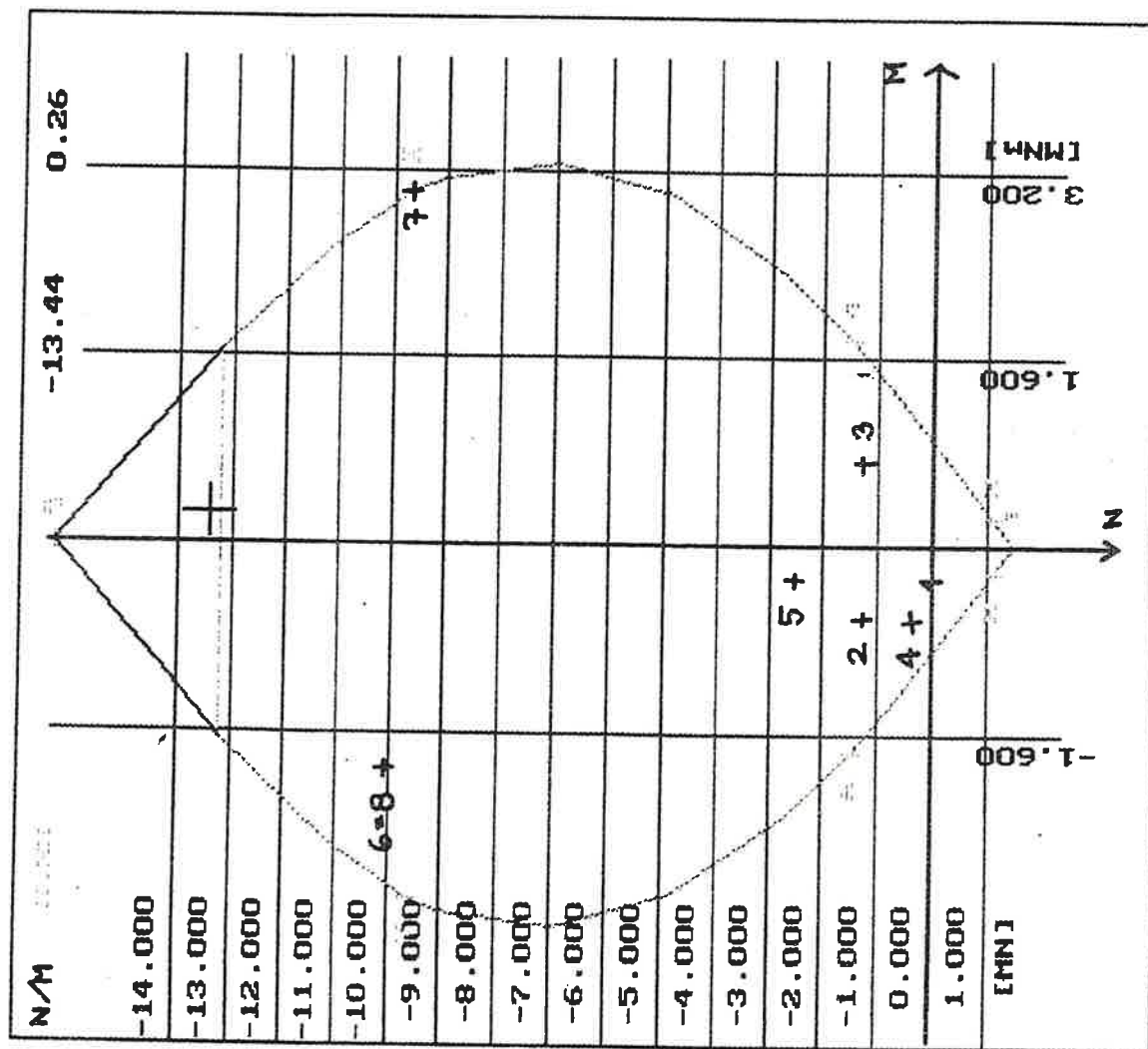
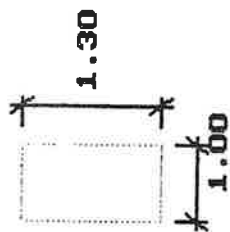
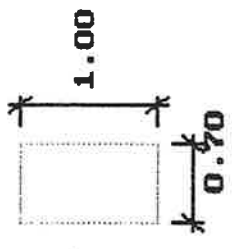
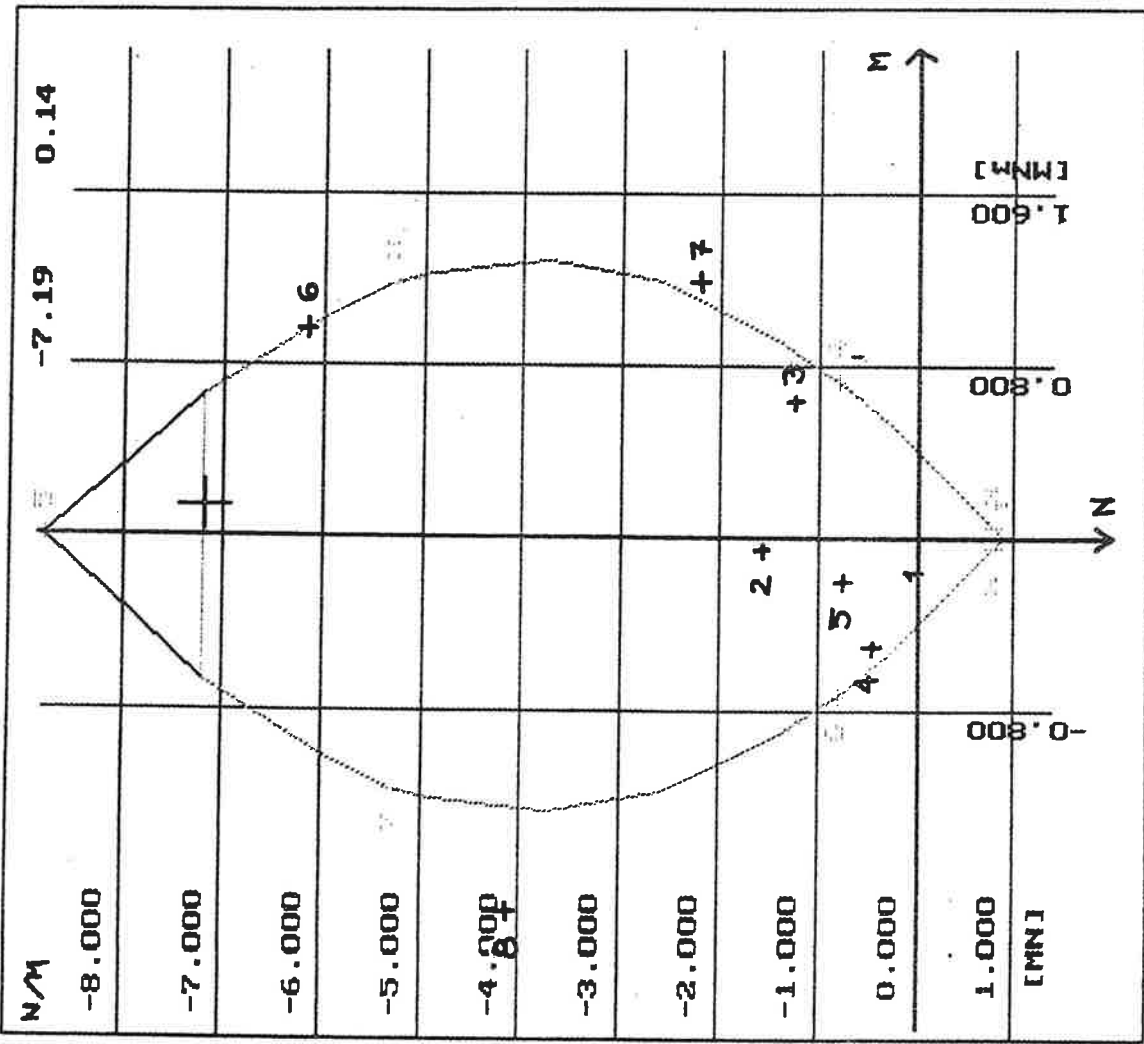




As1:4165.8 As2:4165.8

1	0.0000	1.4775
2	0.2364	1.0835
3	3.0379	-9.6479
4	1.7586	-1.4950
5	0.0000	-16.206
6	-1.7586	-1.4950
7	-3.0379	-9.6479
8	-0.2364	1.0835

1	0.0000	0.0000
2	-0.6201	-1.2828
3	0.7274	-1.2828
4	-0.6292	-0.3873
5	-0.2940	-2.5234
6	-1.9110	-10.057
7	3.0231	-9.6787
8	-1.9110	-10.057



As1:2827.4 As2:2199.1	
1	0.0000 0.8875
2	0.0482 0.7805
3	1.1732 -5.3084
4	0.7362 -0.8050
5	0.0000 -8.7842
6	-0.7362 -0.8050
7	-1.1732 -5.3084
8	-0.0482 0.7805
1	0.0000 0.0000
2	-0.0613 -1.5567
3	0.6346 -1.2236
4	-0.5053 -0.4835
5	-0.1998 -0.7630
6	0.9770 -6.1725
7	1.1828 -2.1971
8	-1.7496 -4.1541

} NEVYKONNÉ

PROSTOROVÝ MODEL

PRŮŘEZNÉ CHARAKTERISTIKY PRŮTOKU

PRŮTOK 1-8 $h_y = 1,30 \text{ m}$
 $h_z = 1,00 \text{ m}$

$$F_x = 1,3 \text{ m}^2$$

$$F_y = 1,083 \text{ m}^2$$

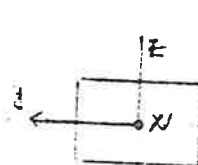
$$F_z = 1,083 \text{ m}^2$$

$$I_x = 0,2275 \text{ m}^4$$

$$I_y = 0,1083 \text{ m}^4$$

$$I_z = 0,1831 \text{ m}^4$$

SOUPRAVA 1-8 PRŮTOKU



1Z

Y PRŮTOK X
 PRŮTOK
 PRŮTOK

$$I_x = \frac{1}{12} \cdot h_y \cdot h_z^3$$

$$F_x = h_y \cdot h_z$$

$$I_y = \frac{1}{12} \cdot h_z \cdot h_y^3$$

$$F_y = \frac{h_y \cdot h_z}{12}$$

$$F_z = \frac{h_y \cdot h_z}{12}$$

$$I_x = \frac{1}{12} \cdot b^3 \cdot h$$

(b JE HEDNĚ 8
 HEDNĚ h_y, h_z)

9-18 $h_y = 1,00 \text{ m}$
 $h_z = 0,70 \text{ m}$

168,163

$$F_x = 0,70 \text{ m}^2$$

$$F_y = 0,583 \text{ m}^2$$

$$F_z = 0,583 \text{ m}^2$$

$$I_x = 0,2635 \text{ m}^4$$

$$I_y = 0,0286 \text{ m}^4$$

$$I_z = 0,0583 \text{ m}^4$$

19-24 $h_y = 0,5 \text{ m}$
 $h_z = 0,4 \text{ m}$

$$F_x = 0,20 \text{ m}^2$$

$$F_y = 0,167 \text{ m}^2$$

$$F_z = 0,167 \text{ m}^2$$

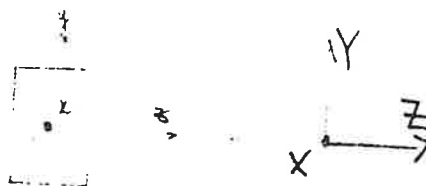
$$I_x = 0,0054 \text{ m}^4$$

$$I_y = 0,0024 \text{ m}^4$$

$$I_z = 0,0042 \text{ m}^4$$

25-33 $h_y = 1,5 \text{ m}$ $F_x = 1,20 \text{ m}^2$
 $h_z = 0,8 \text{ m}$ $F_y = 1,00 \text{ m}^2$
 $F_z = 1,00 \text{ m}^2$
 $I_x = 0,1615 \text{ m}^4$
 $I_y = 0,1064 \text{ m}^4$
 $I_z = 0,225 \text{ m}^4$

25-33



31-38 $h_y = 1,9 \text{ m}$ $F_x = 1,52 \text{ m}^2$ $I_x = 0,2335 \text{ m}^4$
 $h_z = 0,8 \text{ m}$ $F_y = 1,24 \text{ m}^2$ $I_y = 0,0311 \text{ m}^4$
 $F_z = 1,24 \text{ m}^2$ $I_z = 0,4543 \text{ m}^4$

39-40 $h_y = 0,8 \text{ m}$ $F_x = 0,32 \text{ m}^2$ $I_x = 0,0117 \text{ m}^4$ (ODH 40)
 $h_z = 0,4 \text{ m}$ $F_y = 0,27 \text{ m}^2$ $I_y = 0,0043 \text{ m}^4$
 $F_z = 0,27 \text{ m}^2$ $I_z = 0,0171 \text{ m}^4$

41-42 $h_y = 0,6 \text{ m}$ $F_x = 0,12 \text{ m}^2$ $I_x = 0,0013 \text{ m}^4$ (ODH 40)
 $h_z = 0,2 \text{ m}$ $F_y = 0,10 \text{ m}^2$ $I_y = 0,0004 \text{ m}^4$
 $F_z = 0,10 \text{ m}^2$ $I_z = 0,0036 \text{ m}^4$

* 173-180 $h_y = 4,0$ $F_x = 1,00 \text{ m}^2$ $I_x = 0,0203 \text{ m}^4$
 $h_z = 0,25$ $F_y = 0,83 \text{ m}^2$ $I_y = 0,0052 \text{ m}^4$
 $F_z = 0,83 \text{ m}^2$ $I_z = 1,3300 \text{ m}^4$

43-44 $h_y = 0,3 \text{ m}$ $F_x = 0,08 \text{ m}^2$ $I_x = 0,0008 \text{ m}^4$
 $h_z = 0,25 \text{ m}$ $F_y = 0,10 \text{ m}^2$ $I_y = 0,0004 \text{ m}^4$

PENT 45-50

$$h_y = 0,8 \text{ m}$$

$$h_z = 0,5 \text{ m}$$

$$F_x = 0,40 \text{ m}^2$$

$$F_y = 0,30 \text{ m}^2$$

$$F_z = 0,30 \text{ m}^2$$

$$I_x = 0,0210 \text{ m}^4$$

$$I_y = 0,0083 \text{ m}^4$$

$$I_z = 0,0213 \text{ m}^4$$

PENT

51-54

$$h_y = 0,95 \text{ m}$$

$$h_z = 0,5 \text{ m}$$

$$F_x = 0,48 \text{ m}^2$$

$$F_y = 0,40 \text{ m}^2$$

$$F_z = 0,40 \text{ m}^2$$

$$I_x = 0,0261 \text{ m}^4$$

$$I_y = 0,0099 \text{ m}^4$$

$$I_z = 0,0357 \text{ m}^4$$

PENT 55-62

$$h_y = 0,5 \text{ m}$$

$$h_z = 0,25 \text{ m}$$

$$F_x = 0,33 \text{ m}^2$$

$$F_y = 0,28 \text{ m}^2$$

$$F_z = 0,28 \text{ m}^2$$

$$I_x = 0,0104 \text{ m}^4$$

$$I_y = 0,0034 \text{ m}^4$$

$$I_z = 0,0250 \text{ m}^4$$

PENT 63-65

$$h_y = 0,6 \text{ m}$$

$$h_z = 0,4 \text{ m}$$

$$F_x = 0,24 \text{ m}^2$$

$$F_y = 0,20 \text{ m}^2$$

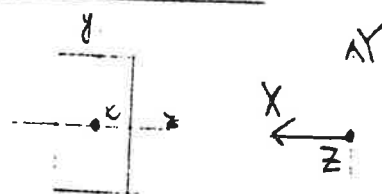
$$F_z = 0,20 \text{ m}^2$$

$$I_x = 0,0075 \text{ m}^4$$

$$I_y = 0,0032 \text{ m}^4$$

$$I_z = 0,0072 \text{ m}^4$$

PROJEKT PRŮPLAVU



PLAT 66-68
161

$$h_1 = 1,60 \text{ m}$$

$$h_2 = 0,95 \text{ m}$$

$$F_x = 0,80 \text{ m}^2$$

$$F_y = 0,67 \text{ m}^2$$

$$F_z = 0,67 \text{ m}^2$$

$$I_x = 0,0530 \text{ m}^4$$

$$I_y = 0,0167 \text{ m}^4$$

$$I_z = 0,1407 \text{ m}^4$$

PLAT 63-77
162, 163

$$h_1 = 1,20 \text{ m}$$

$$h_2 = 0,45 \text{ m}$$

$$F_x = 0,54 \text{ m}^2$$

$$F_y = 0,45 \text{ m}^2$$

$$F_z = 0,45 \text{ m}^2$$

$$I_x = 0,0249 \text{ m}^4$$

$$I_y = 0,0091 \text{ m}^4$$

$$I_z = 0,0648 \text{ m}^4$$

PLAT 75-77
164

$$h_1 = 1,50 \text{ m}$$

$$h_2 = 0,50 \text{ m}$$

$$F_x = 0,75 \text{ m}^2$$

$$F_y = 0,63 \text{ m}^2$$

$$F_z = 0,63 \text{ m}^2$$

$$I_x = 0,0494 \text{ m}^4$$

$$I_y = 0,0156 \text{ m}^4$$

$$I_z = 0,1406 \text{ m}^4$$

PLAT 73-80

$$h_1 = 1,0 \text{ m}$$

$$h_2 = 0,75 \text{ m}$$

$$F_x = 0,75 \text{ m}^2$$

$$F_y = 0,63 \text{ m}^2$$

$$F_z = 0,63 \text{ m}^2$$

$$I_x = 0,0738 \text{ m}^4$$

$$I_y = 0,0352 \text{ m}^4$$

$$I_z = 0,0655 \text{ m}^4$$

PLAT 81-82

$$h_1 = 1,0 \text{ m}$$

$$h_2 = 0,5 \text{ m}$$

$$F_x = 0,50 \text{ m}^2$$

$$F_y = 0,42 \text{ m}^2$$

$$F_z = 0,42 \text{ m}^2$$

$$I_x = 0,0286 \text{ m}^4$$

$$I_y = 0,0104 \text{ m}^4$$

$$I_z = 0,0417 \text{ m}^4$$

PLOT 83-85 $h_y = 1,35m$ $F_x = 1,69m^2$ $I_x = 0,6855m^4$
 $h_z = 1,25m$ $F_y = 1,41m^2$ $I_y = 0,2197m^4$
 $F_z = 1,41m^2$ $I_z = 1,2563m^4$

PLOT 86-90 $h_y = 1,40m$ $F_x = 0,70m^2$ $I_x = 0,0429m^4$
 $h_z = 0,50m$ $F_y = 0,53m^2$ $I_y = 0,0116m^4$
 $F_z = 0,53m^2$ $I_z = 0,1143m^4$

PLOT 91-95 $h_y = 1,50m$ $F_x = 1,50m^2$ $I_x = 0,2936m^4$
 $h_z = 1,00m$ $F_y = 1,25m^2$ $I_y = 0,1250m^4$
 $F_z = 1,25m^2$ $I_z = 0,2813m^4$

PLOT 96-98 $h_y = 1,10m$ $F_x = 1,10m^2$ $I_x = 0,1694m^4$
 $h_z = 1,00m$ $F_y = 0,92m^2$ $I_y = 0,0917m^4$
 $F_z = 0,92m^2$ $I_z = 0,1109m^4$

PLOT 99-103 $h_y = 1,20m$ $F_x = 1,20m^2$ $I_x = 0,1993m^4$
 $h_z = 1,00m$ $F_y = 1,00m^2$ $I_y = 0,1000m^4$
 $F_z = 1,00m^2$ $I_z = 0,1440m^4$

PLOT 104-115 $h_y = 0,8m$ $F_x = 0,80m^2$ $I_x = 0,0896m^4$
 $h_z = 1,0m$ $F_y = 0,67m^2$ $I_y = 0,0667m^4$
 $F_z = 0,67m^2$ $I_z = 0,0427m^4$

PRUT 116 - 123
 $h_1 = 0,80 \text{ m}$
 $h_2 = 0,50 \text{ m}$
 $F_x = 0,40 \text{ m}^2$
 $F_y = 0,32 \text{ m}^2$
 $F_z = 0,32 \text{ m}^2$
 $I_x = 0,0505 \text{ m}^4$
 $I_y = 0,0083 \text{ m}^4$
 $I_z = 0,0213 \text{ m}^4$

PRUT 124 - 125
 (rodová) $h_1 = 0,30 \text{ m}$
 $h_2 = 0,30 \text{ m}$
 $F_x = 0,09 \text{ m}^2$
 $F_y = 0,08 \text{ m}^2$
 $F_z = 0,08 \text{ m}^2$
 $I_x = 0,0011 \text{ m}^4$
 $I_y = 0,0007 \text{ m}^4$
 $I_z = 0,0007 \text{ m}^4$

PRUT 126 - 131
 $h_1 = 0,75 \text{ m}$
 $h_2 = 0,25 \text{ m}$
 $F_x = 0,19 \text{ m}^2$
 $F_y = 0,16 \text{ m}^2$
 $F_z = 0,16 \text{ m}^2$
 $I_x = 0,0051 \text{ m}^4$
 $I_y = 0,0010 \text{ m}^4$
 $I_z = 0,0088 \text{ m}^4$

PRUT 132, 135, 136, 133
 $h_1 = 1,05 \text{ m}$
 $h_2 = 0,35 \text{ m}$
 $F_x = 0,37 \text{ m}^2$
 $F_y = 0,31 \text{ m}^2$
 $F_z = 0,31 \text{ m}^2$
 $I_x = 0,0119 \text{ m}^4$
 $I_y = 0,0038 \text{ m}^4$
 $I_z = 0,0038 \text{ m}^4$

PRUT 134, 137
 $h_1 = 1,05 \text{ m}$
 $h_2 = 0,40 \text{ m}$
 $F_x = 0,74 \text{ m}^2$
 $F_y = 0,61 \text{ m}^2$
 $F_z = 0,61 \text{ m}^2$
 $I_x = 0,0405 \text{ m}^4$
 $I_y = 0,0000 \text{ m}^4$
 $I_z = 0,0675 \text{ m}^4$

PRUT 138 - 141
 $h_1 = 1,20 \text{ m}$
 $h_2 = 0,35 \text{ m}$
 $F_x = 0,42 \text{ m}^2$
 $F_y = 0,35 \text{ m}^2$
 $F_z = 0,35 \text{ m}^2$
 $I_x = 0,0141 \text{ m}^4$
 $I_y = 0,0013 \text{ m}^4$
 $I_z = 0,0504 \text{ m}^4$

138-140

$\text{PEUT } 142 - 143$
 $h_y = 1,20 \text{ m}$
 $h_z = 0,70 \text{ m}$
 $F_x = 0,84 \text{ m}^2$
 $F_y = 0,70 \text{ m}^2$
 $F_z = 0,70 \text{ m}^2$
 $I_x = 0,0564 \text{ m}^4$
 $I_y = 0,0343 \text{ m}^4$
 $I_z = 0,1008 \text{ m}^4$

$\text{PEUT } 144 - 149$
 $154, 155$
 $h_y = 2,50 \text{ m}$
 $h_z = 0,50 \text{ m}$
 $F_x = 0,25 \text{ m}^2$
 $F_y = 2,21 \text{ m}^2$
 $F_z = 0,21 \text{ m}^2$
 $I_x = 0,0088 \text{ m}^4$
 $I_y = 0,0052 \text{ m}^4$
 $I_z = 0,0052 \text{ m}^4$

$\text{PEUT } 150 - 151$
 $h_z = 0,25 \text{ m}$
 $h_z = 0,75 \text{ m}$
 $F_x = 0,10 \text{ m}^2$
 $F_y = 0,16 \text{ m}^2$
 $F_z = 0,16 \text{ m}^2$
 $I_x = 0,0001 \text{ m}^4$
 $I_y = 0,0033 \text{ m}^4$
 $I_z = 0,0010 \text{ m}^4$

$\text{PEUT } 150 - 153$
 $170, 171$
 $h_y = 1,05 \text{ m}$
 $h_z = 0,35 \text{ m}$
 $F_x = 0,35 \text{ m}^2$
 $F_y = 0,29 \text{ m}^2$
 $F_z = 0,29 \text{ m}^2$
 $I_x = 0,0109 \text{ m}^4$
 $I_y = 0,0036 \text{ m}^4$
 $I_z = 0,0292 \text{ m}^4$

$\text{PEUT } 156 - 160$
 $h_y = 0,50 \text{ m}$
 $h_z = 1,60 \text{ m}$
 $F_x = 0,80 \text{ m}^2$
 $F_y = 0,67 \text{ m}^2$
 $F_z = 0,67 \text{ m}^2$
 $I_x = 0,0530 \text{ m}^4$
 $I_y = 0,1707 \text{ m}^4$
 $I_z = 0,0167 \text{ m}^4$

Pev 165-168

$$h_y = 0,20 \text{ m}$$

$$F_x = 0,12 \text{ m}^2$$

$$I_x = 0,0013 \text{ m}^4$$

$$h_b = 0,59 \text{ m}$$

$$F_y = 0,10 \text{ m}^2$$

$$I_y = 0,0036 \text{ m}^4$$

$$F_b = 0,10 \text{ m}^2$$

$$I_b = 0,0004 \text{ m}^4$$

Pev 174-178

$$h_y = 0,75 \text{ m}$$

$$F_x = 0,19 \text{ m}^2$$

$$I_x = 0,0031 \text{ m}^4$$

$$h_z = 0,25 \text{ m}$$

$$F_y = 0,16 \text{ m}^2$$

$$I_y = 0,0010 \text{ m}^4$$

$$F_b = 0,16 \text{ m}^2$$

$$I_z = 0,0005 \text{ m}^4$$

*

Pev 179-180 - 013 50-55

Pev 180-184

179-180

$$h_y = 2,0 \text{ m}$$

$$F_x = 0,5 \text{ m}^2$$

$$I_x = 0,0094 \text{ m}^4$$

$$h_z = 0,25 \text{ m}$$

$$F_y = 0,42 \text{ m}^2$$

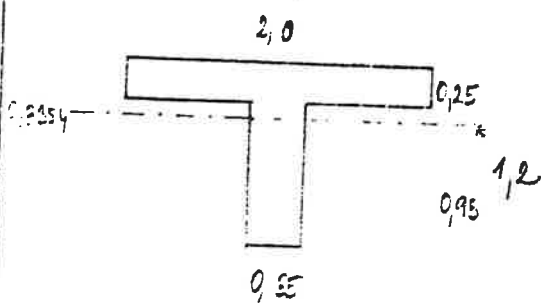
$$I_y = 0,0026 \text{ m}^4$$

$$F_b = 0,42 \text{ m}^2$$

$$I_z = 0,1667 \text{ m}^4$$

PRŮTOK V DVAŽNAKOVÝCH ŽELEZCE

PRŮTOK 138, 140



$$F_x = 0,6938 \text{ m}^2$$

$$I_x = 0,0240 \text{ m}^4$$

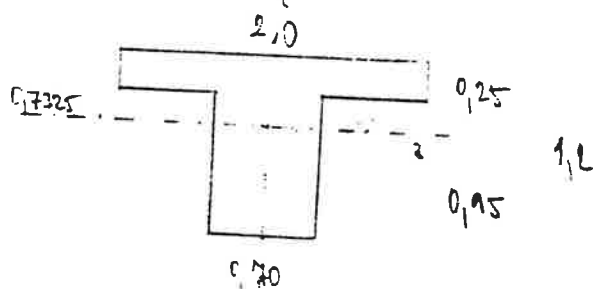
$$F_y = 0,6938 \text{ m}^2$$

$$I_y = 0,1701 \text{ m}^4$$

$$F_z = 0,6938 \text{ m}^2$$

$$I_z = 0,0995 \text{ m}^4$$

PRŮTOK 142, 143



$$F_x = 1,1637 \text{ m}^2$$

$$I_x = 0,1190 \text{ m}^4$$

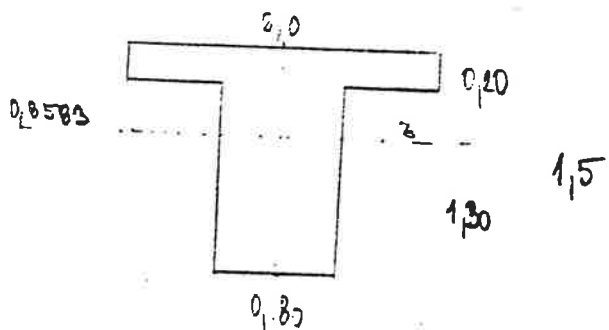
$$F_y = 0,9708 \text{ m}^2$$

$$I_y = 0,1938 \text{ m}^4$$

$$F_z = 0,9708 \text{ m}^2$$

$$I_z = 0,1554 \text{ m}^4$$

PRŮTOK 25-30



$$F_x = 1,144 \text{ m}^2$$

$$I_x = 0,2232 \text{ m}^4$$

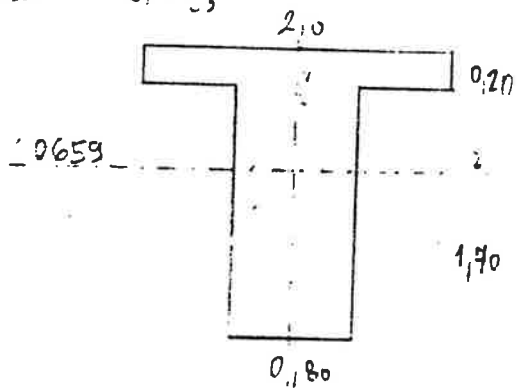
$$F_y = 1,20 \text{ m}^2$$

$$I_y = 0,1888 \text{ m}^4$$

$$F_z = 1,20 \text{ m}^2$$

$$I_z = 0,4218 \text{ m}^4$$

21-53



$$F_x = 1,40 \text{ m}^2$$

$$I_x = 2,2235 \text{ m}^4$$

$$F_y = 1,47 \text{ m}^2$$

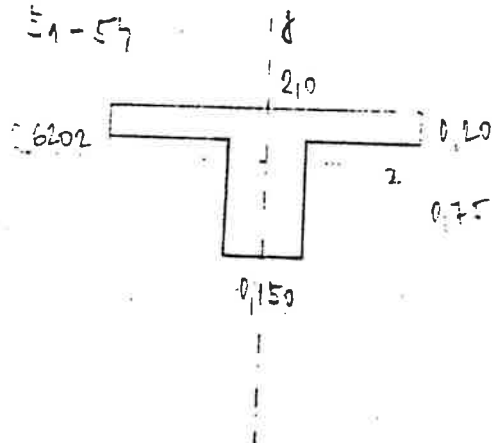
$$I_y = 2,2059 \text{ m}^4$$

$$F_z = 1,47 \text{ m}^2$$

$$I_z = 2,4561 \text{ m}^4$$

1,3

21-57



$$F_x = 0,76 \text{ m}^2$$

$$I_x = 0,2365 \text{ m}^4$$

$$F_y = 0,65 \text{ m}^2$$

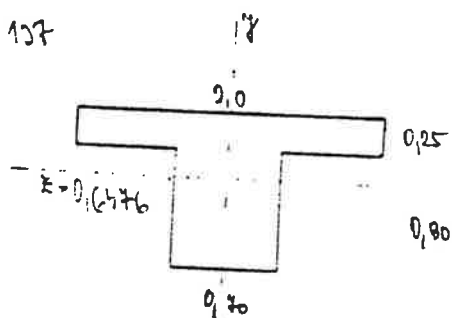
$$I_y = 0,1411 \text{ m}^4$$

$$F_z = 0,65 \text{ m}^2$$

$$I_z = 0,0626 \text{ m}^4$$

2,95

21-107



$$F_x = 1,06 \text{ m}^2$$

$$I_x = 0,1019 \text{ m}^4$$

$$F_y = 0,88 \text{ m}^2$$

$$I_y = 0,1693 \text{ m}^4$$

$$F_z = 0,88 \text{ m}^2$$

$$I_z = 0,1053 \text{ m}^4$$

1,05