

**MINISTERUL EDUCATIEI SI INVATAMINTELUI
INSTYTUTUL POLITEHNIC "TELEKSI VULCAN" TIMISOARA
FACULTATEA DE MECANICA**

Ing. STOICOVICI ST. MIRCEA BLAJIU

**STUDIUL TEORETIC SI EXPERIMENTAL AL RETELEI RADIAL-
AXIALE ROTATOARE, CU APPLICABILITATE LA DIMENSIUNILE
RODAGERELOR DE GUMBILA RADIAL-AXIALE**

**- TESA DE DOCTORAT -
Anului**

**CONDUCATOR STIINTEVIC,
Acad. Prof. Dr.-Doc. Ioan Anton**

-Finisare 1989 -

ANEXELE ALEXANDRI

(Document)

Sunt prezentate sub forma grafică rezultatele calculului dimensional pentru patru variante rotorice de turbina diagonală din seria celor nouă variante dimensionate în cadrul tezei prin metoda transformărilor conforme și programul de calcul "DLT-80". Variantele rotorice la care se referă conținutul anexei sunt variantele 2, 4, 5, 6, 7, 8.

În anexele A1, ...A30 sunt reprezentate distribuțiile de viteza și ale coeficientului de presiune pe conturul profilelor din familia de rețele radial axiale, familie rezultată din intersecția paletei rotorice cu suprafețele de curent evazute (secțiunile de calcul dimensionar). Pentru fiecare variantă, reprezentările sunt efectuate în cinci secțiuni de calcul.

În anexele A31, ...A32, A33 sunt reprezentate în proiecție ortogonală axei turbinelui, conturul paletei și intersecția acestuia cu plane de nivel, pentru variantele rotorice 2, ..., 5, 6, 7, 8.

În anexele A34, ...A43 sunt reprezentat conturul profilelor rezultate din intersecția suprafeței paletei cu liniile ortogonale axei paletei (4 secțiuni), pentru variantele rotorice 2, 4, 6, 7, 8.

ACESTE SECȚIUNI SERVESC LA EXECUȚIURA ȘI VERIFICAREA GEOMETRII EȘĂ A PALETEI. ÎN FINAL S-Ă PREZENTAT UN DESEN DE EXECUȚIE LA SCALA PĂBTRU UNA DIN VARIANTELE ROTORICE DIMENSIIONATE.

Toate reprezentările grafice au fost obținute cu ajutorul programelor de grafică "COC", "SYNUF", "SYNUAL" și "DLA" (vezi cap. 5 Teză), utilizând un calculator "COMPAQ" 4021, prin copierea ecranului (instalare imprimantă în mod "hard copy").

CONTINUU

1. Distribuția de viteze și coeficientul de presiune pe conturul profilului din reședință radial-axială

- rotor varianta 2 Anexa A1
- rotor varianta 4 A6
- rotor varianta 5 A11
- rotor varianta 6 A16
- rotor varianta 7 A21
- rotor varianta 8 A26

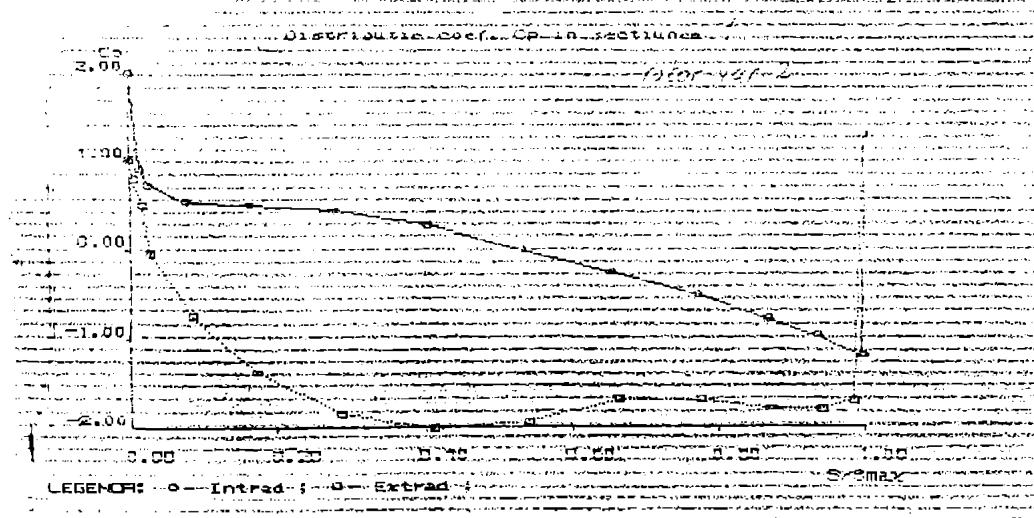
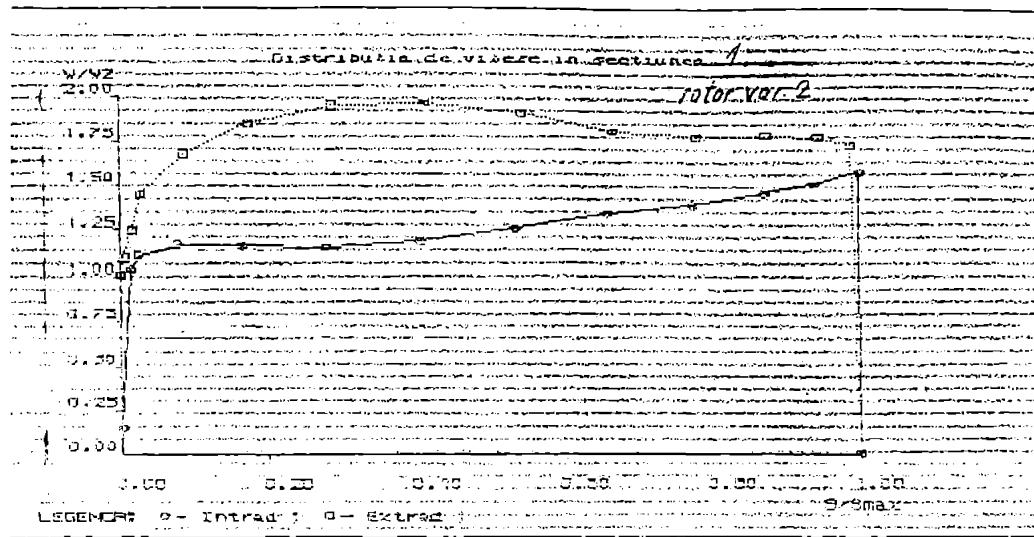
2. Intersecția paletei cu plane de nivel , proiectată în plan ortogonal axei rotorului..... A31

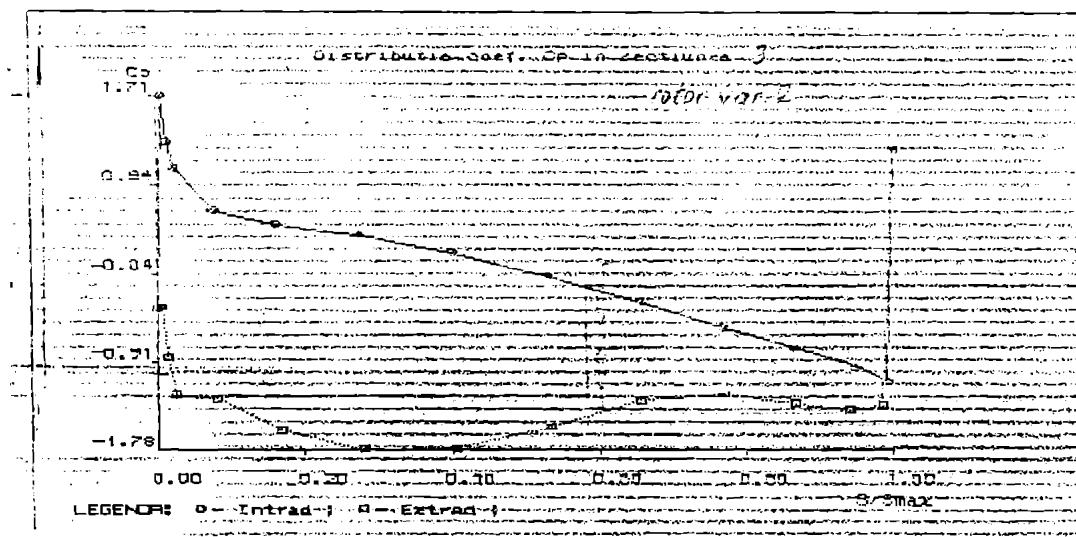
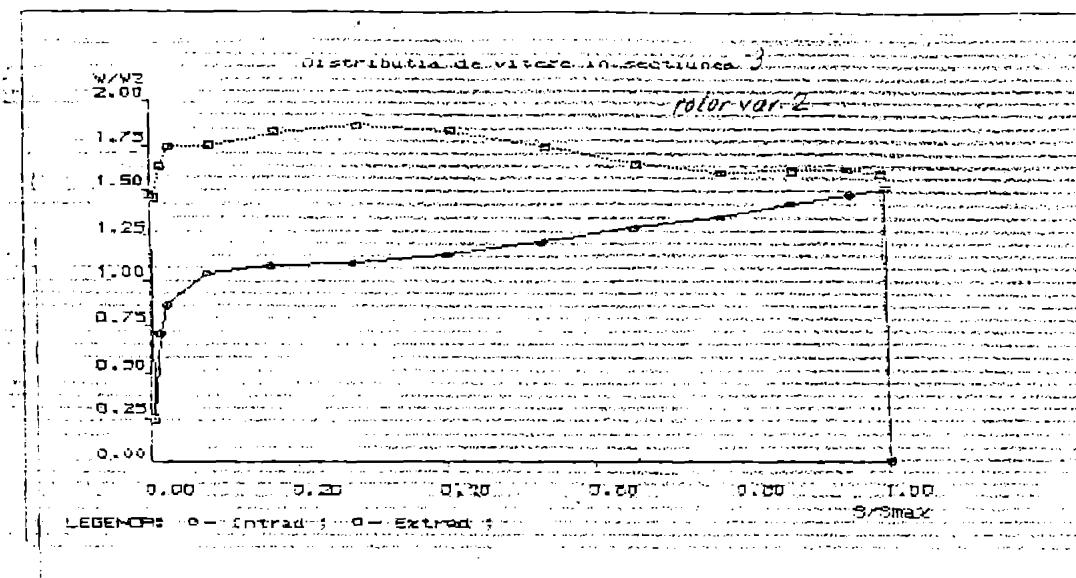
3. Secțiuni plane , ortogonale axei paletei

- rotor varianta 2 A34
- rotor varianta 4 A36
- rotor varianta 6 A38
- rotor varianta 7 A40
- rotor varianta 8 A42

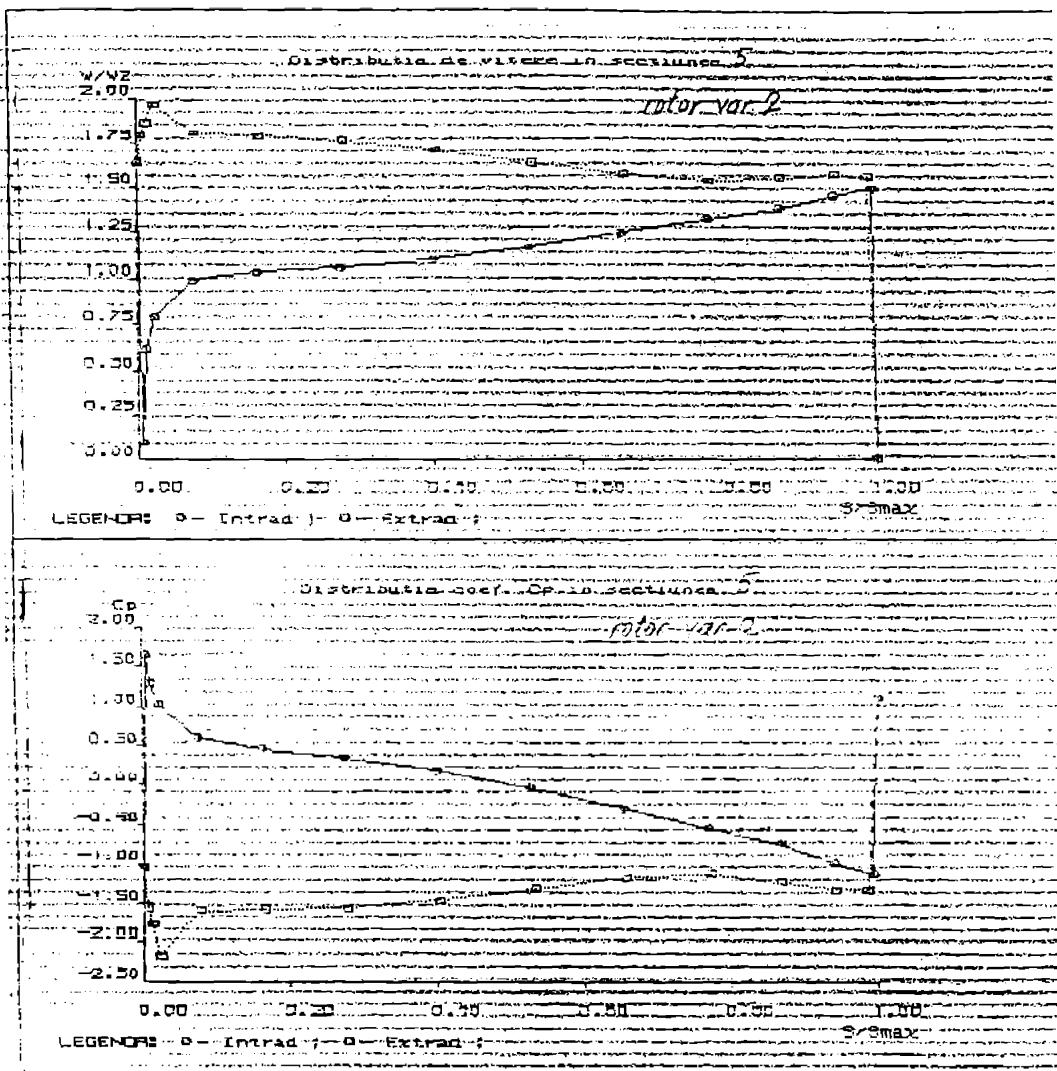
4. Desen de execuție al paletei rotor varianta 2

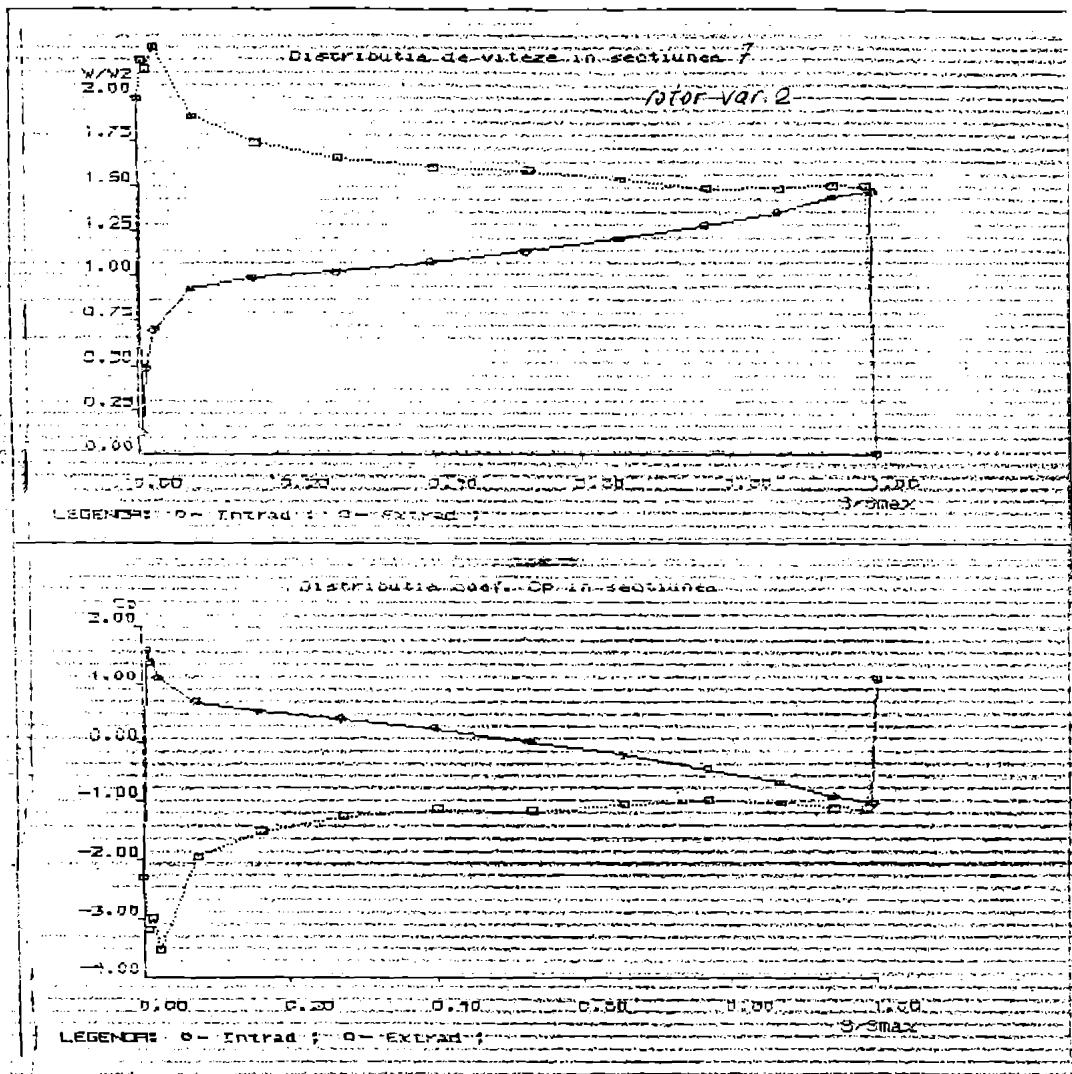
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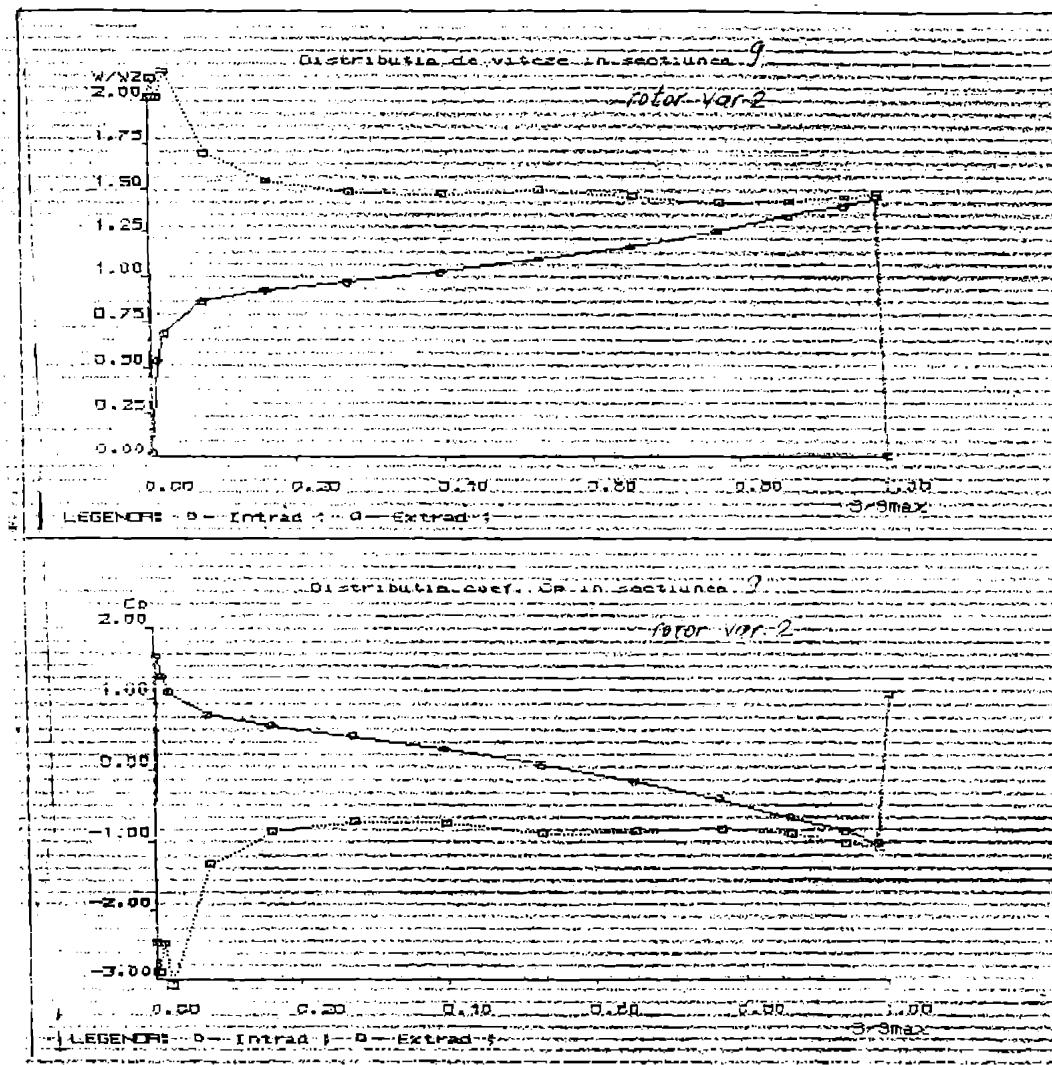


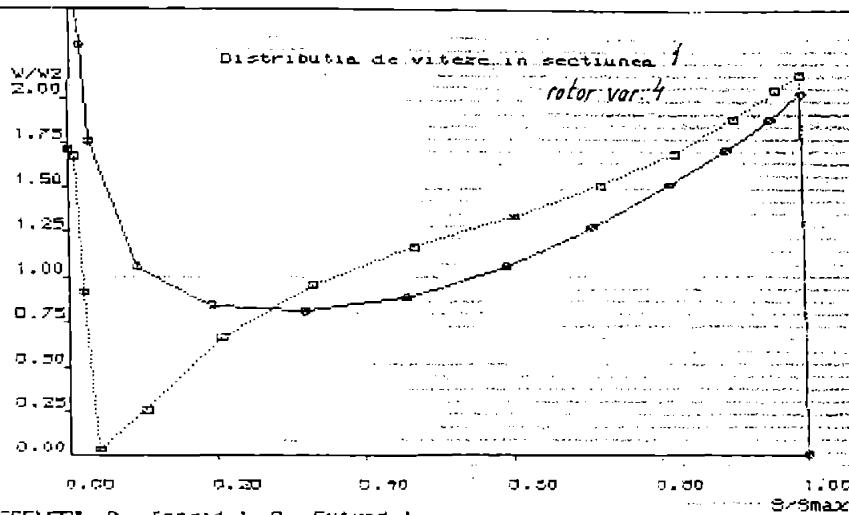


-43 -

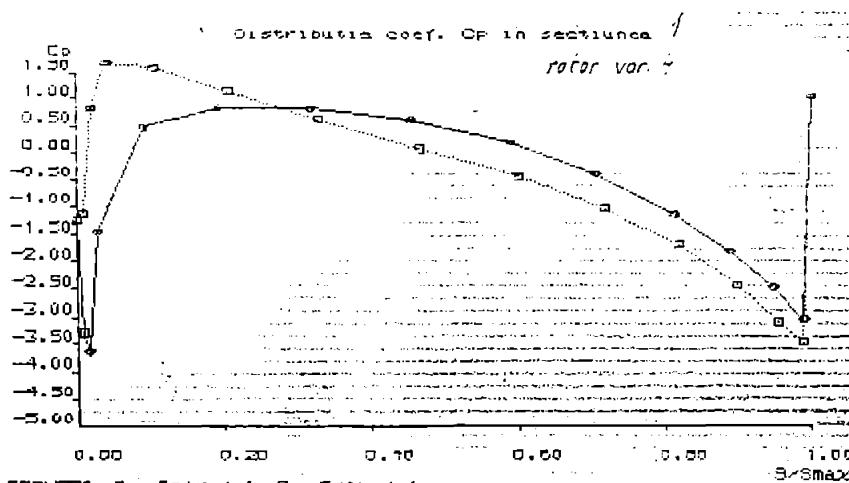




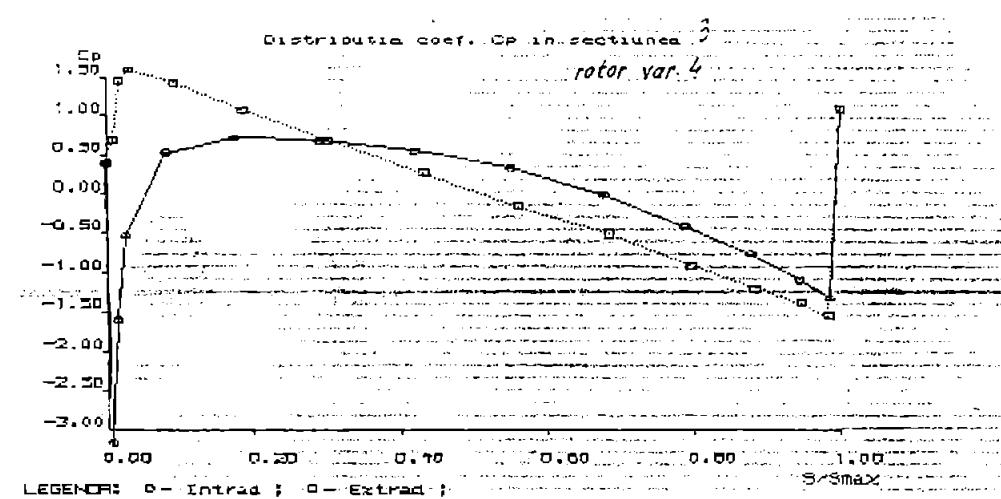
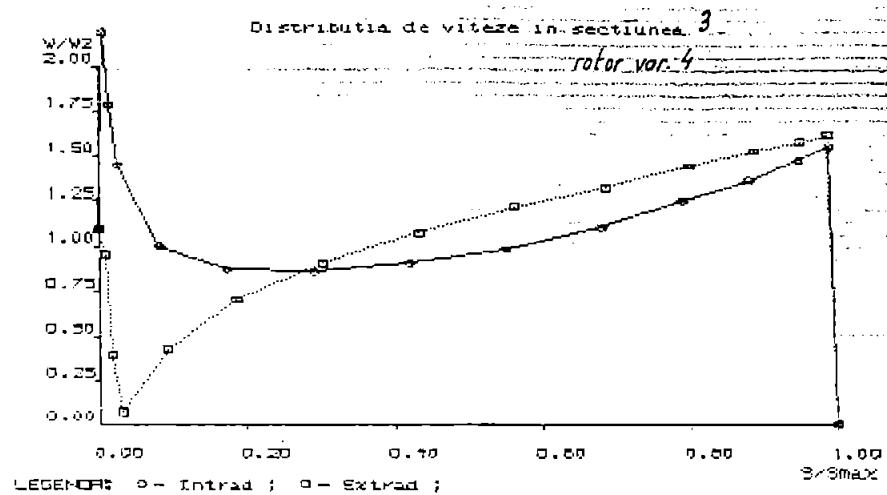


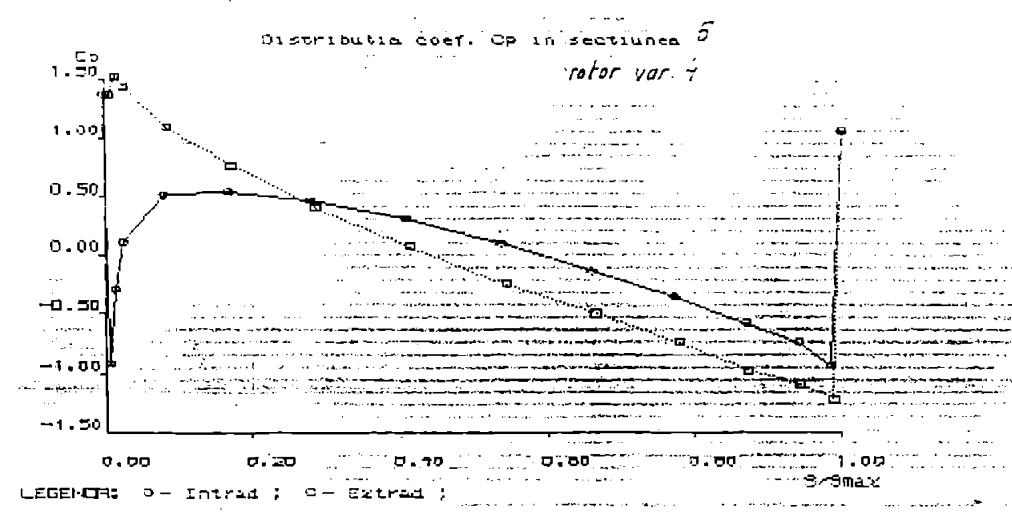
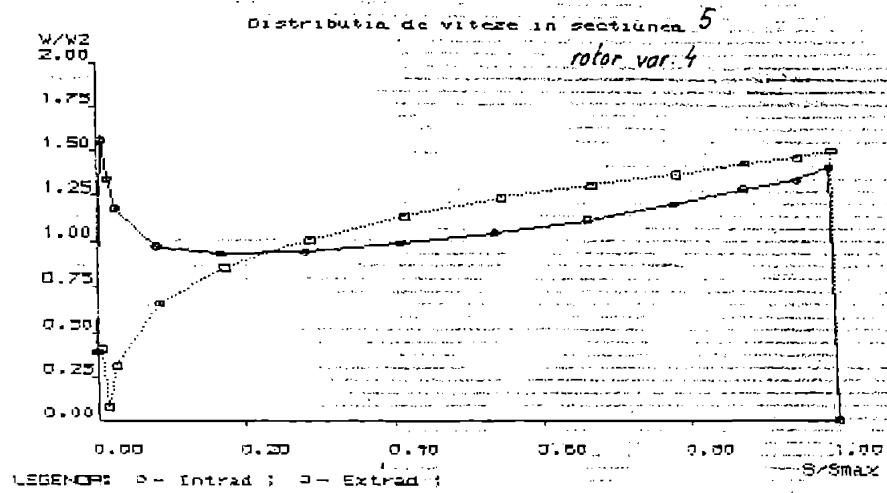


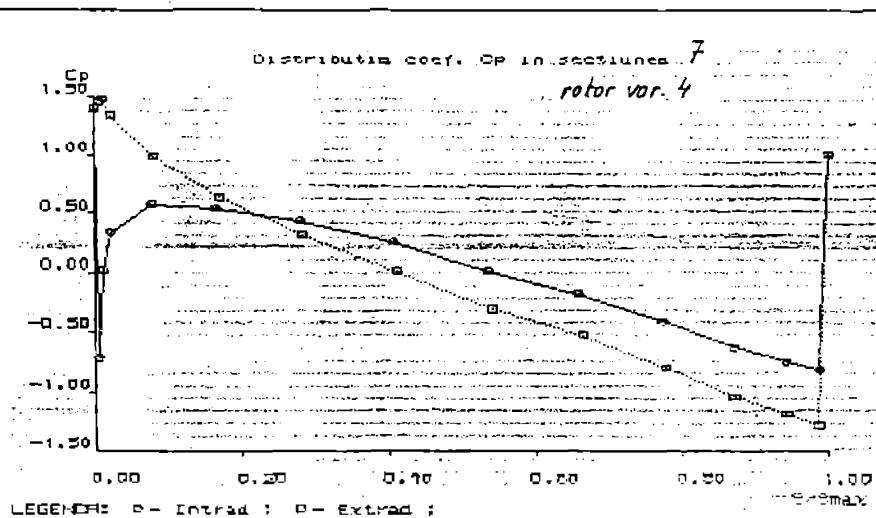
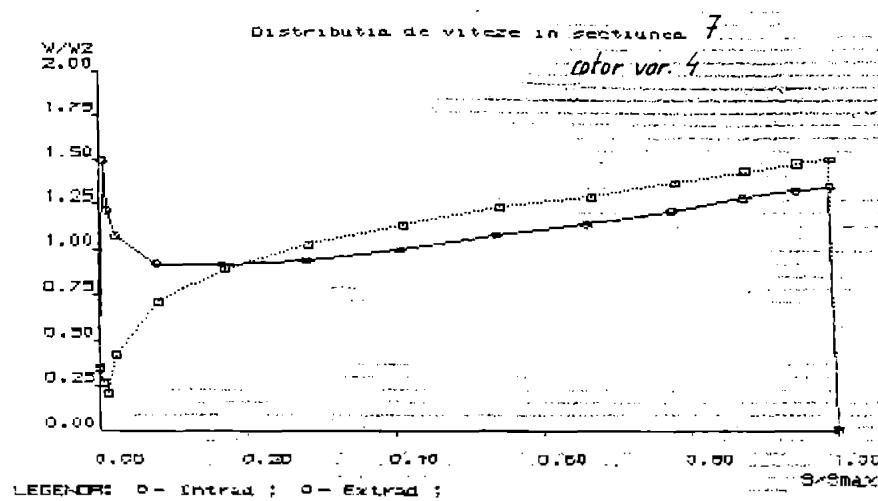
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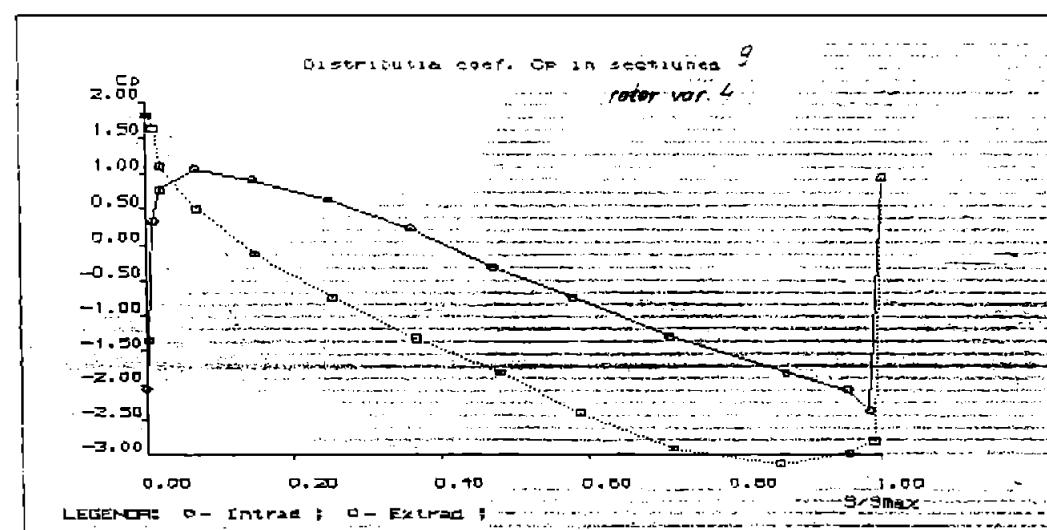
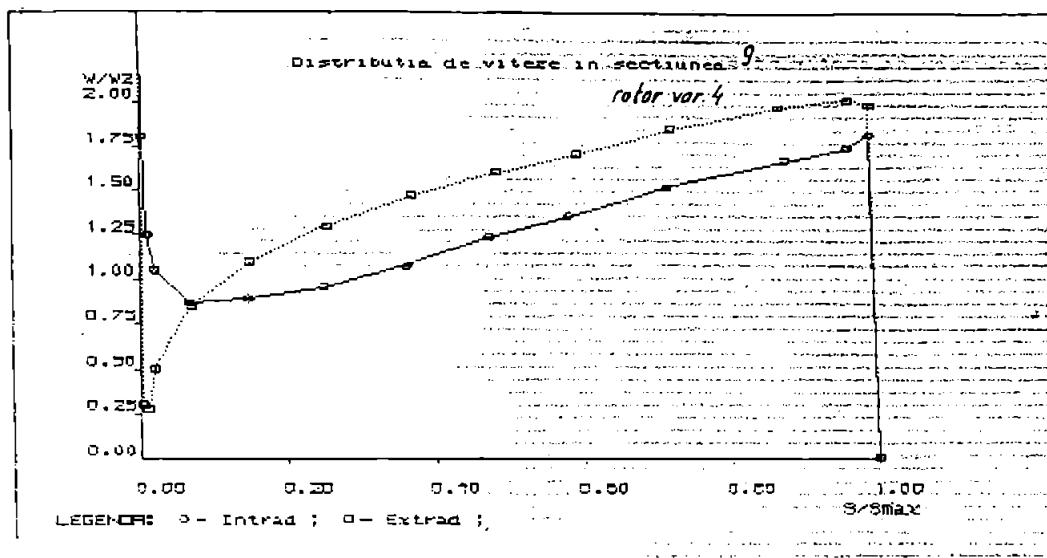


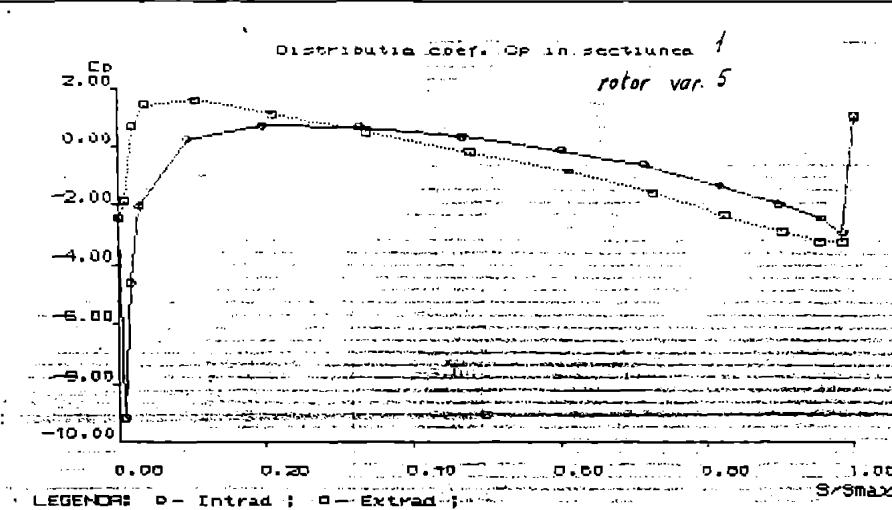
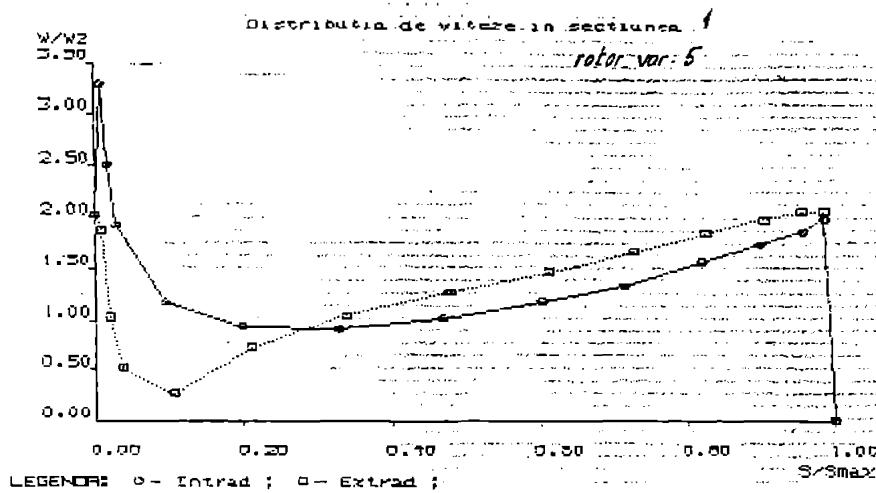
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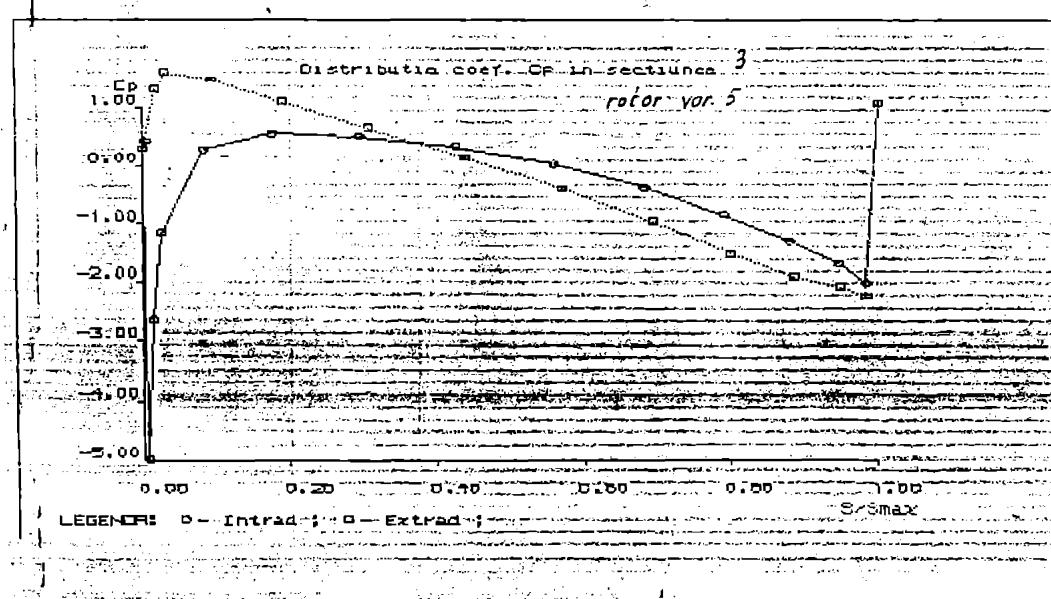
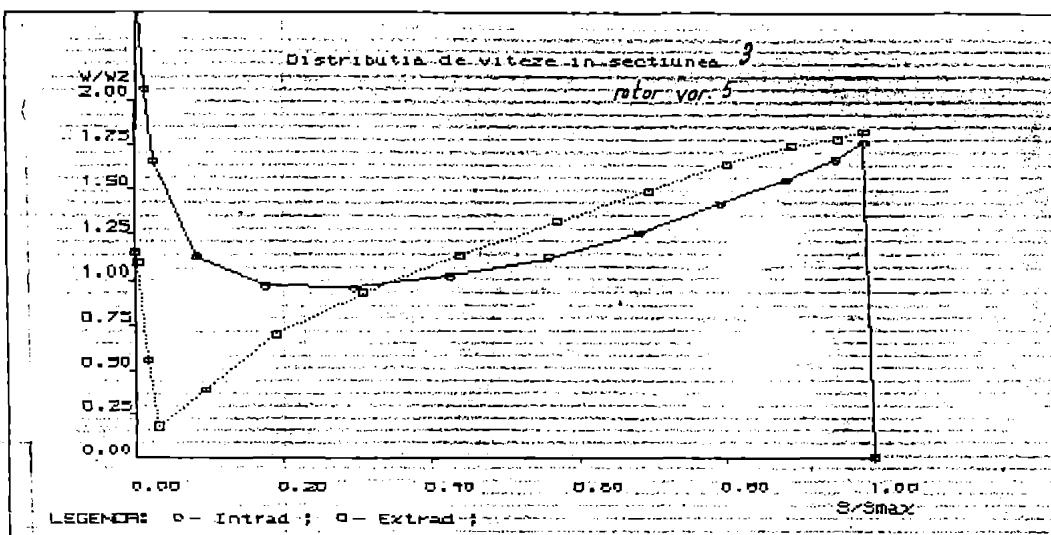


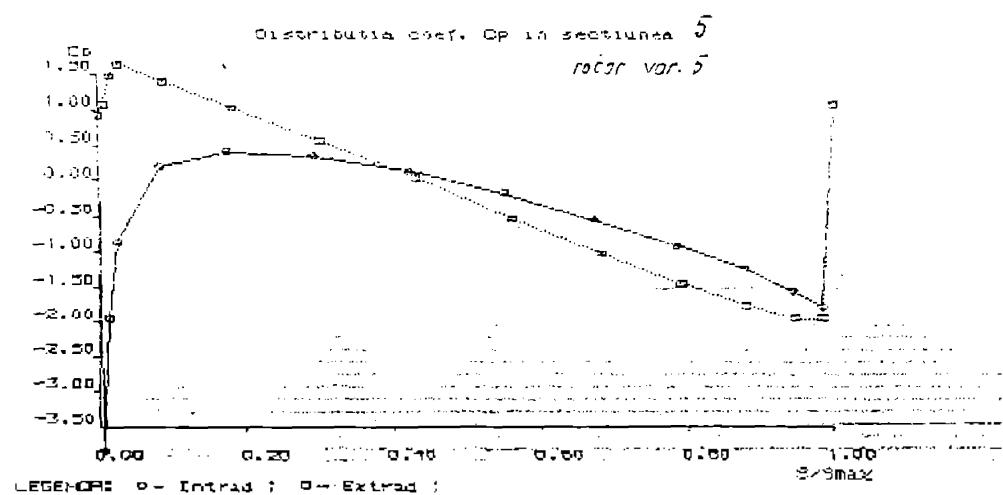
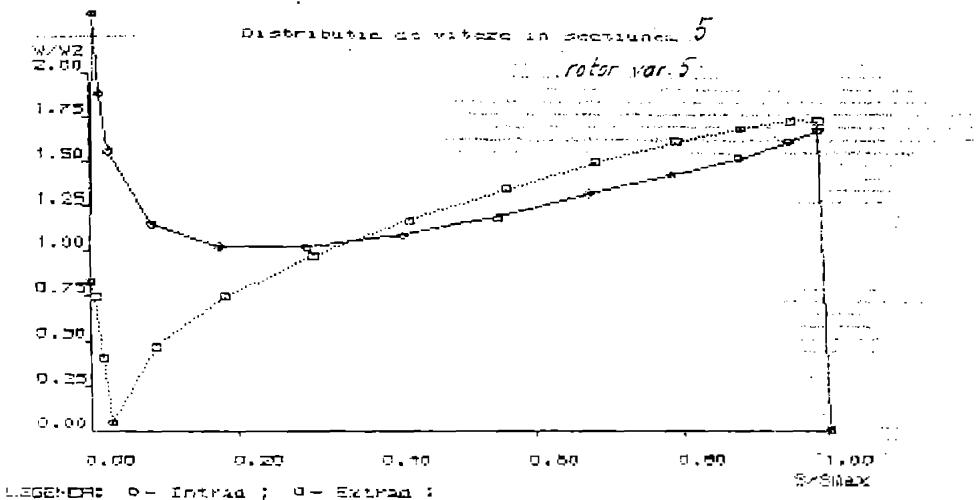


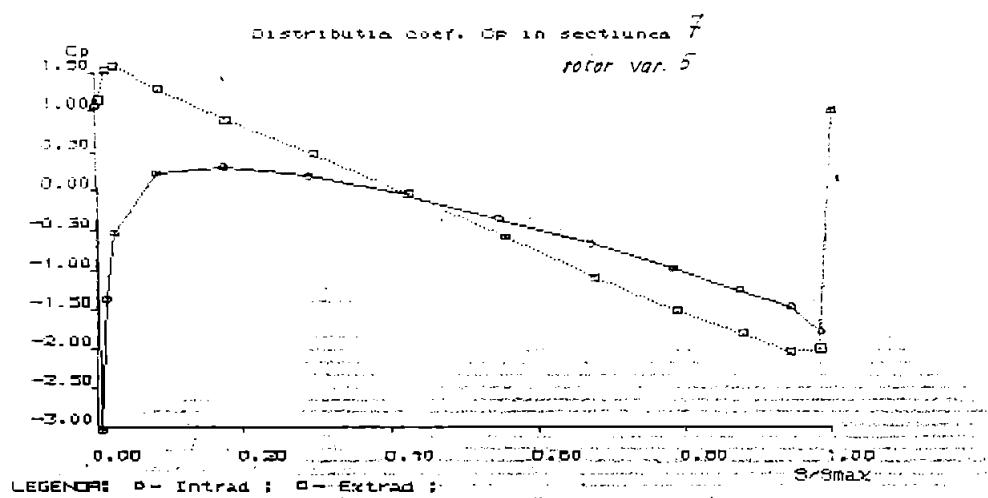
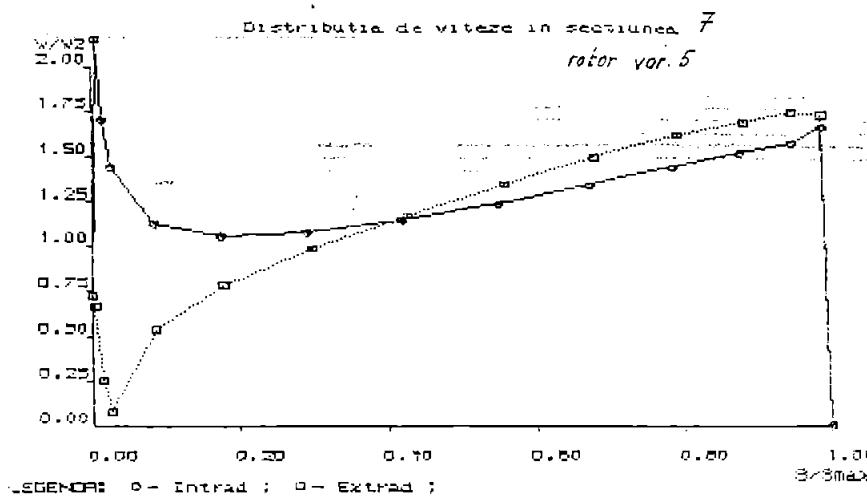


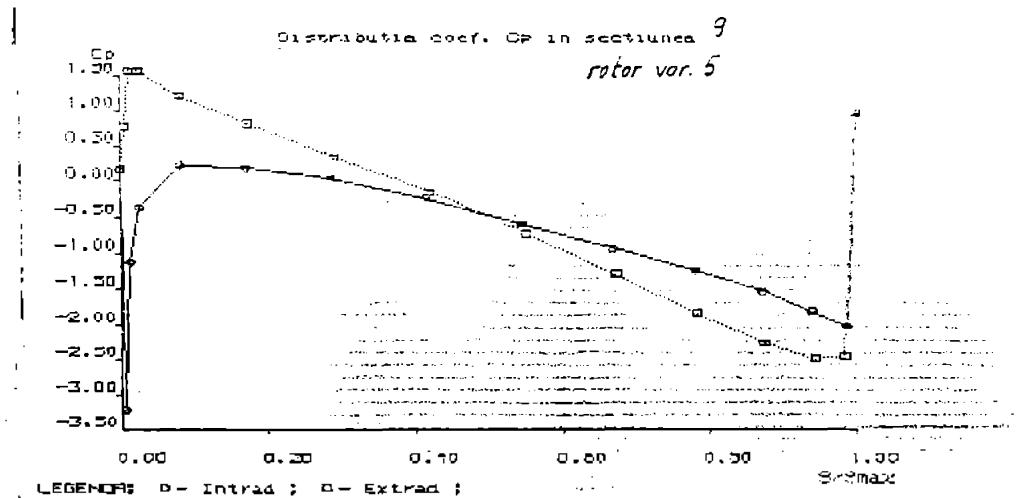
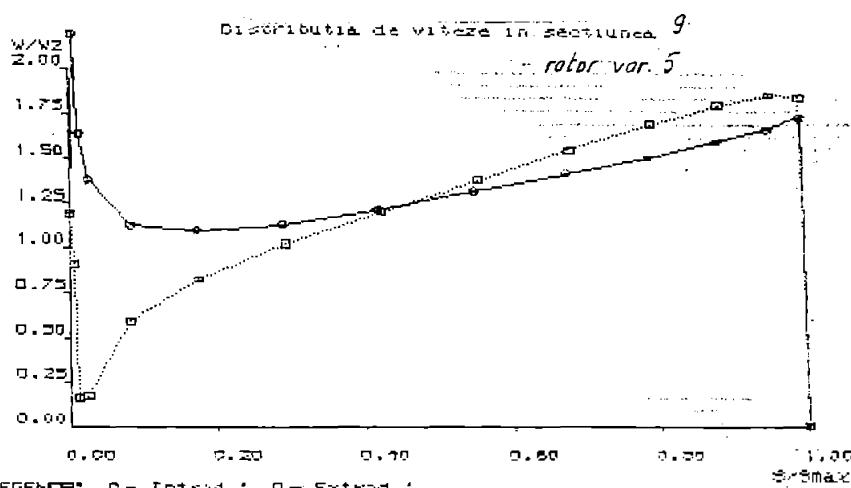


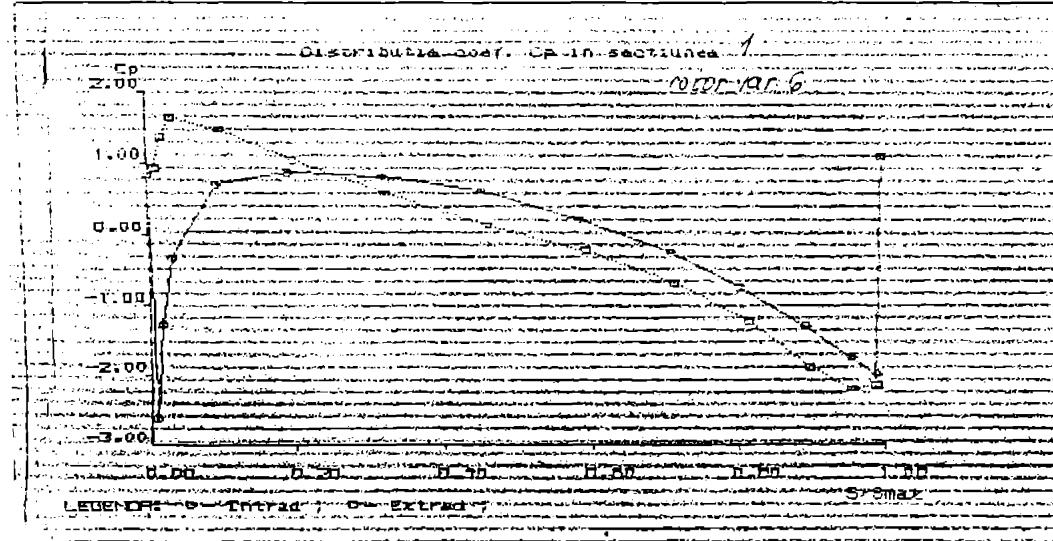
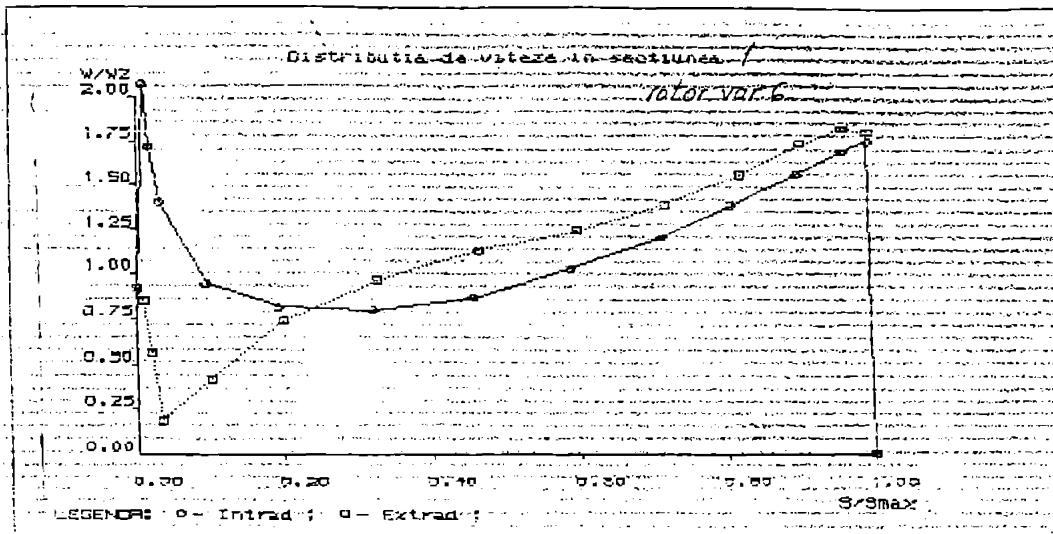


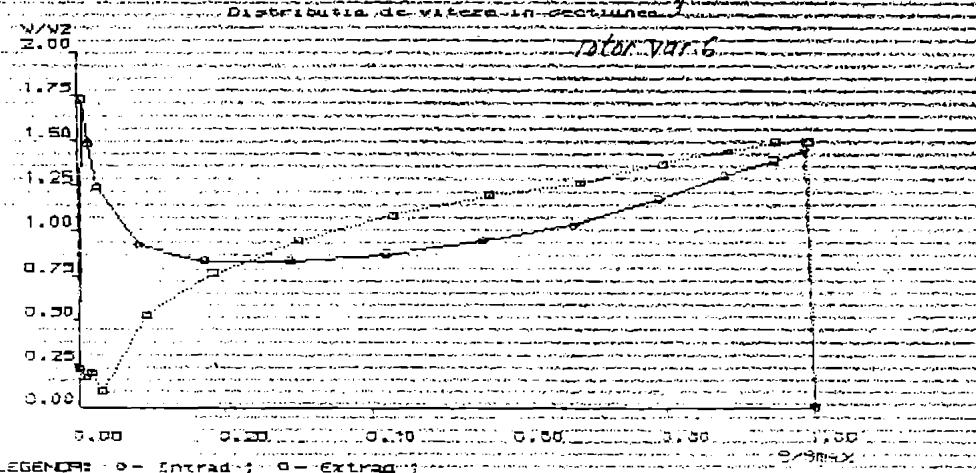


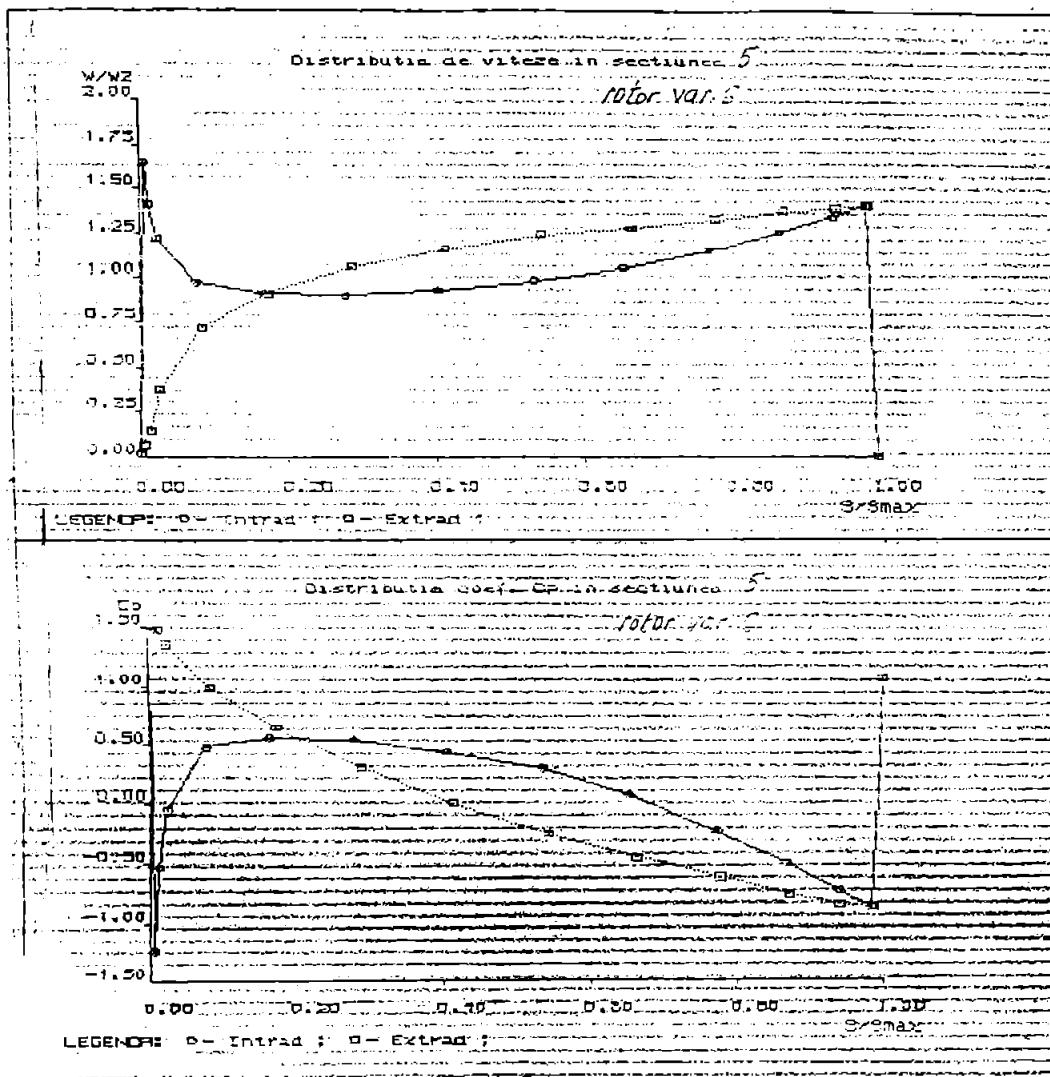


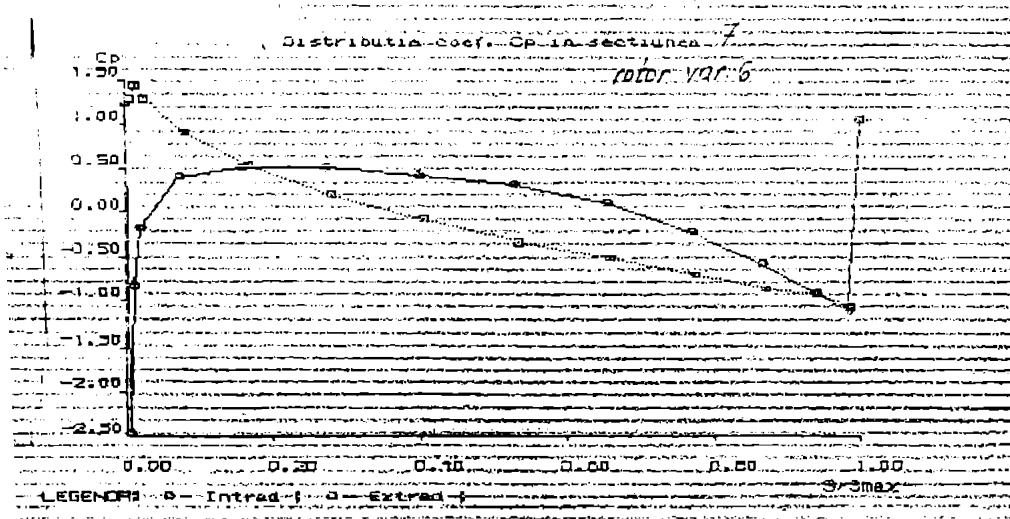
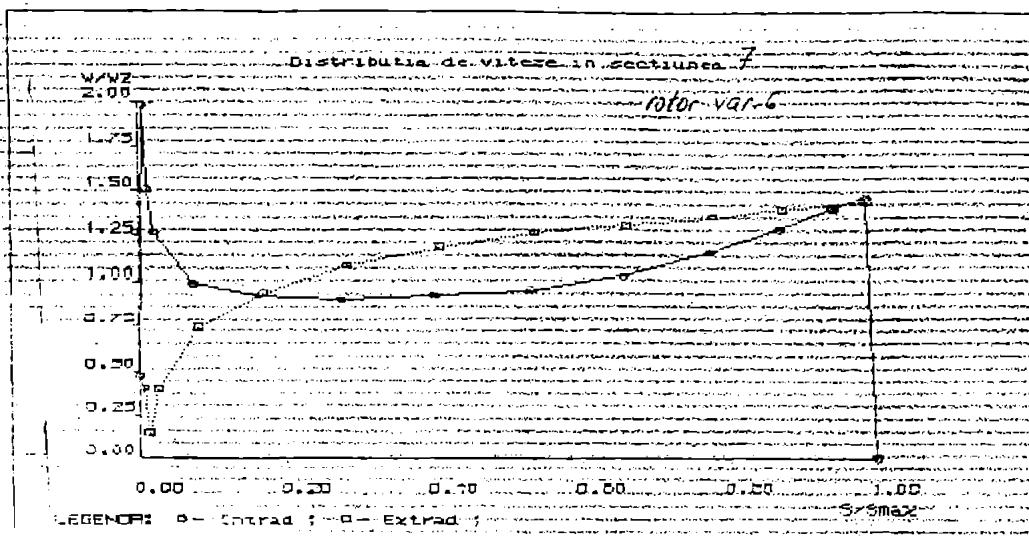


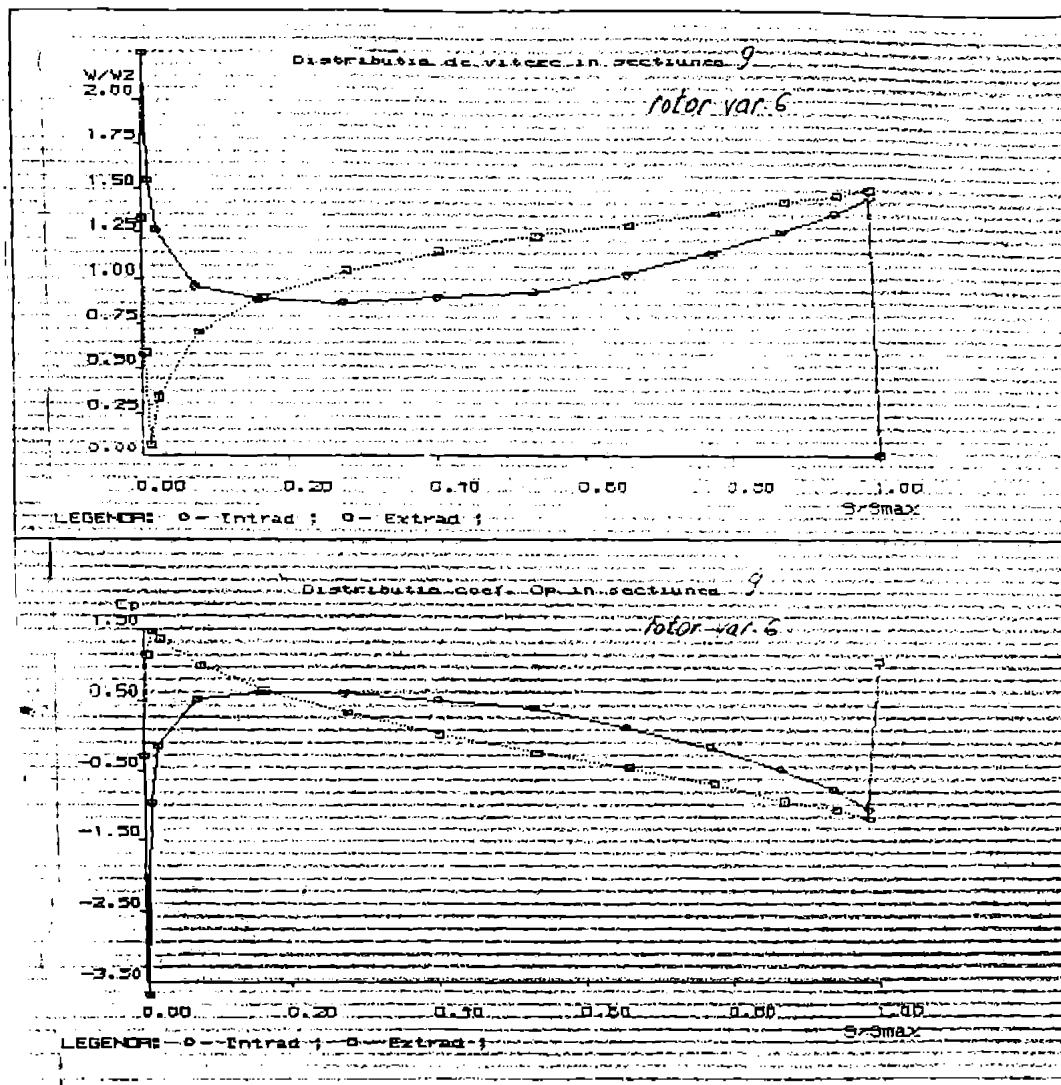


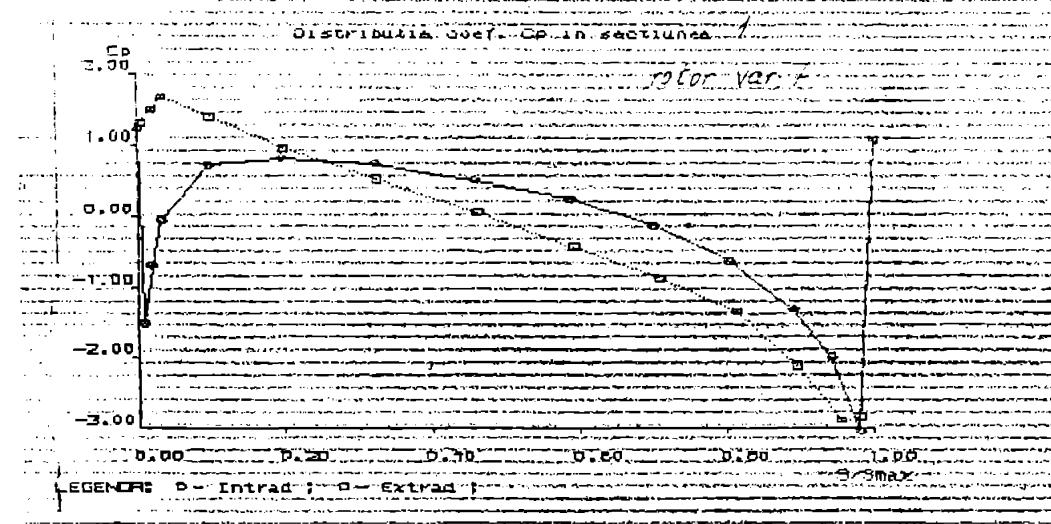
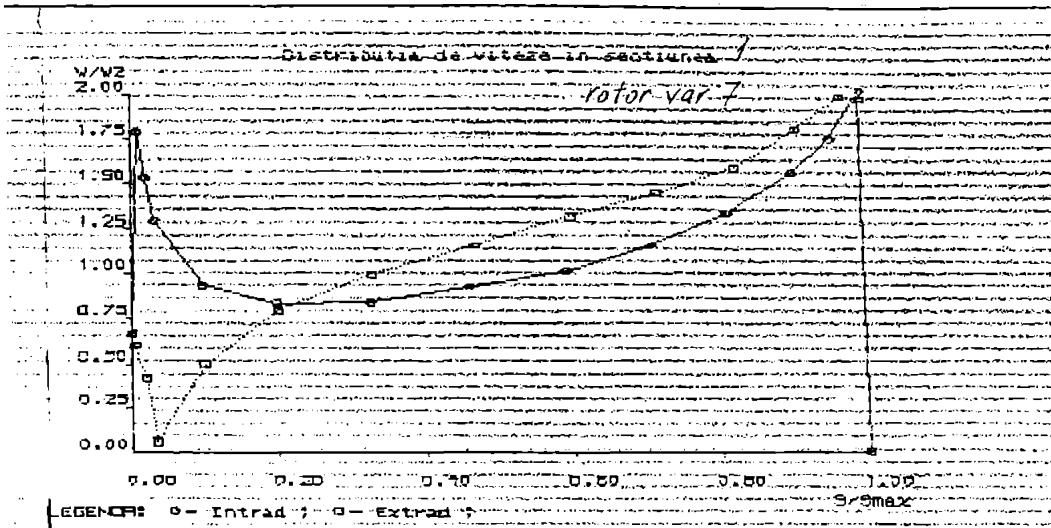


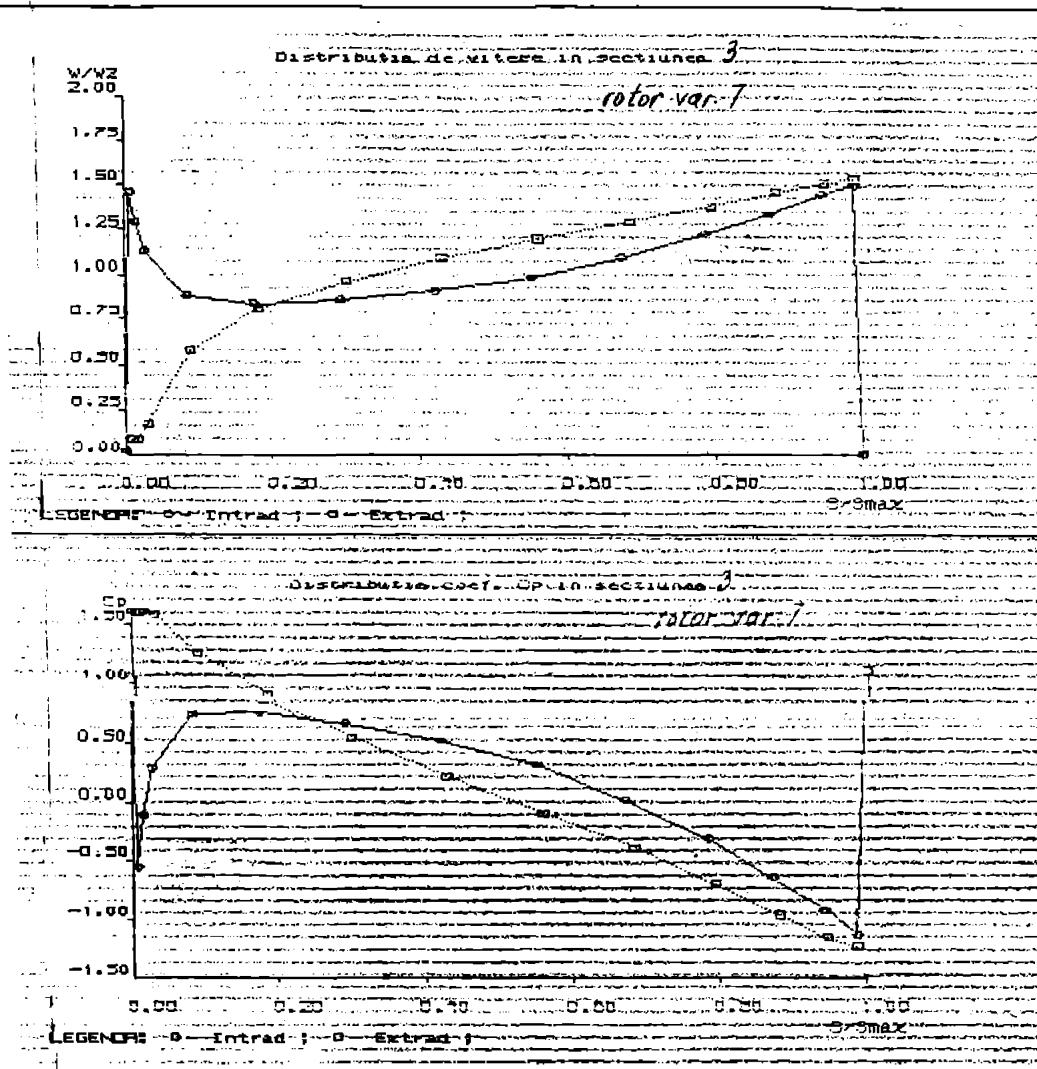


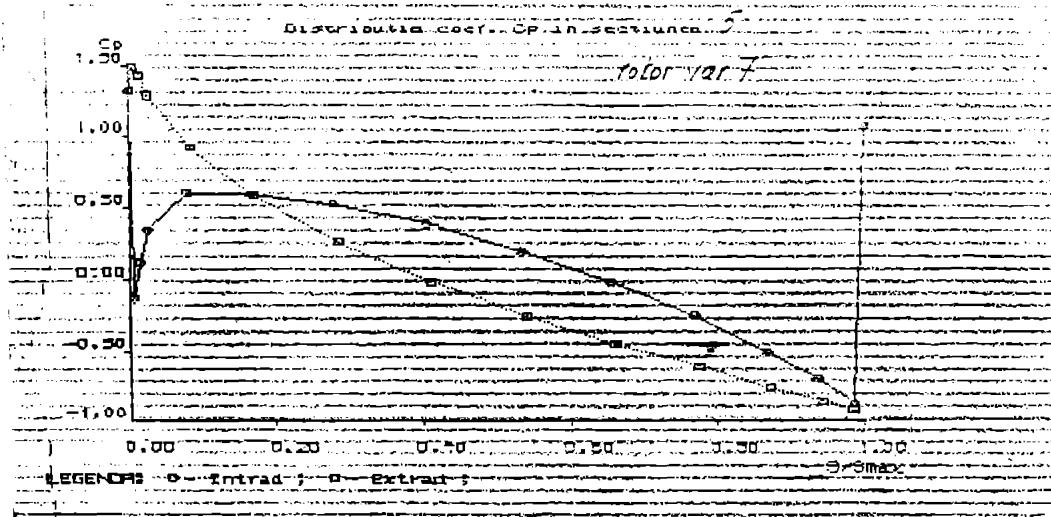
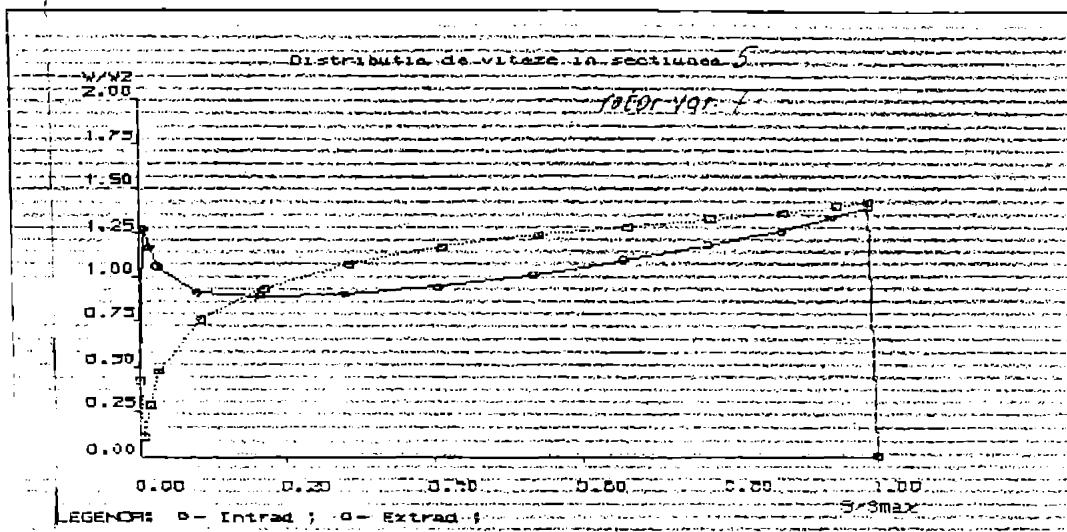


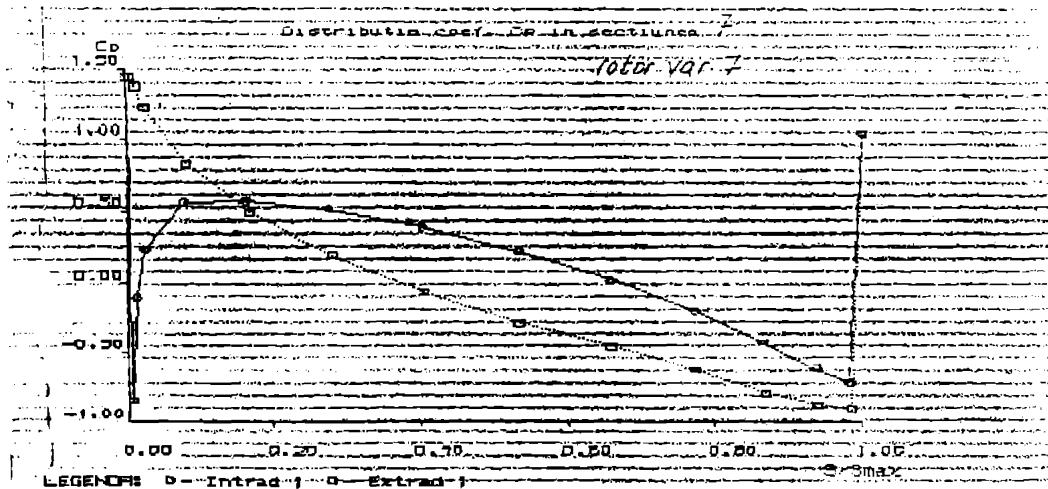
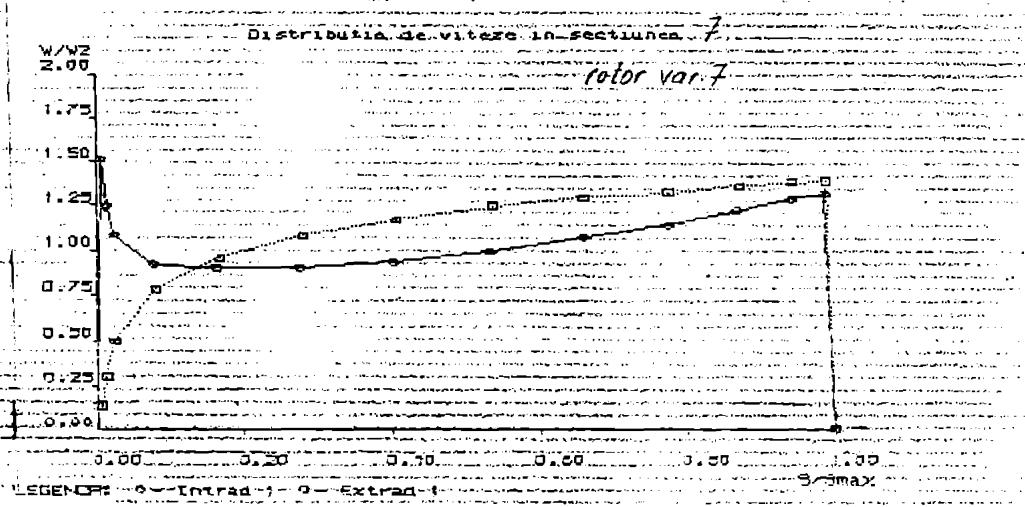


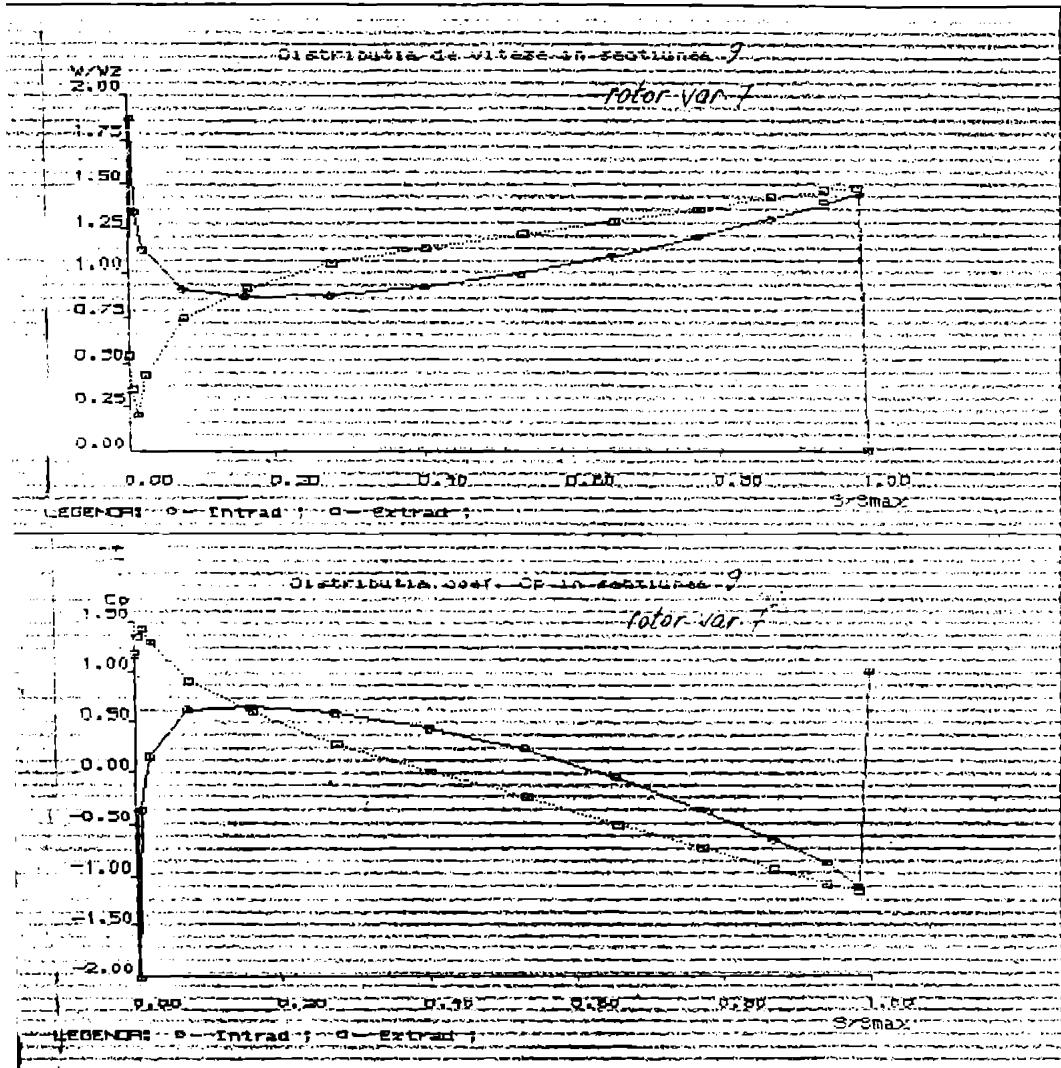


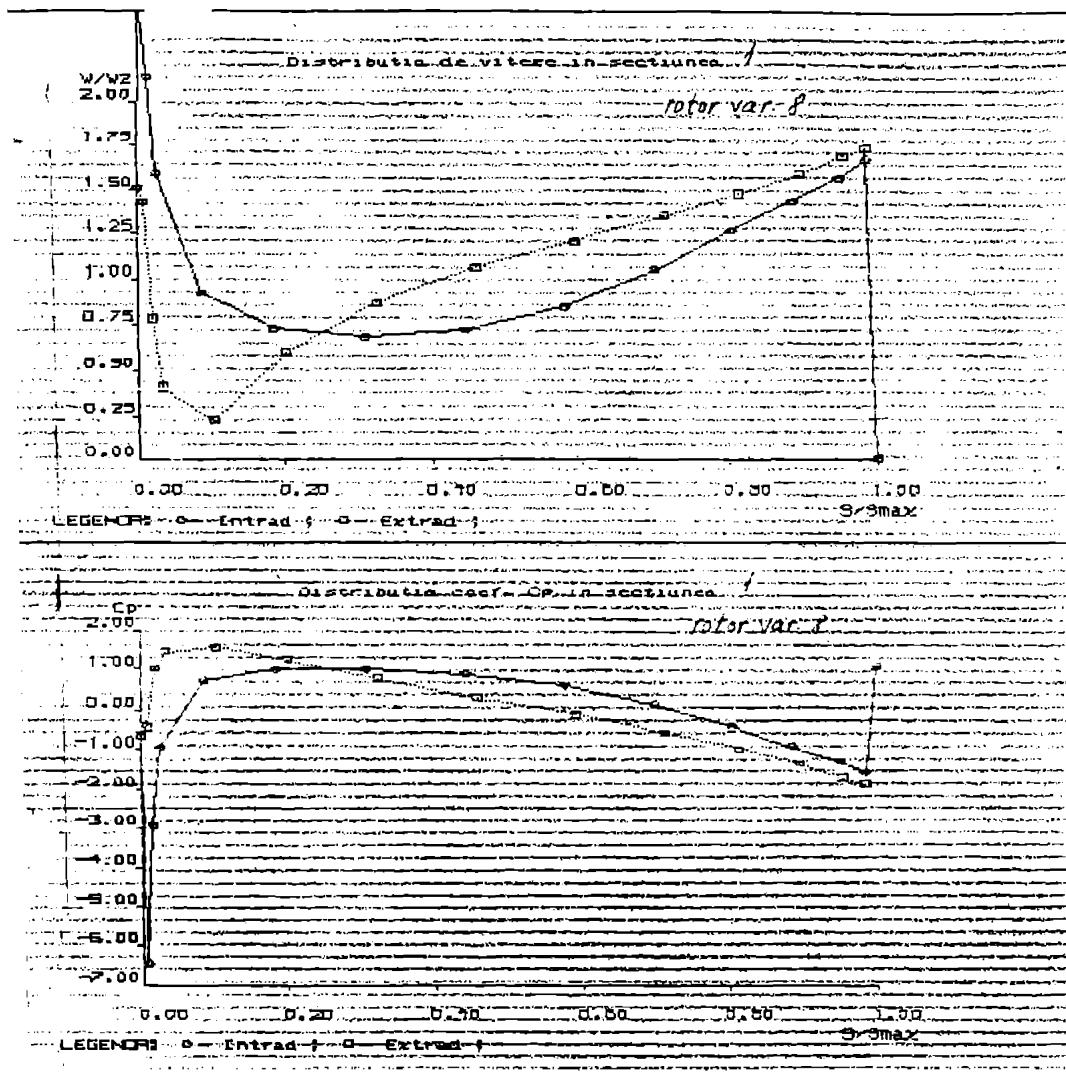


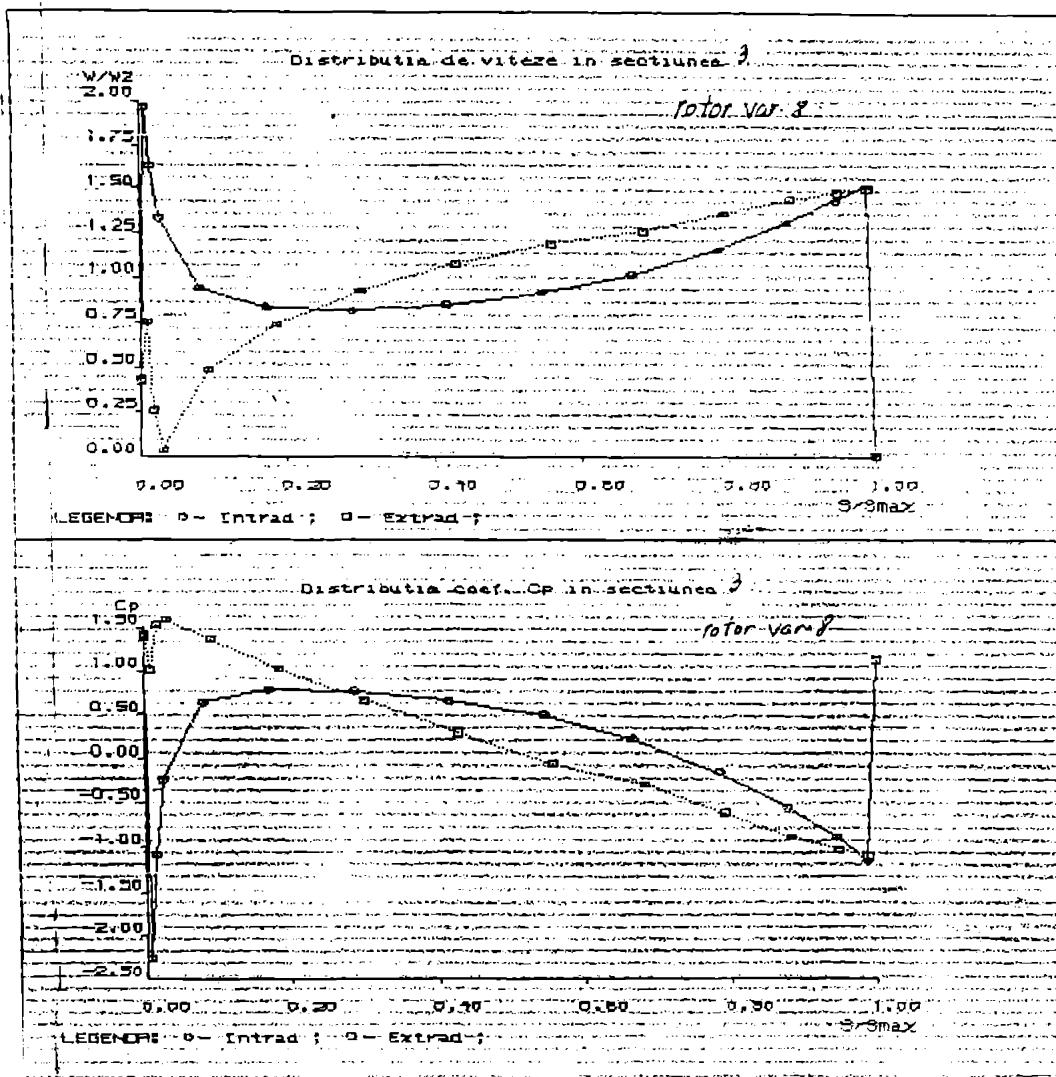


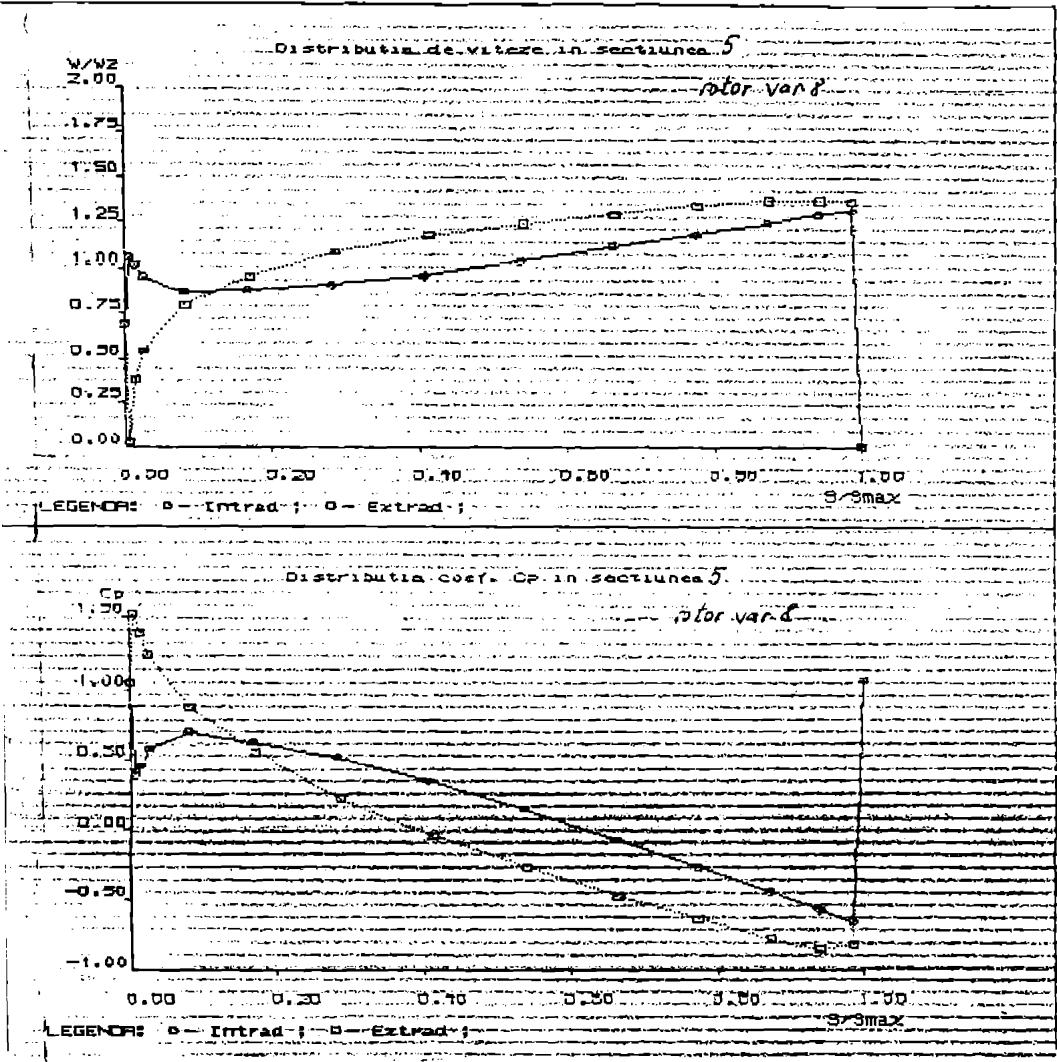


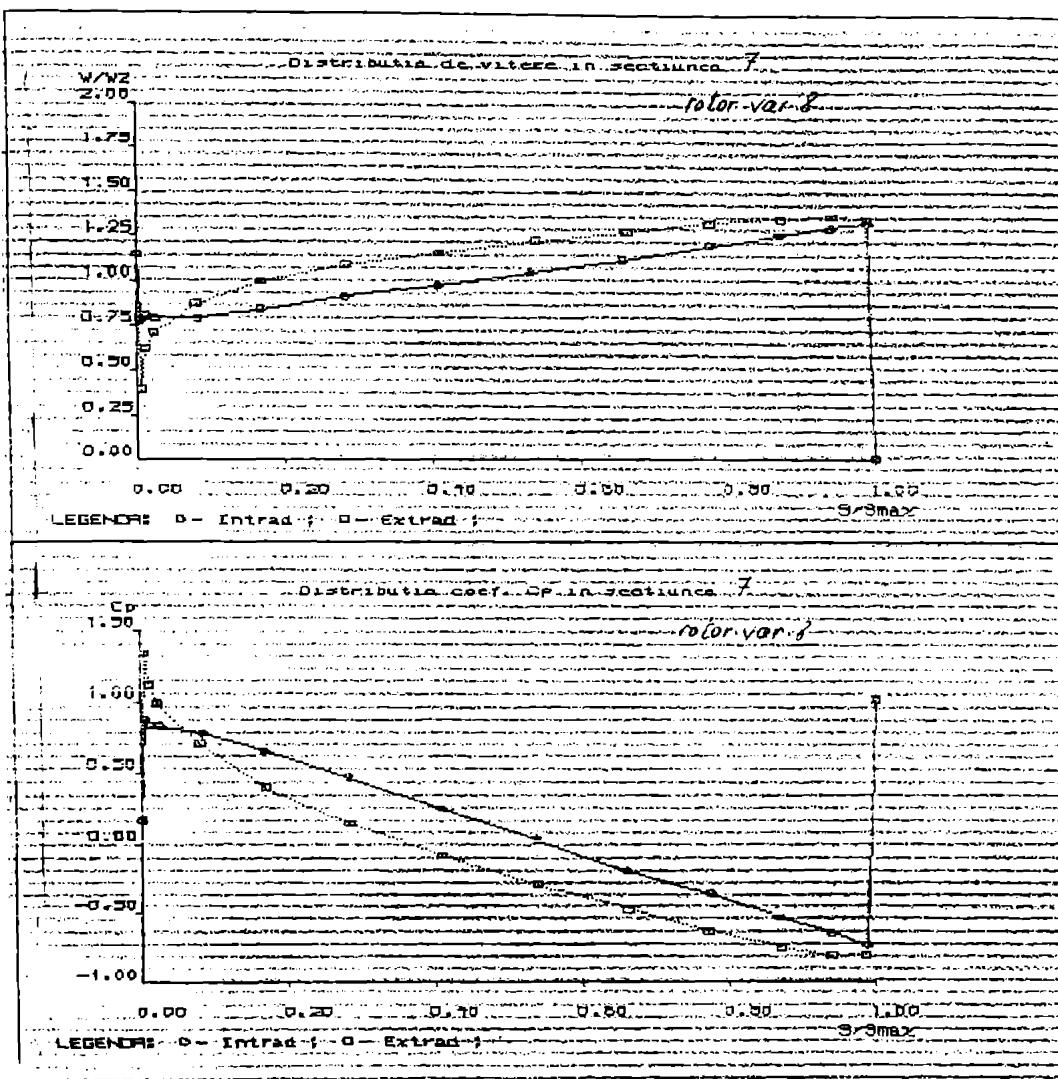


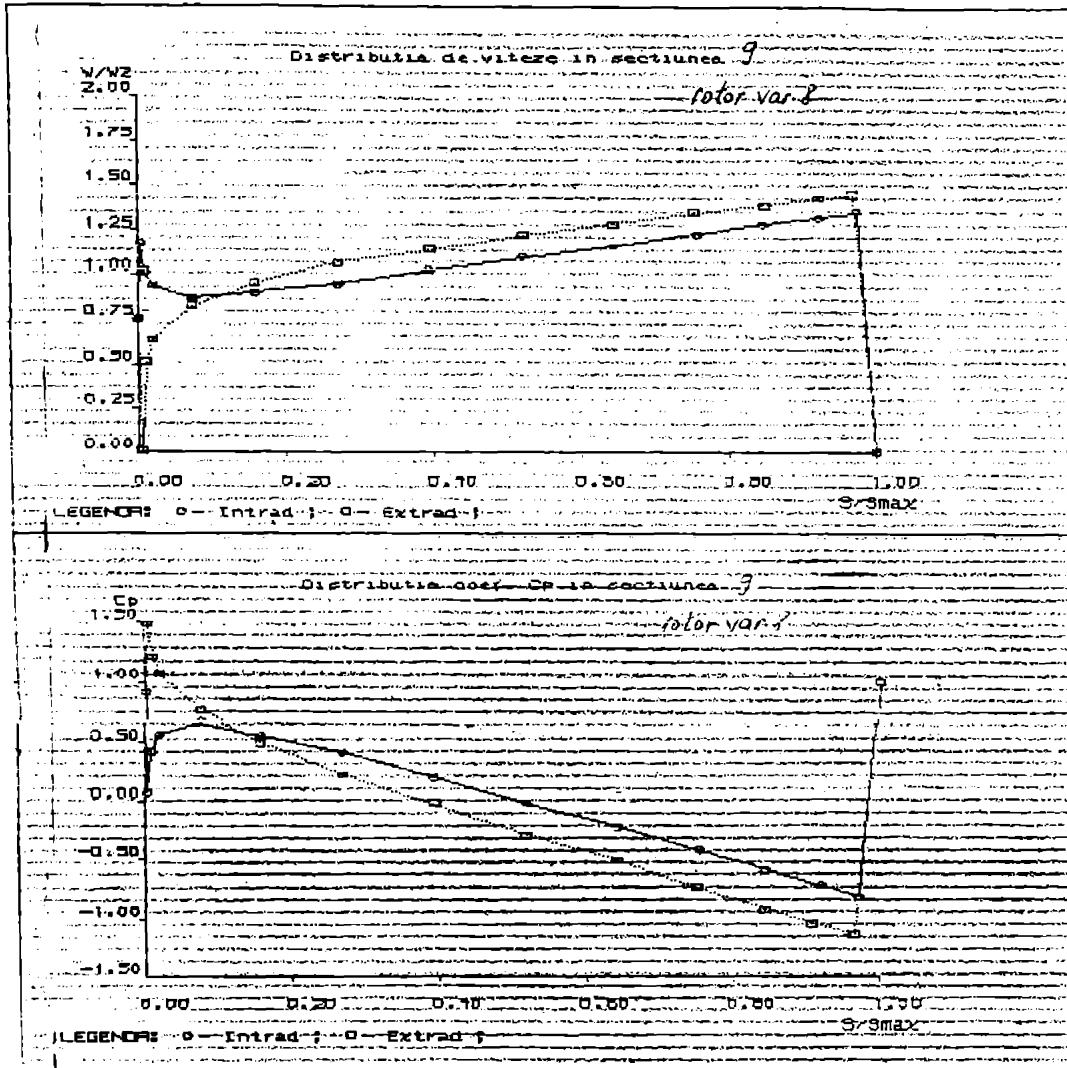


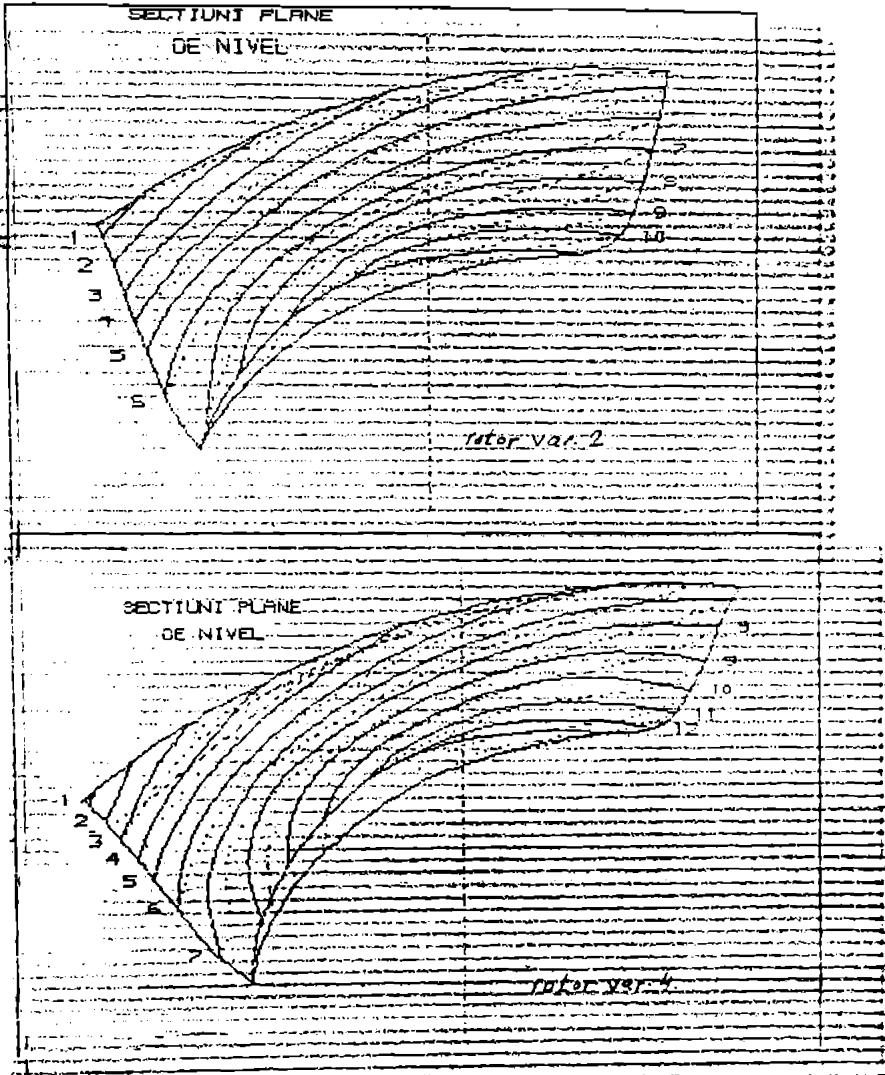


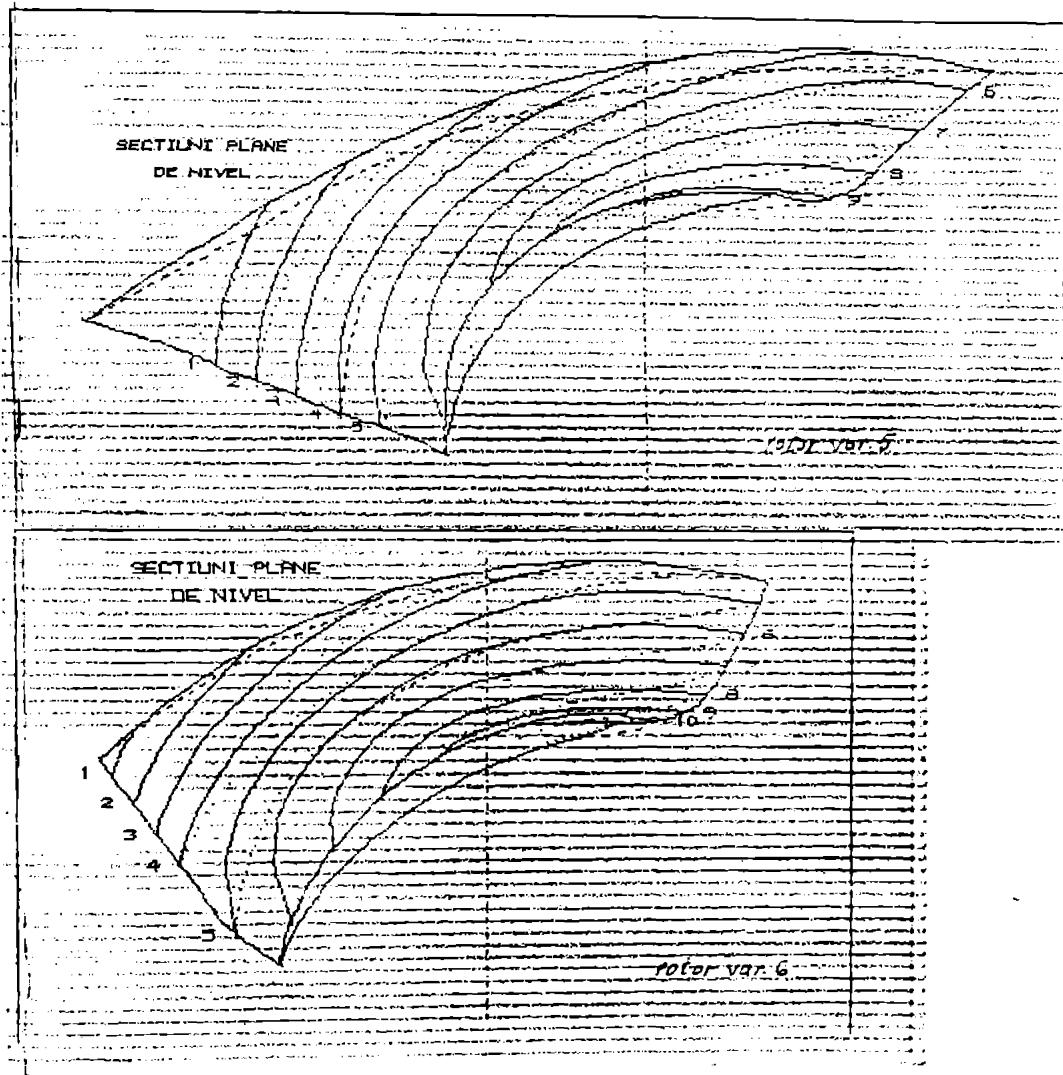












SECTIUNI PLANE
DE NIVEL

1
2
3
4
5

6
7
8
9
10

motor var. 7

SECTIUNI PLANE
DE NIVEL

1
2
3
4

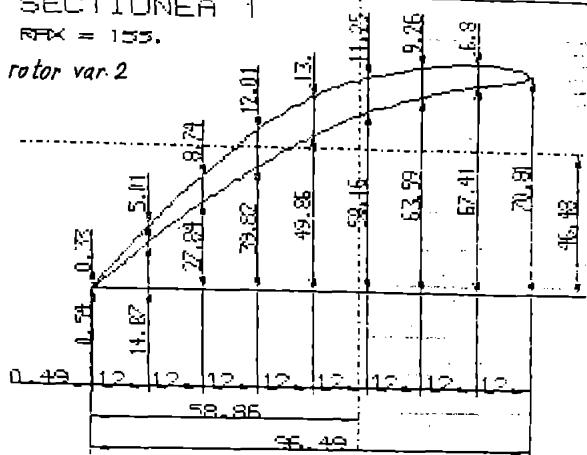
5
6
7
8

motor var. 8

SECTIUNEA 1

RAX = 155.

rotor var. 2

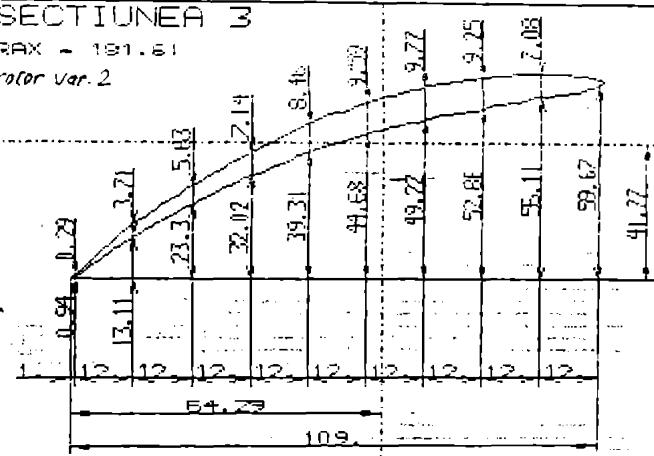


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SECTIUNEA 3

RAX = 181.61

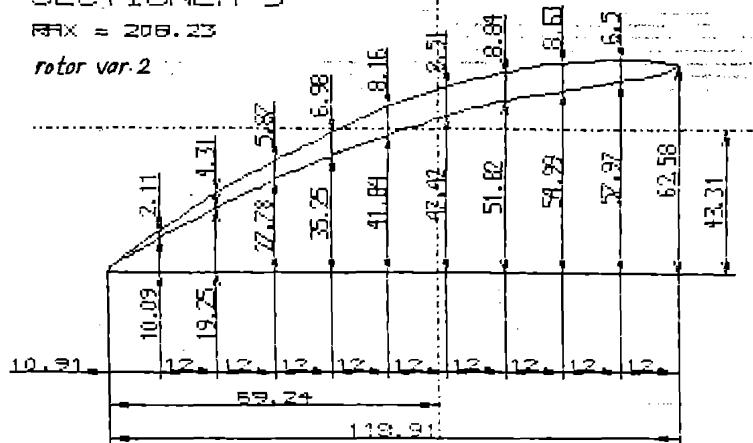
rotor var. 2



SECTIUNEA 5

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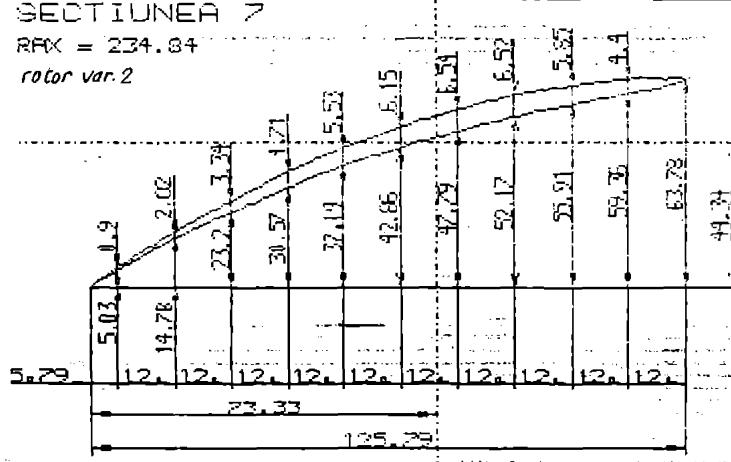
rotor var. 2

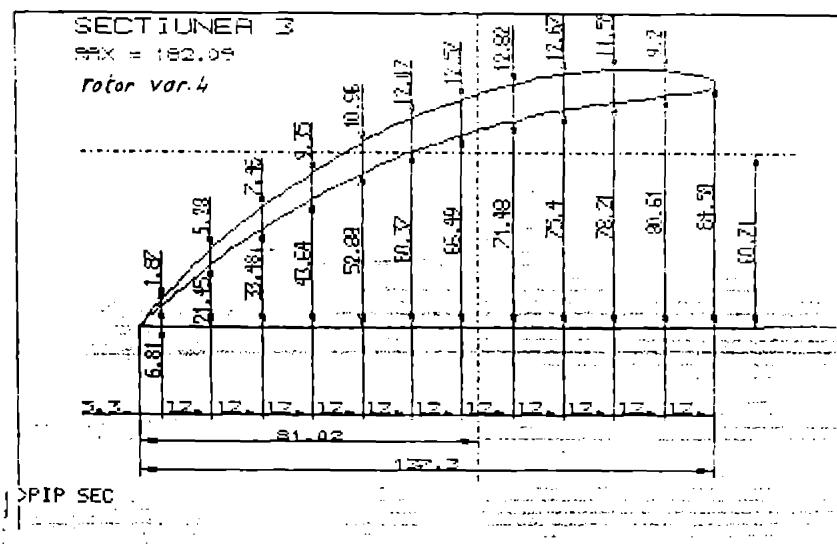
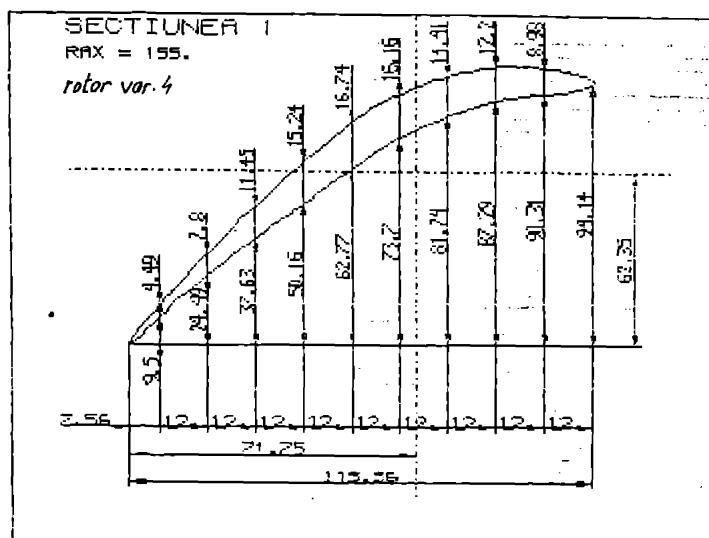


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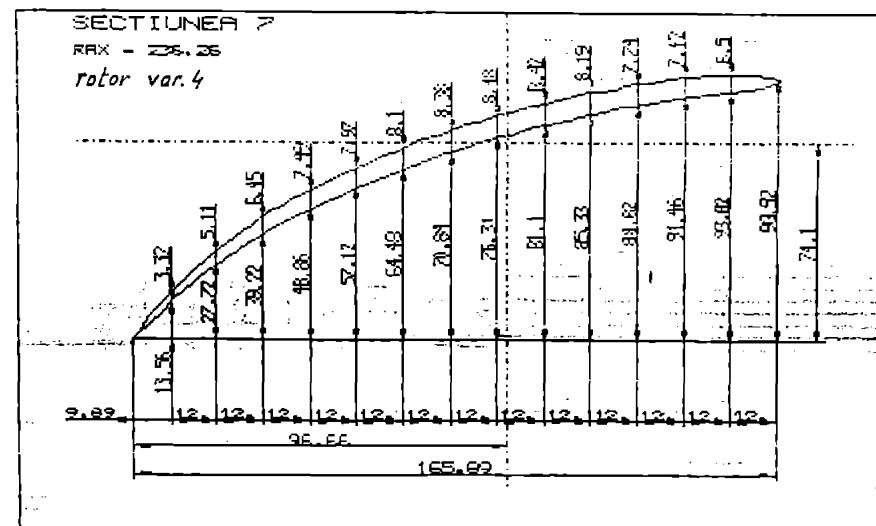
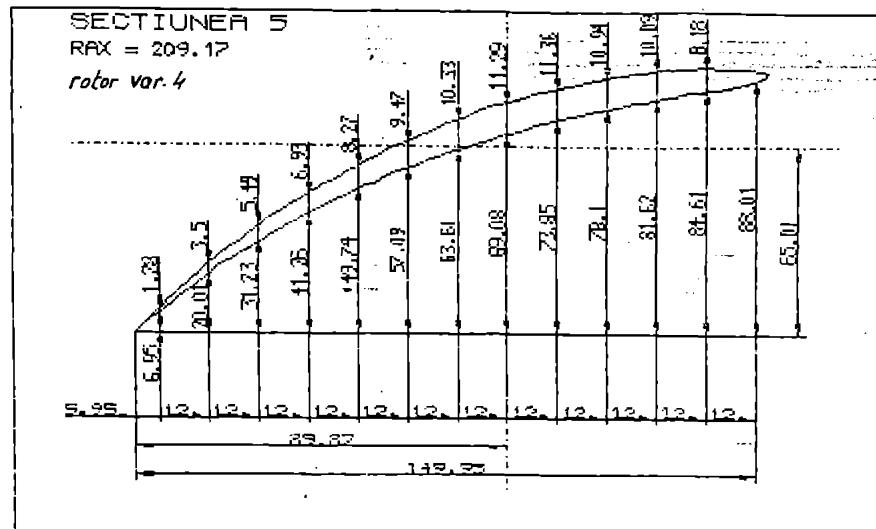
RAX = 234.84

rotor var. 2





- 437 -



SECTIUNEA 1

RAX = 150.

rotor var. 6

10.12

106.19

SECTIUNEA 3

RAX = 178.85

rotor var. 6

10.95

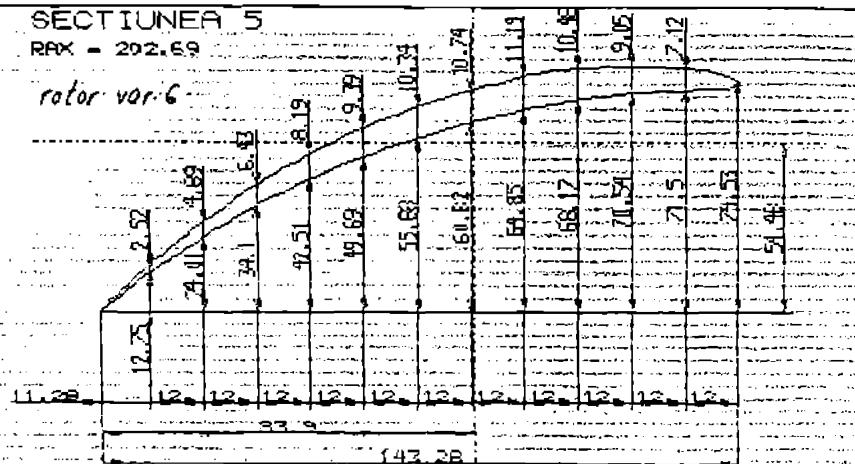
75.72

118.95

SECTIUNEA 5

RAX = 292.69

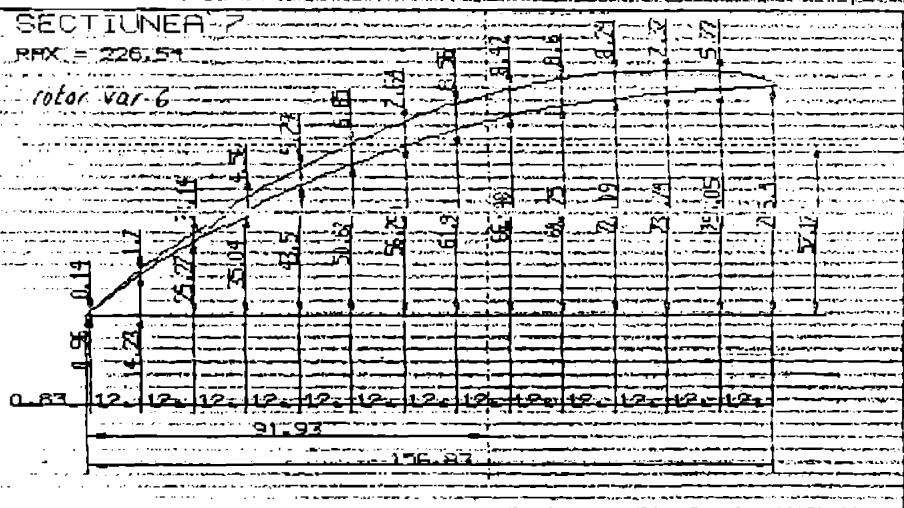
rotor var.6

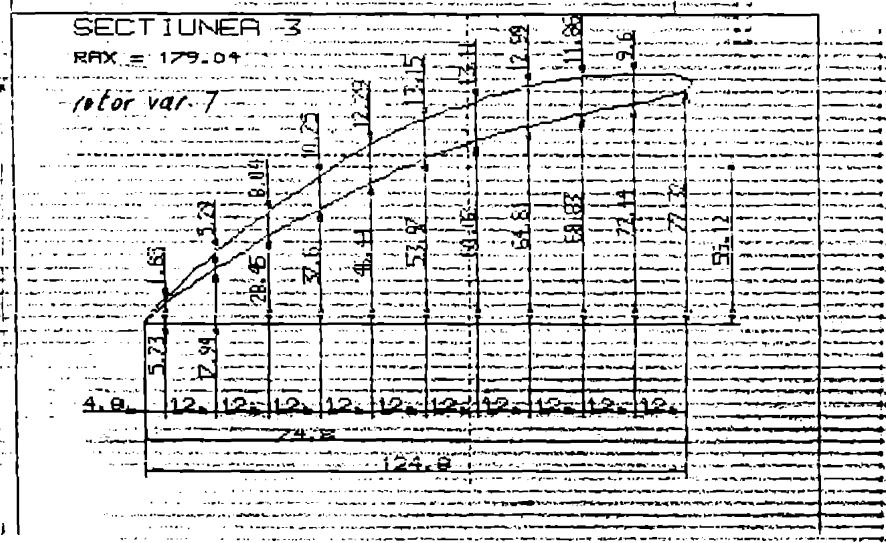
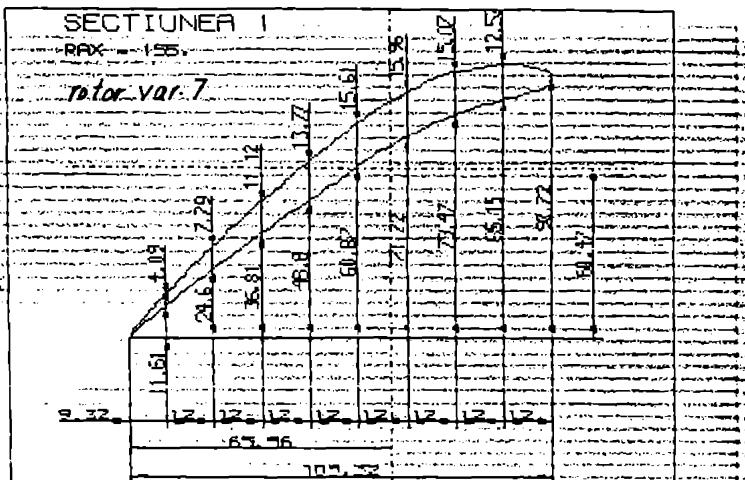


SECTIUNEA 7

RAX = 226.51

rotor var.6

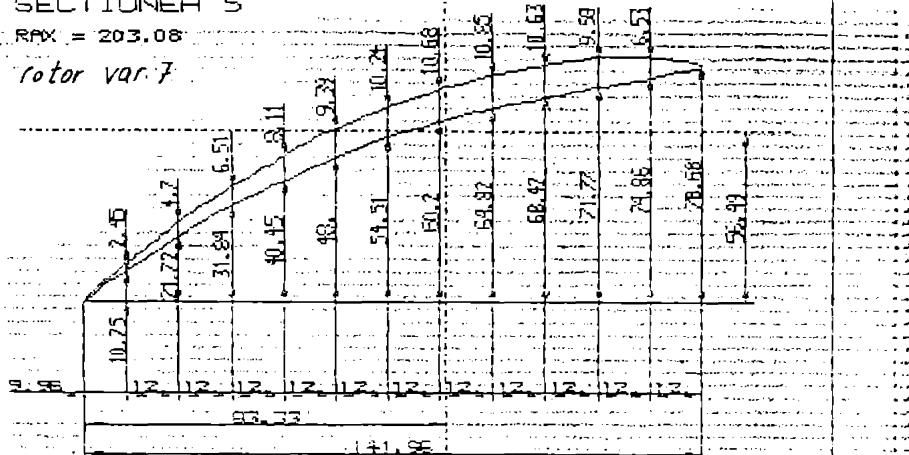




SECTIUNEA 5

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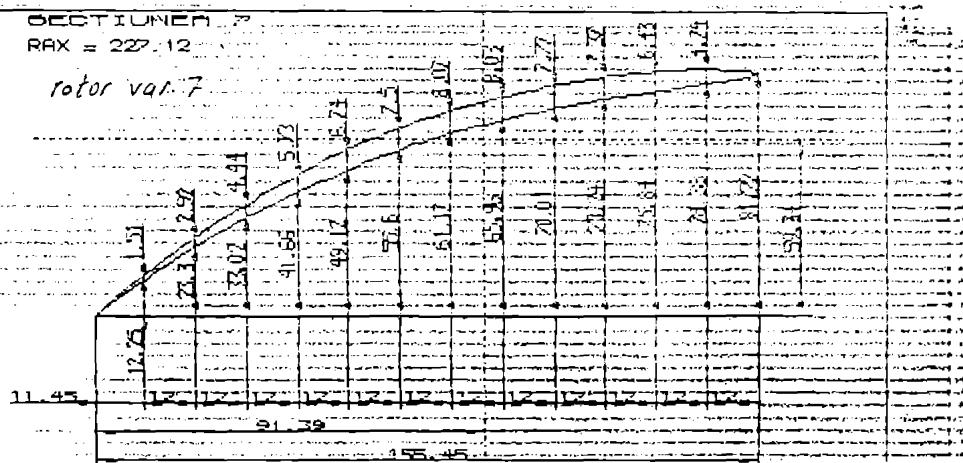
rotor var. f

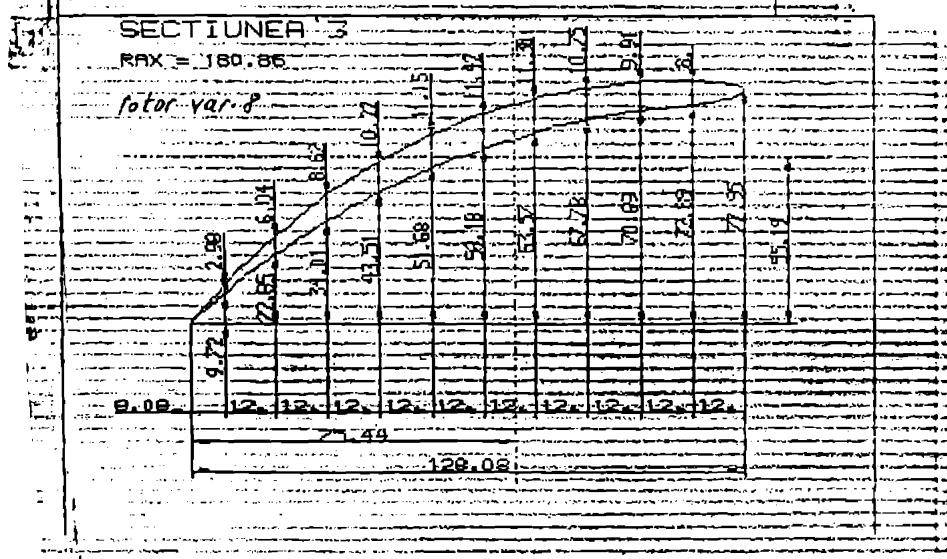
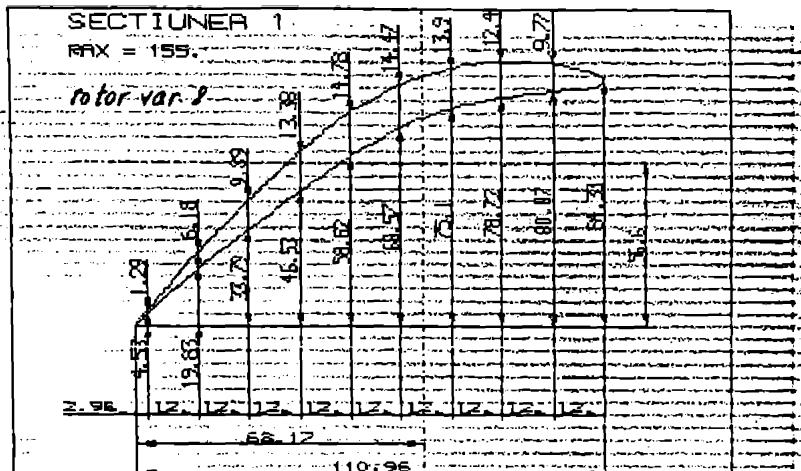


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RAX = 227,12

rotor var. 7

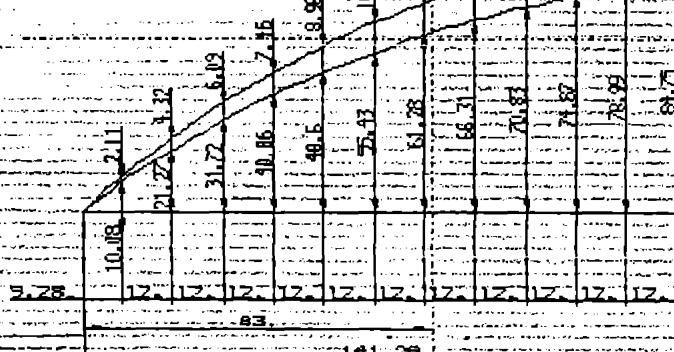




SECTIUNEA 5

RAX = 206,73

rotor var. 8



SECTIUNEA 7

RAX = 232,59

rotor var. 8

