P; TOVAREK, J.

Czechoslovakia

Third Internal Medicine Clinic of the Medical Faculty
-- Brno (III. vnitřní klinika lékařské fakulty v
Brně); Head: J. POJER, Prof Dr; Infection Clinic
of the Medical Faculty (Infekční klinika lékařské
fakulty -- Brno-Bohunice); Head: V. HOUBAL, Docent
Dr.

Prague, Vnitřní Lékařství, No VIII-12, 1962, pp 1251-
1257

"Tripeptidase Activity of Blood Serum in Disease of the Liver
and Biliary Passages."

JEZEK, P.

3

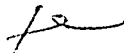
CZECHOSLOVAKIA

ANTOS, A; JEZEK P; NINGER, E; TOVANEK, J.

1. Third Internal Medicine Clinic of J. E. Purkyně University (III vnitřní kliniky University J. Ev. Purkyně), Brno; 2. Infectious Ward of the Faculty Hospital (Infekční oddělení fakultní nemocnice), Brno-Bohunice

Prague
Brno, Vnitřní lékařství, No 7, 1963, pp 682-689

"Serum Enzymes (Transaminases and Aldolase) in Some Chronic Hepatic Disorders and in Diseases of the Biliary Passages."


CZECHOSLOVAKIA

JEZEK, P; TOVAREK, J.

1. Infectious Disease Clinic of the Faculty Hospital (Klinika infekcnich chorob Fakultni nemocnice), Brno-Bohunici; 2. Third Internal Medicine Clinic of the Faculty Hospital (III. vnitri klinika Fakultni nemocnice), Brno

Prague, Vnitri lekarstvi, No 11, 1963, pp 1090-1094

"Liver Damage in Some Infectious Diseases. Part II. The Study of Liver Functions in Acute Viral Infections of the Nervous System."

YEZNIK, Pavel F. [Jezek, P.F.]

Neurosurgical instruments. Med.prom. 12 no.3:58-61 Mr '58.

(MIRA 11:4)

1. Prazhskiy nauchno-issledovatel'skiy institut meditsinskoy tekhniki.
(SURGICAL INSTRUMENTS AND APPARATUS)
(NERVOUS SYSTEM--SURGERY)

HĹAVATY, Vladimir; JEZEK, Stanislav

The uniform standard as a means of reducing the work involved
in production. Prace mada 11 no.4:169-174 Ap '63.

JEZEK, Vladimir, inz.

A single steatite glaze baking at 1,350°C. Sklar a keramik
13 no.3:73-75 Mr '63.

1. Elektroporcelan, narodni podnik, Louny.

JEZEK, V.; DAUM, S.; SERF, B. Technical assistance: KROUZKOVA, L.

Heart contraction in chronic cor pulmonale. Cor. vasa 6 no. 2:
85-98 '64

1. Cardiological Laboratory, Second Medical Clinic, Faculty
of General Medicine, Charles University, Prague.

*

JEZEK, VI. Technicka spoluprace: PETRZILKOVA, J.; KROUZKOVA, I.

Hemodynamic effects of some drugs acting on the tone of vegetative nerves. I. Effect of sympathomimetics and parasympatholytics. Sborn. lek. 66 no.3:75-84 F'64

Hemodynamic effect of some drugs acting on the tone of vegetative nerves. II. Effect of parasympathomimetics and sympatholytics. Ibid:85-91

JEZEK, V.; DAUM, S.

Contribution to the occurrence of pulsus alternans. Sborn.lek.
65 no.12:365-372 D '63.

1. Kardiologicka laborator II. interni kliniky fakulty vseobec-
neho lekarstvi University Karlovy v Praze, prednosta prof. dr.
F. Herles, DrSc.

*

OUREDNIK, A.; DAUM, S.; JEZEK, V. Technická spolupráce: KROUZKOVÁ, L.

Medical treatment of respiratory insufficiency. Cas. lek. cesk.
103 no. 9: 244-245 28 F'64

1. II. interní klinika fakulty všeobecného lékařství KU v
Praze; přednosta: prof. dr. F. Herles, DrSc.

*

JEZEK, V.

SOVA, J.; JEZEK, V.; MACHACEK, P.

Hypertension & myocardial infarct. Cas. lek. cesk. 97 no.21:662-668
23 May 58.

1. II. interni klinika, prednosta prof. MUDr Frantisek Herles.

Adres. autora: J. S. Praha 2, U nemocnice 2.

(HYPERTENSION, statist.

in myocardial infarct (Cz))

(MYOCARDIAL INFARCT, statist.

with hypertension (Cz))

JAHANOVSKA, Kveta; JEZEK, Vlastimil; SOVA, Josef

Polygraphic picture of complete sino-ventricular block. Sborn.
lek. 61.no.10:289-305 0 '59.

1. II. interni klinika fakulty vseobecneho lekarstvi University
Karlovy v Praze, prednosta prof.dr. Frantisek Herles.
(HEART BLOCK diag.)

JOHANOVSKA, Kveta; JEZEK, Vlastimil; SOVA, Josef; LHOŤKA, Jaroslav

Polygraphic examination of patients with mitral stenosis before and after surgery. Sborn.lek. 61 no.10:306-316 0 '59.

1. II. interni klinika fakulty vseobecneho lekarstvi University Karlovy v Praze, prednosta prof.dr. F. Herles. II. chirurgicka klinika fakulty vseobecneho lekarstvi University Karlovy v Praze prednosta akad. J. Divis.

(COMMISSUROTOMY)

SOVA, Josef; JEZEK, Vlastimil

Embolism of the coronary arteries. Cas.lek.cesk.98 no.49/50:
1573-1575 4 D '59.

1. II.interni klinika KU v Praze, prednosta prof. MUDr. Fr. Herles.
(CORONARY DISEASE diag.)

JEZEK, V.

Dynamics of cardiac contractions in arrhythmias. I. Auricular
fibrillation. Sborn.lek. 62 no.1:10-18 Ja '60.

1. II. interni klinika fakulty vseobecneho lekarstvi Karlovy
University v Praze, prednosta prof.dr. Fr. Herles, pracovni
skupina prof.dr. J. Sovy.

(AURICULAR FIBRILLATION physiol.)

JEZEK, VI.

Dynamics of cardiac contractions in arrhythmias. II. Atrial and ventricular extrasystole. Sborn.lek. 62 no.4:100-107 '60.

1. II. interni klinika fakulty vseobecneho lekarstvi University Karlovy v Praze, prednosta prof.dr. F. Herles; pracovni skupina prof.dr. J. Sovy.

(ARRHYTHMIA physiol.)

CIHAK, J.; DONNER, L.; DVORAK, L.; DVORAKOVA, H.; JEZEK, Vl.; KAFKA, H.;
KOTATKO, J.; MALY, Vl.; REINIS, Z.

Effect of anticoagulant therapy on the mortality in myocardial
infarct during first 6 weeks. Sborn.lek. 62 no.10:281-286 0 '60.

1. I. interni klinika fakulty vseobecneho lekarstvi University
Karlov v Praze, prednosta prof. dr. V.Hoenig. II. interni klinika
fakulty vseobecneho lekarstvi University Karlov v Praze, prednosta
prof. dr. Fr. Herles. III. interni klinika fakulty vseobecneho
lekarstvi University Karlov v Praze, prednosta akademik J.Charvat.
IV. interni klinika fakulty vseobecneho lekarstvi University
Karlov v Praze, prednosta prof. dr. M Fucik. Interni oddeleni
fakultni polikliniky v Praze 2, prednosta prof. dr. K.Herfort.
Ustav organizace zdravotnictvi fakulty vseobecneho lekarstvi
University Karlov v Praze, prednosta prof. dr. V.Prosek.
(MYOCARDIAL INFARCT ther)
(ANTICOAGULANTS ther)

SOVA, J.; JEZEK, V.

On the problem of clinically undiagnosed cases of myocardial infarction.
Acta univ. carol. [med.] Suppl. 14:495-500 '61.

I. II. interni klinika fakulty vseobecneho lekarstvi University
Karlovy v Praze, prednosta prof. dr. Fr. Herles.
(MYOCARDIAL INFARCT diag)

JEZEK, VL.; SOVA, J.

The picture of chronic cardiac aneurysm in polygraphic recordings.
Acta univ. carol [med.] Suppl. 14:513-530 '61.

1. II. interni klinika fakulty vseobecneho lekarstvi University Karlovy
v Praze, prednosta prof. dr. Fr. Herles.
(ANEURYSM diag) (HEART DISEASE diag)

TOMASEK, R.; JEZEK, Vl.

Chronometry of cardiac systole in acute renal failure. Sborn. lek.
63 no.9:269-276 8:1961.

1. II. interni kliniki fakulty vseobecneho lekarstvi Karlovy
university v Praze, prednosta prof. dr. F.Harles.
(ACUTE RENAL FAILURE physiol.) (HEART physiol.)

JEZEK, V.; SOVA, J.

Cardiac aneurysm in the light of polygraphic data on the systole.
Cas.lek.cesk 100 no.18:554-560 5 My '61.

1. II. interni klinika KU v Praze, prednosta prof. MUDr. F. Herles.
Cas.lek.cesk 100 no.18:554-560 5 My '61.

(HEART DISEASE diag)

JEZEK, VLASTIMIL

245

— 3/4 —

Prague, Intern. Kongress, Vol. VIII, No. 2, February 1962 (continues)

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- 9. General course of research, laboratory of the Faculty of Science, Charles University, Prague, Czechoslovakia, directed by Professor J. Jezek, M.D., Director (Prague) pp 151-152 (English summary)
- 10. "An unusual type of acute leucemia (leukemia)" Jan J. Jezek, M.D., Department of Internal Medicine (Faculty of Medicine, Charles University, Prague) pp 153-154 (English summary)
- 11. "A case of bilateral degeneration of the parietal (centrotemporal) gyri" J. Jezek, M.D., Section of Internal Medicine (Faculty of Medicine, Charles University, Prague) pp 155-156 (English summary)
- 12. "Formulation of hypochromic high redness" J. Jezek, M.D., Department of Hematology (Faculty of Medicine, Charles University, Prague) pp 157-158 (English summary)
- 13. "Preliminary Report on the use of a handle for the purpose of hematology" J. Jezek, M.D., Section of Internal Medicine (Faculty of Medicine, Charles University, Prague) pp 159-160 (English summary)
- 14. "Hypochromic anemia of the type of hypochromic anemia" J. Jezek, M.D., Department of Hematology (Faculty of Medicine, Charles University, Prague) pp 161-162 (English summary)

JEZEK, Vlastinil

Estimation of the time period in contraction of the right chamber of the heart in chronic cor pulmonale. Sborn. lek. 44 no.3:37-45 'F '62.

1. II interni klinika fakulty vseobecneho lekarstvi University Karlovy v Praze, prednosta prof. DrSc. MUDr. F. Herles.
(PULMONARY HEART DISEASE physiol.)

CZECHOSLOVAKIA

SOVA, J. Prof., Dr., Dr. Sc; JEZEK, V., Prom. Dr; KOLAR, M., Dr.

1. Second Internal Medicine Clinic of KU (II. Vnitřní klinika KU), Prague; 2. Biophysical Institute of KU (Biofyzikální ústav KU), Prague

Prague, Vnitřní lékařství, no 10, 1963, pp 968-979

"Radiocardiography and Pulmonary Radiocirculography as Determined by RIHSA in Various ~~Sorts~~ ^a Cardiopathies."

CZECHOSLOVAKIA

JEZEK, V.

Second Internal Medicine Clinic (II. vnitřní klinika),
Prague

Prague, Vnitřní lékařství, No 11, 1963, pp 1053-1061

"The Clinical Values of the Determination of the Course
of Cardiac Contraction with the Aid of Polygraphic
Tracing."

SOVA, J.; KOLAR, M.; JEZEK, V.; TOMASEK, R.

Coronary atherosclerosis and the ¹³¹I-triolein tolerance
test. Cor vasa 5 no.3:184-189 '63.

1. The Second Clinic of Internal Medicine, and the Institute
of Biophysics, Charles University, Prague.

(CORONARY DISEASE) (LIPID METABOLISM)
(TRIOLEIN) (IODINE ISOTOPES, DIAGNOSTIC)

SOVA, J.; JEZEK, V.

Atypical and undiagnosed heart infarcts. Cas. lek. cesk. 102
no.24:649-654 14 Je '63.

1. II.interni klinika fakulty vseobecneho lekarstvi. KU v Praze,
prednosta prof. dr. F. Herles.
(MYOCARDIAL INFARCT) (ELECTROCARDIOGRAPHY)
(ANGINA PECTORIS)

CZECHOSLOVAKIA

SOVA, J., and JEZEK, V., Second Clinic of Internal Medicine (II. interni klinika), Faculty of General Medicine (Fakulta vseobecneho lekarstvi), Charles University, Prague, Prof. Dr F. HERLES, director.

"Atypical and Nondiagnosed Myocardial Infarctions"

Prague, Casopis Lekarů Ceskych, Vol CII, No 24, 14 June 63, pp 649-654.

Abstract [Authors' English summary, modified]: In a group of 30 patients who according to the post-mortem examination had a total of 120 myocardial infarctions, 38 infarctions (31.6%) were not diagnosed clinically. Conclusions: 1. Not diagnosed infarctions are more frequent in the age above 70 years. Usually slight, atypical, or no complaints are recorded. 2. The majority of nondiagnosed infarctions are due to atherosclerotic obliteration of the coronary artery without thrombosis. 3. No relationship was found between

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CZECHOSLOVAKIA

Prague, Casopis Lekaru Ceskych, Vol CII, No 24, 14 June 63, pp 649-654.

the percentage of nondiagnosed myocardial infarctions and their localization. The ECG diagnosis failed in about one quarter of these infarctions. The causes were bundle branch block, preexcitation, or incomplete recording. 4. Patients with nondiagnosed myocardial infarction developed chronic cardiac aneurysms much more frequently than the other groups. Twelve references, including 3 Czech.

12/2

JEZEK, V.; JOHANOVSKA, K.

Dynamic heart reaction to Master's work load. Sborn.lek.66 no.2:
41-48 F'64

1. II.interni klinika fakulty vseobecneho lekarstvi University
Karlovy v Praze; prednosta: prof.MUDr. F.Herles, DrSc.

JEZEK,V.; TOMASEK,R.

Positive inotropic effect of calcium on the myocardium. Sborn.
lek. 66 no.2:49-54 F'64

I. II. interni klinika fakulty vseobecneho lekarstvi University
Karlovy v Praze; prednosta : prof.dr. F.Herles, DrSc.

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DAUM, S.; JEZEK, V.

"Cannon" waves in the picture of the pressure curve from the right heart. Cas. lek. cesk. 103 no.49:1359-1363 4 D '64

I. Vyzkumny ustav experimentalni terapie v Praze (reditel prof. dr. O. Spahel) a Kardiologicka laborator fakulty vseobecneho lekarstvi Karlovy University v Praze (reditel prof. dr. P. Herles).

KRALOVA, L. (Praha 4-Pankrac, nam, Hrdina 8); JEZEK, V.; LINHARTOVA, J.;
STEPANEK, J.

Occurrence of ischemic heart disease in chronic cor pulmonale
and possibilities of its recognition. Cas. lek. c esk. 104
no.24:654-658 18 Je'65.

1. II. interni klinika fakulty vseobecneho lekarstvi Karlovy
University v Praze (prenosta: prof. dr. F. Herles, DrSc.)
a Kardiologicka laborator fakulty vseobecneho lekarstvi Karlovy
University v Praze (vedouci: prof. dr. F. Herles, DrSc).

FIALOVA, V.; JEZEK, V.; OUREDNIK, A.; KROUZKOVA, L.

The effect of hypoxemia and respiratory acidosis on the electrocardiogram in chronic cor pulmonale. Sborn. lek. 67 no.5:140-145 My'65.

1. II. interni klinika fakulty vseobecneho lekarstvi University Karlovy v Praze a kardiologicka laborator fakulty vseobecneho lekarstvi University Karlovy v Praze (prednosta: prof. dr. F. Herles, DrSc.).

JEZEK, V.; PICK, P.; OUREDNIK, A.; KROUZKOVA, L.

Various changes in the electrolyte metabolism of patients with chronic cor pulmonale and respiratory insufficiency. Sborn. lek. 67 no.5:153-159 My'65.

1. Kardiologicka laborator a II. in erni klinika fakulty vseobecneho lekarstvi University Karlovy v Praze (prednosta: prof. dr. F. Herles, DrSc.).

OUREDNIK, A.; JEZEK, V. Technicka spoluprace: DCUBRAVOVA, V.; KROUZKOVA, L.

Comparison of pulmonary ventilation and blood gas levels in patients with chronic bronchitis. Cas. lek. cesk. 104 no.23: 638-639 11 Je'65.

I. II. interni klinika fakulty vseobecneho lekarstvi Karlovy University v Praze (prednosta: prof. dr. F. Herles, DrSc. a Kardiologicka laborator fakulty vseobecneho lekarstvi Karlovy University v Praze (reditel: prof. dr. F. Herles, DrSc.).

BOUDIK, E.; JEZEK, V.

Indirekt determination of carbon dioxide tension in mixed
venous blood (with the aid of rebreathing). Vnitřní lek. 11
no.9:848-854 S '65.

1. II. vnitřní klinika Fakulty všeobecného lékařství University
Karlovy, Praha (prednosta prof. Dr. F. Herles, Dr.Sc.).

JEZEK, V.; KRALOVA, L.; TEICHMANN, V.

Left heart insufficiency and its treatment with strophanthin, studied by graphic recording of cardiac contractions. Sborn. lek. 67 no.11:321-326 N '65.

1. Kardiologicka laborator a II. interni klinika fakulty vseobecneho lekarstvi University Karlovy v Praze (prednosta - prof. dr. F. Herles, DrSc.).

Internal Medicine

CZECHOSLOVAKIA

JEZEK, V.; PICK, P.; 2nd Internal Clinic, Faculty of General Medicine, Charles University (II. Interní Klinika Fakulty Všeobecného Lekarství KU), Prague, Head (Prednosta) Prof Dr F. HERLES.

"Serum Transaminase Levels in Cor Pulmonale."

Prague, Casopis Lekarů Ceských, Vol 105, No 42, 21 Oct 66, pp 1155 - 1156

Abstract: The increased transaminase level is not specific for a definite disease. 40 patients suffering from emphysema with chronic bronchitis were examined. Increased levels of GOT and GPT were found only in decompensated patients, and less frequently than is indicated in literature. The normalization of the values takes usually 3-4 days. The finding of increased GOT and GPT levels may be used for a differentiation of a simultaneous cardiac infarct. The actual causes of the increased values of GOT and GPT could not be determined unequivocally. 1 Table, 3 Western, 3 Czech references.

1/1

CZECHOSLOVAKIA

POPLUHAR, L.; ROSIVAL, F.; JEZEK, Z.; HEBELKA, M.; Veterinary Faculty, Chair of Infectious Diseases, College of Agriculture (VSP, Veter. Fakulta, Katedra Infekcnych Chorob), Kosice; Okresny Epizootologist (Epizootolog), Kosice; Institute of Epidemiology and Microbiology (Ustav Epidemiologie a Mikrobiologie), Prague.

"On the Problems of Tuberculosis in Pigs."

Prague, Veterinarni Medicina, Vol 11, No 8, Aug 66, pp 485-496

Abstract [Authors' English summary modified]: Mammalian PPD tuberculin was used for allergic diagnosis of tuberculosis in pigs, using a dose of 5000 Tu, and a dose of 2500 Tu of avian tuberculin. The swellings were excessive; when only 500 Tu of either tuberculin were used reliable results were obtained. Swellings which had a diameter of 8 mm and over were considered to be positive reactions. 4 Figures, 4 Tables, 5 Western, 5 Czech, 3 Russian, 1 Hungarian reference. (Manuscript received 10 May 65).
1/1

SERY, Vladimir; MATEJOVSKA, Dobromila; JEZEK, Zdenek; SODJA, Ivan

'An epidemic of gastroenteritis caused by portable water. Cesk. epidem. mikrob. imun. 10 no.4:226-239 ~~1961~~ 1961.

1. Ustav epidemiologie a mikrobiologie v Praze.
(GASTROENTERITIS epidemiol) (WATER SUPPLY microbiol)

CZECHOSLOVAKIA

SERY, V; JEZEK, Z; SVANDOVA, E; FUCHSOVA, M; GALLIOVA, J; CHYTOVA, K.

1. Institute of Epidemiology and Microbiology (Ustav epidemiologie a mikrobiologie), Prague; 2. Tuberculosis Ward OUNZ (Tuberkulozni oddeleni OUNZ), Litomerici; 3. Research Institute of Tuberculosis (Vyzkumny ustav tuberkulozy), Prague (for all)

Prague, Rozhledy v tuberkulose, no 5, 1963, pp 324-332

"The Utilization of the Tuberculosis Test for Studies on the Incidence of Mycobacterium bovis."

3
CZECHOSLOVAKIA

JEZEK, Z; HEBELKA, M; SVANDOVA, E.

Institute of Epidemiology and Microbiology (Ustav epidemiologie a mikrobiologie), Prague (for all)

Prague, Rozhledy v tuberkulose, No 6-7, 1963, pp 454-460

"The Significance of *Mycobacterium bovis* in the Spread of Tuberculosis Infection in the Rural Population."

SERY, V.; JEZEK, Z.; SVANDOVA, E.; FUCHSOVA, M.; HEBELKA, M.

Use of tuberculin tests in the study of *Mycobacterium bovis*.
II. Analysis of allergy to tuberculin in children and adolescents
in relation to *Mycobacterium bovis* infection. *Cesk. epidem. lz*
no.5:262-267 S '63.

1. Ustav epidemiologie a mikrobiologie v Praze - Tuberkulozni
oddeleni OUNZ v Litomericich.

(TUBERCULIN REACTION) (TUBERCULOSIS, BOVINE)
(TUBERCULOSIS IN CHILDHOOD) (MYCOBACTERIUM BOVIS)

JEZEK, Z.; SERY, V.; HEBELKA, M.; SVANDOVA, E.

The value of simultaneous application of human and bovine
tuberculin. Cesk. epidem. 14 no.3:143-148 My '65

1. Ustav epidemiologie a mikrobiologie, Praha, Katedra nemoci
tropu a subtropu, UDL, Praha.

SZEKELY, Katalin, dr.; KISS SZABO, Antal, dr.; MAKAY, Aniko, dr.;
JEZERNICZKY, Judit

Serum enzyme studies in infants and children. Gyermekgyógyászat
14 no. 8:238-243 Ag. '63.

1. A Debreceni Orvostudományi Egyetem Gyermekklinika-jának
(Igazgató: Kulin László dr. egyetemi tanár) közleménye.
(ENZYME TESTS) (INFANT, NEWBORN, DISEASES)
(ASPARTATE AMINOTRANSFERASE) (ALANINE AMINOTRANSFERASE)
(ATROPHY) (HEPATITIS, EPIDEMIC) (ALDOLASE)