

W#EBE170

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JOB WIEBE:AN:P401.PN:LI-DETAU
COMPILE FORTRAN
*STAPLER
PUNIKAN

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FORTRAN UZ.YU

```
SX=0.
SXY=0.
PAS=IPAS
ALFAC=PAS/2.
NT=N-1
---- CALCUL SUME. PARAMETRI ----
DO 0 I=1,N1
  XE(I)=TANXUT(I)/COSIMAX
  IF(XE(I).GE.1.) XE(I)=.999999
  X=ALOG(-ALOG(1.-XE(I)))-.9398447
  Y=ALOG(ALFAC)
```

WIEBE 19702782 08.57.17

2

FORTRAN UZ.YU

```
ALFAC=ALFAC+PAS
SX=SX+Y
SY=SY+V
SXX=SX2+X*X
SXY=SXY+X*Y
XE(N)=TANXUT(N)/COSIMAX
ME(N)=(SXY-SX*SY)/(N1+SAJ-2A*SJ)-1.
A=(SY-2X)/(N1+1.)/M1
ALFA=X/(A)
---- COPYE REZULTATE INTERMEDIARE ----
PRINT 106,COSIMAX,M,P,ALFA
---- CALCULE FINALE. GENERARE VALORI PE CU LEGEA WIEBE, CU PARAMETRI
TRI: CALCULATI ANTERIOR. COMPARARE CU DATELE EXPERIMENTALE.
I: STARE IN Pachete de 20 de intervale. ----
CTQ=NT/(LAMBDA+LO)
ALFA=ALFA+IPAS
IALFA=ABS(ALFA)
VEVCA=TANXUT(IALFA)
X=XE(I)-TANXUT(I)
XE(I)=TANXUT(I)-6.7077755*(ALFA/A-PAS)*M+1.))
ALFAC=ALFAC+PAS
DXE=(XE(I)-XE(I))/XE(I)+100.
WO=6.7077755*(M+1.)+(ALFAC/ALFA2)**M*A*(-XE(I))
QUOT=CTQ+TANXUT(I)
OUT=CTQ+TANXUT(I)
---- COPYE VALORI CALCULATE ----
PRINT 10X,TANXUT(I),TANXUT(I),TANXUT(I),XP,XE(I),XE(I),DXE,
TWO,QUOT,OUT,ALFA,TABP(I+1)
---- YES/NO IN CAZ CA SA TERMINAT TRATAREA DIAGramei ----
IF(I.GT.N) GO TO 2
& CONTINUE
GO TO 7
& STOP
101 FORMAT(16A4/5F10.3/3F10.3/4F10.3)
102 FORMAT('10X',16A4///10X,'DATE INITIALE DE CALCUL: ')
10X 'COMPOZITIA COMBUSTIB'LULUI: C H O
10X ' WIEBE 19702782 08.37.17
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3

FORTRAN UZ.YU

```
10X 'PUTAREA CALORIFICA INFERUARA: NY *F10.2* kcal/kg**
10X 'MASA MOLECULARA (NUMAI LA MAS): MA *F10.2* -1///
10X 'DATE CONSTRUCTIVE: //
10X 'RAPORTUL DE COMPACTARE: EDS *F10.5* -1///
10X 'RAPORTUL P/L BIELA: LBDB *F10.5* -1///
10X 'VOLUMUL CAMEREI DE ARDERE: VPA *F10.2* cm3///
10X 'ALTE MARI MI DATE: //
10X 'VOL. SPECIF. LA SF. ADMIS:UNI: VA *F10.5* m3/kg**
10X 'VOL. SPECIF. AL GASELOR ARSE: VP *F10.5* m3/kg comb**
10X 'COEFICIENTUL DE EXCE. DE ARSE: LAMBDA *F10.5* -1///
10X 'COEFICIENTUL DE GAZE KEAYUALE: LAMA *F10.5* -1///
103 FORMAT(//10X'MAXIMI CALCULATE: ')
10X 'ATRUL MINIM NECESAR ARDERI: LO *F10.5* kg/kg comb**
10X 'ATRUL MINIM NECESAR ARDERI: LPRIMU *F10.5* kmol/kg comb*
//
10X 'GRUTATEA INCARCATURII PROASPEIE: GI *F10.5* kmol/kg comb*
//
10X 'NP. KMOLI DE INCARC. PROASPEIE: NT *F10.5* kmol/kg comb*
//
10X 'COEFICIENTUL DE VAR.ATIE MOLARA: M+UMAX *F10.5* -1///
104 FORMAT(5A4,3I5)
105 FORMAT(16F5.2)
106 (
10X 'COEF. DE UTILIZARE A CALORIEI: COSIMAX *F10.5* -1///
10X 'PARAMETRUL M DIN LEGEA WIEBE: M *F10.5* -1///
10X 'PARAMETRUL A DIN LEGEA WIEBE: A *F10.5* -1///
```

```

108 -TUX*DEBATA ARDELI A 29.0% DIN COMB: ALFAZ (F10.5 PA*)
109 FORMAT(29A.F0.2,0F0.5,F0.7,F0.5,2F0.5/10X,I3.2F0.4)
110 -TUX,ALFA P V I KAPA AD XUT XP
111 AE YE* DAF WU QU - QUT**
112 -TUA,PA KGF/CM2 CM3 N - - -
113 " " " " " " " " " " " "
114 -TUZX,K6 - KR **/100,I0.2F0.2)
115 FORMAT(29A.F0.2,0F0.5,F0.7,F0.5,2F0.5/10X,I3.2F0.4)
116 END

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WABE172
FORTRAN 02.00

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4

BUPT

MODULE FXMATA TYPE P LONGUEUR (F 0 (08096)

**** FIN DE COMPILATION (PLUS HAUT NIVEAU D'ERREUR RENCONTRE = 0) 08.37.48

WAEBE173

EP

VENTRIKUL DE CALCUL AL I.P.T. SISTEM FELIX V-255
D. DEB WAEBE AM = F401 PH = 0007 DATE = 17/02/82
L. DEB WAEBE JRM 105 H FIN = 08H 37M 51S TIME = 00001965 CODE = 000
L. DEB WAEBE MEM = 00015 LU = 000200 LN = 00179 CYT = 00000

LANK
LANK
STARTED

WABE174
AUCUNE ERREUR A L EDITION DE LIENS

W4EBE175

EP

CONTROL DE CALCUL AL I.P.I. SYSTEM FELIX V-250
0000 WIEBE AM = 0401 PH = 0002 DATE = 17/02/82-000
H. DEB = 08H 37M 31S H. FIN = 08H 39M 03S TIME = 00000671 CODE = 000
LBP = 00050 MEM = 00012 LU = 000008 IN = 00000 OUT = 00000
CP = 01

RUN
STARTED

WAEDE170

MOTOR MONOCILINDRICU 195

DATE INITIALE DE CALCUL:

COMPOZITIA COMBUSTIBILULUI:	C	0.87000	KG/KG	COMB
	H	0.12600	KG/KG	COMB
	O	0.00400	KG/KG	COMB
VALOREA CALORIFICA SUPERIOARA:	HA	10874.86	KCAL/KG	
MASA MOLECULARA (NUMAI LA MAS):	MO	0.00	-	

DATE CONSTRUCTIVE:

SAFARIUL DE COMPRIIMARE:	EPS	20.00000	-
SAFARIUL KAL BIELA:	EBUB	0.67380	-
VOLUMUL CAMEREI DE ARDERE:	VCA	22.90	CM ³

ALTE MAJIMA DATE:

COEF. SPECIF. LA SF. ADMISIONII:	VA	1.05727	M ³ /KG
COEF. SPECIF. AL GAZELOR ARDE:	VG	1.19770	M ³ /KG COMB
CUFIICIENTUL DE EXCES DE AER:	LAMBDA	1.20080	-
CUFIICIENTUL DE GAZE REZIDUALE:	GAMA	0.2800	-

MAJIMA CALCULATE:

NECUL MINIM NECESAR ARDERII:	LU	14.00276	KG/KG COMB
NECUL MINIM NECESAR ARDERII:	LMKIMU	0.29924	KMUL/KG COMB
VELOCITATEA INCARCATURII PROASPETE:	U1	23.00096	KMUL/KG COMB
VELOCITATEA DE INCARC. PROASPATA:	U2	0.17977	KMUL/KG COMB
CUFIICIENTUL DE VAKATIE MULARA:	MIUMAX	1.04039	-
COEF. DE UTILIZARE A CALDURII:	CSIMAX	0.7500	-
SARABETKUL M DIN LEGEA WIEBE:	M	0.17169	-
SARABETKUL A DIN LEGEA WIEBE:	A	4.02900	-
PERCENTAJUL ARDERII A 99.9% DIN COMB:	ALFA2	92.02004	KA

REFLECTANCE DIAGRAMS INDICATE PTFE/CALFA

ALFA	P	V	T	KAPA	QU	QUT	AP	QE	AE+	UQE	WO	QU	QUT
KAL	NGP/UMC	CMC	K	-	-	-	-	-	-	%	-	KCAL/CG	KCAL/CG
46	42.90	43.22	837.00	1.34800	.00033	.26033	.00170	.00000	.10700	30.4	3.27704	31.914	31.914
47	52.50	42.90	1010.00	1.33240	.00433	.13000	.00386	.71352	.21109	27.0	4.73379	40.582	72.501
48	60.00	43.22	1216.97	1.31870	.01123	.60089	.00608	.20150	.30741	13.0	4.30120	53.047	125.548
49	74.70	44.10	1393.83	1.31200	.00044	.22734	.00838	.33372	.39344	14.7	3.82709	31.973	137.521
50	79.00	43.74	1334.71	1.30631	.09800	.21741	.01009	.46010	.47008	8.9	3.38809	43.347	200.868
51	84.00	47.93	1044.21	1.30440	.04800	.23730	.01172	.40921	.53794	12.0	2.98705	19.280	220.150
52	82.00	50.77	1120.61	1.30132	.00960	.22710	.01330	.35060	.59777	9.0	2.02324	33.494	233.049
53	81.00	54.22	1022.30	1.29897	.07089	.29799	.01532	.61330	.63030	3.7	2.30130	34.114	207.763
54	80.00	58.27	1412.71	1.29722	.00300	.00104	.01695	.70039	.69640	2.0	2.01309	30.033	318.396
55	78.00	62.93	1428.31	1.29573	.00107	.12334	.01833	.74180	.73678	2.7	1.73707	29.087	348.083
56	74.00	68.10	2031.34	1.29500	.03030	.13389	.01931	.77320	.77197	2.2	1.33217	14.700	302.789
57	69.30	74.02	2032.43	1.29504	.04400	.19379	.02046	.81723	.80203	-2.1	1.33362	21.007	304.390
58	63.00	80.43	2055.17	1.29609	.00709	.20040	.02006	.82714	.82935	.3	1.13940	3.701	308.096
59	58.80	87.39	1499.30	1.29703	-.01372	.19070	.02025	.87102	.83235	4.9	1.00072	-7.303	300.531
60	52.00	94.97	1456.32	1.29740	.02497	.21373	.02089	.83002	.87270	4.1	.87320	12.013	392.340
61	48.00	102.93	1449.81	1.29700	.01023	.23190	.02131	.83329	.89017	4.1	.73000	7.810	400.364
62	44.00	111.32	1411.33	1.29943	-.01070	.22119	.02103	.84223	.90530	7.0	.03300	-5.190	395.174
63	39.30	120.30	1088.33	1.29834	.03038	.23738	.02196	.87954	.91840	4.2	.30663	17.300	412.083
64	37.00	130.13	1043.42	1.29910	.07709	.20807	.02223	.89091	.92973	4.2	.48973	3.330	418.019
65	34.00	140.74	1072.30	1.29900	.01007	.27874	.02231	.90123	.93933	4.1	.42298	4.840	422.867

AKELUVRAKER DIAGRAMEI INDICATE P=F(ALFA)

ALFA	P	V	T	KAPA	AU	XUT	XP	AE	XE*	UXE	WU	QU	QUT
RA	NGP/UMZ	UMS	K	-	-	-	-	-	-	%	-	NCAL/ NG	NCAL/ NG
30	37.50	130.00	1072.12	1.29901	.03255	.21127	.42354	95401	.94798	1.4	.30500	15.654	438.521
40	29.00	107.48	1085.14	1.29909	.02021	.25140	.42386	95534	.95528	1.0	.31480	9.727	448.249
42	27.70	172.70	1086.57	1.29905	.02041	.25189	.42438	97027	.90157	1.5	.27140	9.819	438.068
44	20.00	104.45	1079.97	1.29957	.00982	.20171	.42403	90034	.90699	1.0	.25379	4.723	402.793
40	24.20	196.50	1080.67	1.30004	.00010	.20787	.42479	99260	.97100	1.2	.20128	2.905	405.758
30	21.00	221.57	1039.87	1.30040	.00710	.27505	.42497	1.00000	.97508	1.5	.17320	3.445	409.202

***STOP**