ТИПОВЫЕ СТРОИТЕЛЬНЫЕ КОНСТРУКЦИИ, ИЗДЕЛИЯ И УЗЛЫ

СЕРИЯ 1.020-1/87

КОНСТРУКЦИИ КАРКАСА МЕЖВИДОВОГО ПРИМЕНЕНИЯ ДЛЯ МНОГОЭТАЖНЫХ ОБЩЕСТВЕННЫХ ЗДАНИЙ,ПРОИЗВОДСТВЕННЫХ И ВСПОМОГАТЕЛЬНЫХ ЗДАНИЙ ПРОМЫШЛЕННЫХ ПРЕДПРИЯТИЙ

ВЫПУСК 0-6

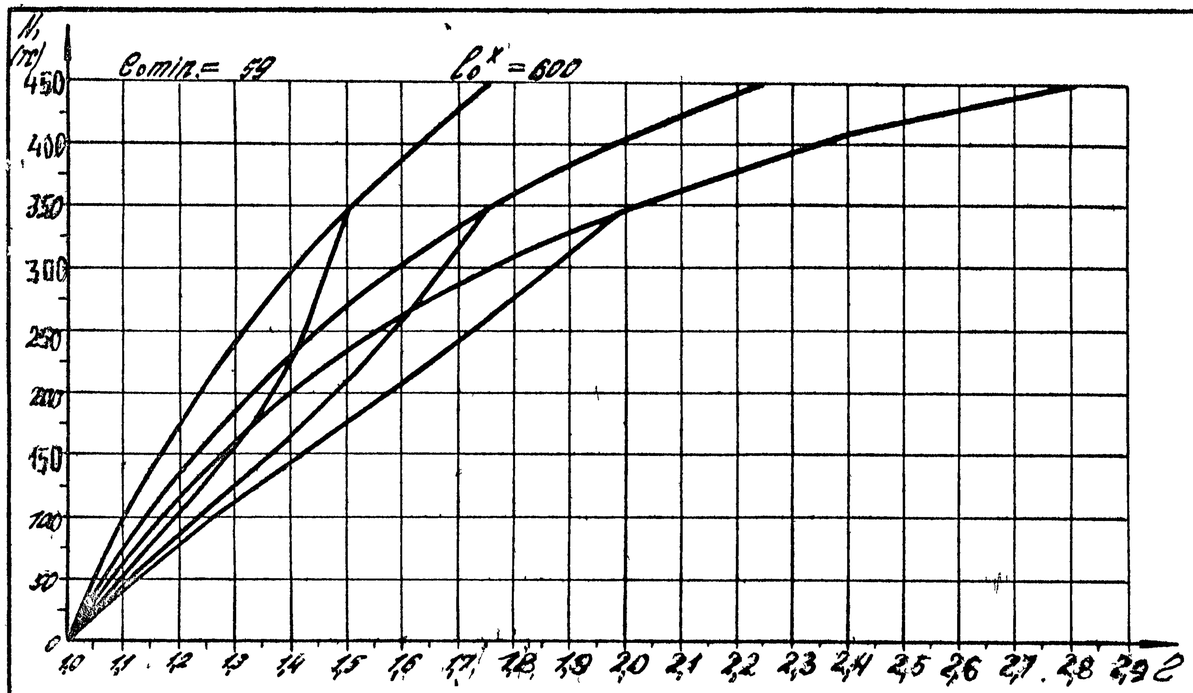
ГРАФИКИ НЕСУЩИХ СПОСОБНОСТЕЙ КОЛОНН ДЛЯ ЗДАНИЙ С ВЫСОТАМИ ЭТАЖЕЙ 4,8; 6,0 И 7,2 М

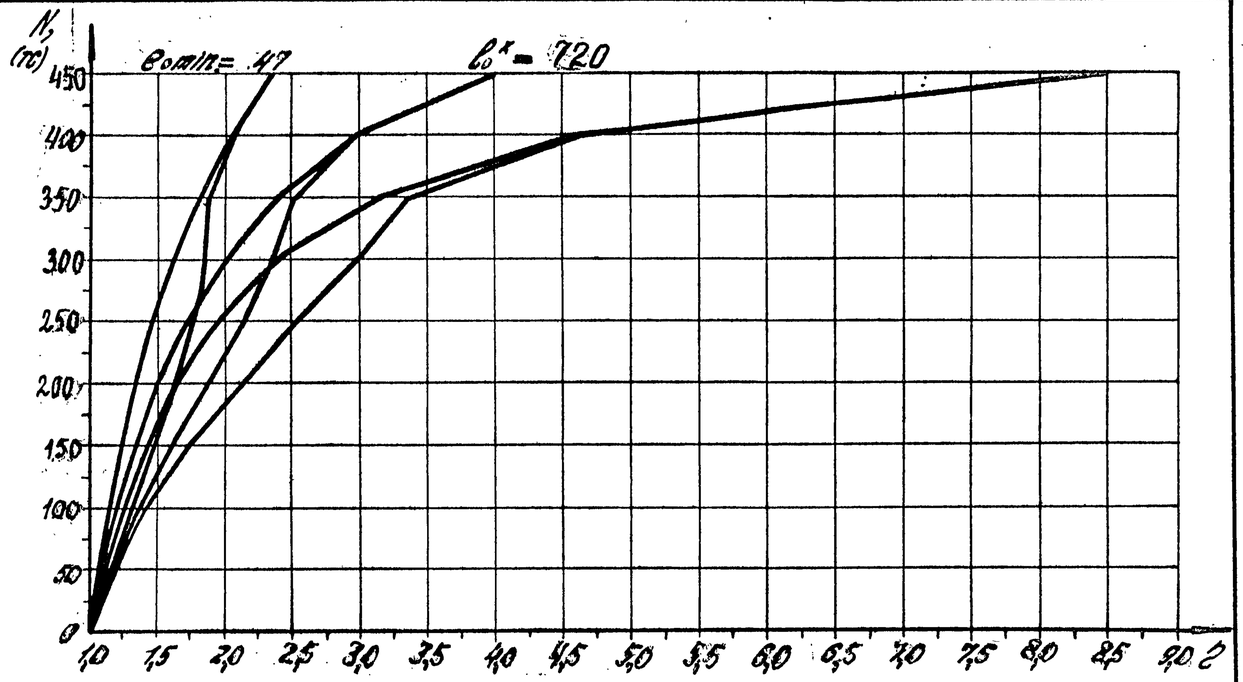
ЧАСТЬ 3
/СТР 201 . 247/

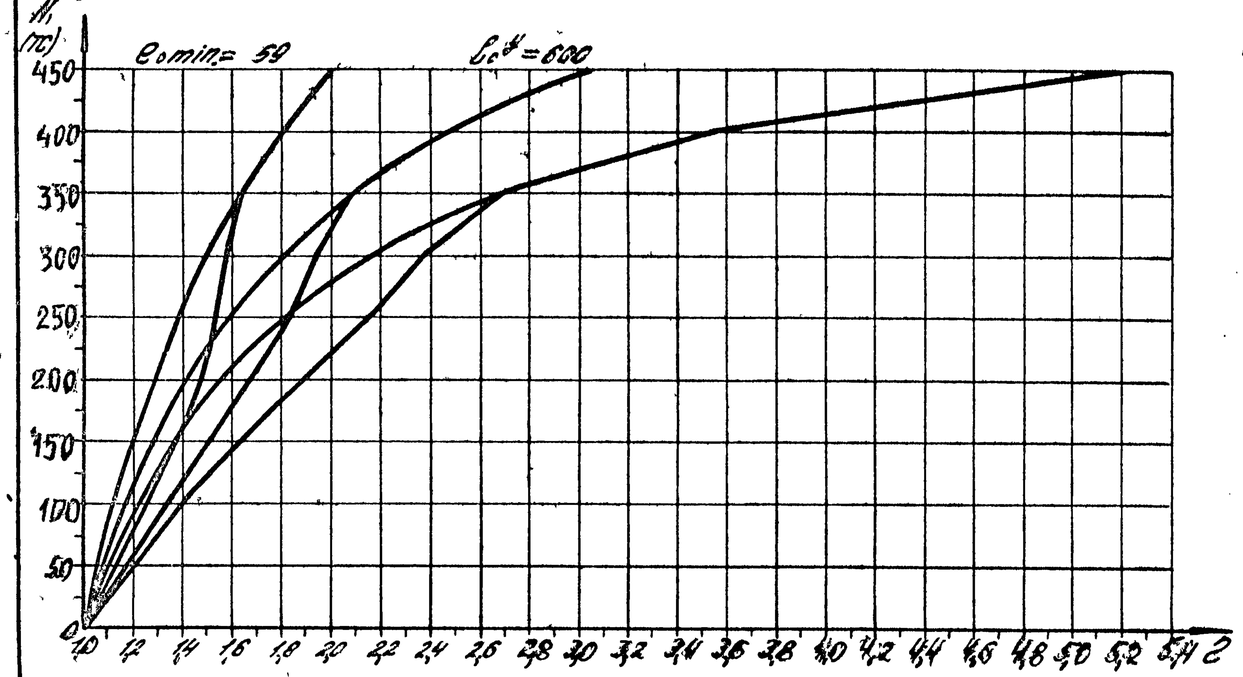
24788-03

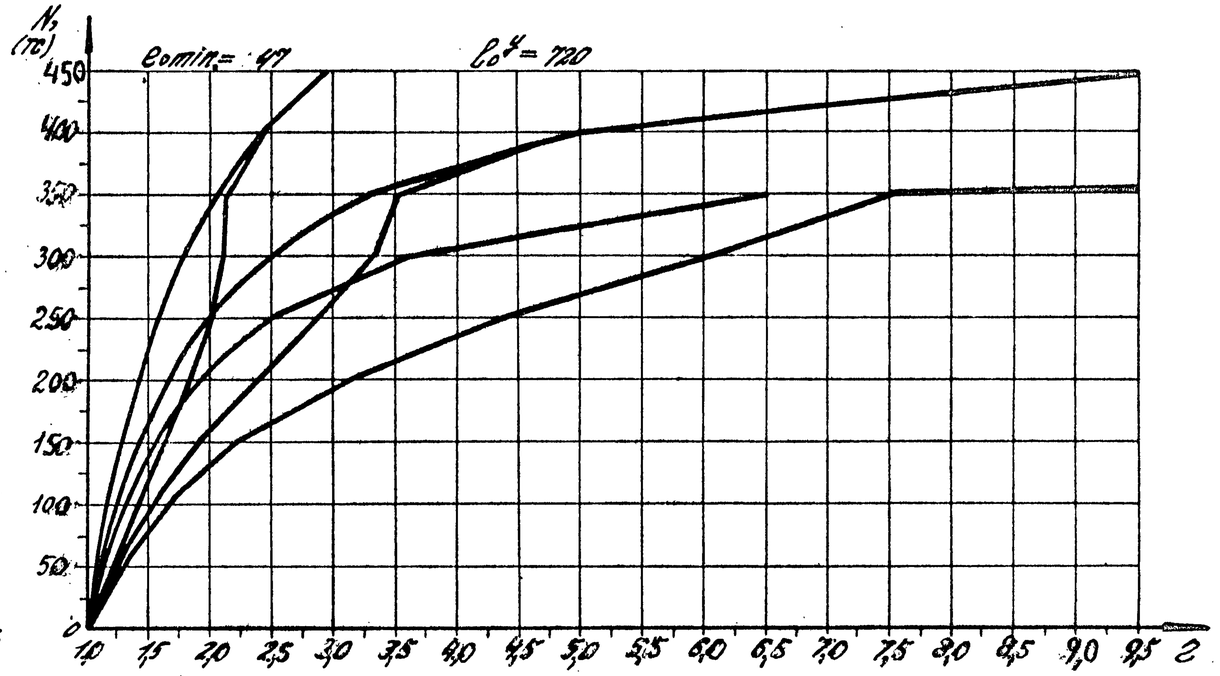
Отпускная цена
на момент реализации,
указана в счет-накладной

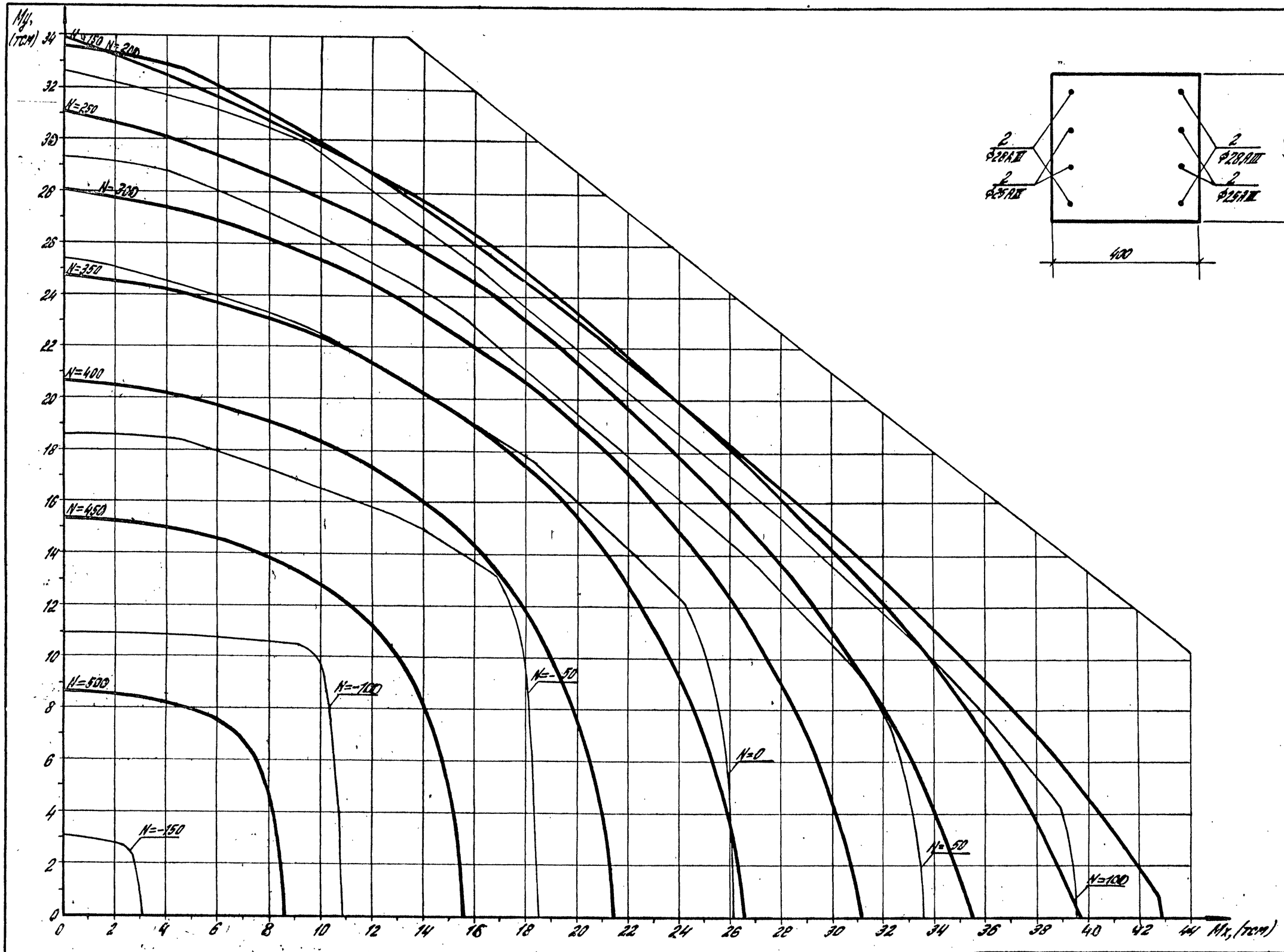
Пров 1 10 92 Коп Конкуз


N1 (тс)
e0min.= 59
L0x = 600
450
400
350
300
250
200
150
100
50
0
1,0 1,1 1,2 1,3 1,4 1,5 1,6 1,7 1,8 1,9 2,0 2,1 2,2 2,3 2,4 2,5 2,6 2,7 2,8 2,9 e


N2 (тс)
e0min.= 47
L0x = 720
450
400
350
300
250
200
150
100
50
0
1,0 1,5 2,0 2,5 3,0 3,5 4,0 4,5 5,0 5,5 6,0 6,5 7,0 7,5 8,0 8,5 9,0 e


N1 (тс)
e0min.= 59
L0y = 600
450
400
350
300
250
200
150
100
50
0
1,0 1,2 1,4 1,6 1,8 2,0 2,2 2,4 2,6 2,8 3,0 3,2 3,4 3,6 3,8 4,0 4,2 4,4 4,6 4,8 5,0 5,2 5,4 e

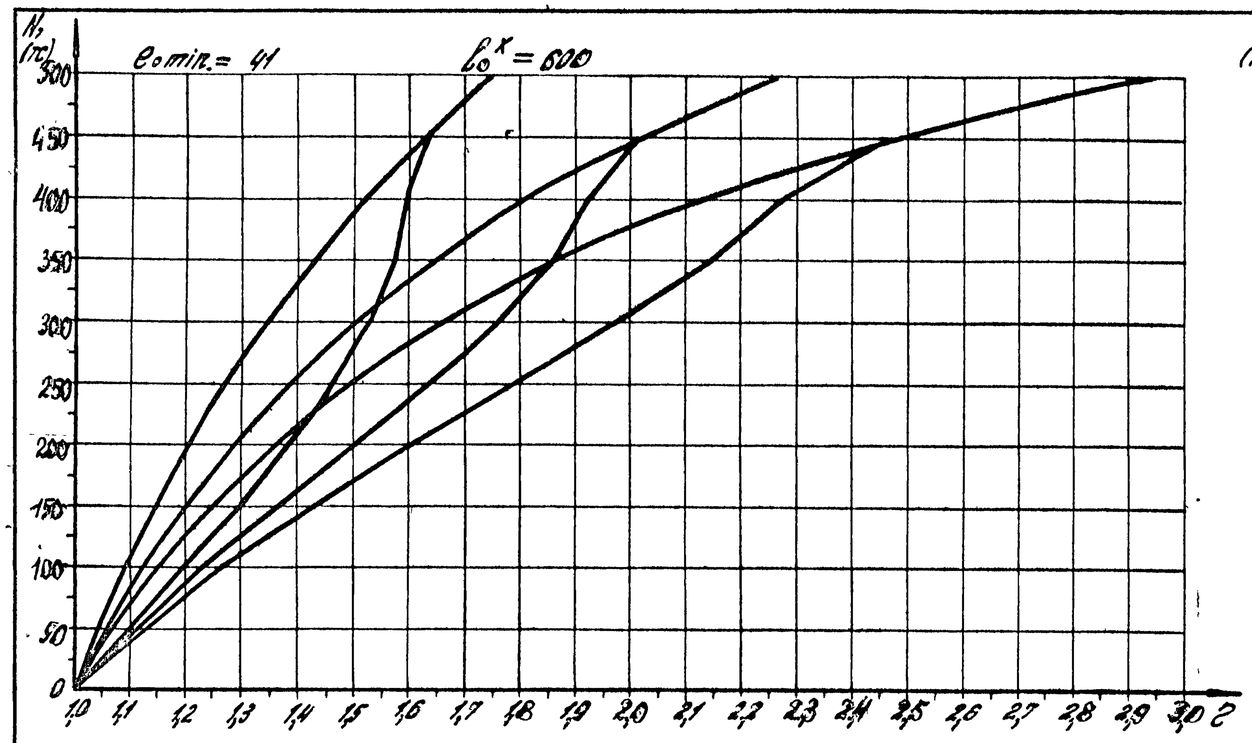

N2 (тс)
e0min.= 47
L0y = 720
450
400
350
300
250
200
150
100
50
0
1,0 1,5 2,0 2,5 3,0 3,5 4,0 4,5 5,0 5,5 6,0 6,5 7,0 7,5 8,0 8,5 9,0 9,5 e

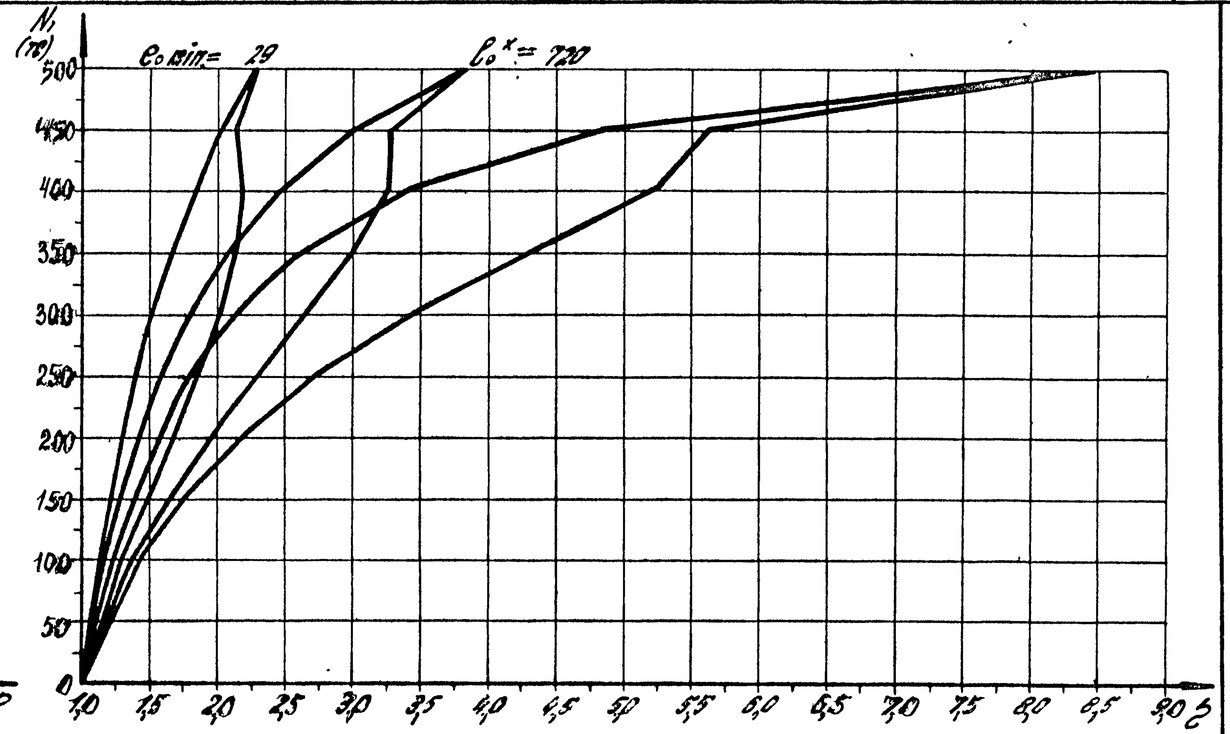


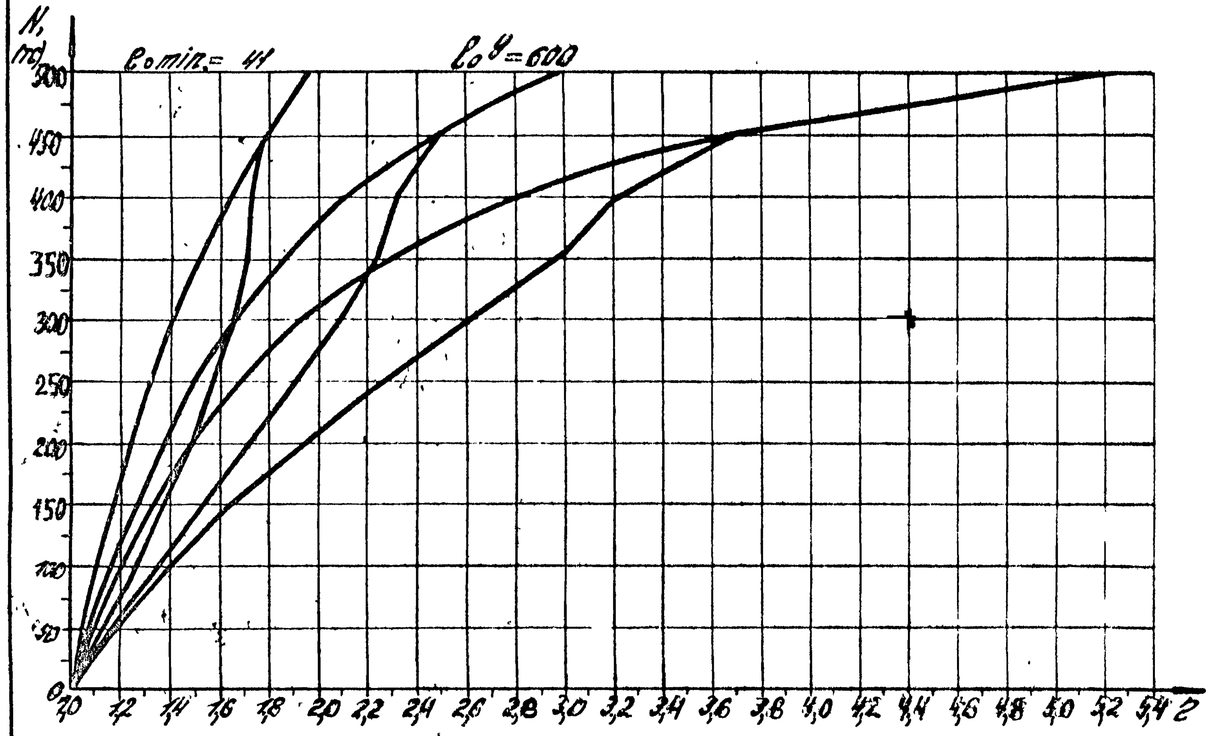
Класс бетона В40 (R_B = 246,4 кгс/см² при учете γ_{B2} = 1,10)

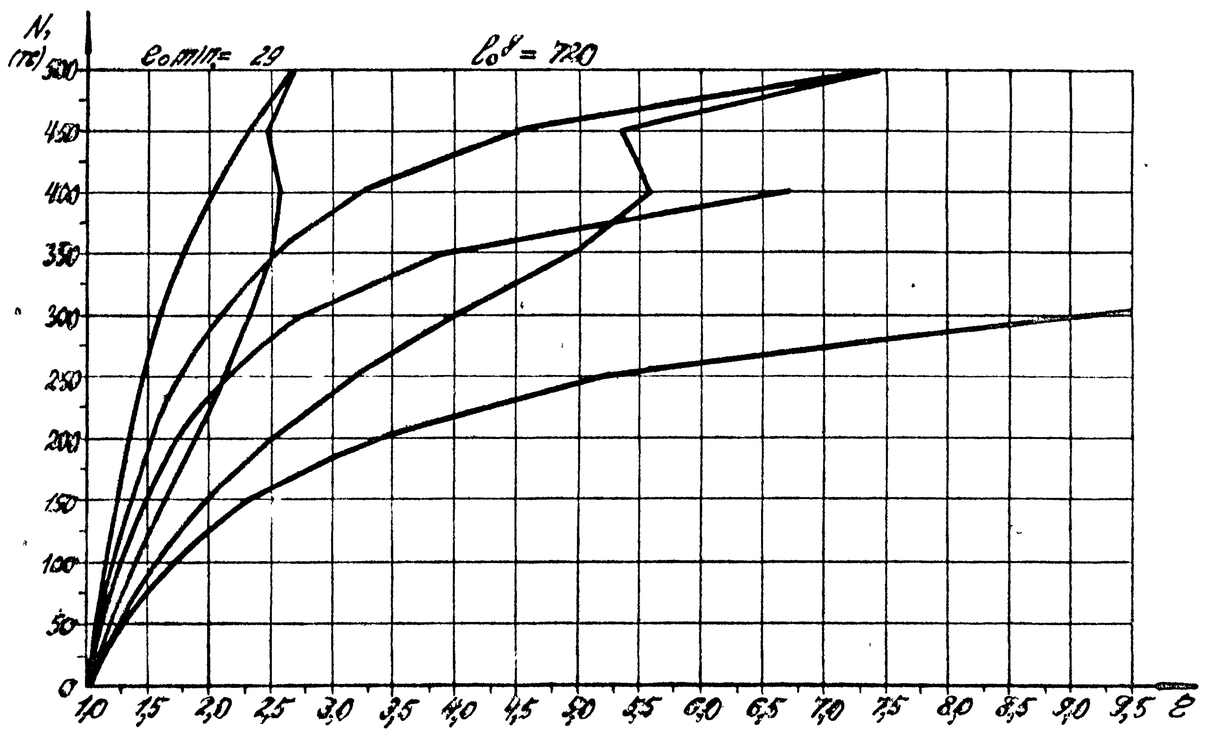
1.020-1/87 . 0-6-.3 ПЗ

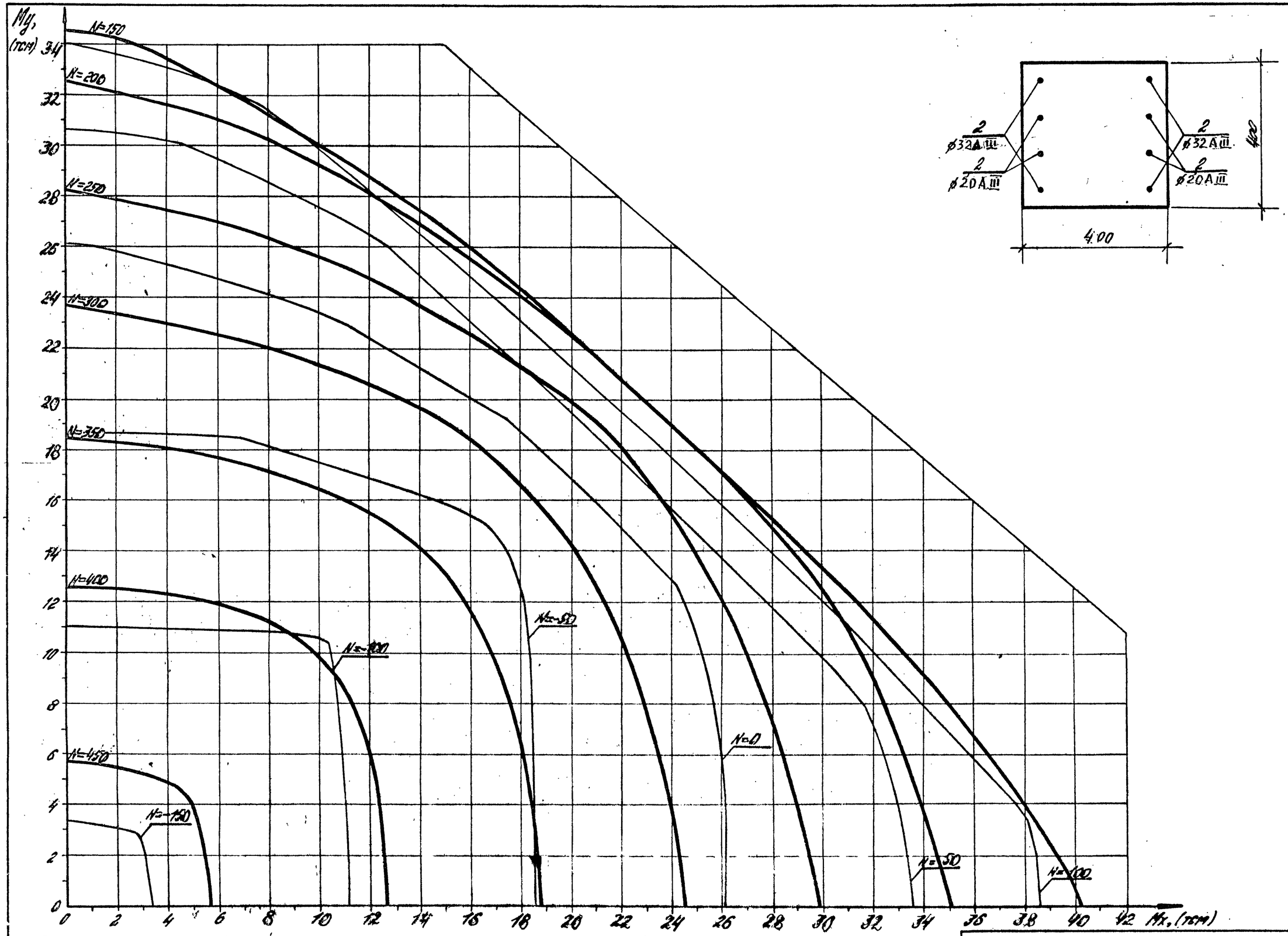
Лист 197


N, (тс)
e₀min.= 41
l₀ˣ = 600
500
450
400
350
300
250
200
150
100
50
0
1,0 1,1 1,2 1,3 1,4 1,5 1,6 1,7 1,8 1,9 2,0 2,1 2,2 2,3 2,4 2,5 2,6 2,7 2,8 2,9 3,0 e

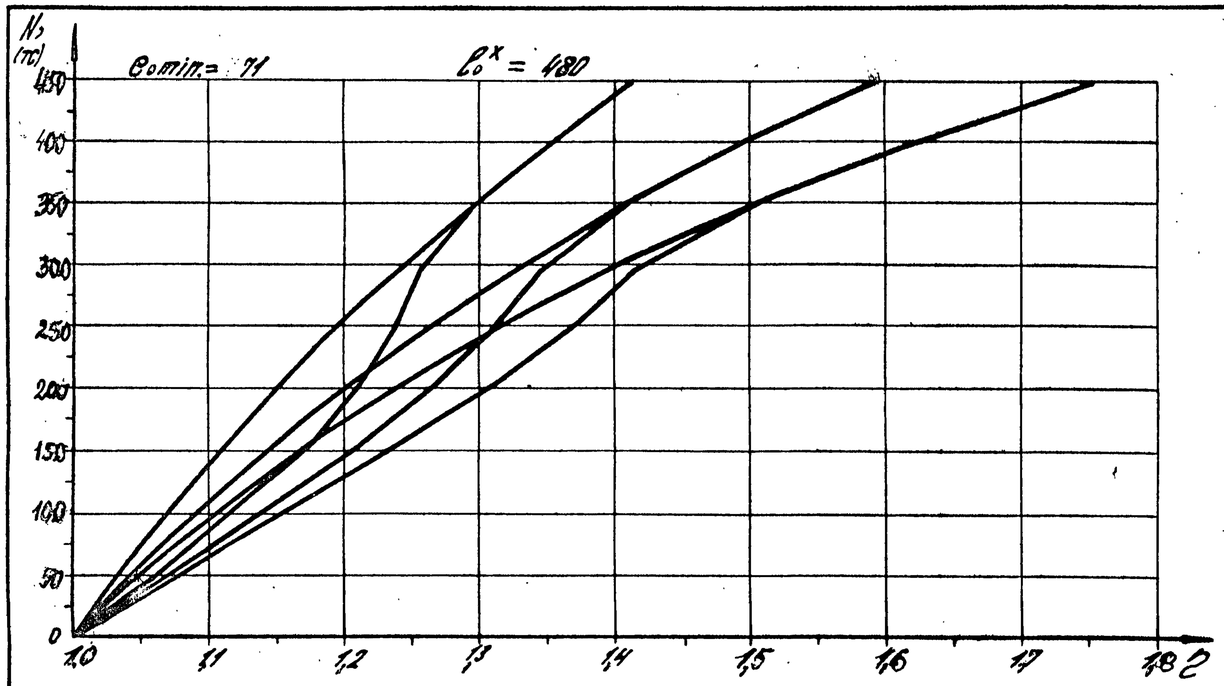

N, (тс)
e₀min.= 29
l₀ˣ = 720
500
450
400
350
300
250
200
150
100
50
0
1,0 1,5 2,0 2,5 3,0 3,5 4,0 4,5 5,0 5,5 6,0 6,5 7,0 7,5 8,0 8,5 9,0 e

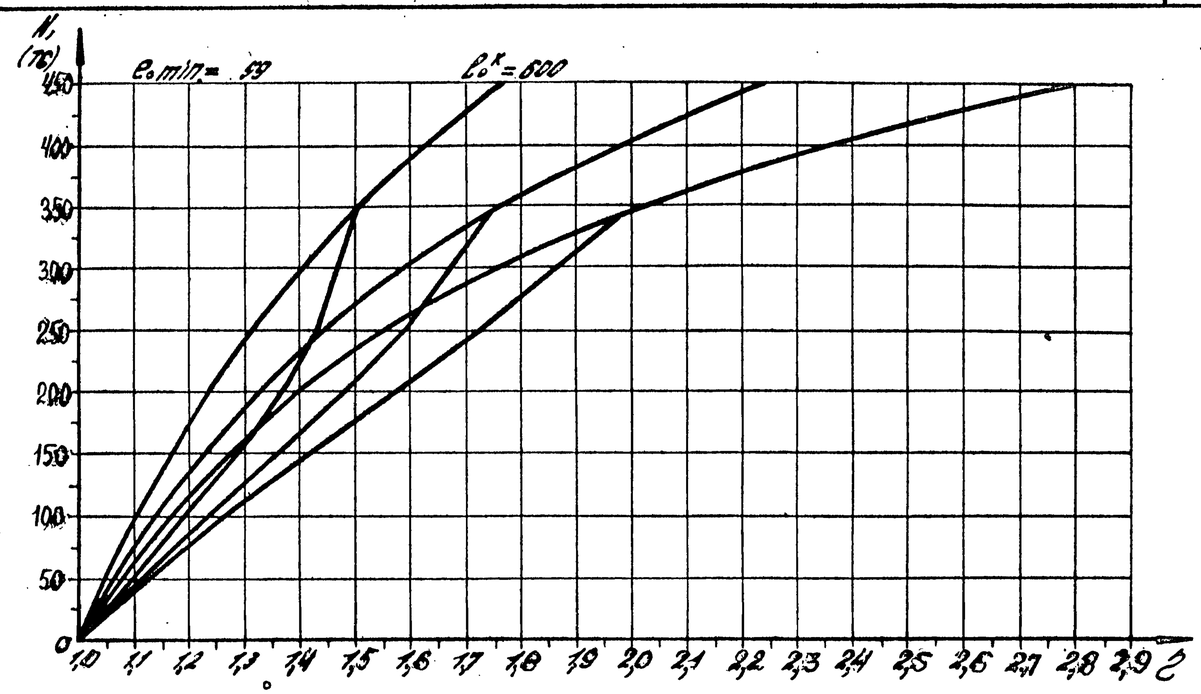

N, (тс)
e₀min.= 41
l₀ʸ = 600
500
450
400
350
300
250
200
150
100
50
0
1,0 1,2 1,4 1,6 1,8 2,0 2,2 2,4 2,6 2,8 3,0 3,2 3,4 3,6 3,8 4,0 4,2 4,4 4,6 4,8 5,0 5,2 5,4 e

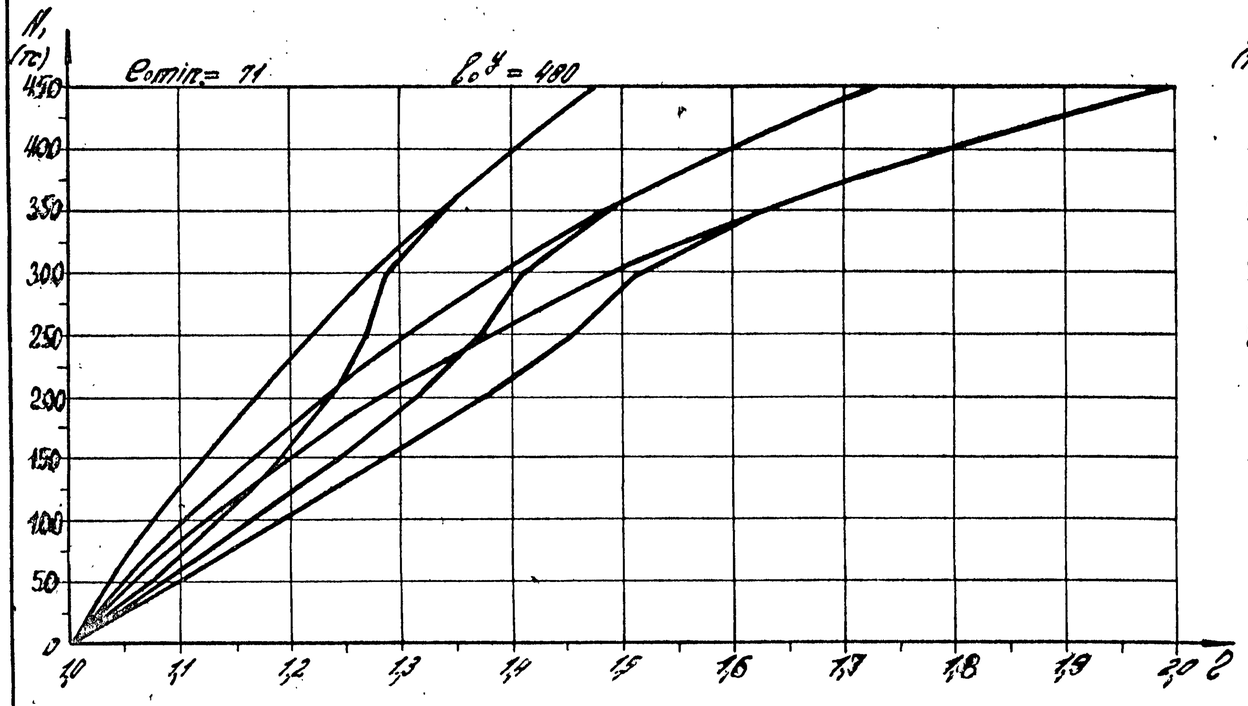

N, (тс)
e₀min.= 29
l₀ʸ = 720
500
450
400
350
300
250
200
150
100
50
0
1,0 1,5 2,0 2,5 3,0 3,5 4,0 4,5 5,0 5,5 6,0 6,5 7,0 7,5 8,0 8,5 9,0 9,5 e

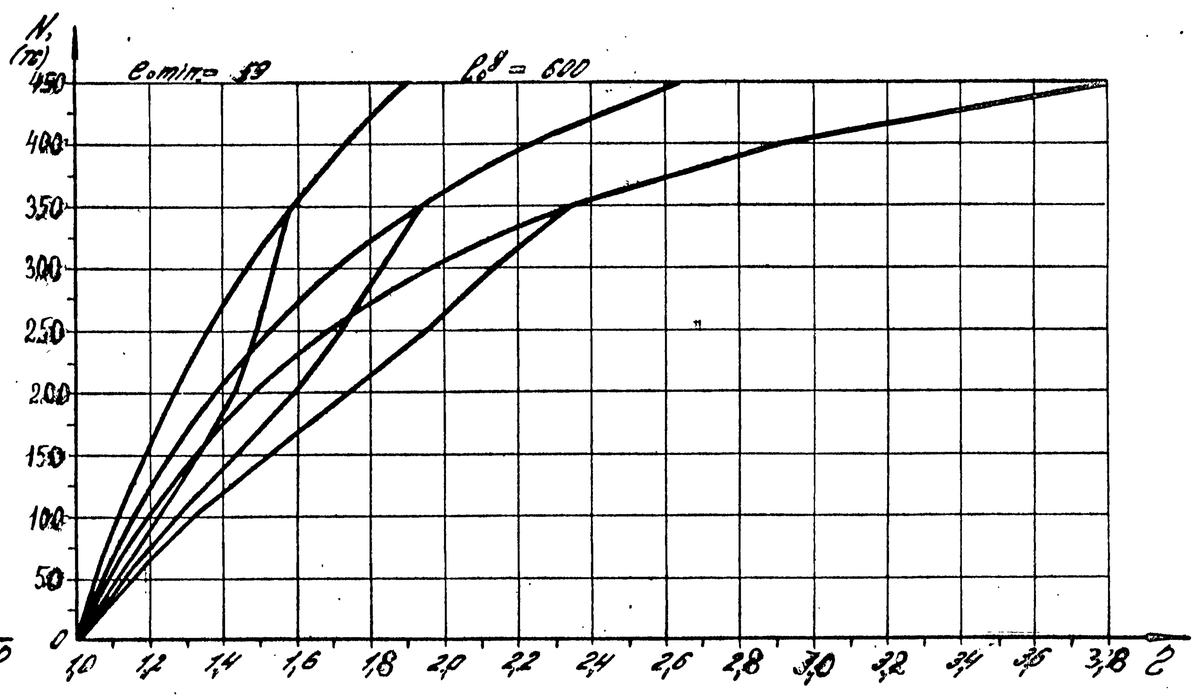


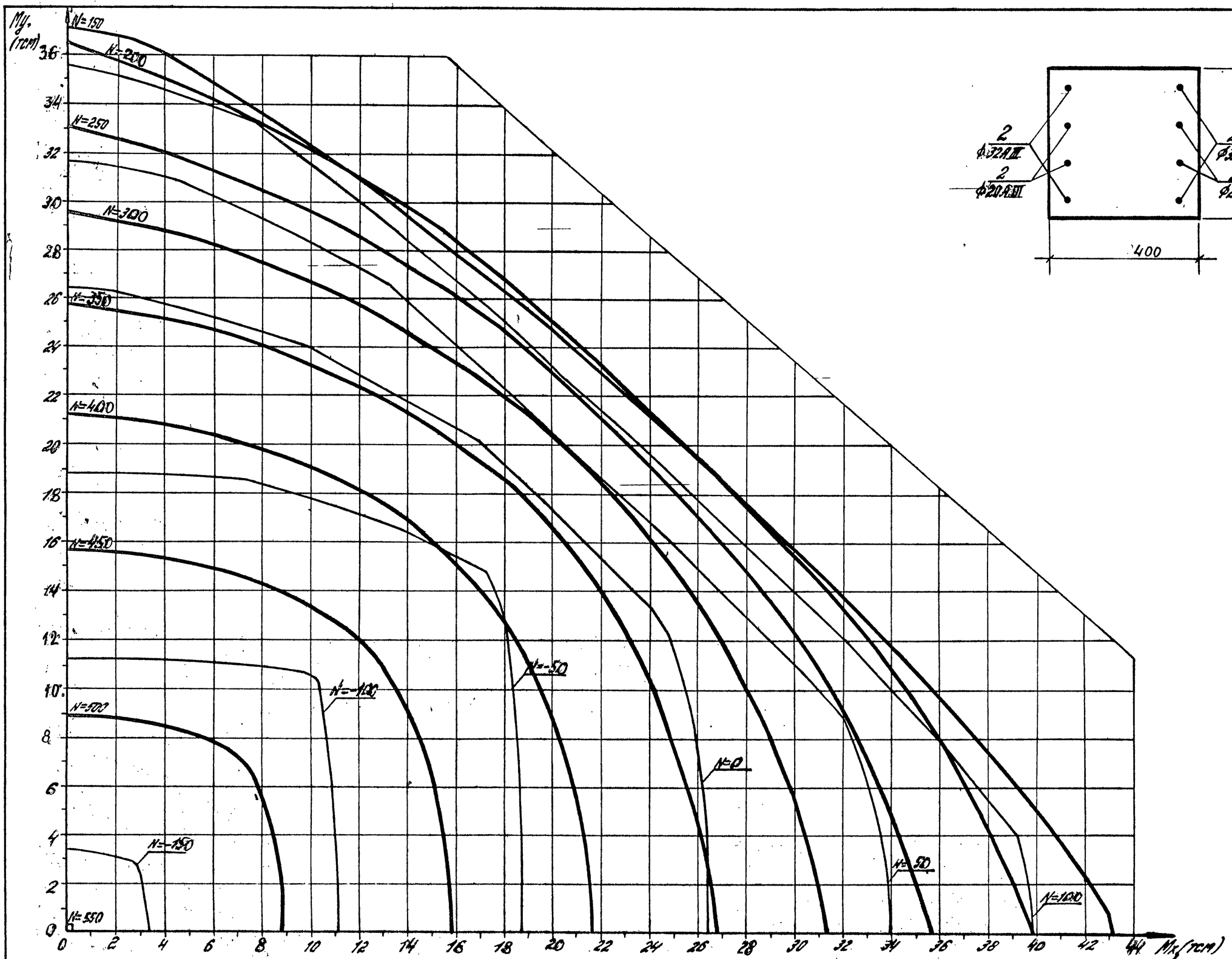
Класс бетона В40 ($R_в$ = 291,6 кгс/см² при учете γ_{b2} = 0,9)


N, (тс)
e₀min= 71
e_0^x = 480
450
400
350
300
250
200
150
100
50
0
1,0 1,1 1,2 1,3 1,4 1,5 1,6 1,7 1,8 ℓ

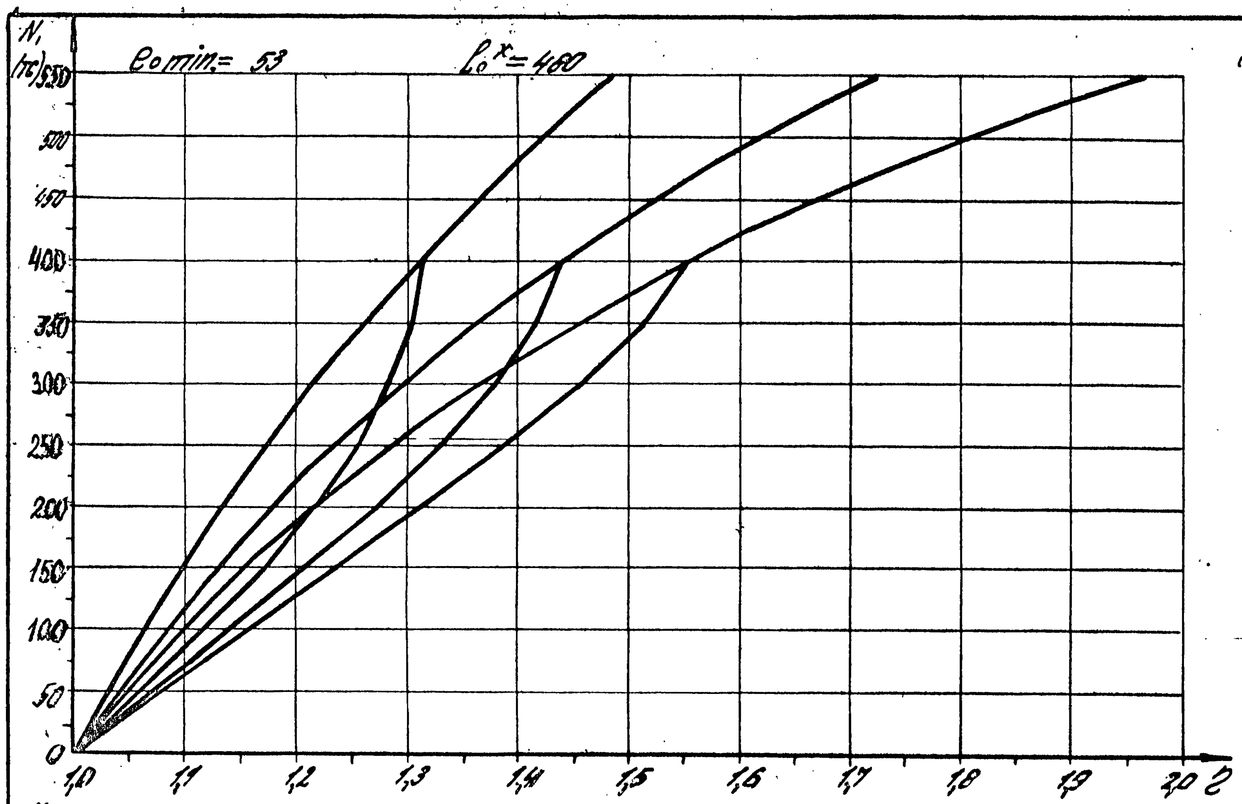

N, (тс)
e₀min= 33
e_0^x = 600
450
400
350
300
250
200
150
100
50
0
1,0 1,1 1,2 1,3 1,4 1,5 1,6 1,7 1,8 1,9 2,0 2,1 2,2 2,3 2,4 2,5 2,6 2,7 2,8 2,9 ℓ

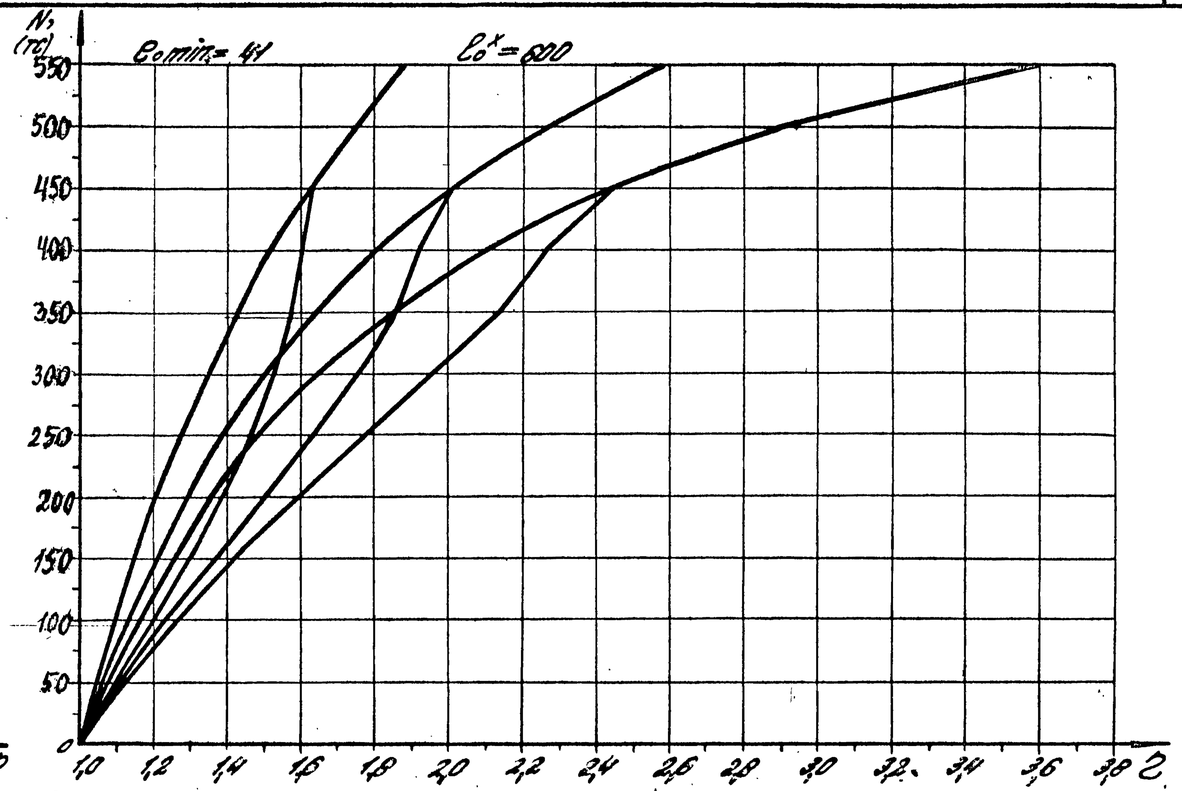

N, (тс)
e₀min= 71
e_0^y = 480
450
400
350
300
250
200
150
100
50
0
1,0 1,1 1,2 1,3 1,4 1,5 1,6 1,7 1,8 1,9 2,0 ℓ

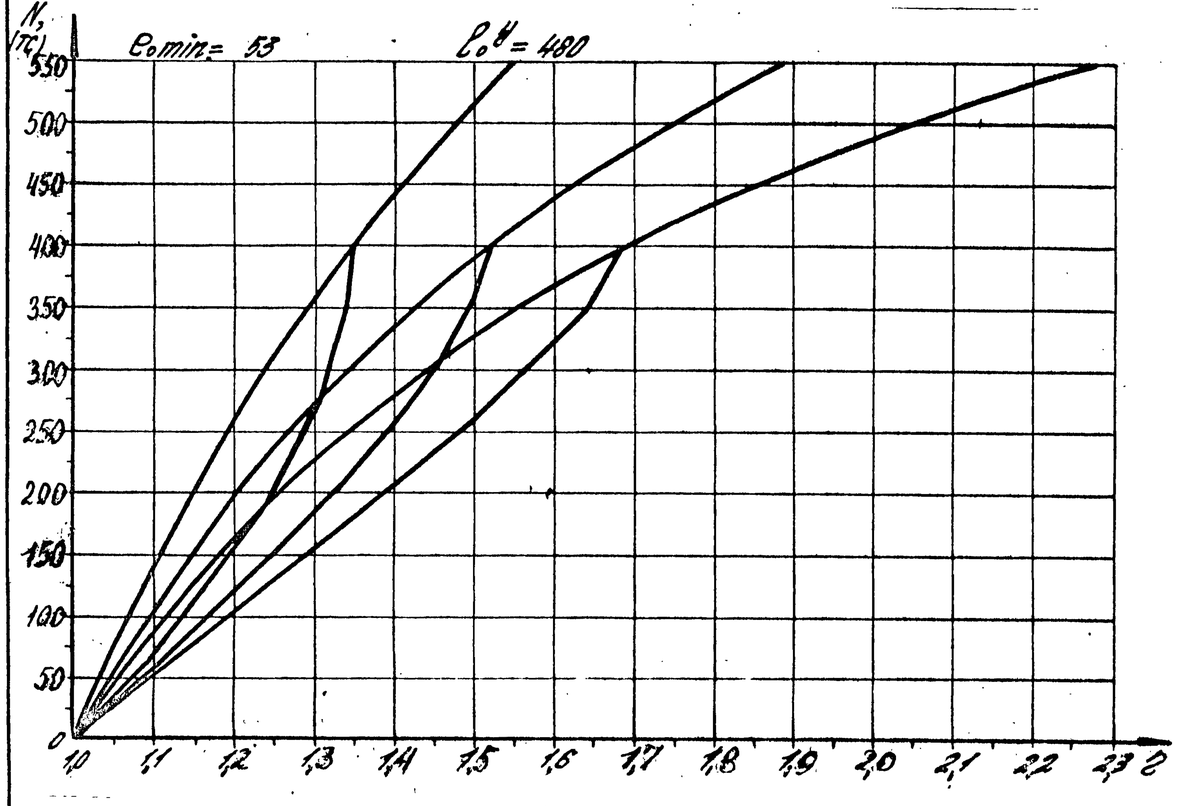

N, (тс)
e₀min= 33
e_0^y = 600
450
400
350
300
250
200
150
100
50
0
1,0 1,2 1,4 1,6 1,8 2,0 2,2 2,4 2,6 2,8 3,0 3,2 3,4 3,6 3,8 ℓ

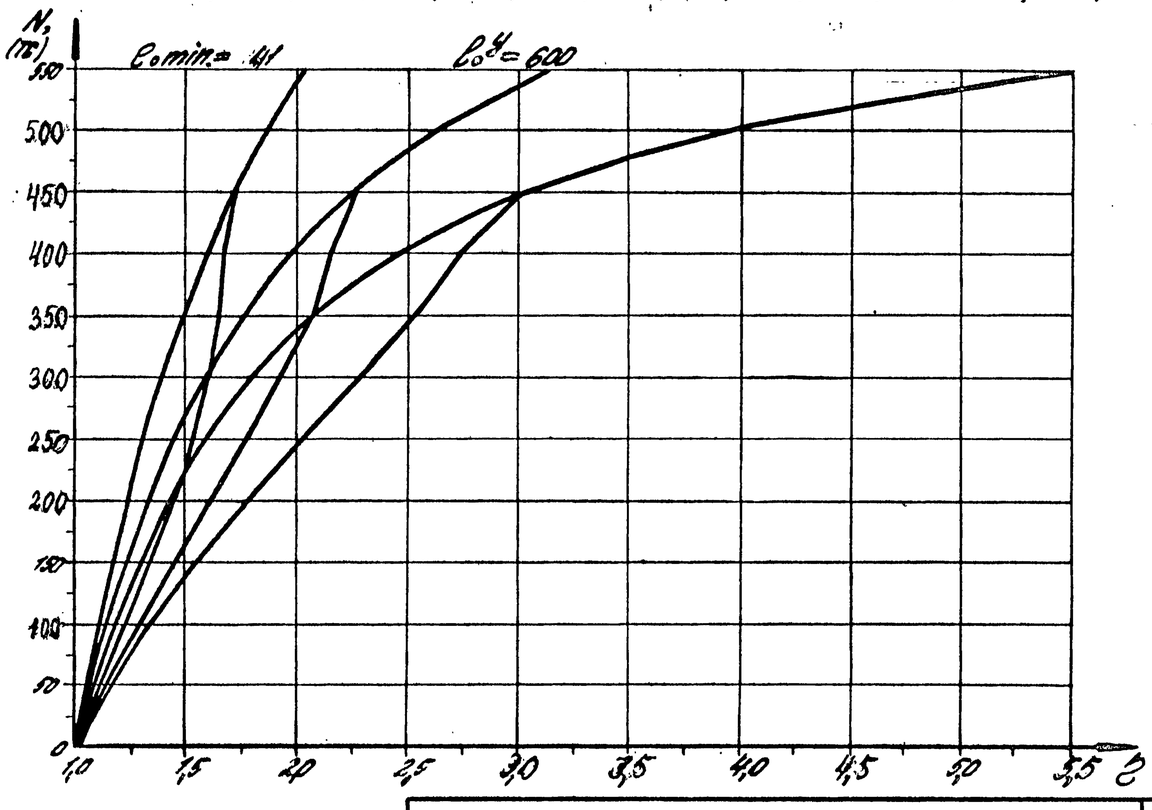


1) Класс бетона В40 ($R_в = 248{,}4$ кгс/см^2 при учете $\gamma_{в2} = 1{,}10$)



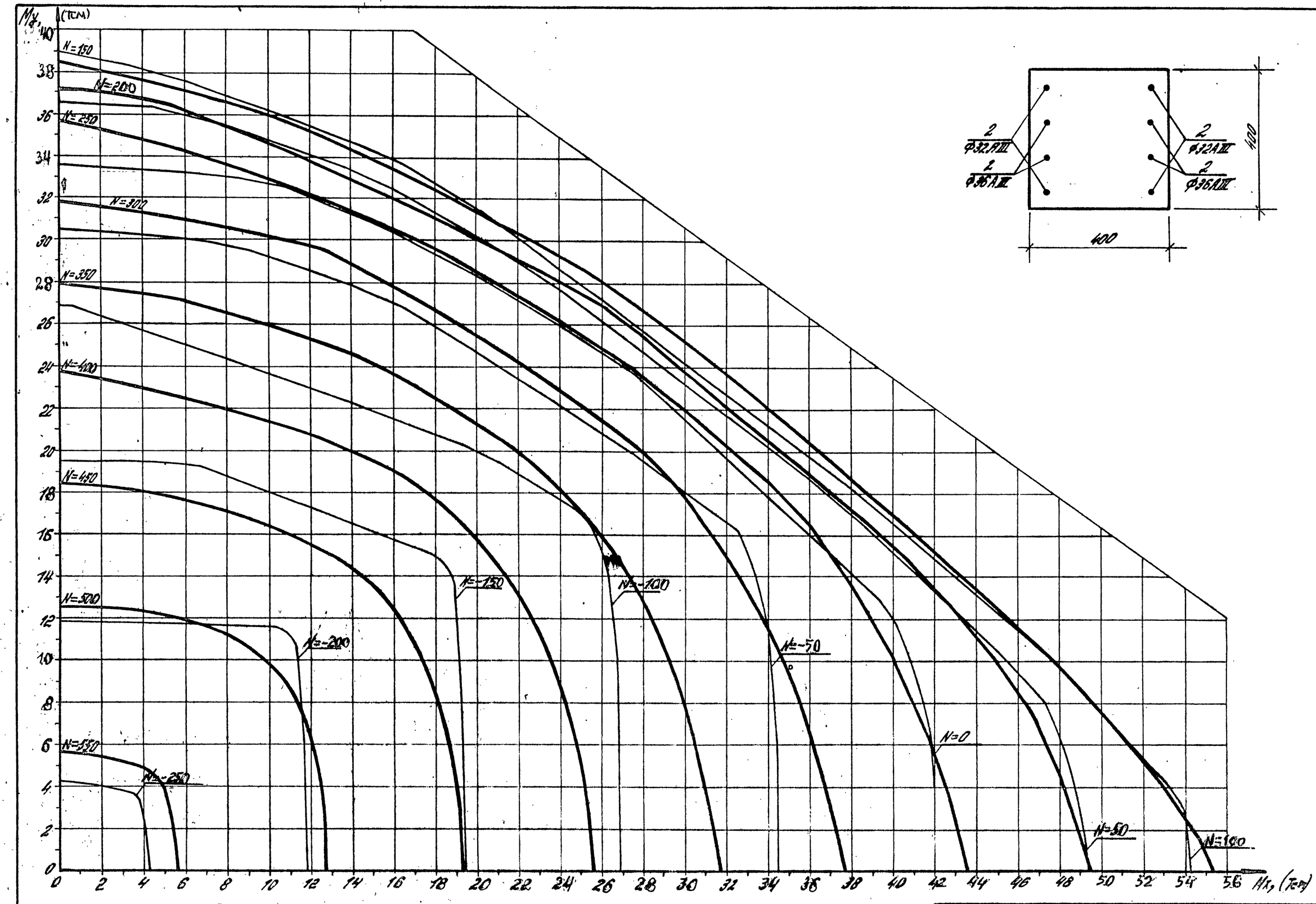






1.020-1/87. 0-6- 3 ПЗ

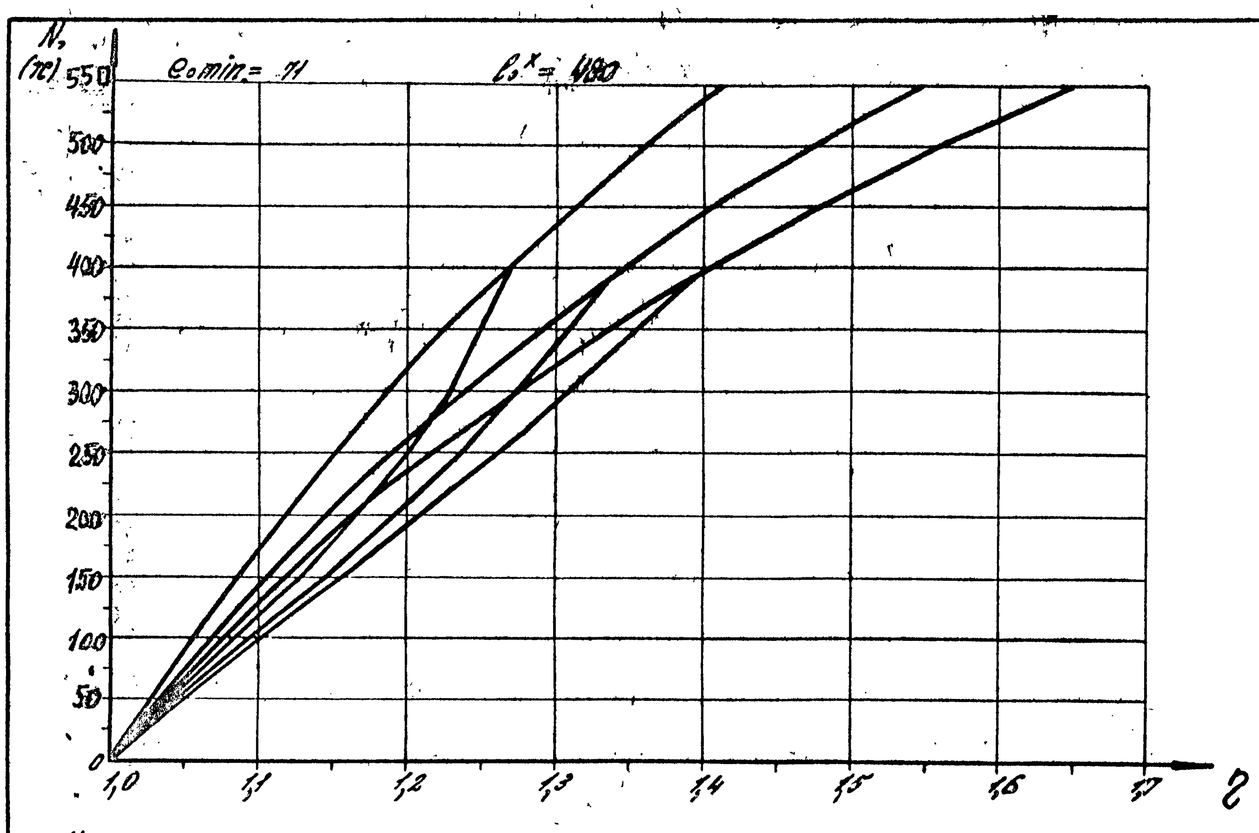
Лист 202

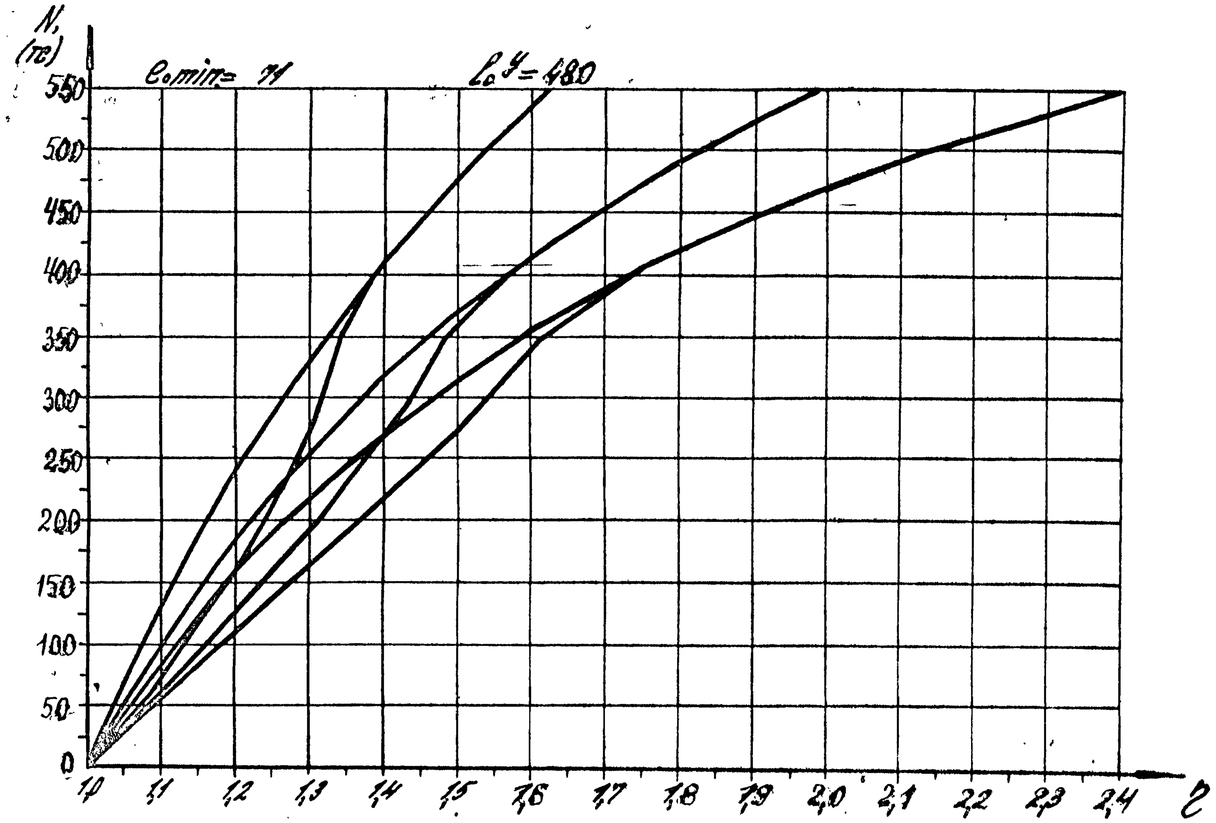


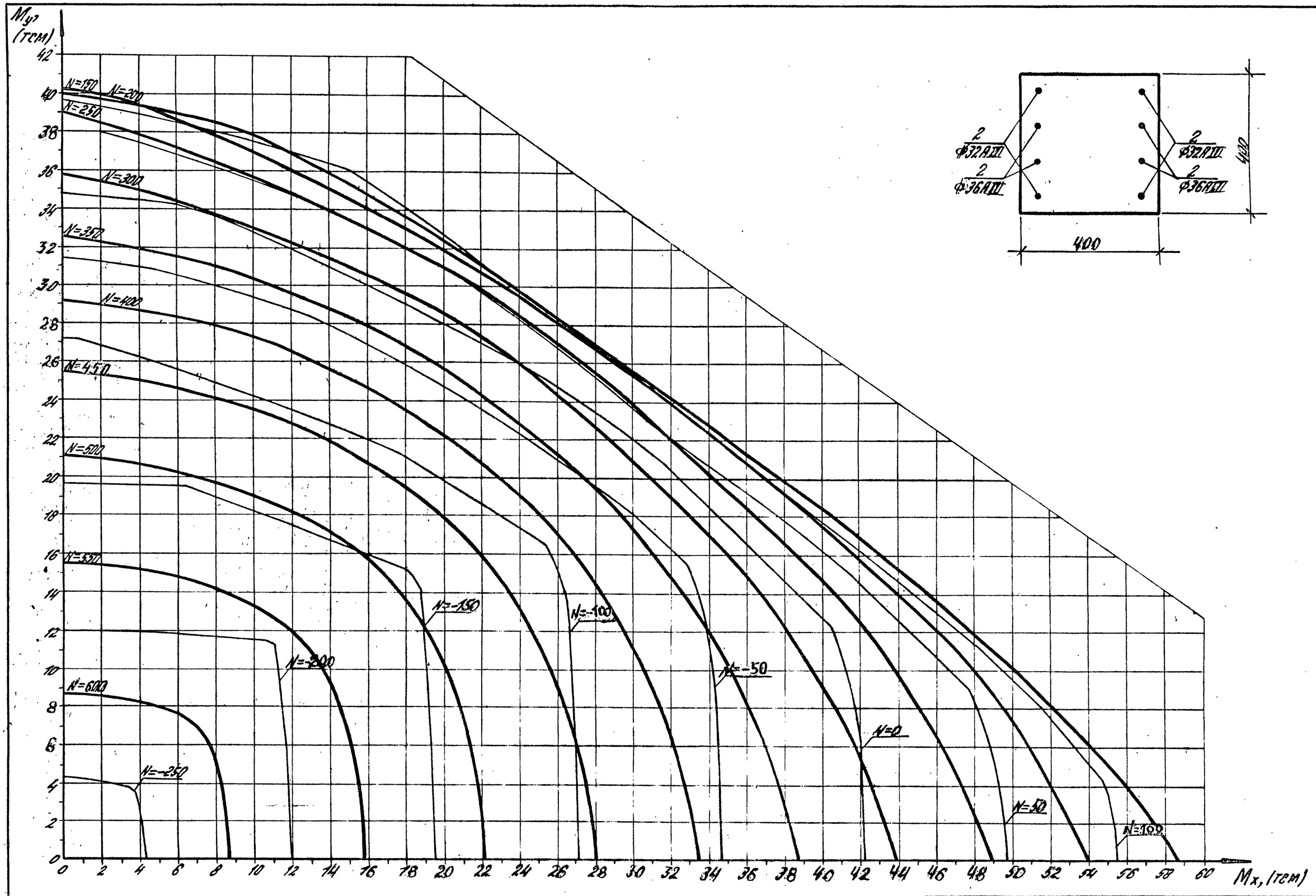
Класс бетона В40 (R_B=201,6 кгс/см² при учете γ_{b2}=0,9)

1.020-1/87. 0-6-3 ПЗ

Лист 203


N, (тс)
e₀min = 11
L₀ˣ = 480
550
500
450
400
350
300
250
200
150
100
50
0
1,0
1,1
1,2
1,3
1,4
1,5
1,6
1,7
e

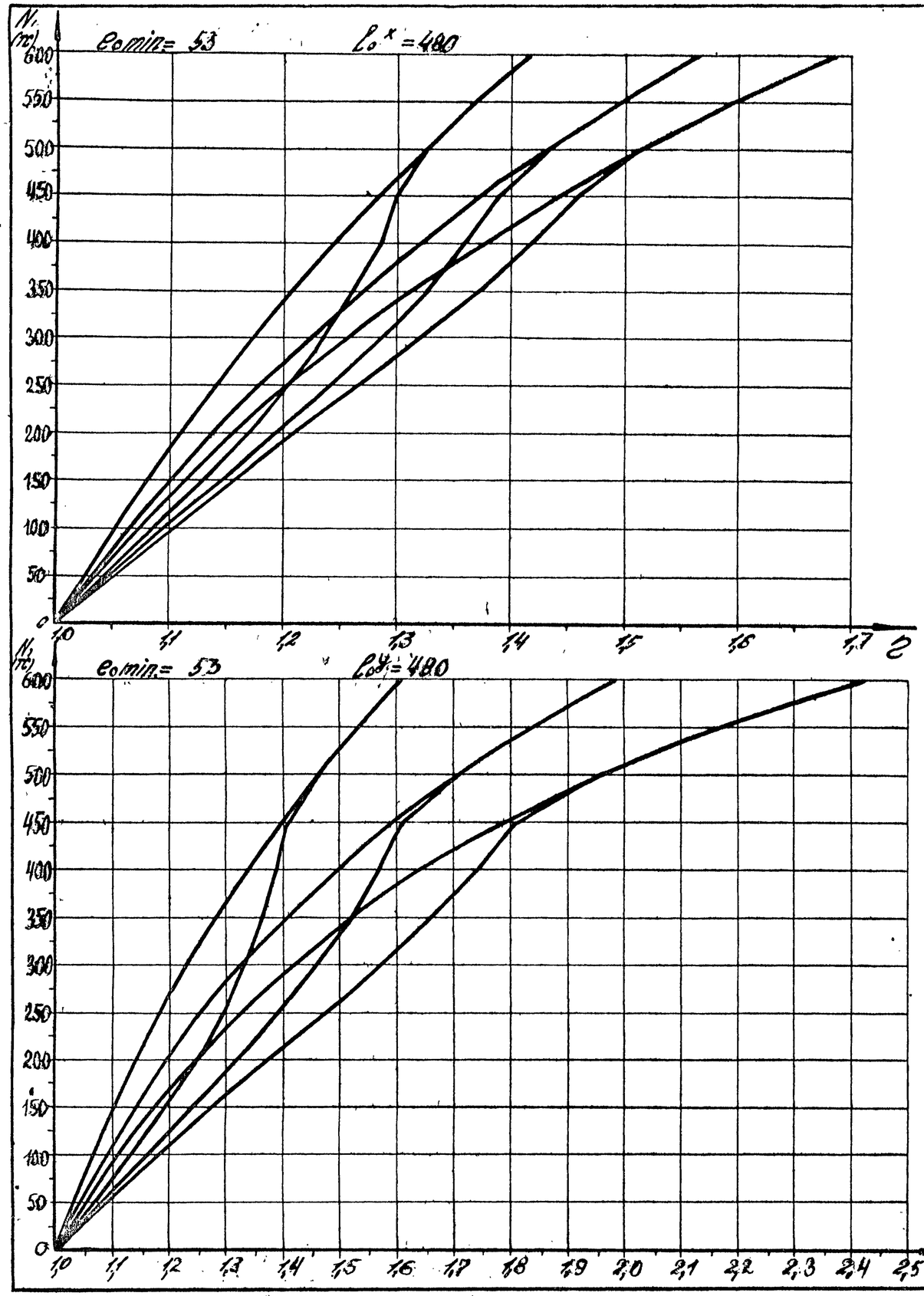

N, (тс)
e₀min = 11
L₀ʸ = 480
550
500
450
400
350
300
250
200
150
100
50
0
1,0
1,1
1,2
1,3
1,4
1,5
1,6
1,7
1,8
1,9
2,0
2,1
2,2
2,3
2,4
e

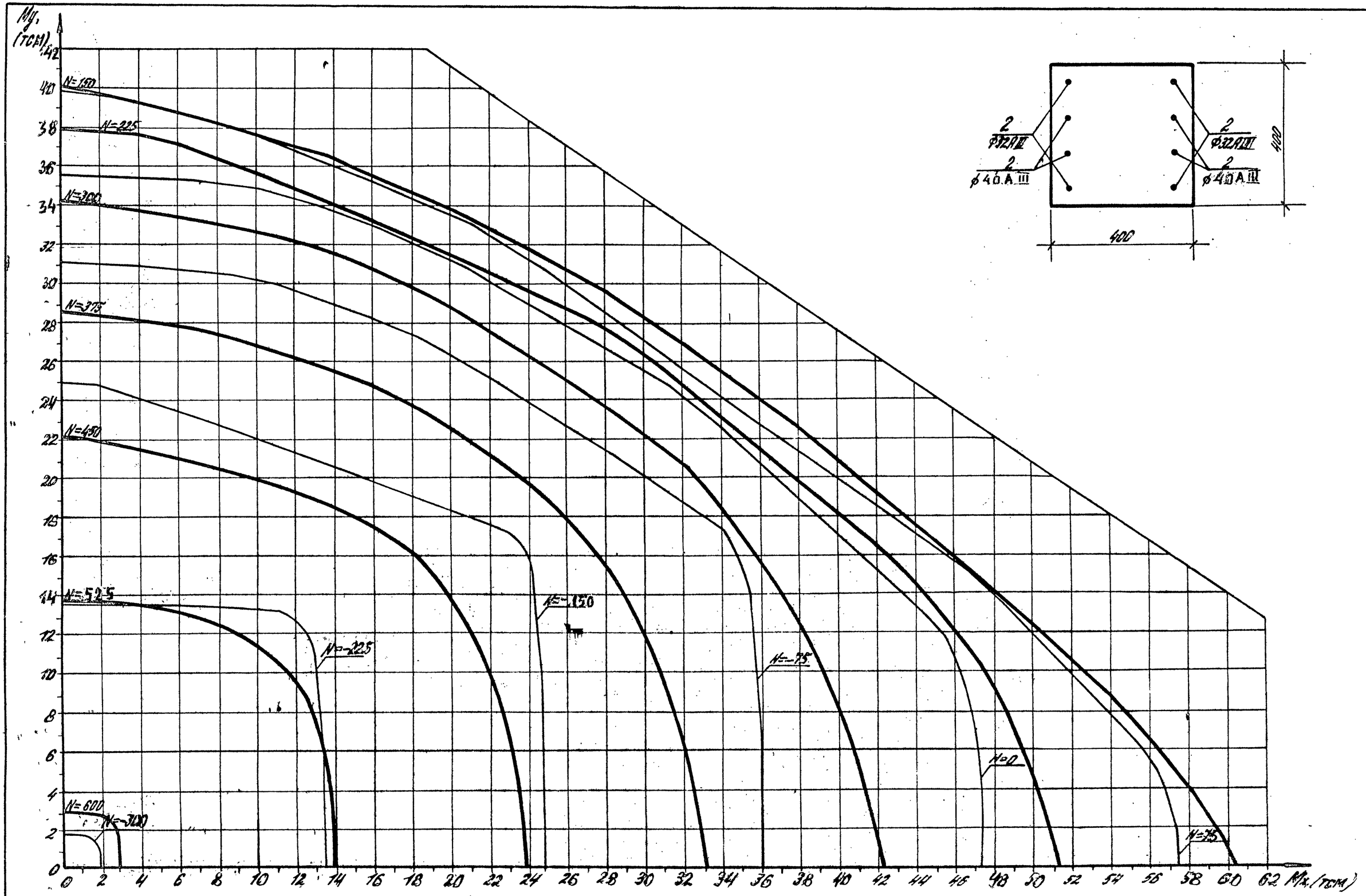


Класс бетона В40 ($R_в$ = 246,4 кгс/см² при учете $\gamma_{в2}$ = 1,10)

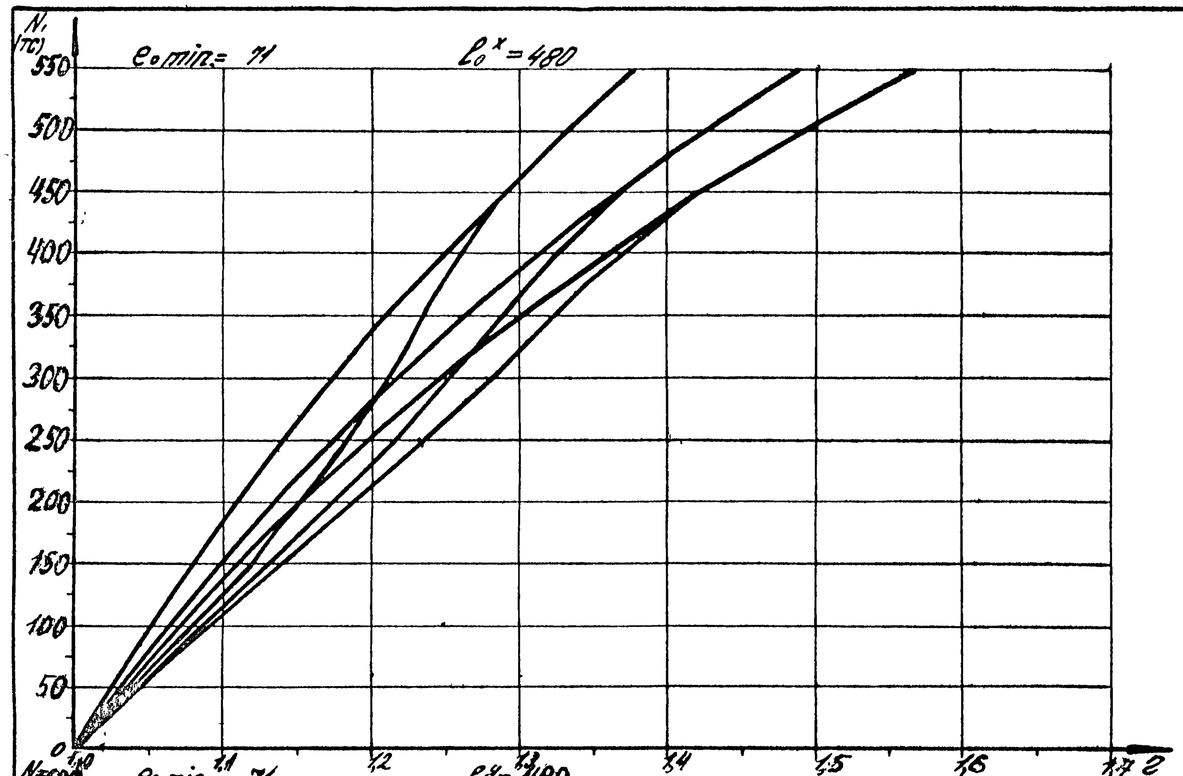
1.020-1/87. 0-6-3 ПЗ

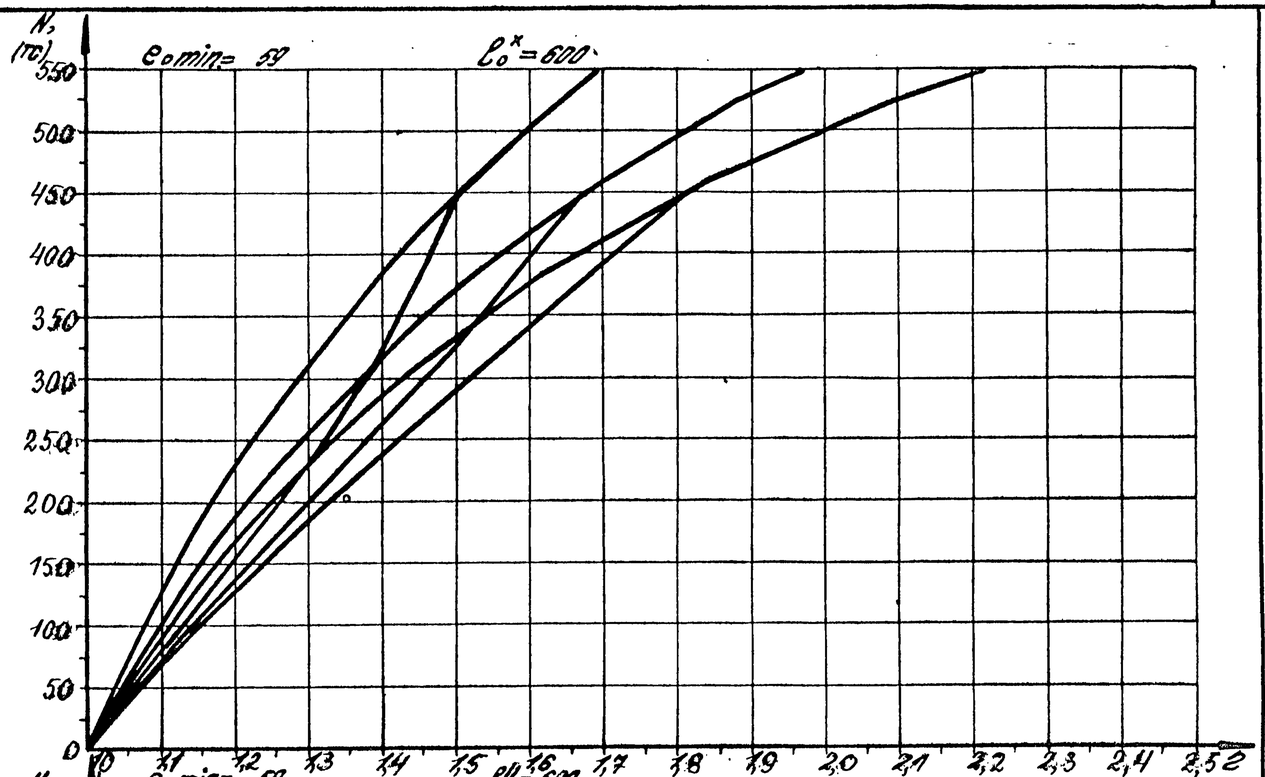
Лист 205

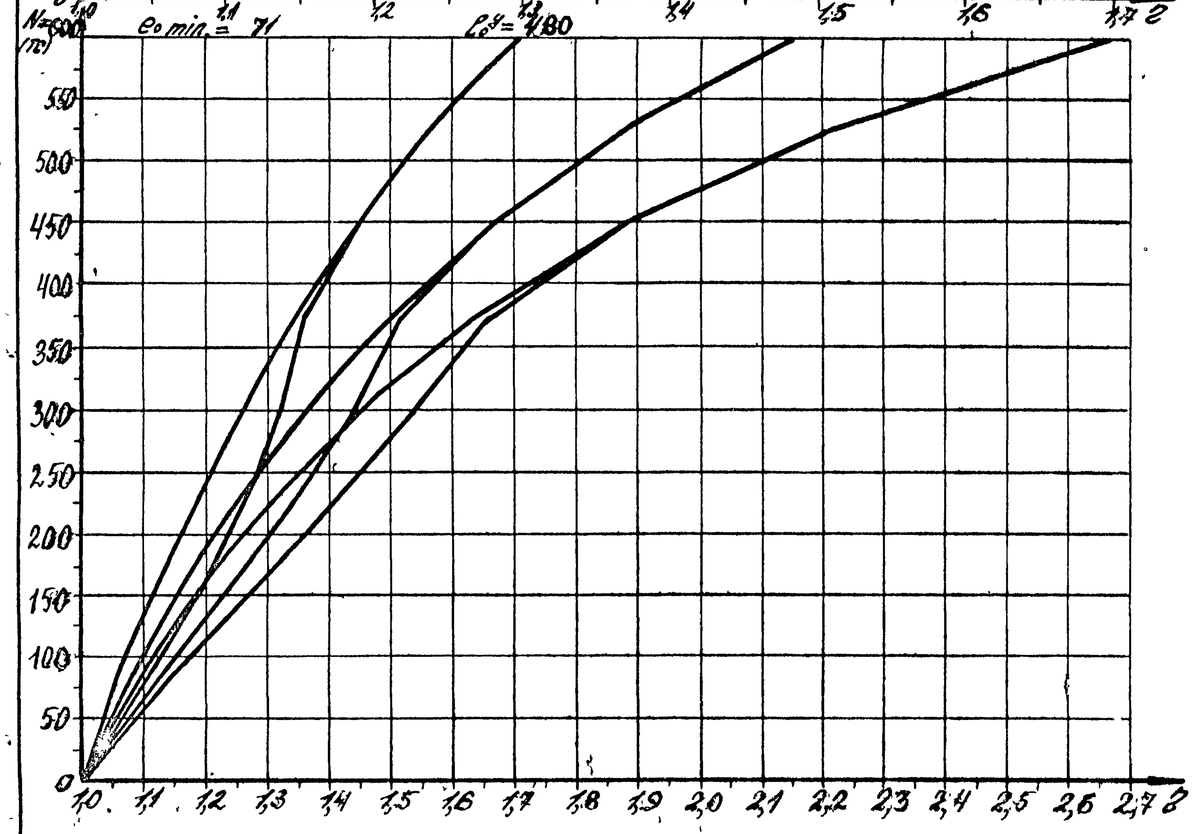

N, кН/м
e₀min= 53
L₀ˣ = 480
600
550
500
450
400
350
300
250
200
150
100
50
0
1,0
1,1
1,2
1,3
1,4
1,5
1,6
1,7
e
N, кН/м
e₀min= 53
L₀ˣ = 480
600
550
500
450
400
350
300
250
200
150
100
50
0
1,0
1,1
1,2
1,3
1,4
1,5
1,6
1,7
1,8
1,9
2,0
2,1
2,2
2,3
2,4
2,5
e

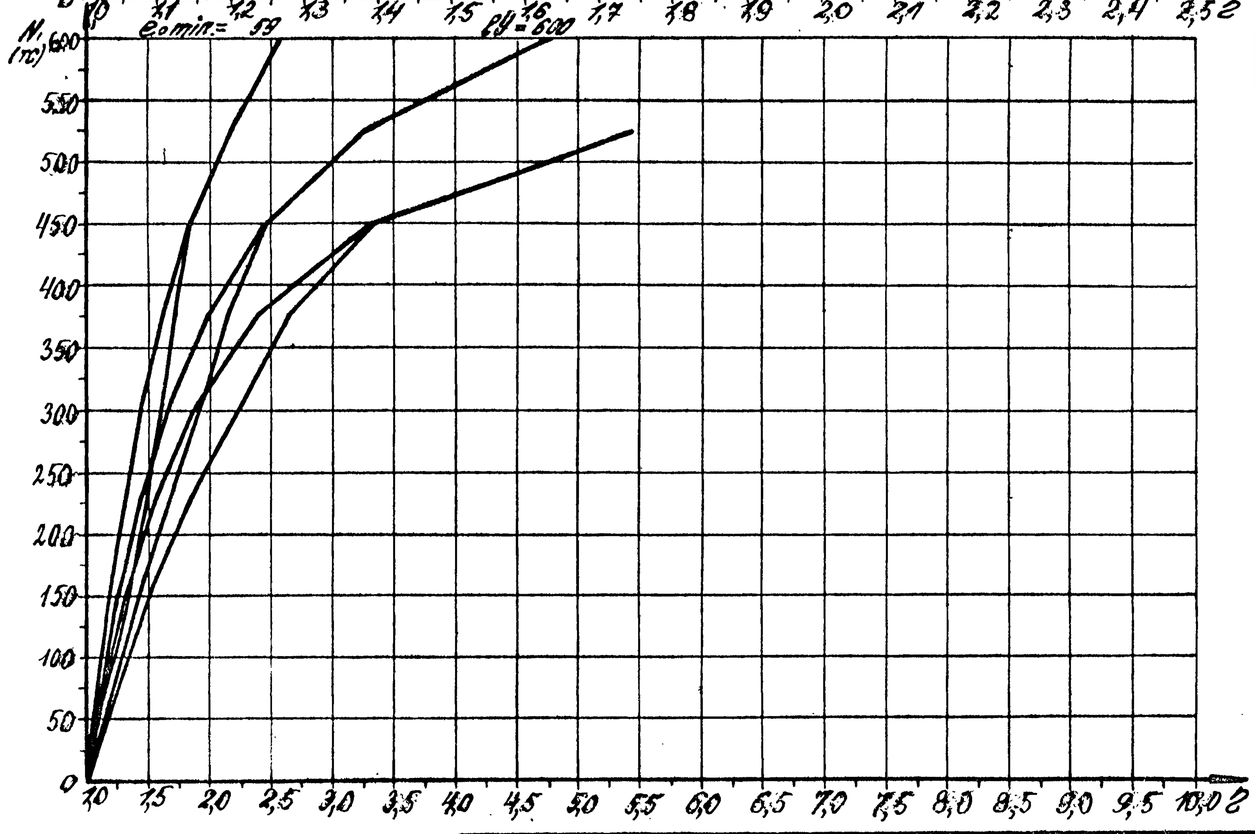


Класс бетона В40 (Rв = 201,6 кгс/см² при учете γb2 = 0,9)





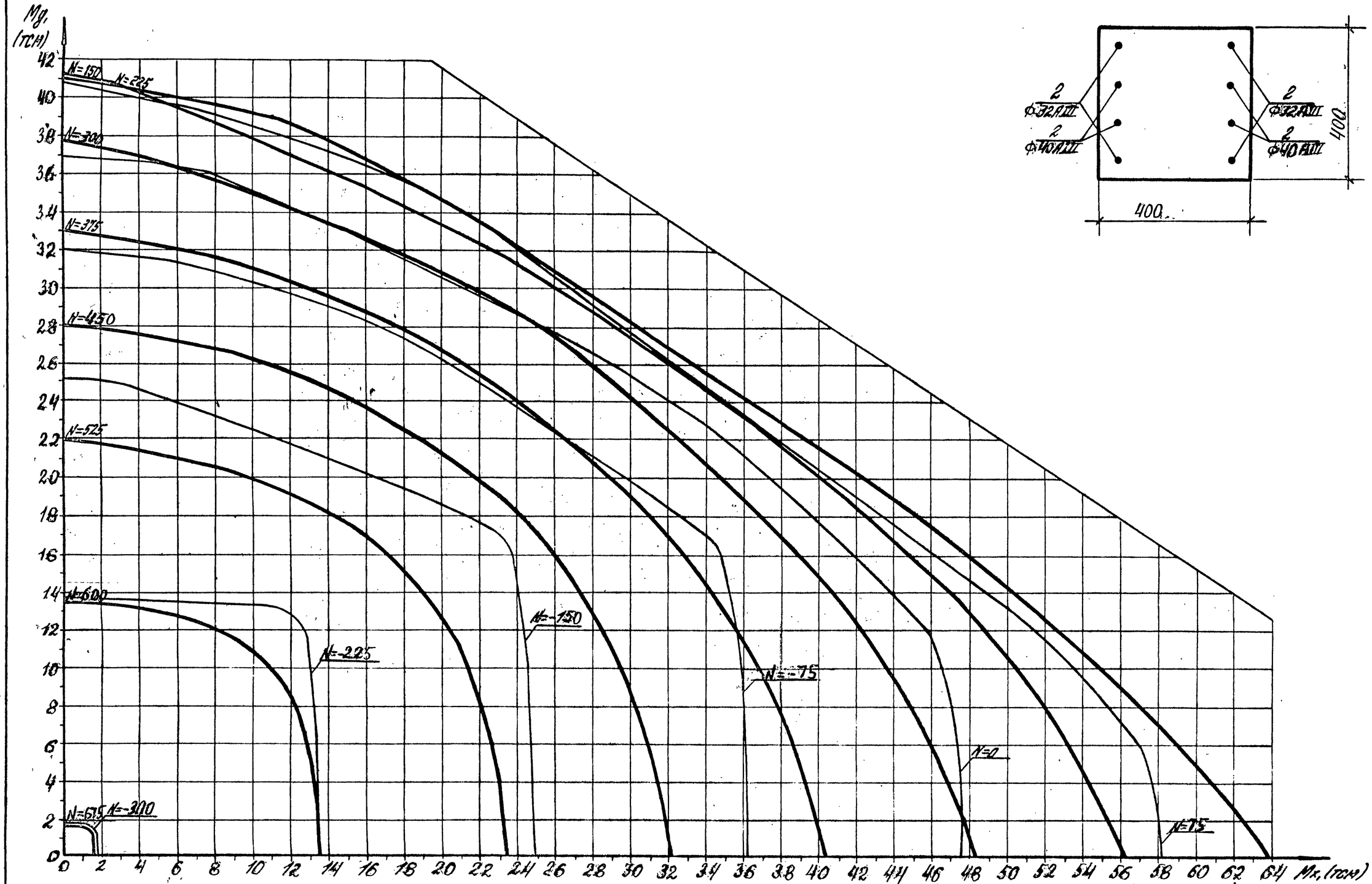




1.020-1/87.0-6 – 3 ПЗ

Лист 208

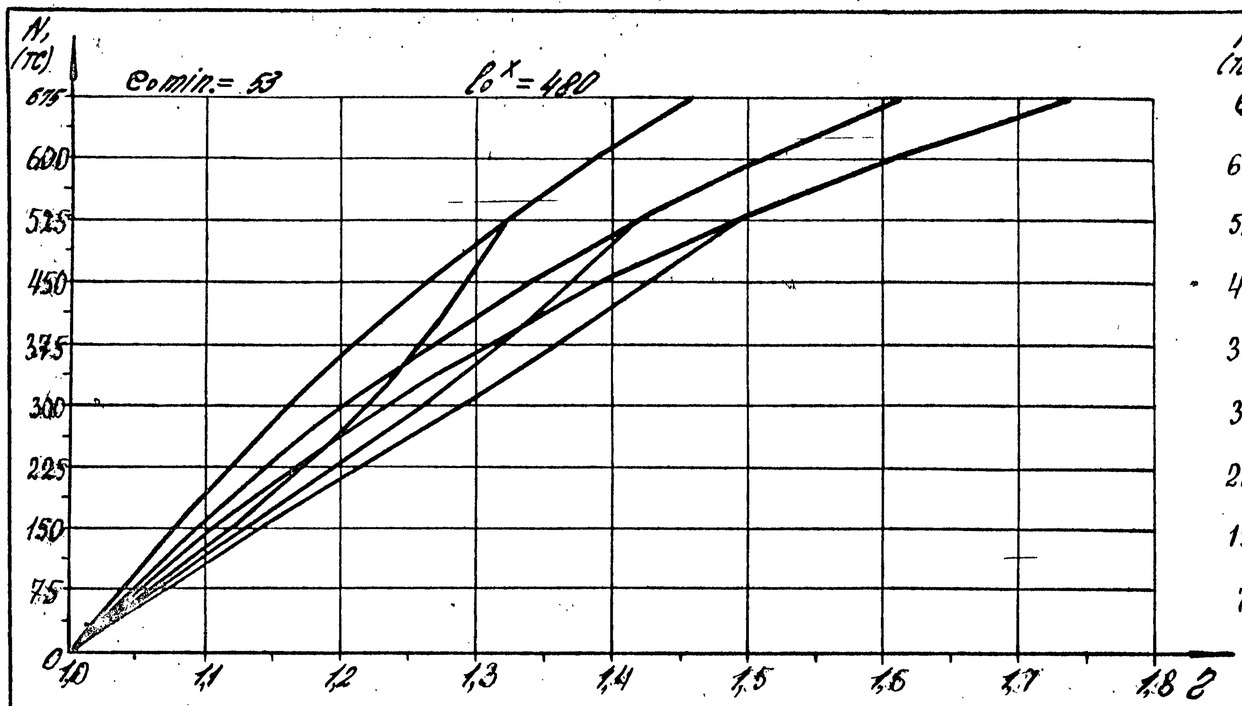
24788-03 14

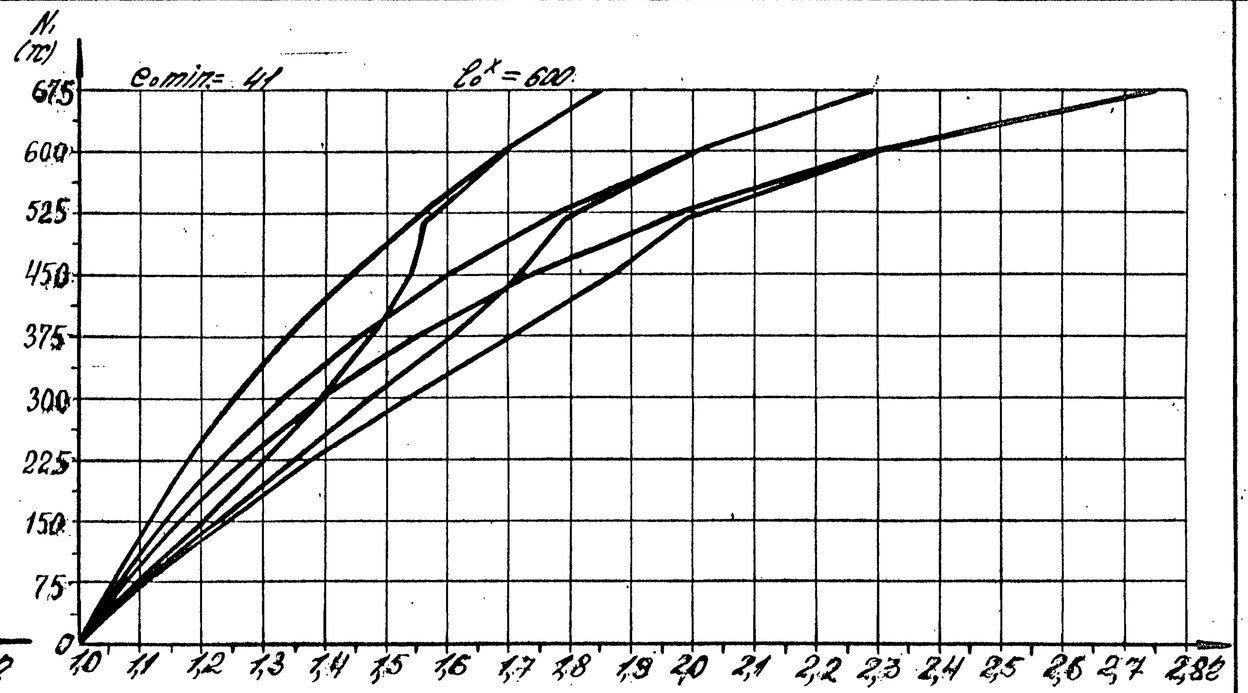


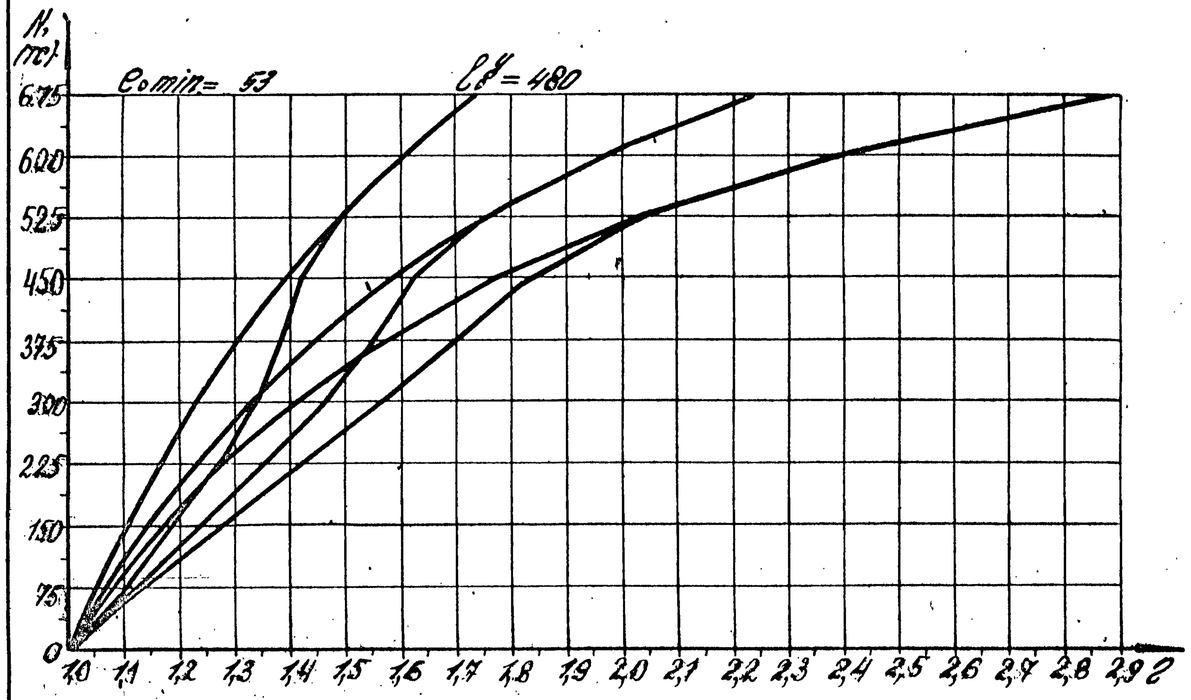
Класс бетона В40 ($R_в$=246,4 кгс/см² при учете $\gamma_{в2}$=1,10)

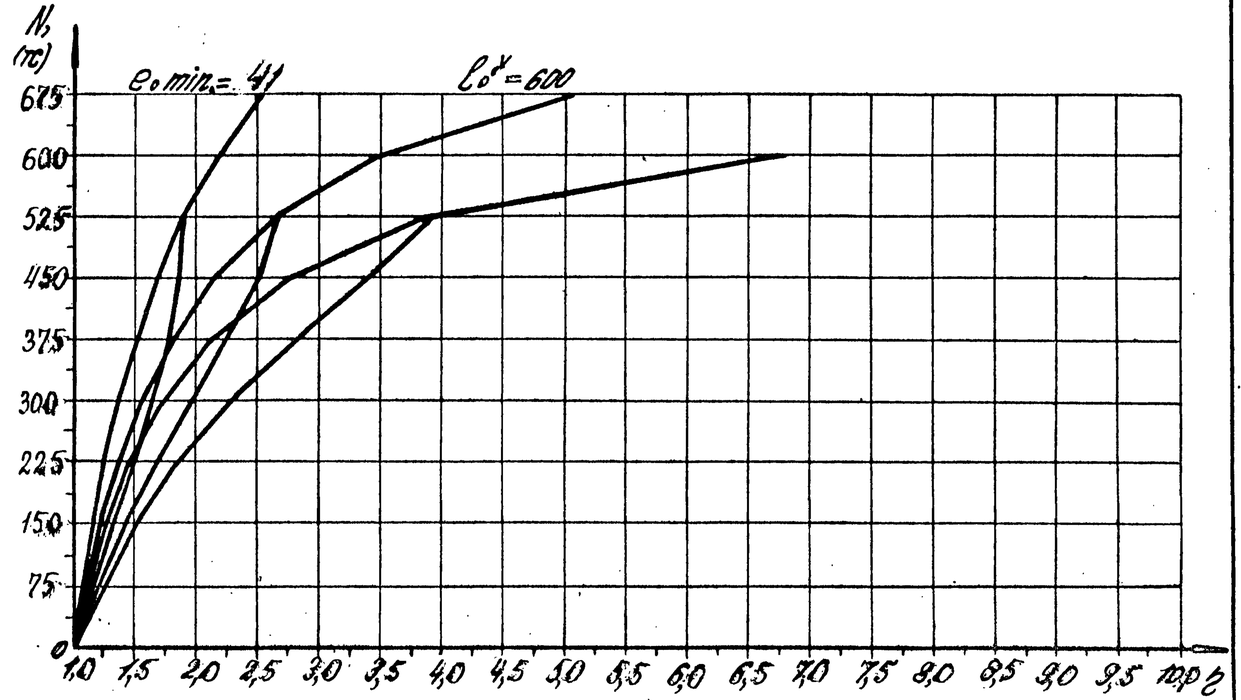
1.020-1/87. 0-6-3 ПЗ

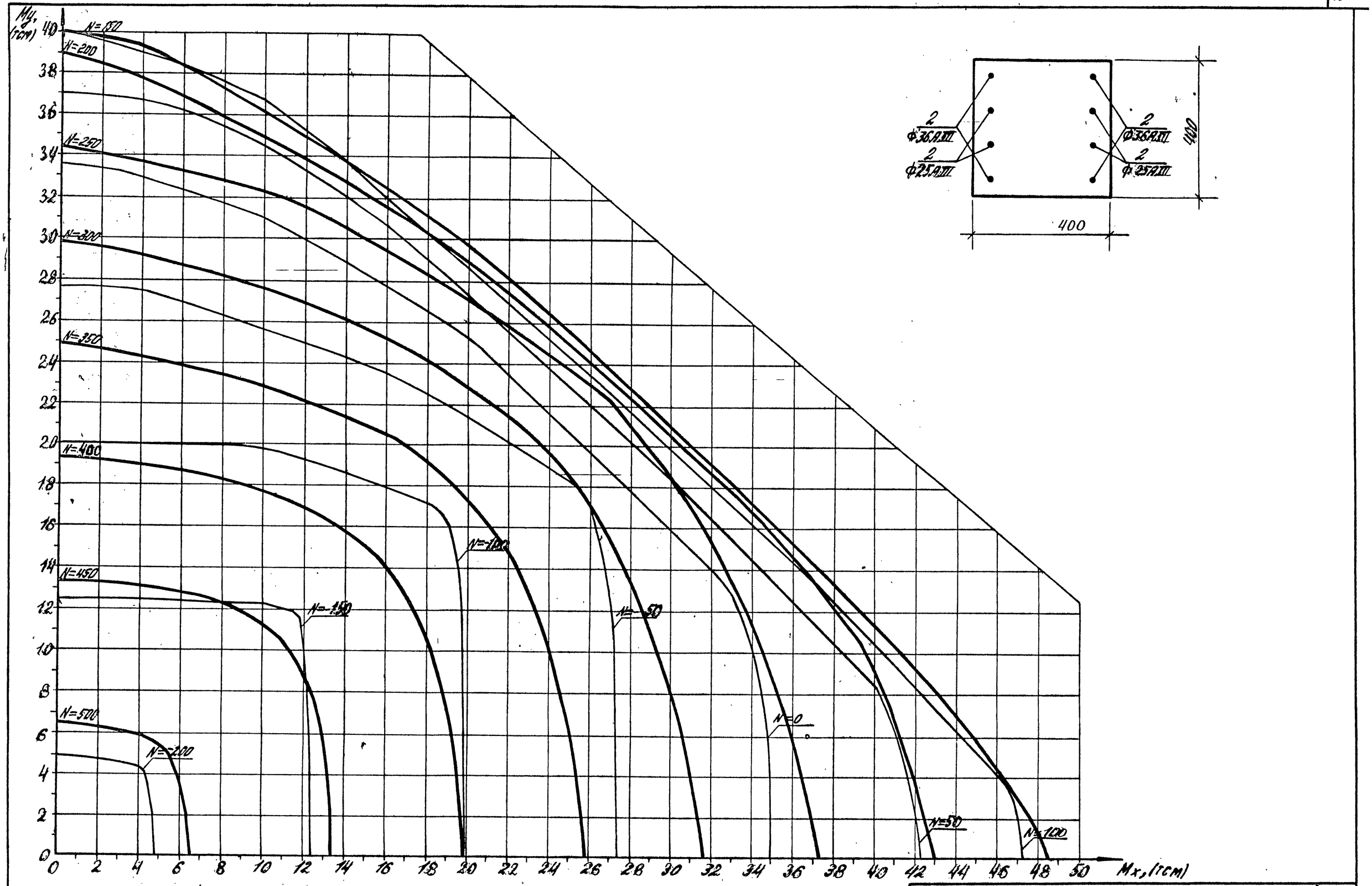
Лист 209


N, (тс)
e₀min.= 53
ℓ₀ˣ = 480
675
600
525
450
375
300
225
150
75
0
1,0 1,1 1,2 1,3 1,4 1,5 1,6 1,7 1,8 ℓ


N, (тс)
e₀min.= 41
ℓ₀ˣ = 600
675
600
525
450
375
300
225
150
75
0
1,0 1,1 1,2 1,3 1,4 1,5 1,6 1,7 1,8 1,9 2,0 2,1 2,2 2,3 2,4 2,5 2,6 2,7 2,8 ℓ


N, (тс)
e₀min.= 53
ℓ₀ˣ = 480
675
600
525
450
375
300
225
150
75
0
1,0 1,1 1,2 1,3 1,4 1,5 1,6 1,7 1,8 1,9 2,0 2,1 2,2 2,3 2,4 2,5 2,6 2,7 2,8 2,9 ℓ

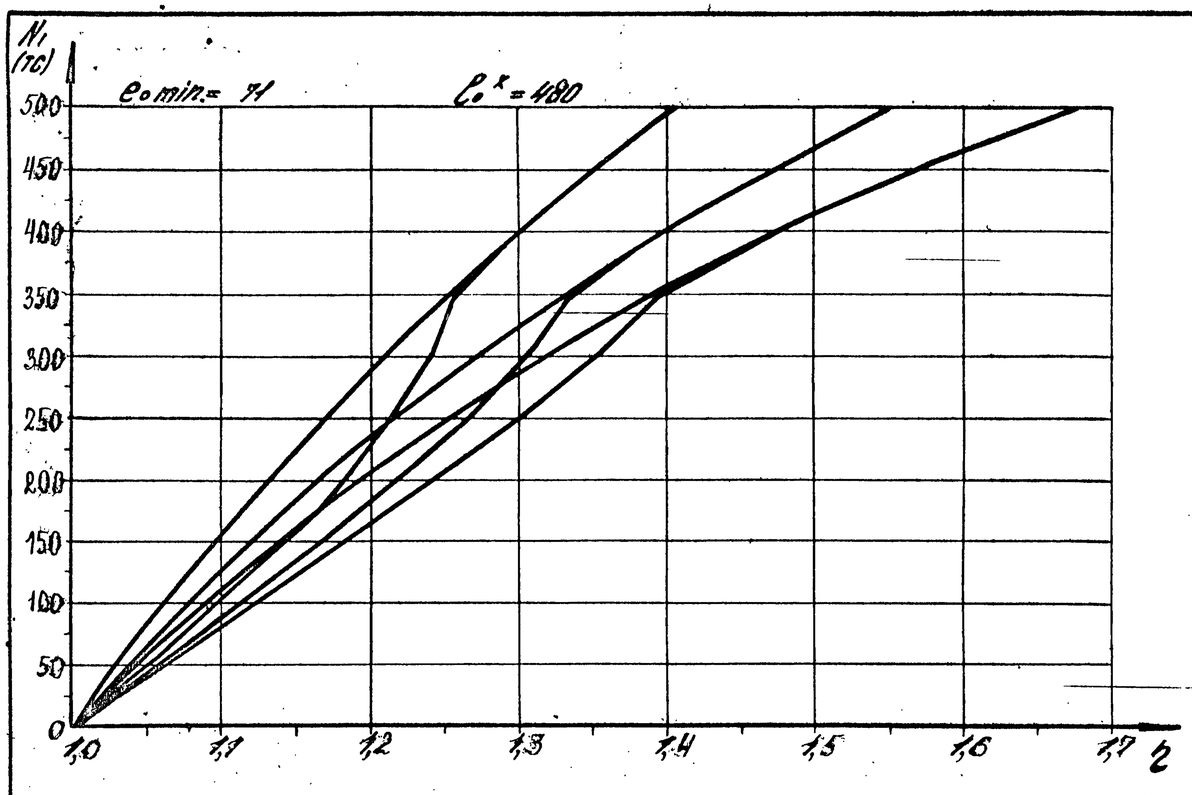

N, (тс)
e₀min.= 41
ℓ₀ˣ = 600
675
600
525
450
375
300
225
150
75
0
1,0 1,5 2,0 2,5 3,0 3,5 4,0 4,5 5,0 5,5 6,0 6,5 7,0 7,5 8,0 8,5 9,0 9,5 10,0 ℓ

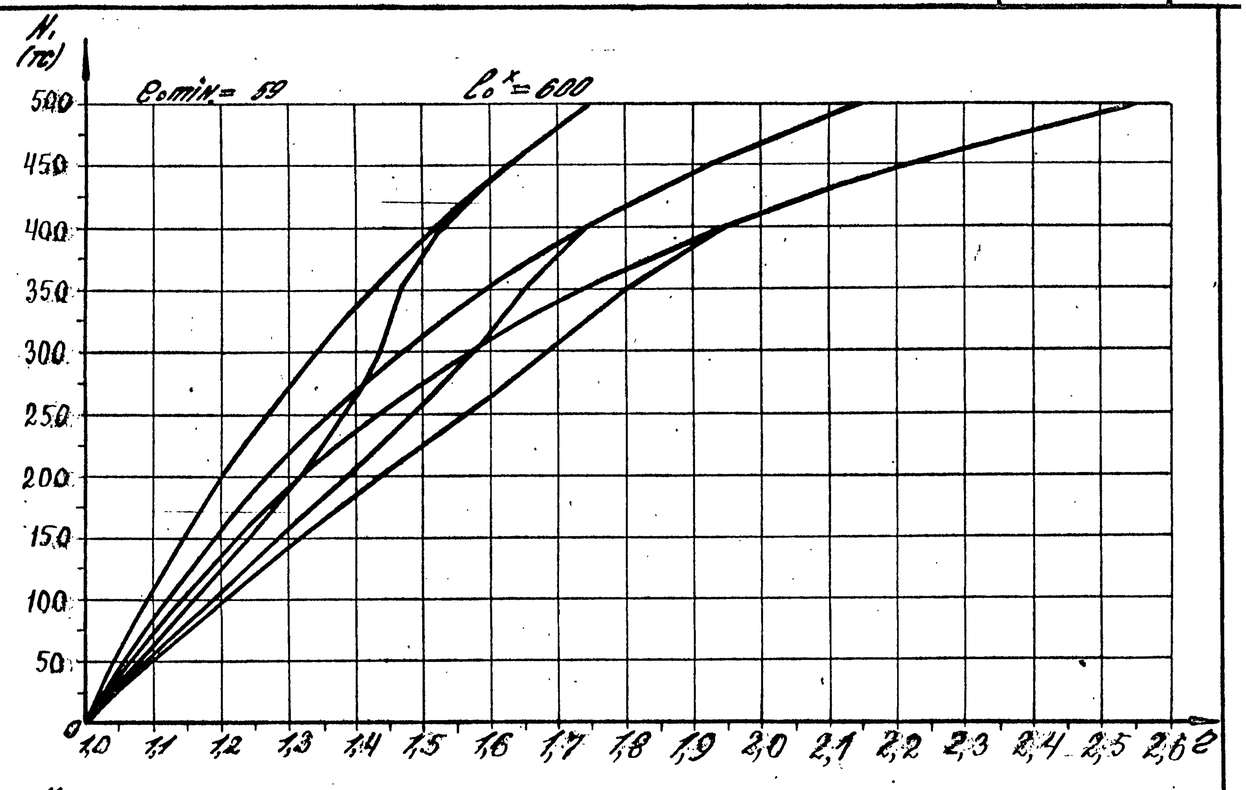


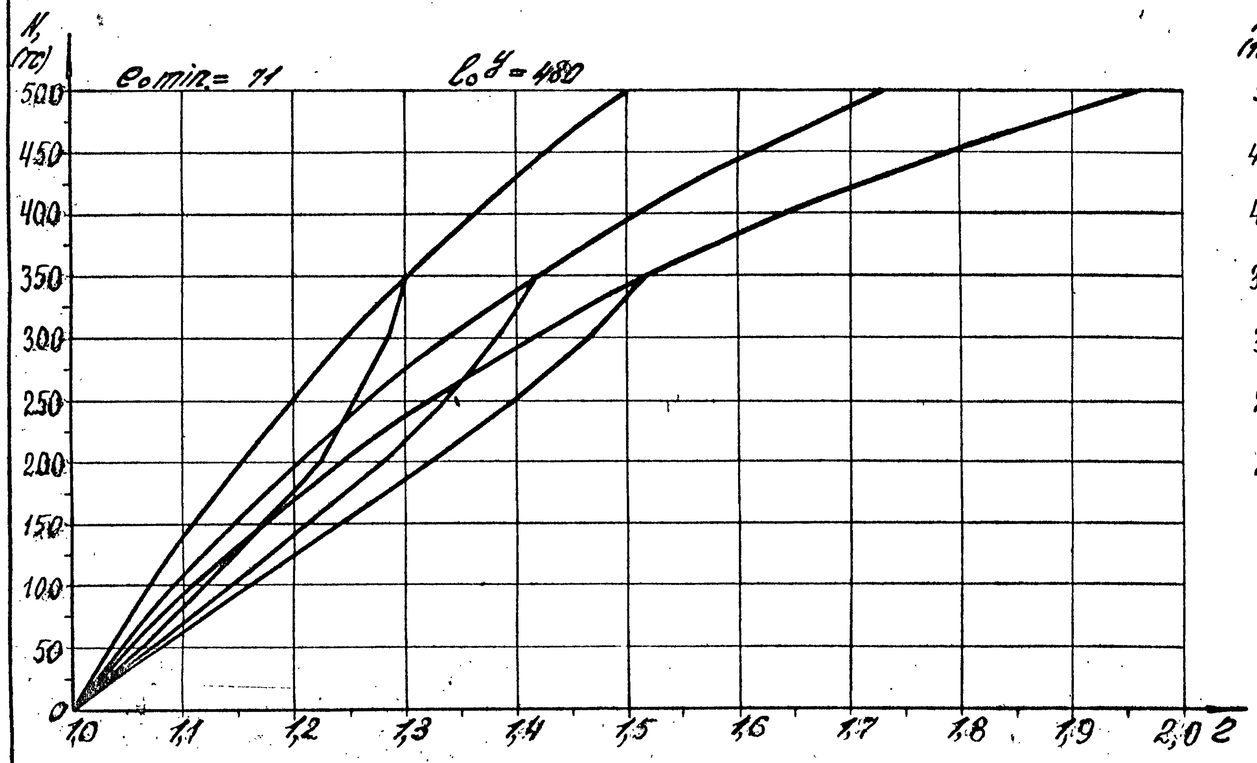
Класс бетона В40 (R_B = 201,6 кгс/см² при учете γ_{B2} = 0,9)

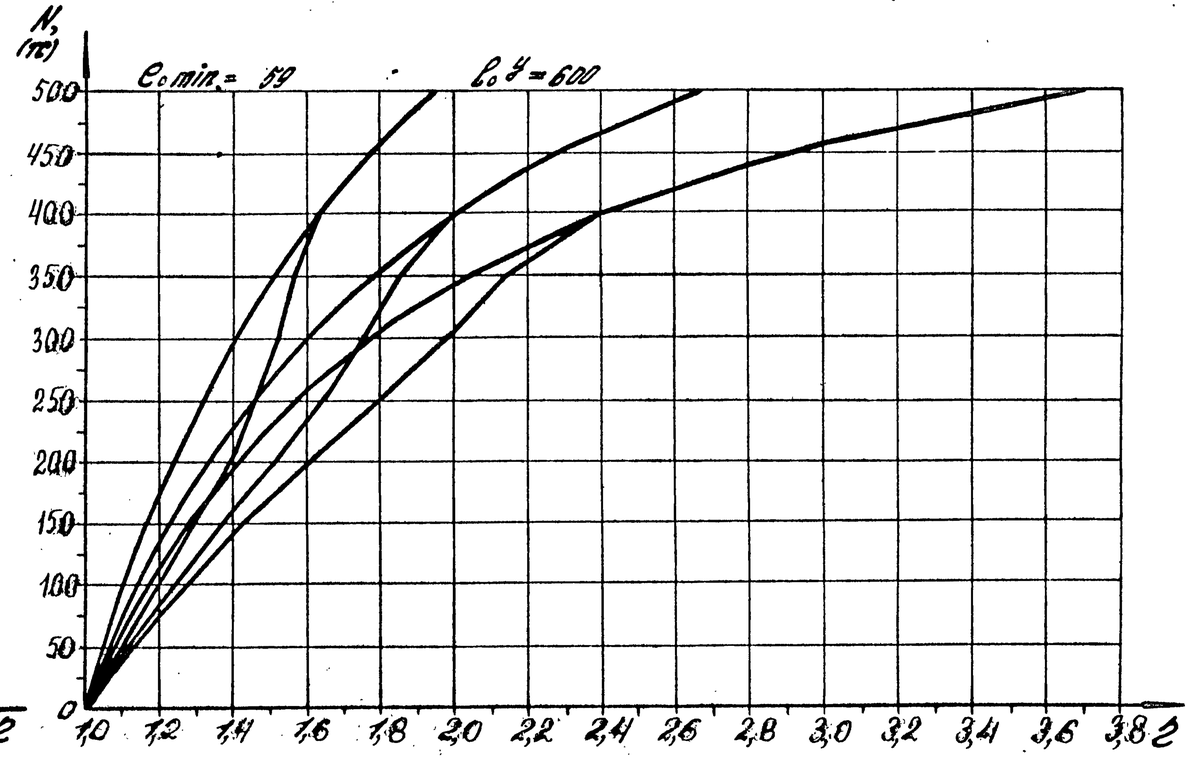
1.020-1/87. 0-6-3 ПЗ

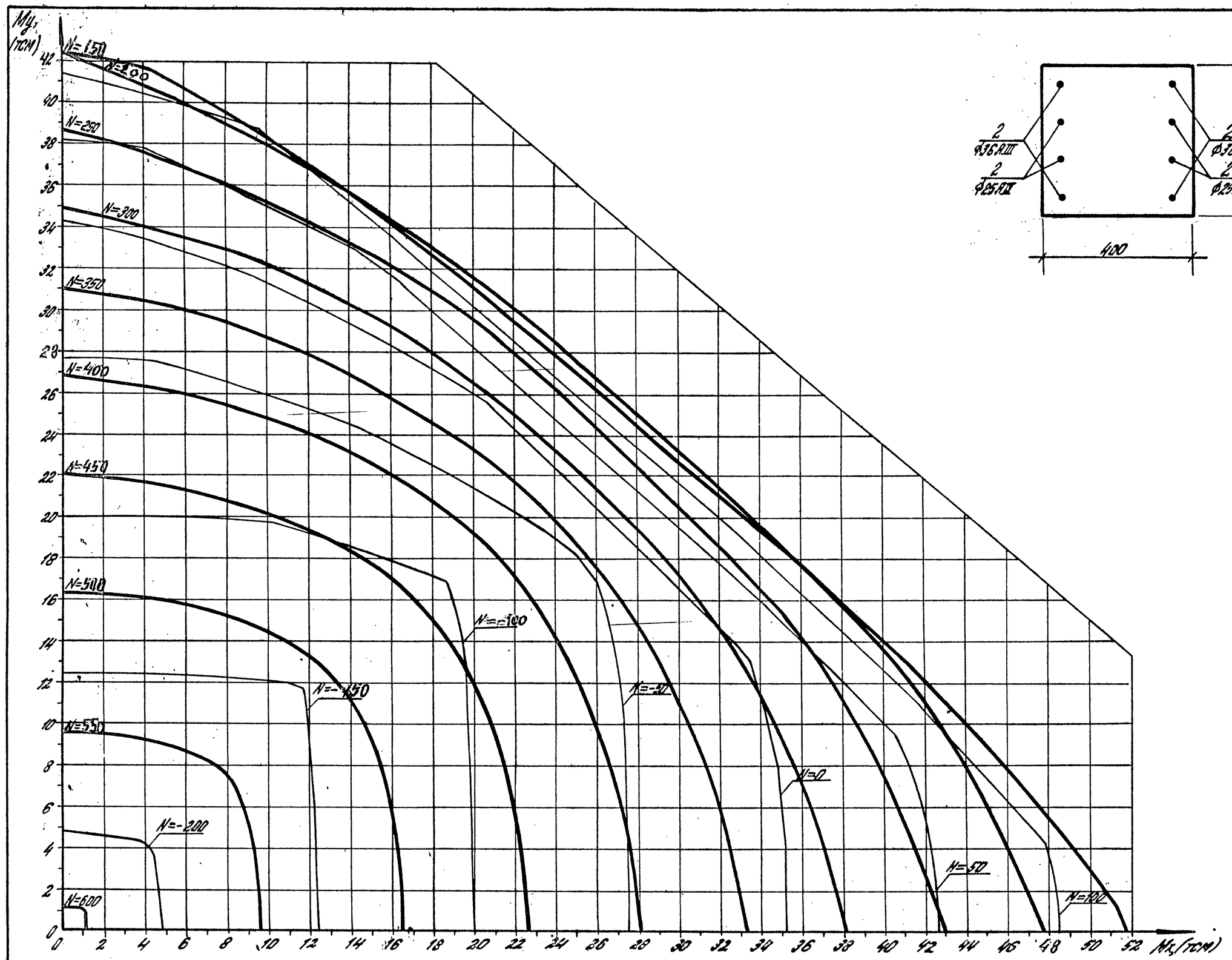
Лист 211


N, (тс)
e₀min = 71
l₀ˣ = 480
500
450
400
350
300
250
200
150
100
50
0
1,0 1,1 1,2 1,3 1,4 1,5 1,6 1,7 l


N, (тс)
e₀min = 59
l₀ˣ = 600
500
450
400
350
300
250
200
150
100
50
0
1,0 1,1 1,2 1,3 1,4 1,5 1,6 1,7 1,8 1,9 2,0 2,1 2,2 2,3 2,4 2,5 2,6 e


N, (тс)
e₀min = 71
l₀ʸ = 480
500
450
400
350
300
250
200
150
100
50
0
1,0 1,1 1,2 1,3 1,4 1,5 1,6 1,7 1,8 1,9 2,0 e

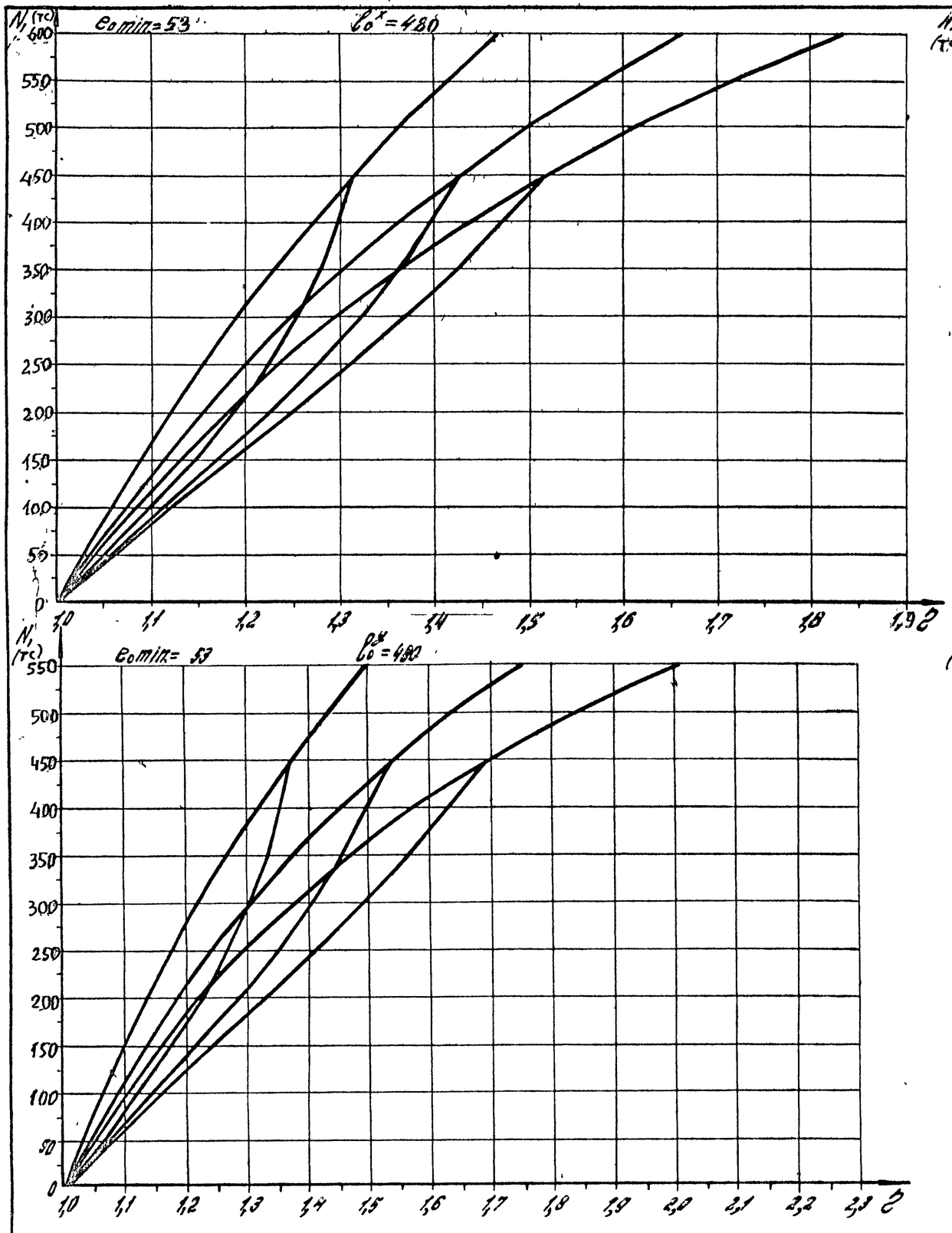

N, (тс)
e₀min = 59
l₀ʸ = 600
500
450
400
350
300
250
200
150
100
50
0
1,0 1,2 1,4 1,6 1,8 2,0 2,2 2,4 2,6 2,8 3,0 3,2 3,4 3,6 3,8 e

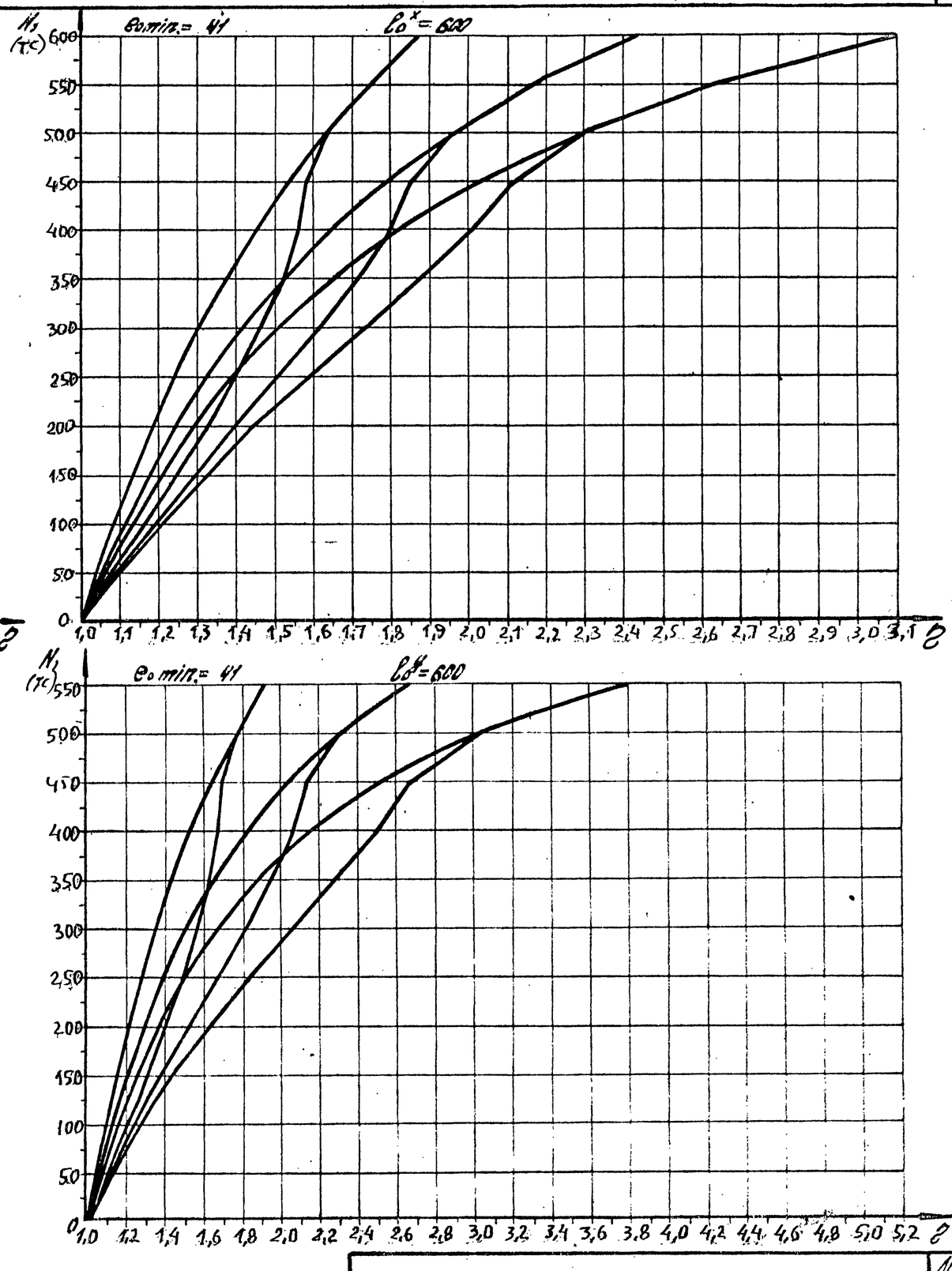


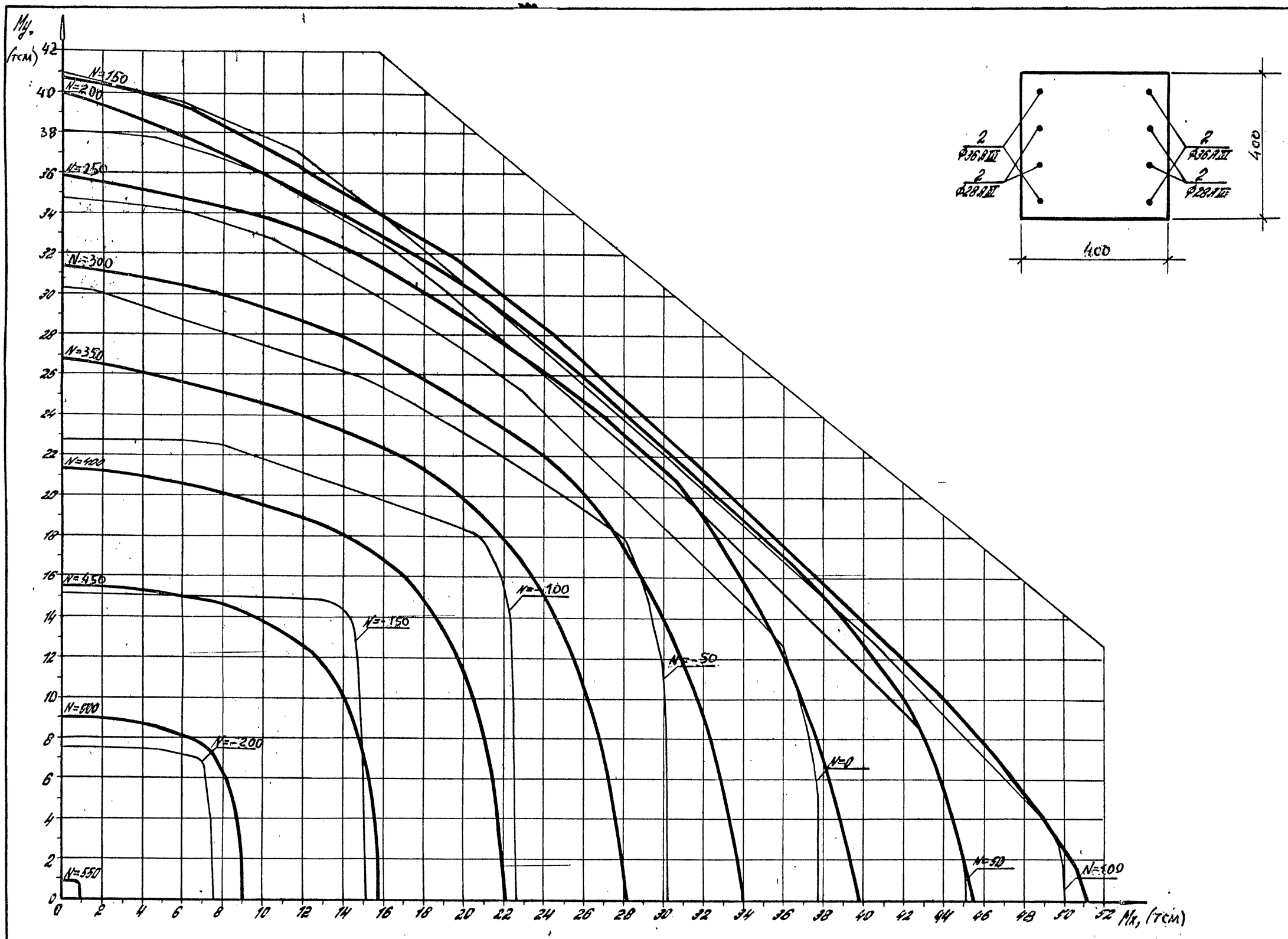
Класс бетона В40 ($R_в$ = 246,4 кгс/см² при учете γ_{b2} = 1,10)

1.020-1/87.0-6-3ПЗ

Лист 213


N_1 (тс)
$e_0 min = 53$
$\ell_0^x = 480$
$\ell_0^y = 480$
e

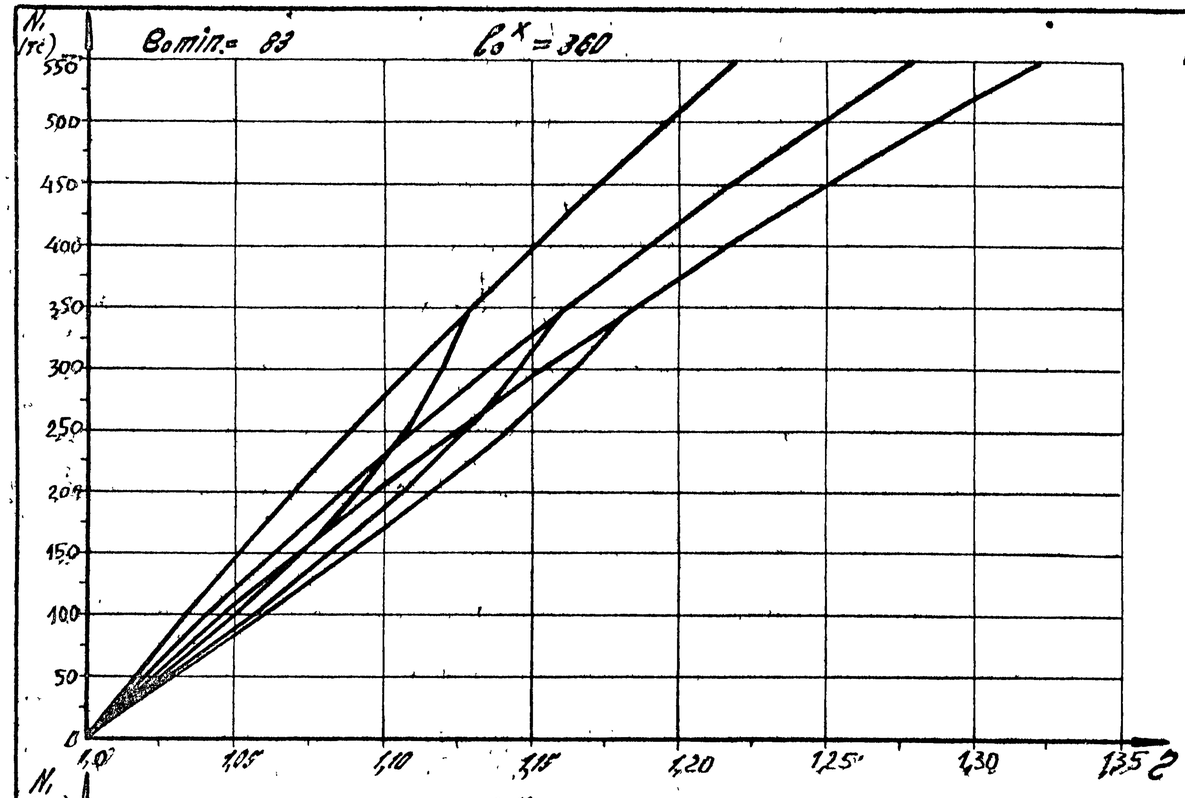

N_1 (тс)
$e_0 min = 41$
$\ell_0^x = 600$
$\ell_0^y = 600$
e

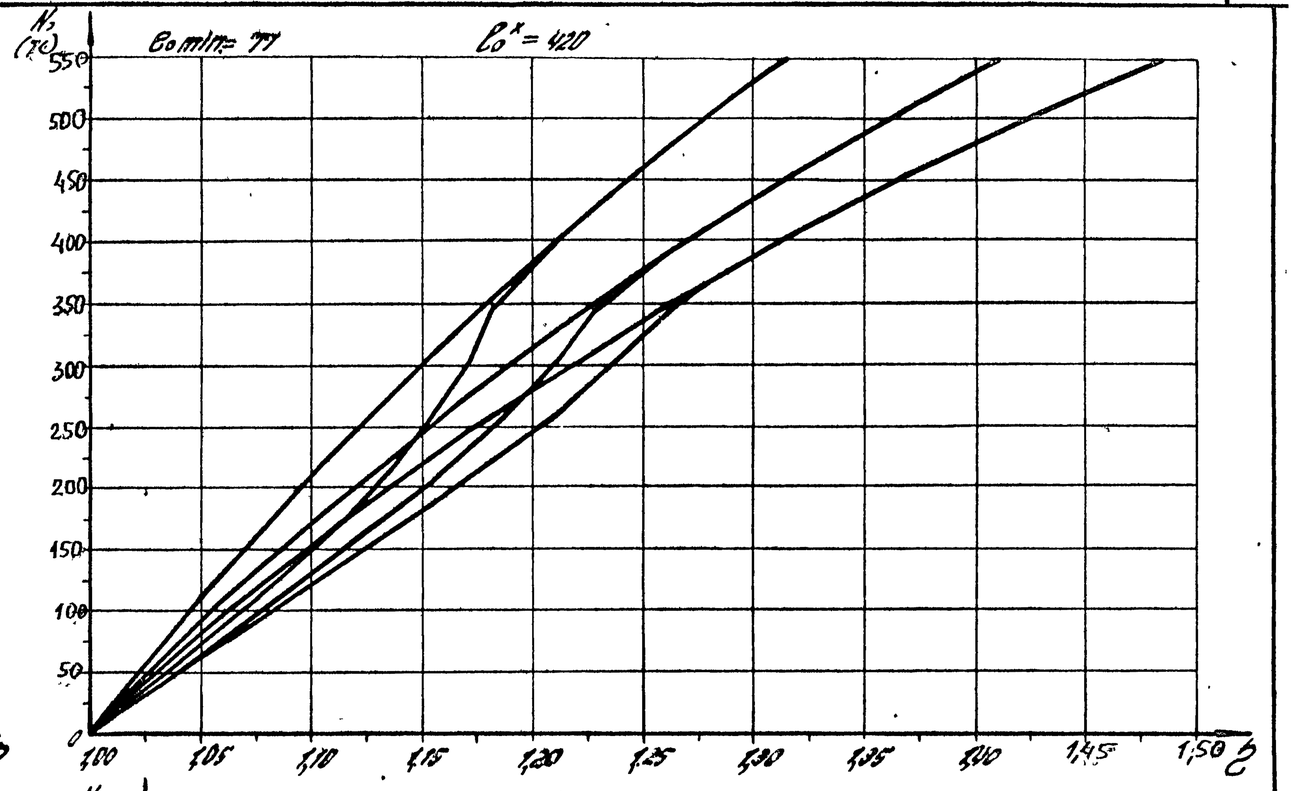


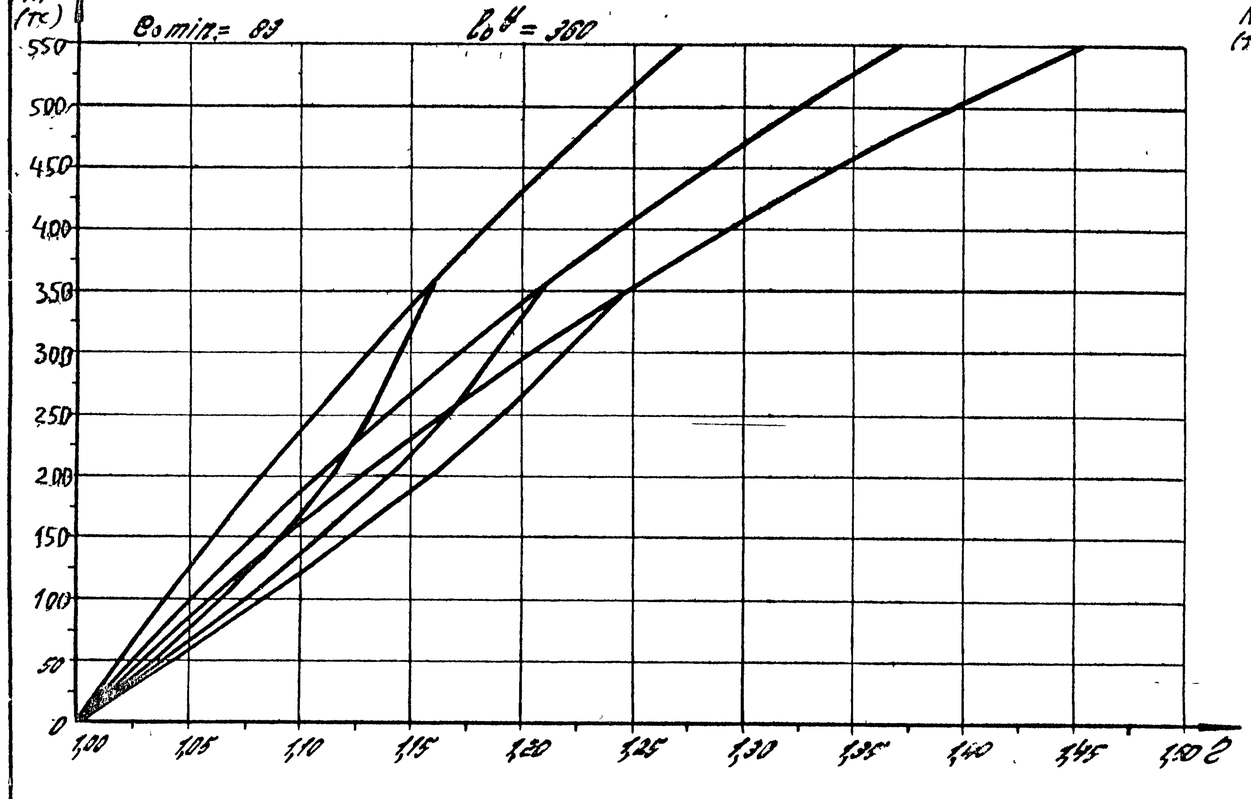
Класс бетона В40 ($R_в$ = 201,6 кгс/см² при учете $\gamma_{в2}$ = 0,9)

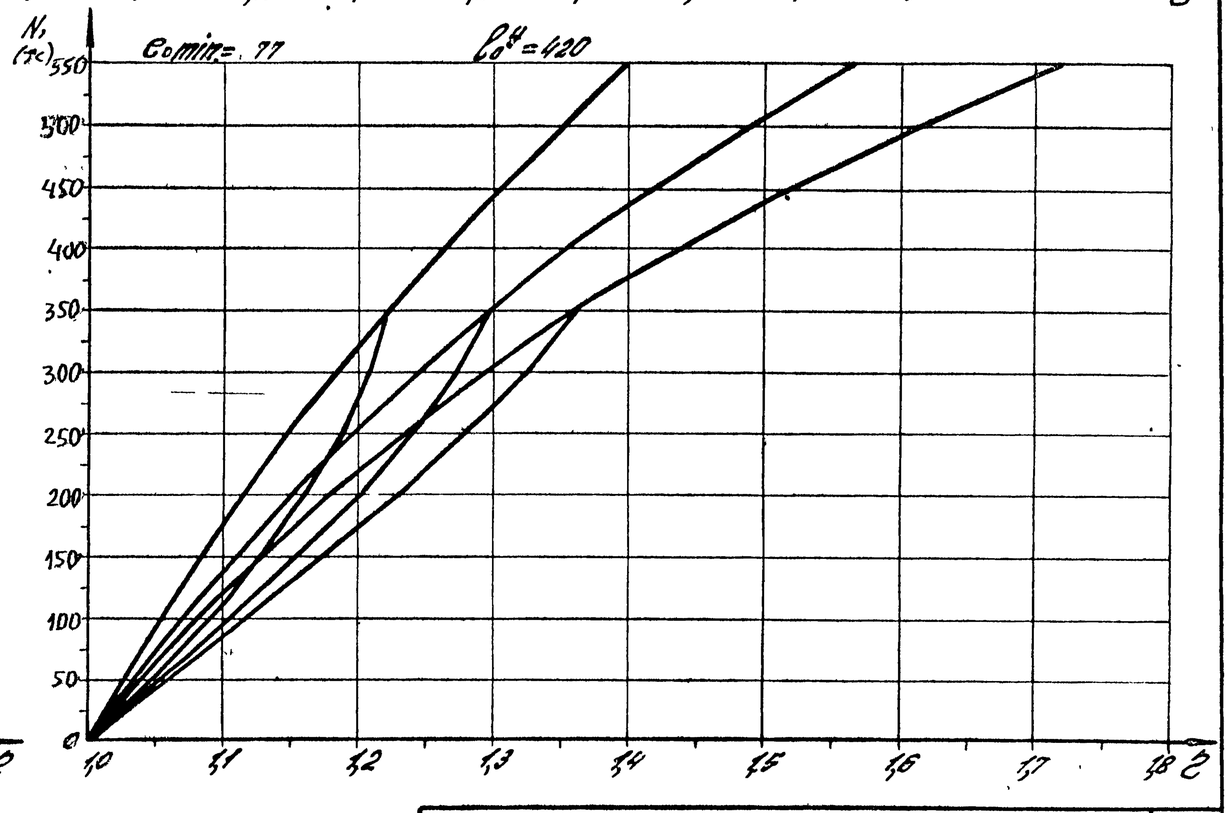
1.020-1/87.0-6 – 3.ПЗ

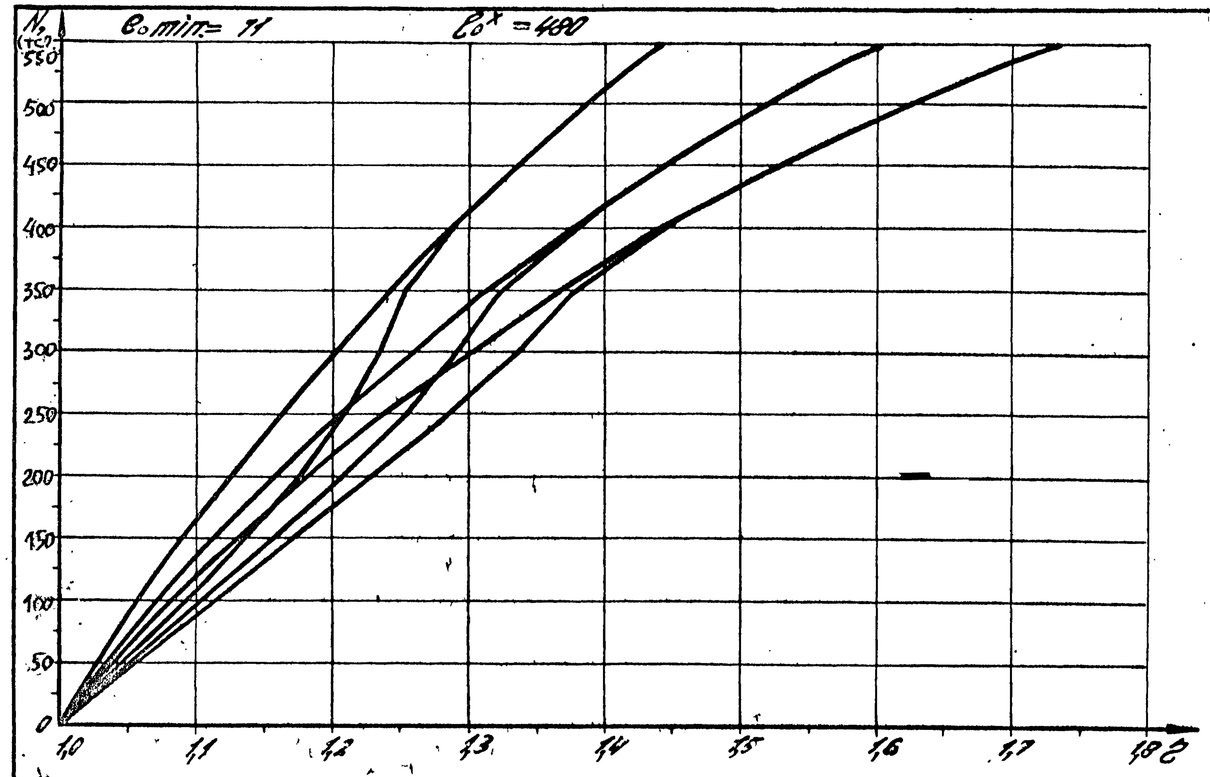
Лист 215

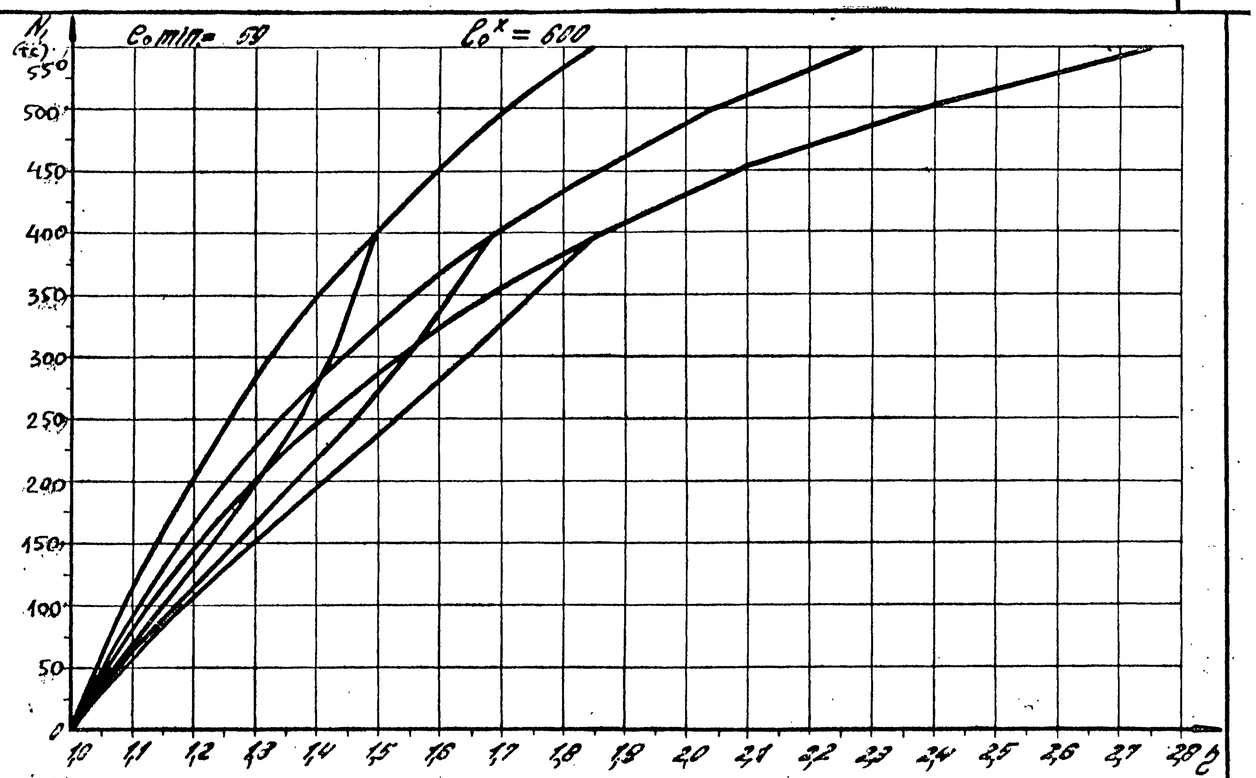

N, (тс)
Co min = 83
Co^x = 360
550
500
450
400
350
300
250
200
150
100
50
0
1,00
1,05
1,10
1,15
1,20
1,25
1,30
1,35
e

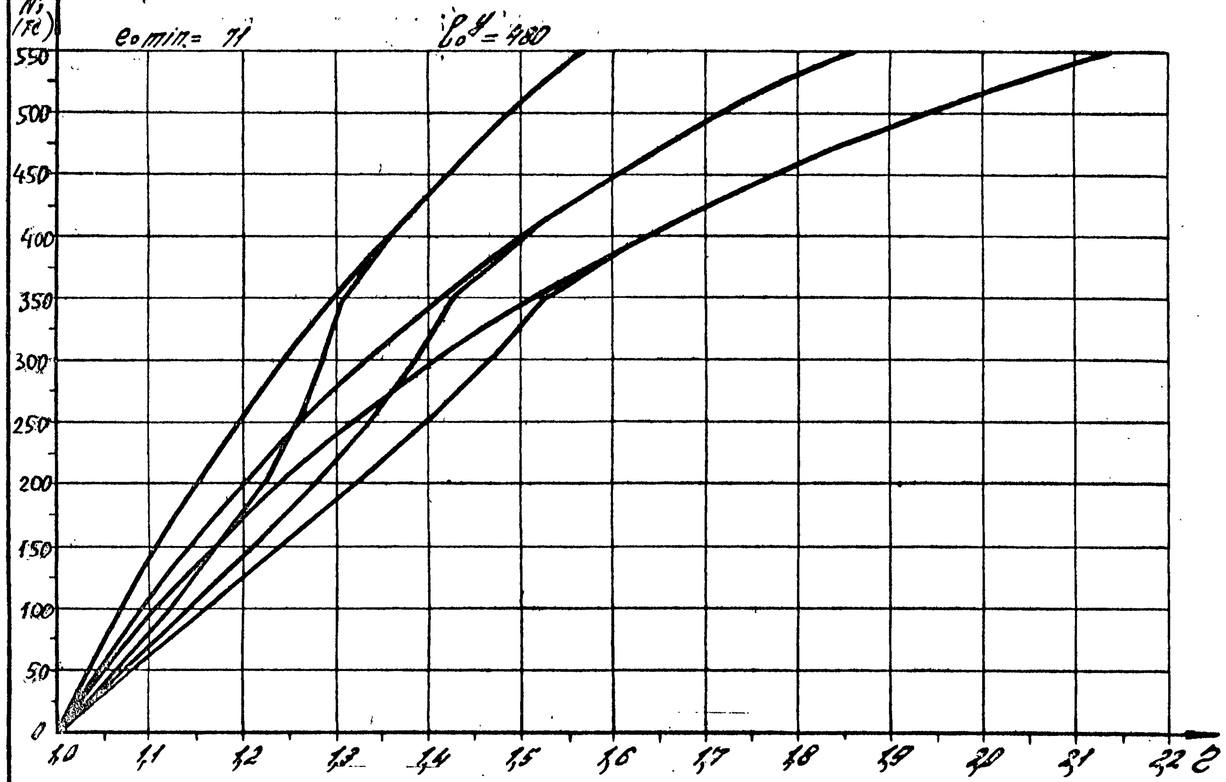

N, (тс)
Co min = 77
Co^x = 420
550
500
450
400
350
300
250
200
150
100
50
0
1,00
1,05
1,10
1,15
1,20
1,25
1,30
1,35
1,40
1,45
1,50
e

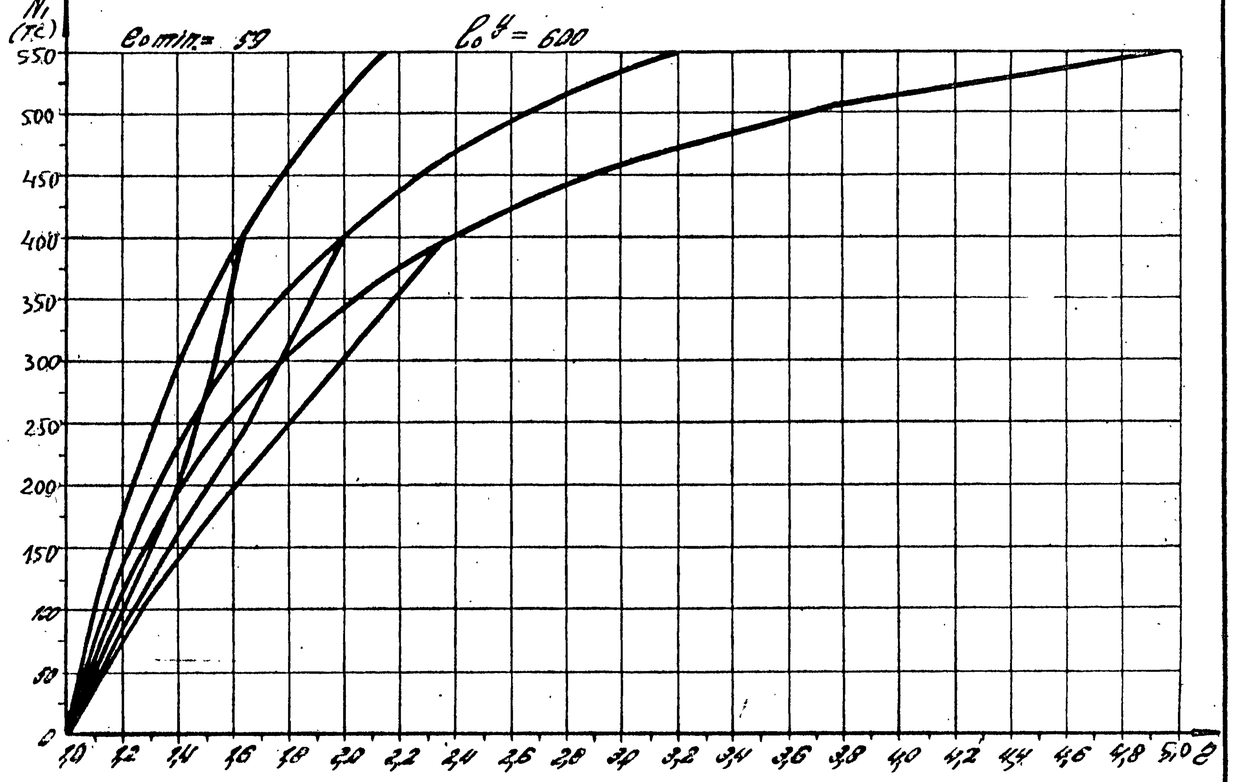

N, (тс)
Co min = 83
Co^y = 360
550
500
450
400
350
300
250
200
150
100
50
0
1,00
1,05
1,10
1,15
1,20
1,25
1,30
1,35
1,40
1,45
1,50
e

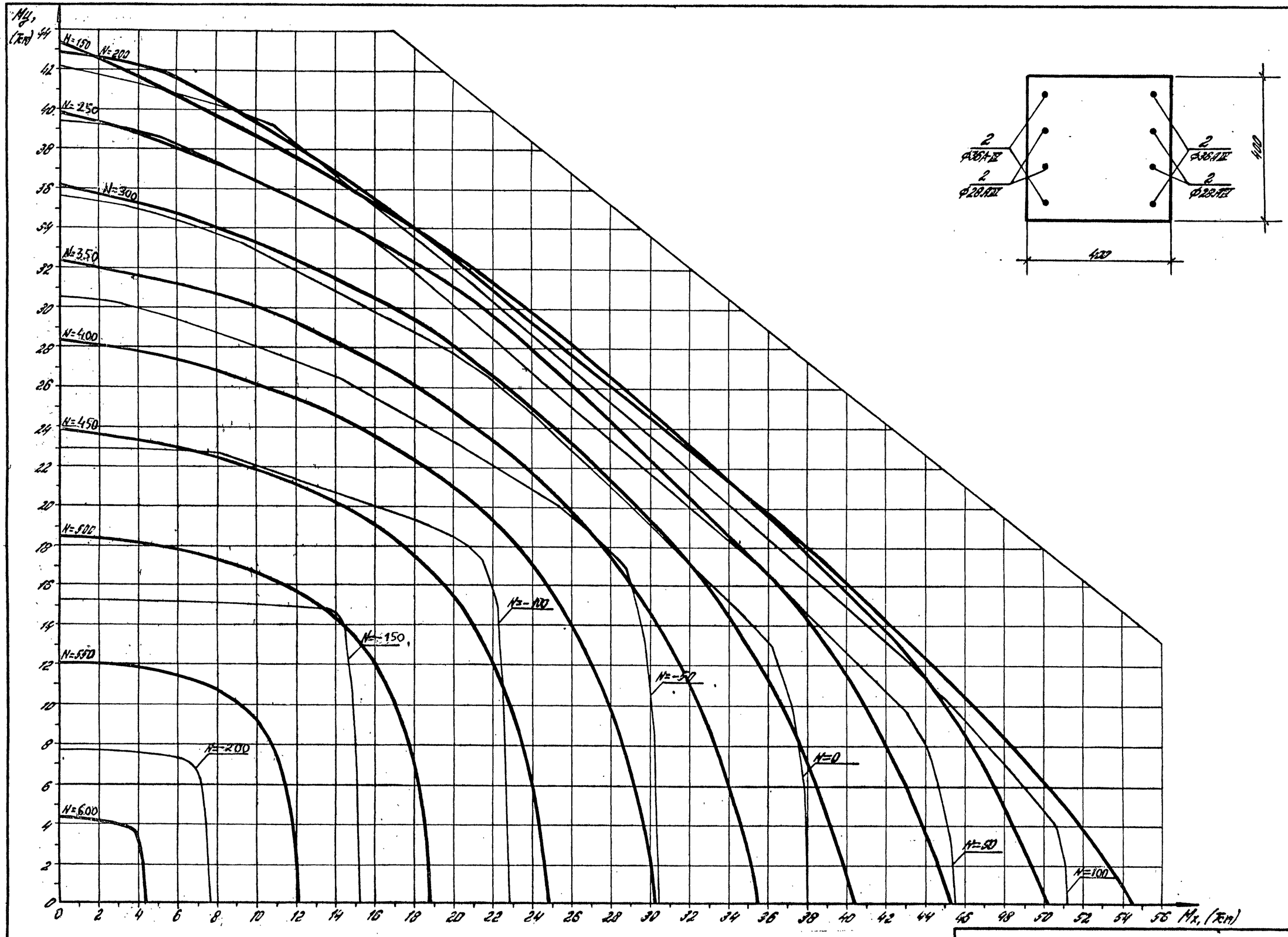

N, (тс)
Co min = 77
Co^y = 420
550
500
450
400
350
300
250
200
150
100
50
0
1,0
1,1
1,2
1,3
1,4
1,5
1,6
1,7
1,8
e


N_2 (тс)
$e_0 min$= 11
e_0^x = 480
550
500
450
400
350
300
250
200
150
100
50
0
1,0 1,1 1,2 1,3 1,4 1,5 1,6 1,7 1,8 e

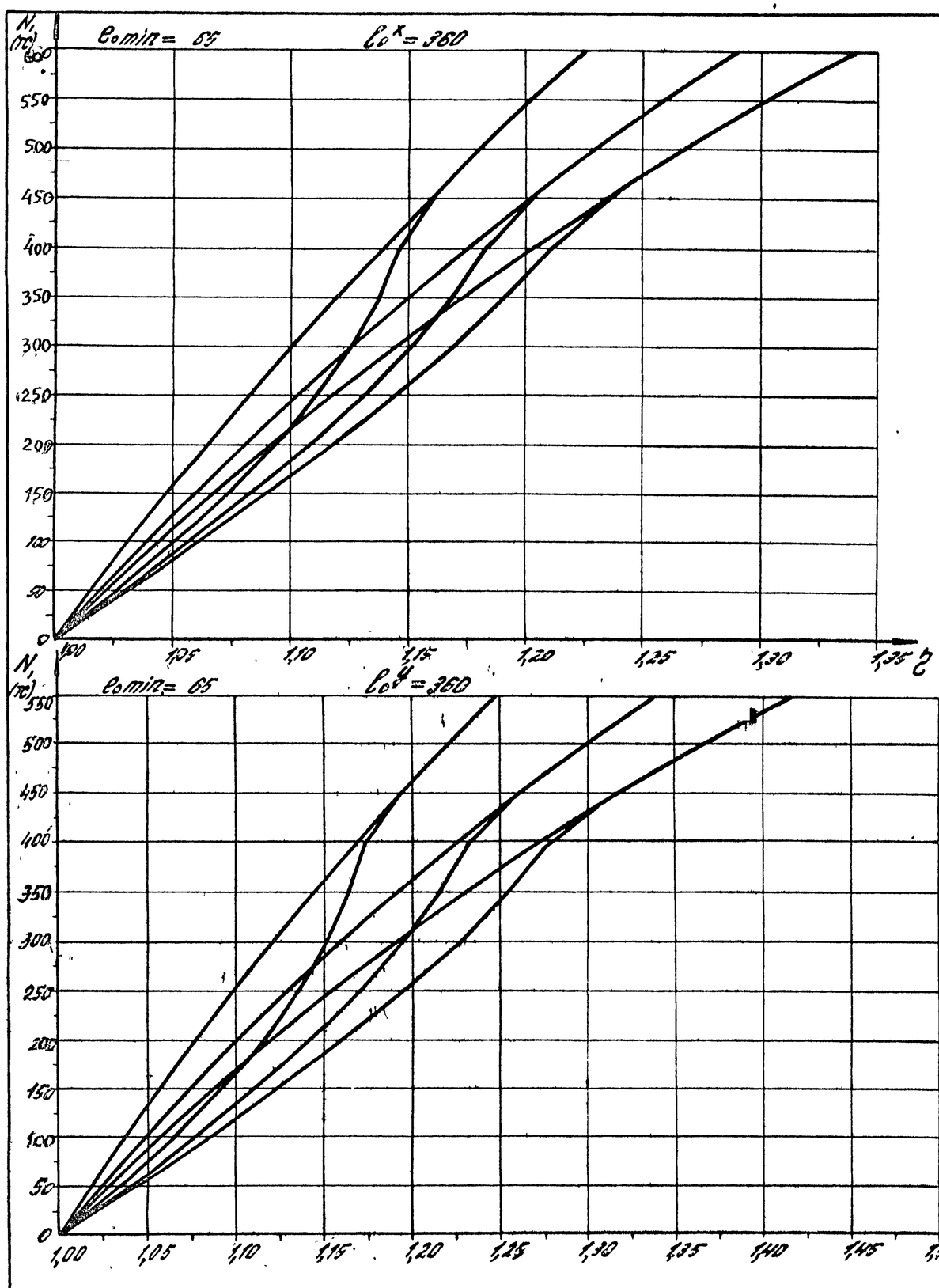

N_1 (тс)
$e_0 min$= 59
e_0^x = 600
550
500
450
400
350
300
250
200
150
100
50
0
1,0 1,1 1,2 1,3 1,4 1,5 1,6 1,7 1,8 1,9 2,0 2,1 2,2 2,3 2,4 2,5 2,6 2,7 2,8 e

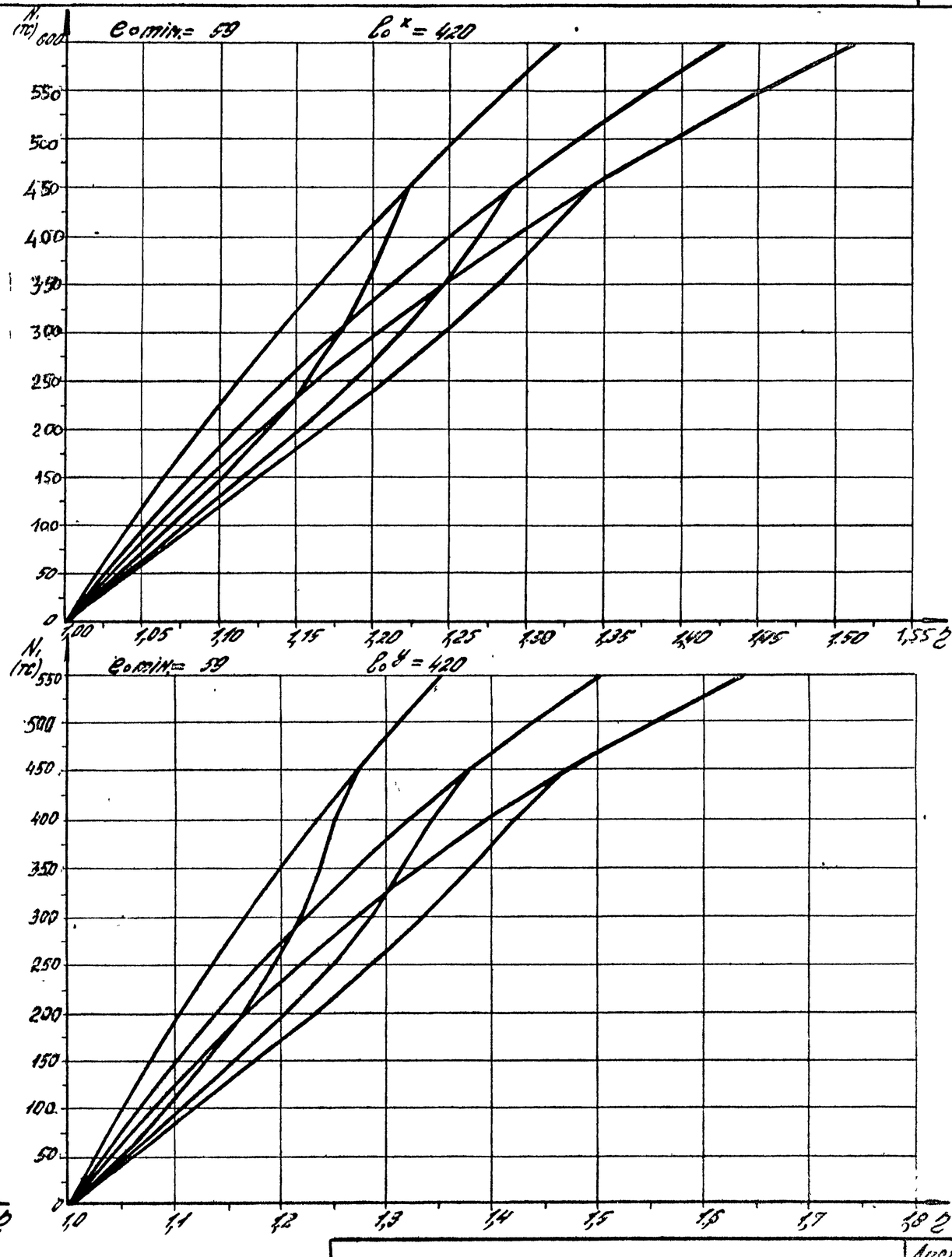

N_2 (тс)
$e_0 min$= 11
e_0^y = 480
550
500
450
400
350
300
250
200
150
100
50
0
1,0 1,1 1,2 1,3 1,4 1,5 1,6 1,7 1,8 1,9 2,0 2,1 2,2 e

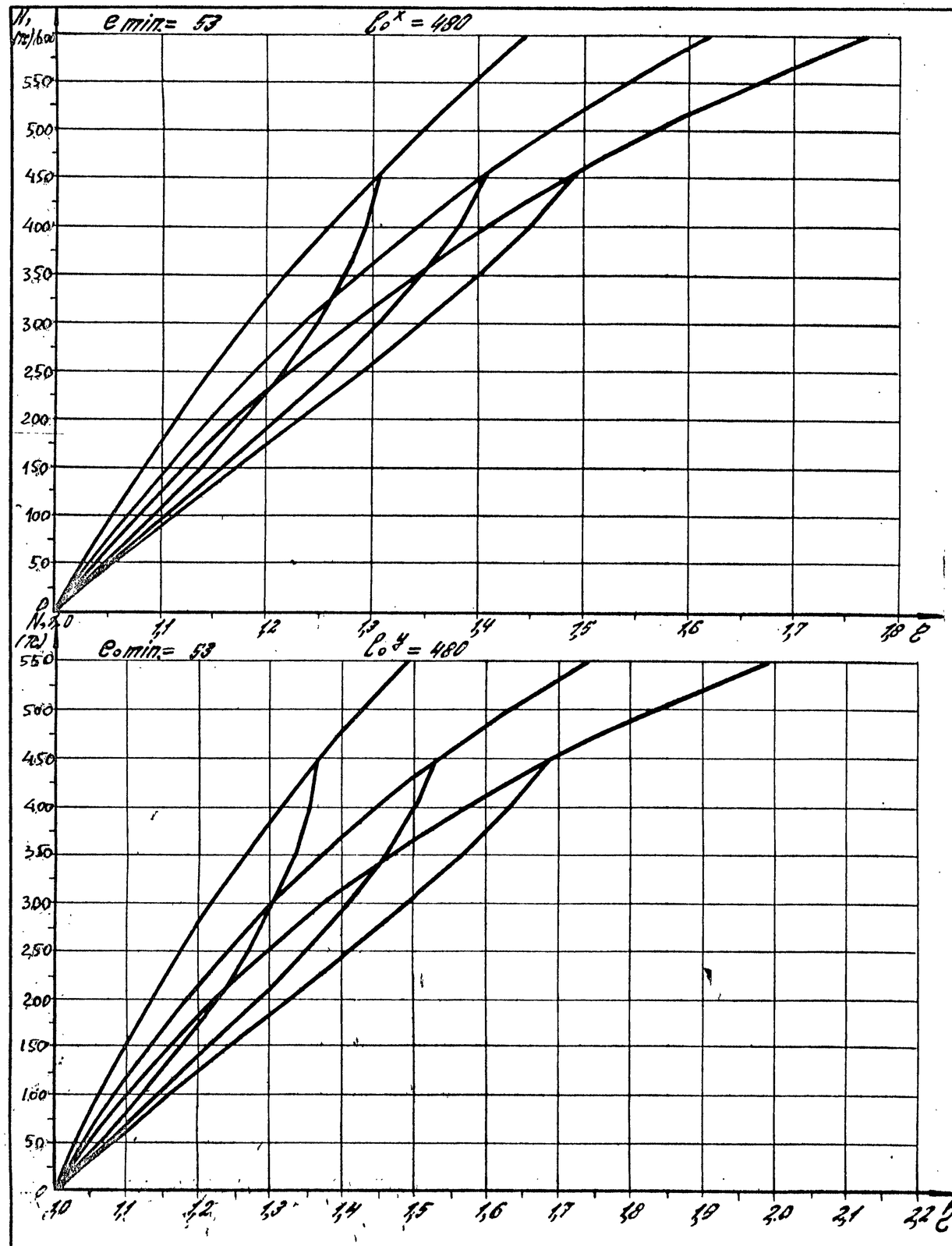

N_1 (тс)
$e_0 min$= 59
e_0^y = 600
550
500
450
400
350
300
250
200
150
100
50
0
1,0 1,2 1,4 1,6 1,8 2,0 2,2 2,4 2,6 2,8 3,0 3,2 3,4 3,6 3,8 4,0 4,2 4,4 4,6 4,8 5,0 e

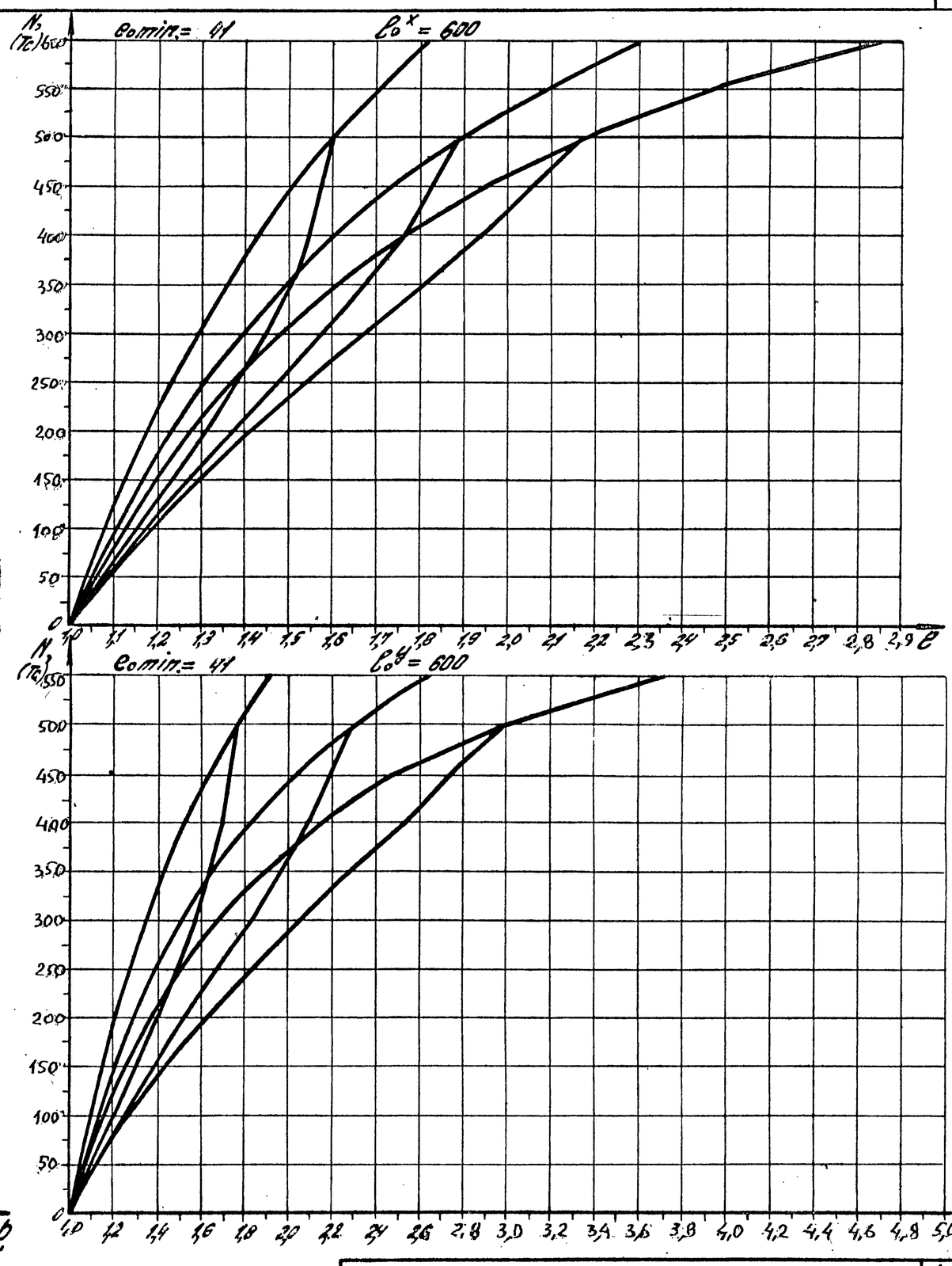


Класс бетона В40 ($R_в$ = 246,4 кгс/см² при учете $\gamma_{в2}$ = 1,10)


N_i (тс)
$e_{o\,min}$ = 65
l_o^x = 360
l_o^y = 360
0
50
100
150
200
250
300
350
400
450
500
550
600
1,00
1,05
1,10
1,15
1,20
1,25
1,30
1,35
1,40
1,45
1,50
ℓ

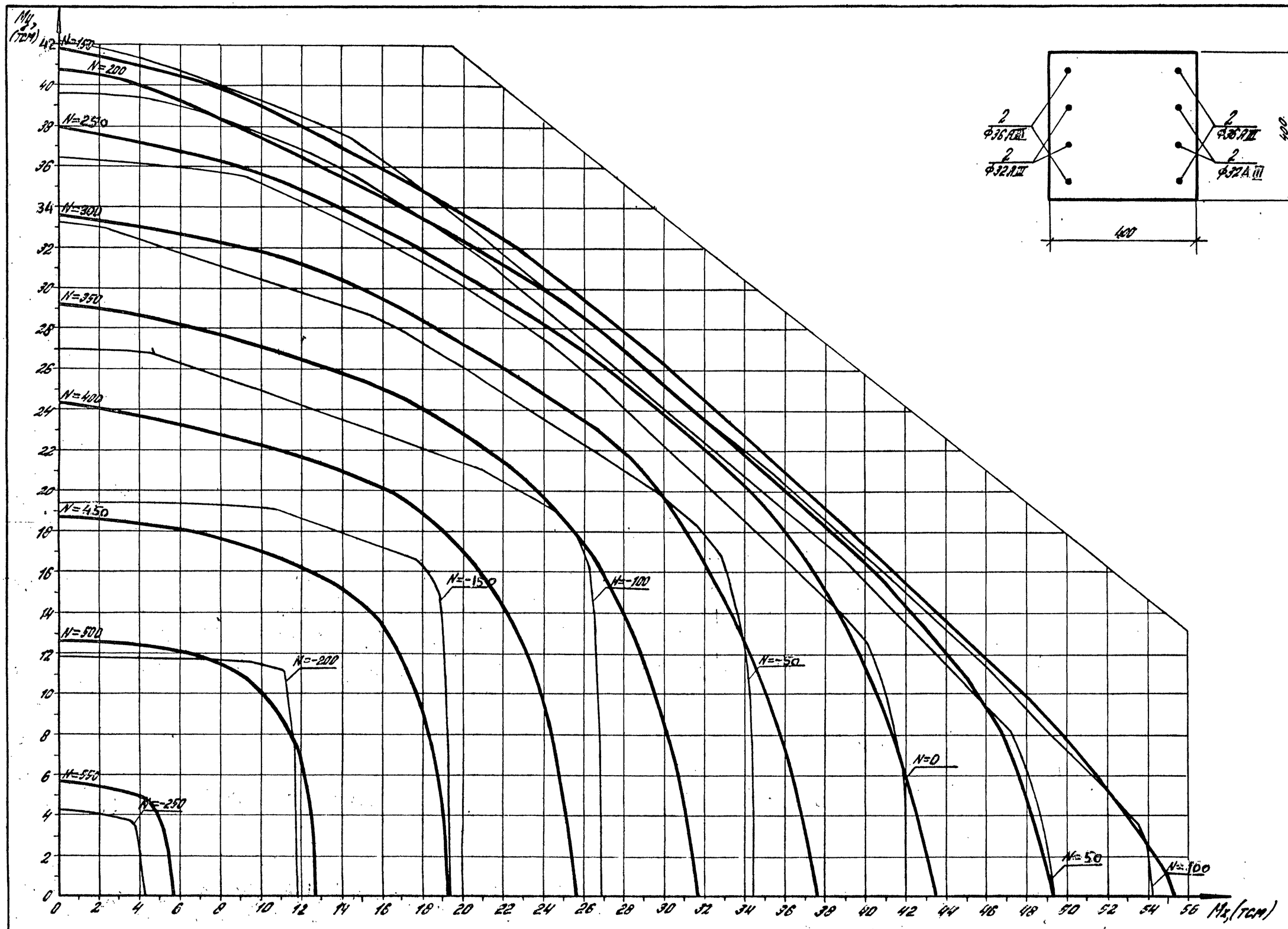

N_i (тс)
$e_{o\,min}$ = 59
l_o^x = 420
l_o^y = 420
0
50
100
150
200
250
300
350
400
450
500
550
600
1,00
1,05
1,10
1,15
1,20
1,25
1,30
1,35
1,40
1,45
1,50
1,55
ℓ


e min= 53
e_0^x = 480
N, (тс)/600
550
500
450
400
350
300
250
200
150
100
50
0
1,0 1,1 1,2 1,3 1,4 1,5 1,6 1,7 1,8 e

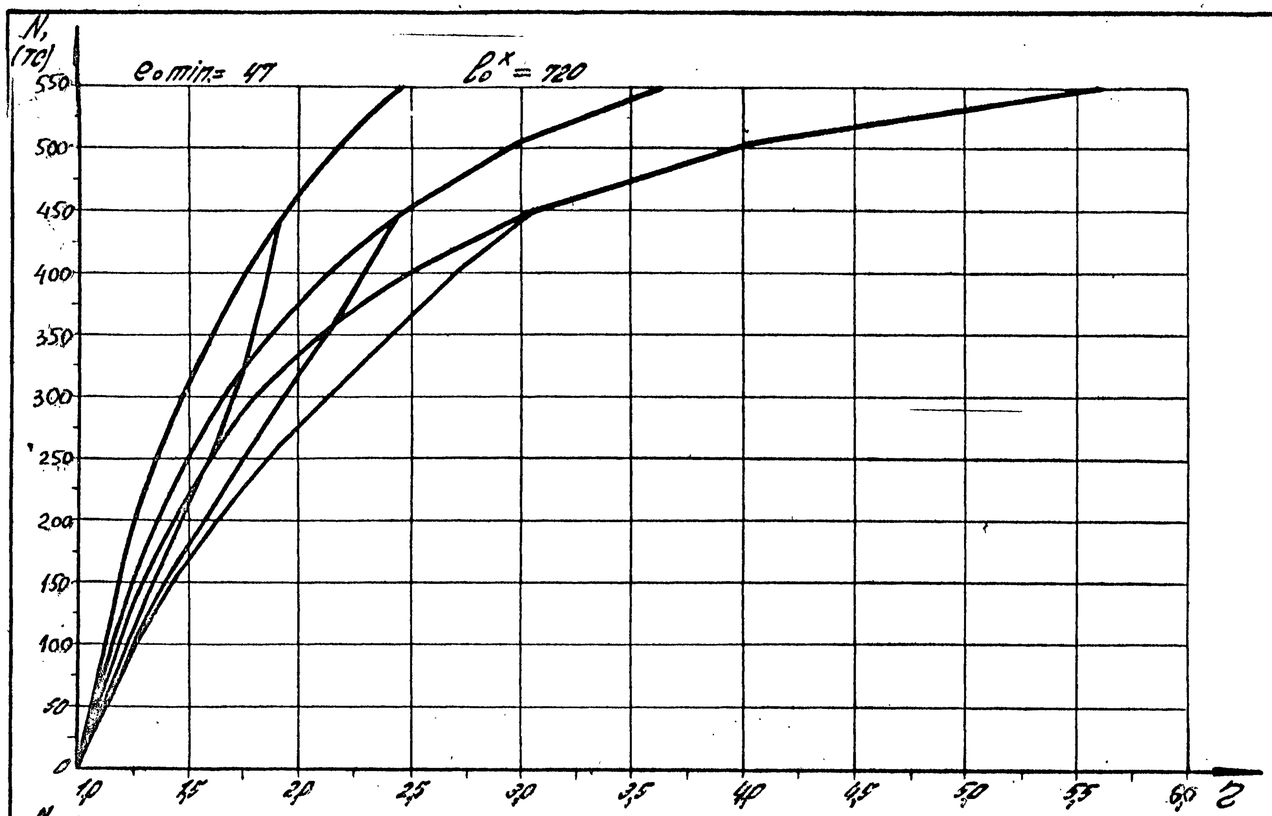

e₀min= 41
e_0^x = 600
N, (тс)/600
550
500
450
400
350
300
250
200
150
100
50
0
1,0 1,1 1,2 1,3 1,4 1,5 1,6 1,7 1,8 1,9 2,0 2,1 2,2 2,3 2,4 2,5 2,6 2,7 2,8 2,9 e

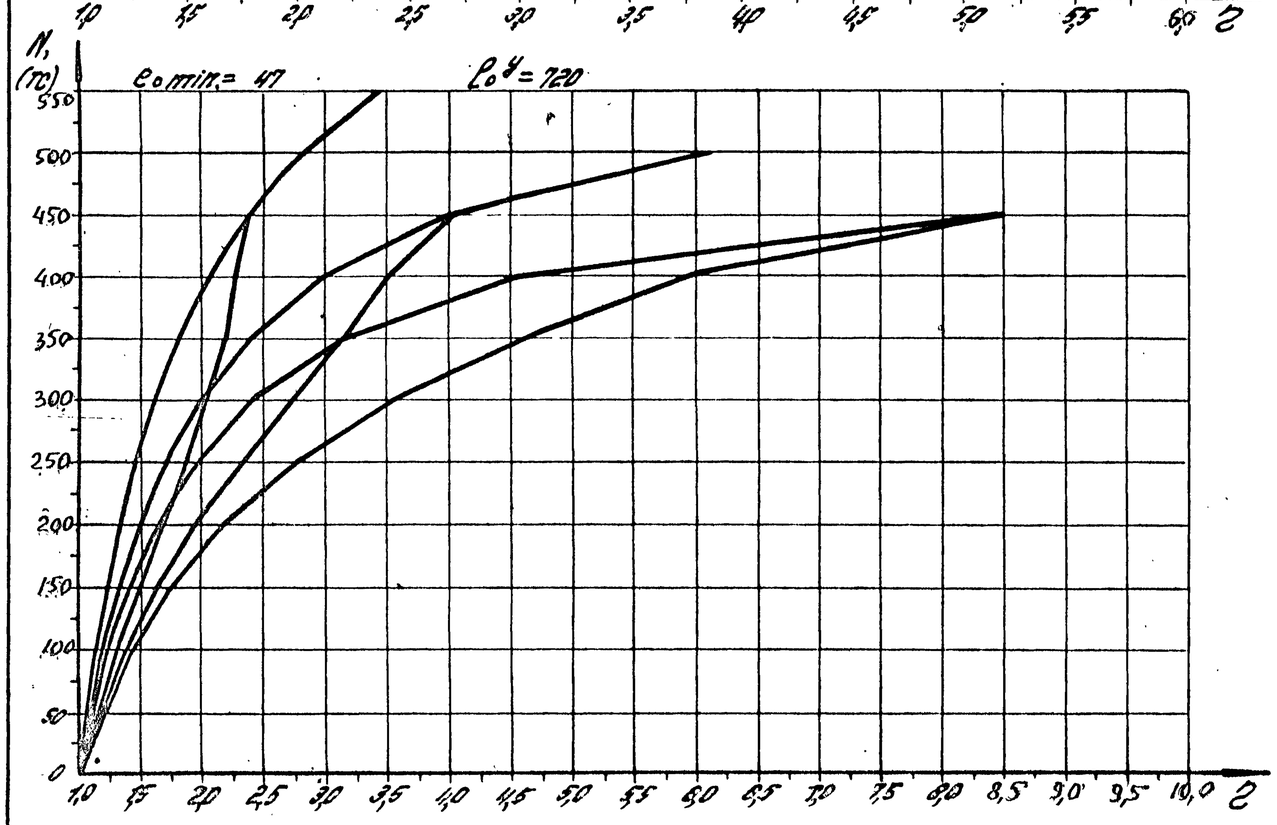
e₀min= 53
e_0^y = 480
N, (тс)
550
500
450
400
350
300
250
200
150
100
50
0
1,0 1,1 1,2 1,3 1,4 1,5 1,6 1,7 1,8 1,9 2,0 2,1 2,2 e

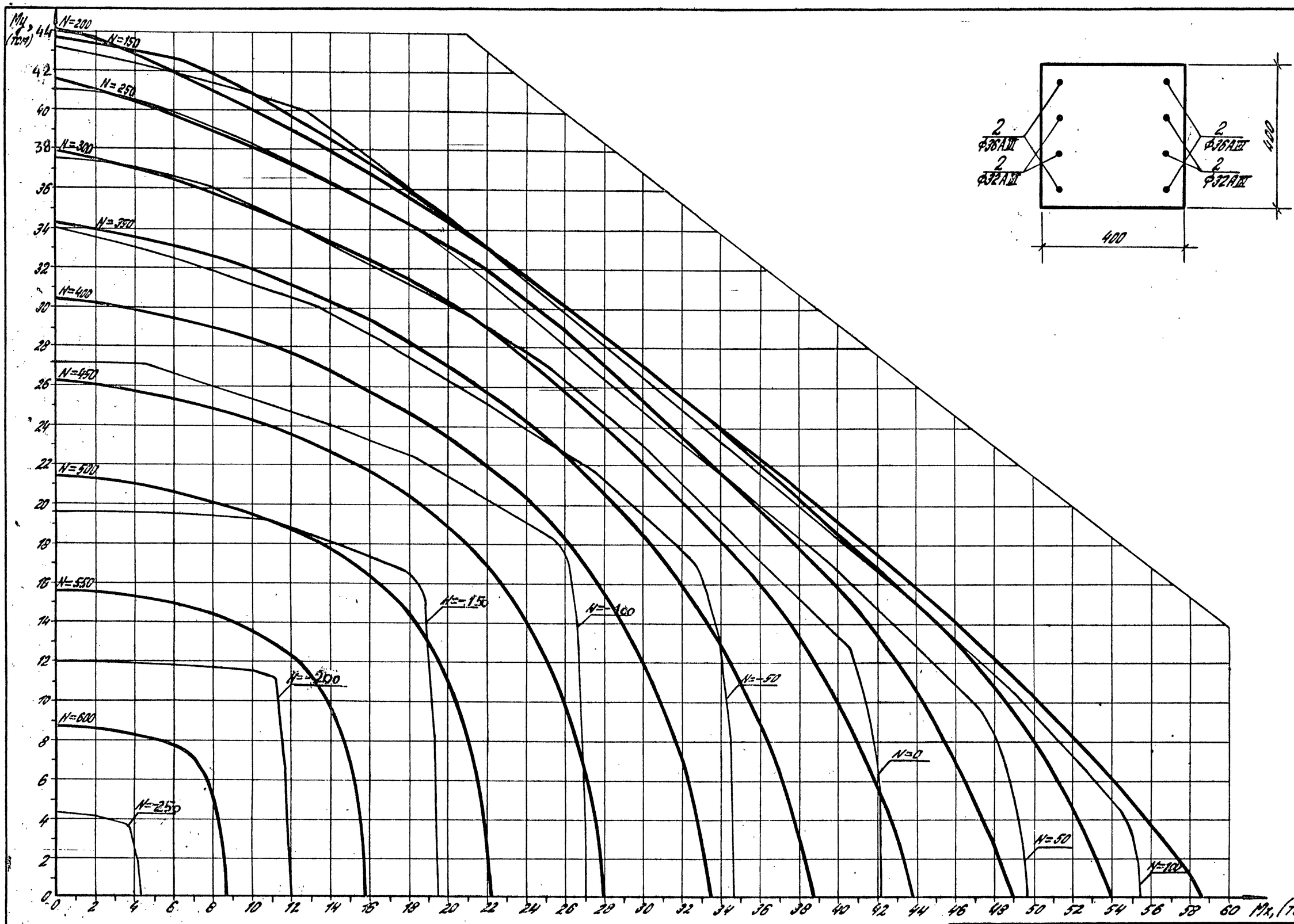
e₀min= 41
e_0^y = 600
N, (тс)
550
500
450
400
350
300
250
200
150
100
50
0
4,0 4,2 4,4 4,6 4,8 5,0 e



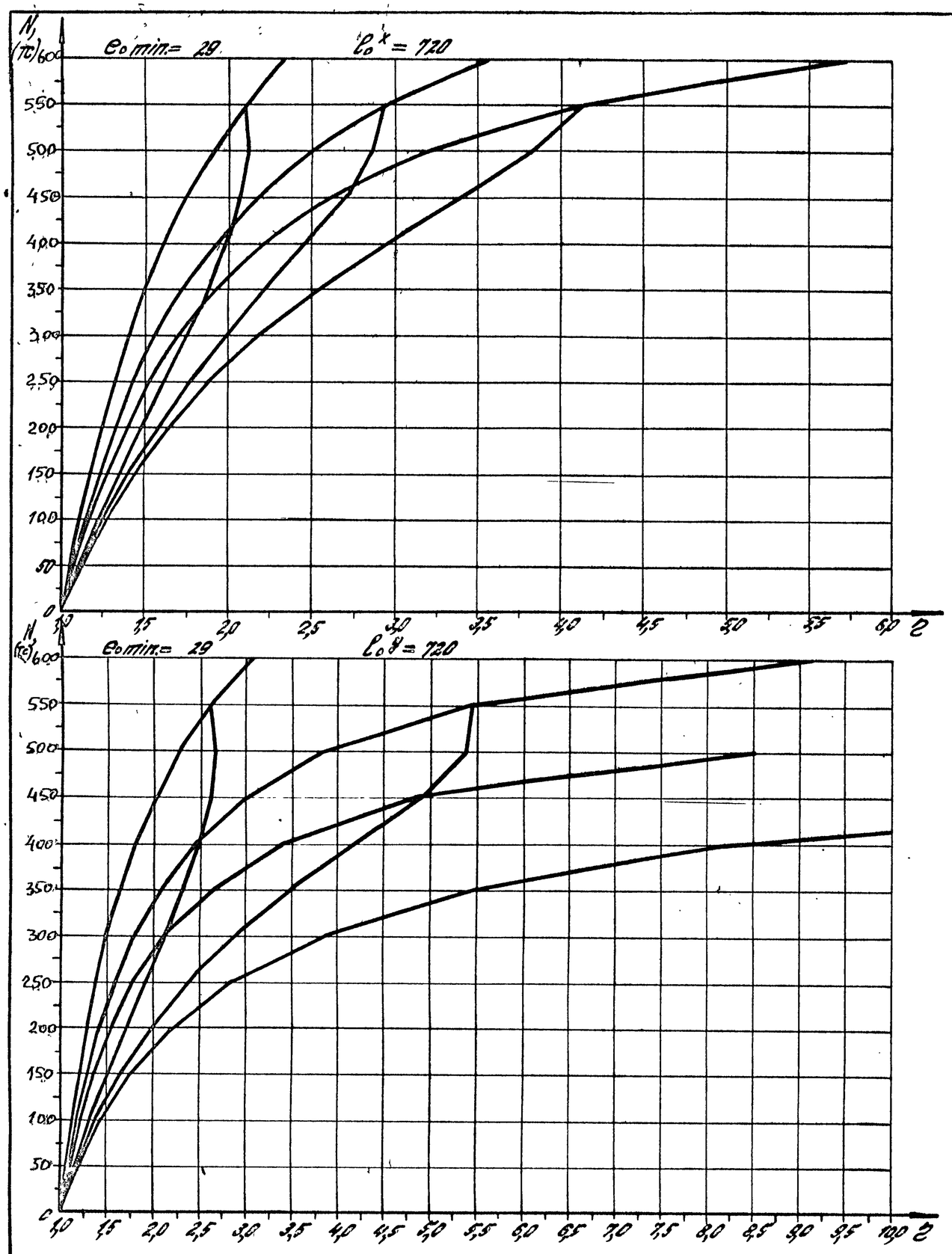
Класс бетона В40 ($R_в = 201{,}6$ кгс/см^2 при учете $\gamma_{в2} = 0{,}9$)

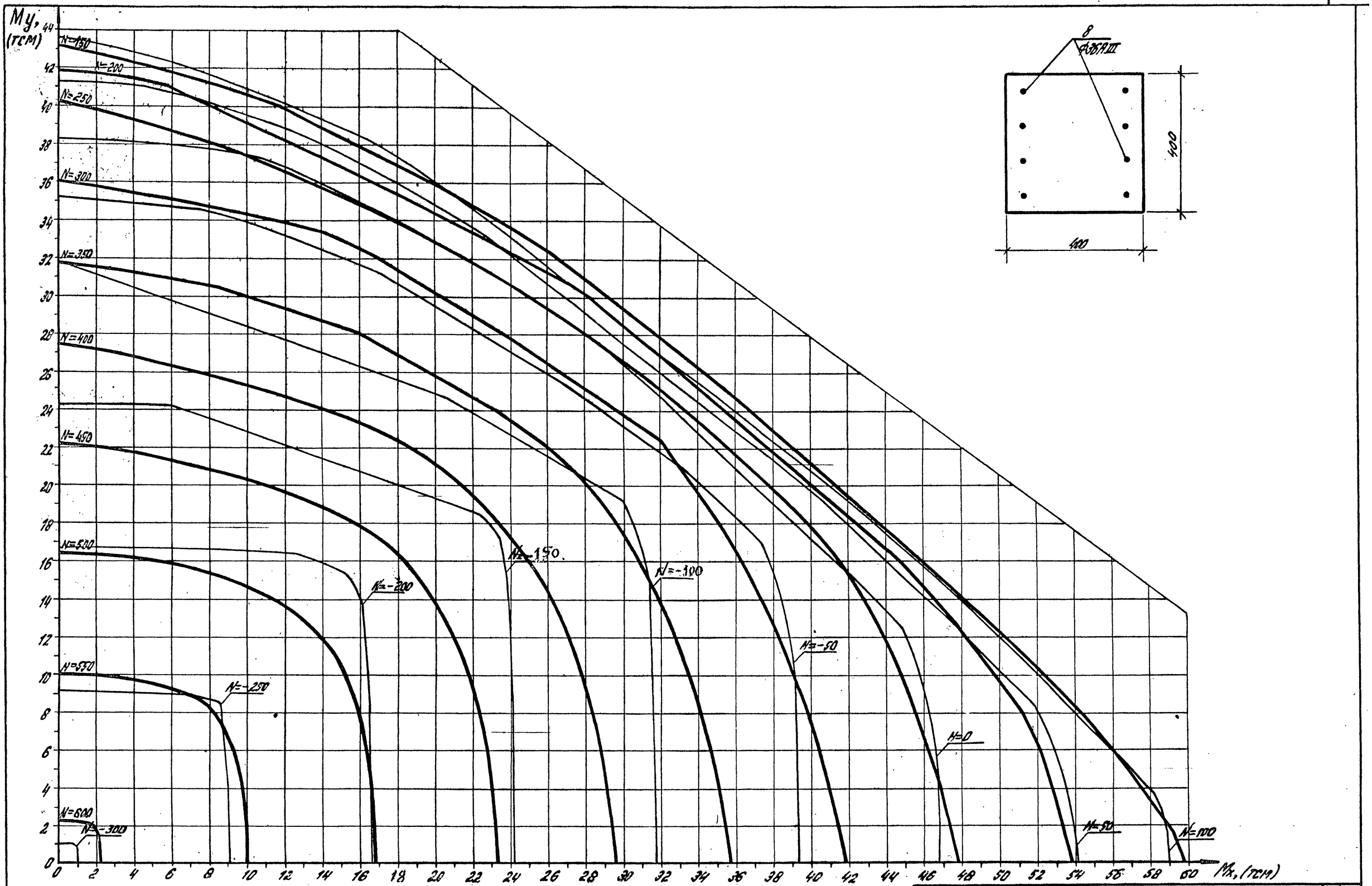

N, (тс)
e₀min= 47
l₀ˣ = 720
550
500
450
400
350
300
250
200
150
100
50
0
1,0
1,5
2,0
2,5
3,0
3,5
4,0
4,5
5,0
5,5
6,0
r


N, (тс)
e₀min= 47
l₀ʸ = 720
550
500
450
400
350
300
250
200
150
100
50
0
1,0
1,5
2,0
2,5
3,0
3,5
4,0
4,5
5,0
5,5
6,0
6,5
7,0
7,5
8,0
8,5
9,0
9,5
10,0
r



Класс бетона В40 ($R_в$=246,4 кгс/см² при учете $\gamma_{в2}$=1,10)

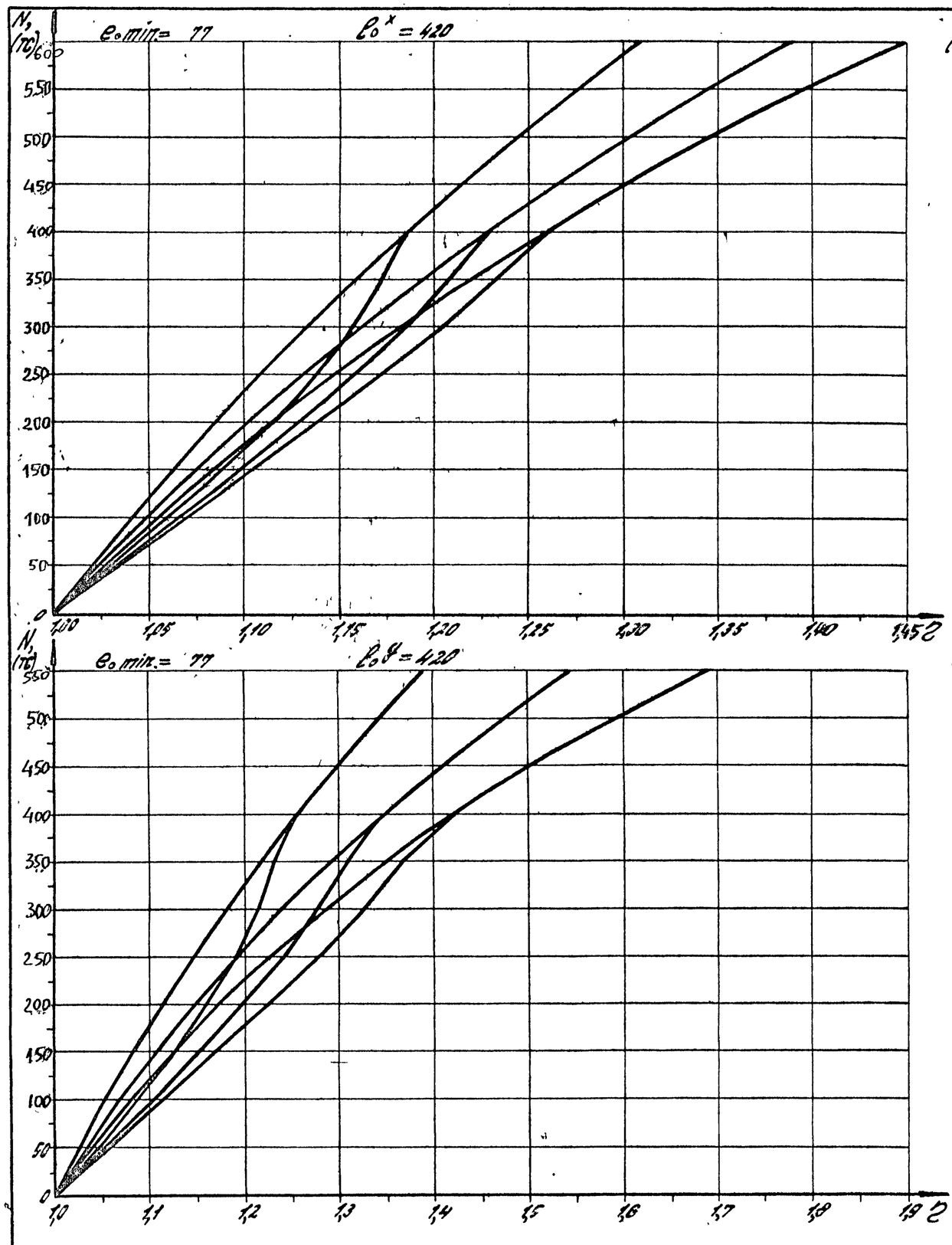

N, (тс)
e₀ min = 29
e₀ max = 720
600
550
500
450
400
350
300
250
200
150
100
50
0
1,0
1,5
2,0
2,5
3,0
3,5
4,0
4,5
5,0
5,5
6,0
6,5
7,0
7,5
8,0
8,5
9,0
9,5
10,0
e
N, (тс)
e₀ min = 29
e₀ max = 720
600
550
500
450
400
350
300
250
200
150
100
50
0
1,0
1,5
2,0
2,5
3,0
3,5
4,0
4,5
5,0
5,5
6,0
6,5
7,0
7,5
8,0
8,5
9,0
9,5
10,0
e

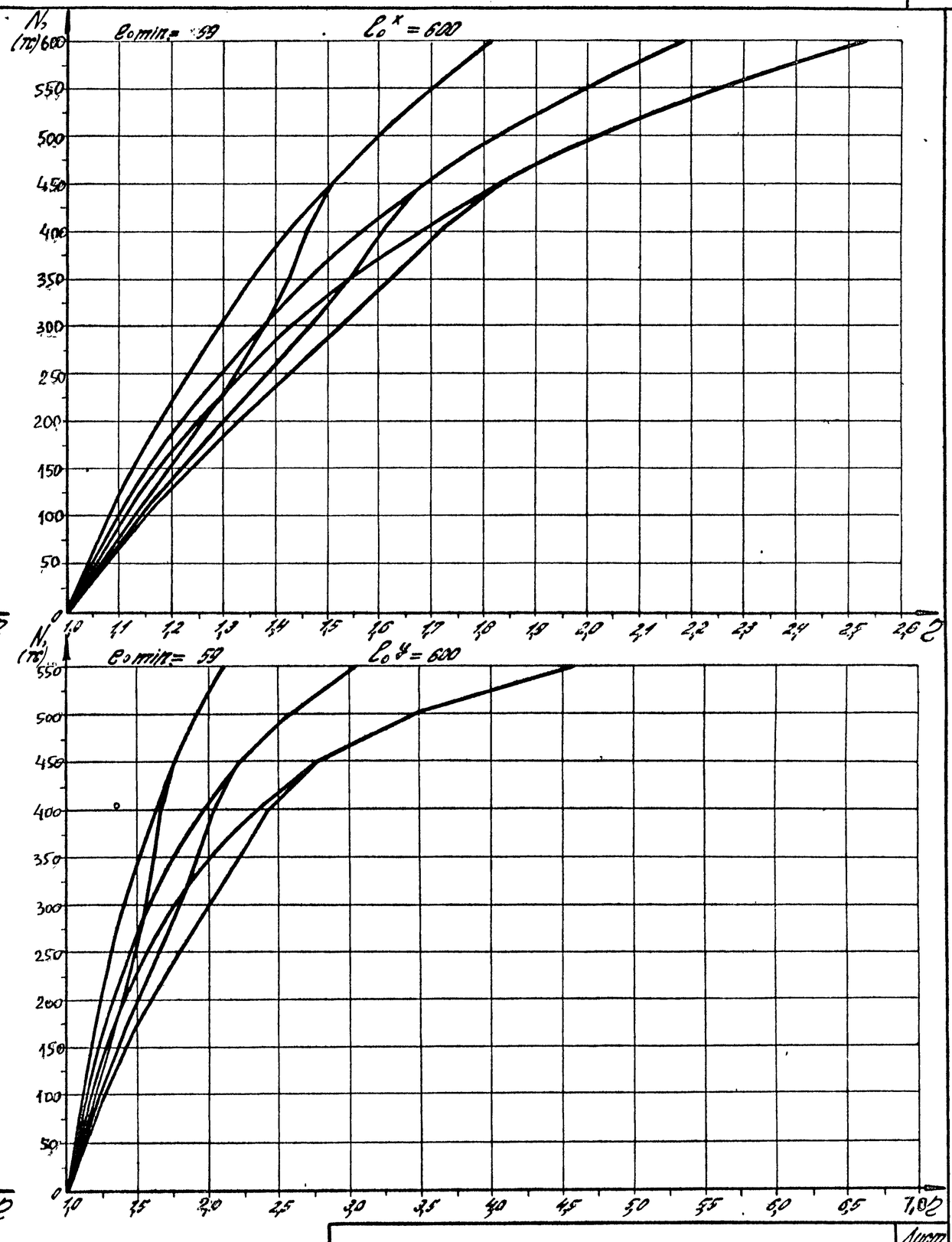


Класс бетона В40 ($R_в$ = 201,6 кгс/см² при учете γ_{b2} = 0,9)

1.020-1/87. 0-6-3 ПЗ

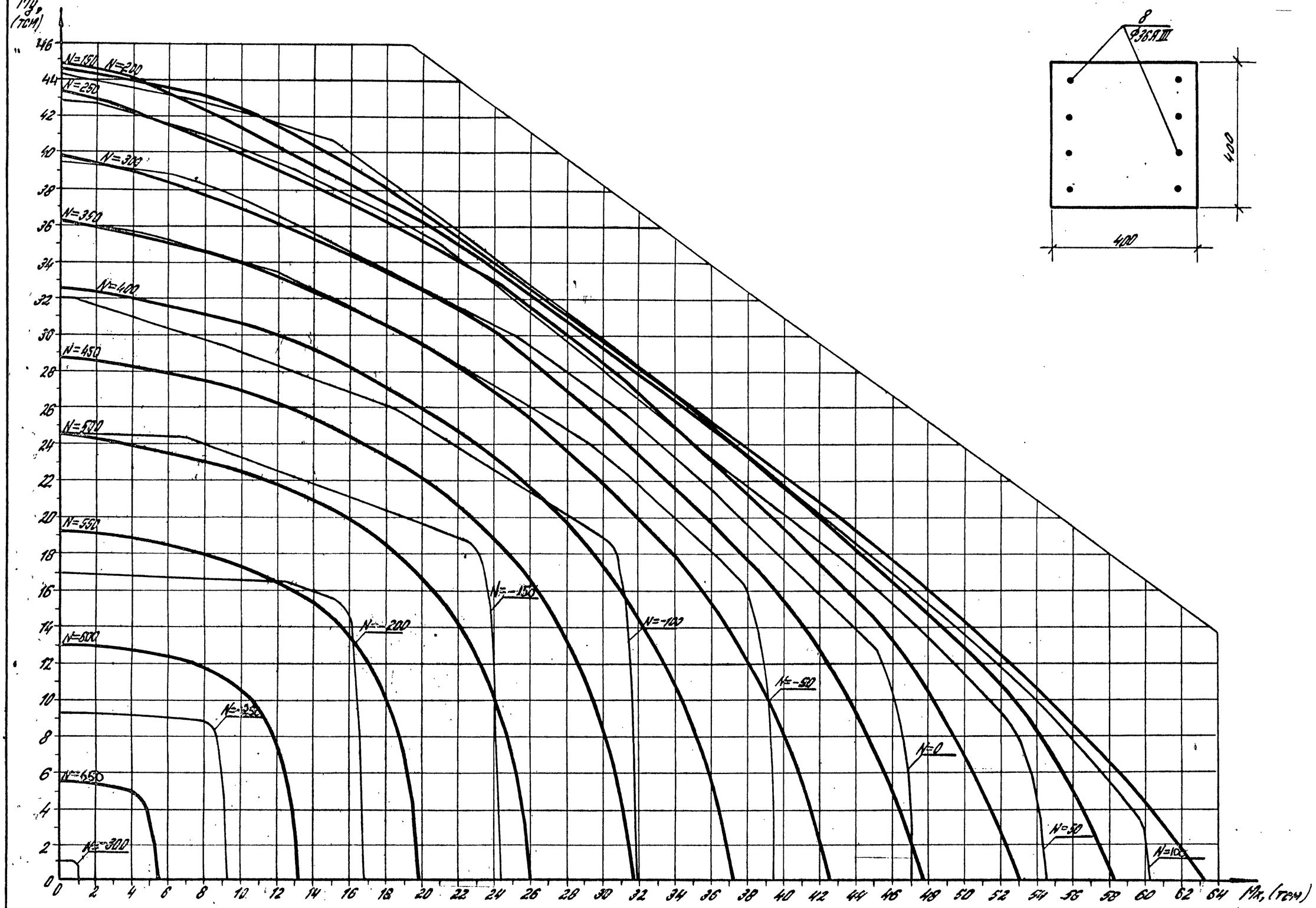
Лист 225





1.020-1/87. 0-6 - ЭТЗ

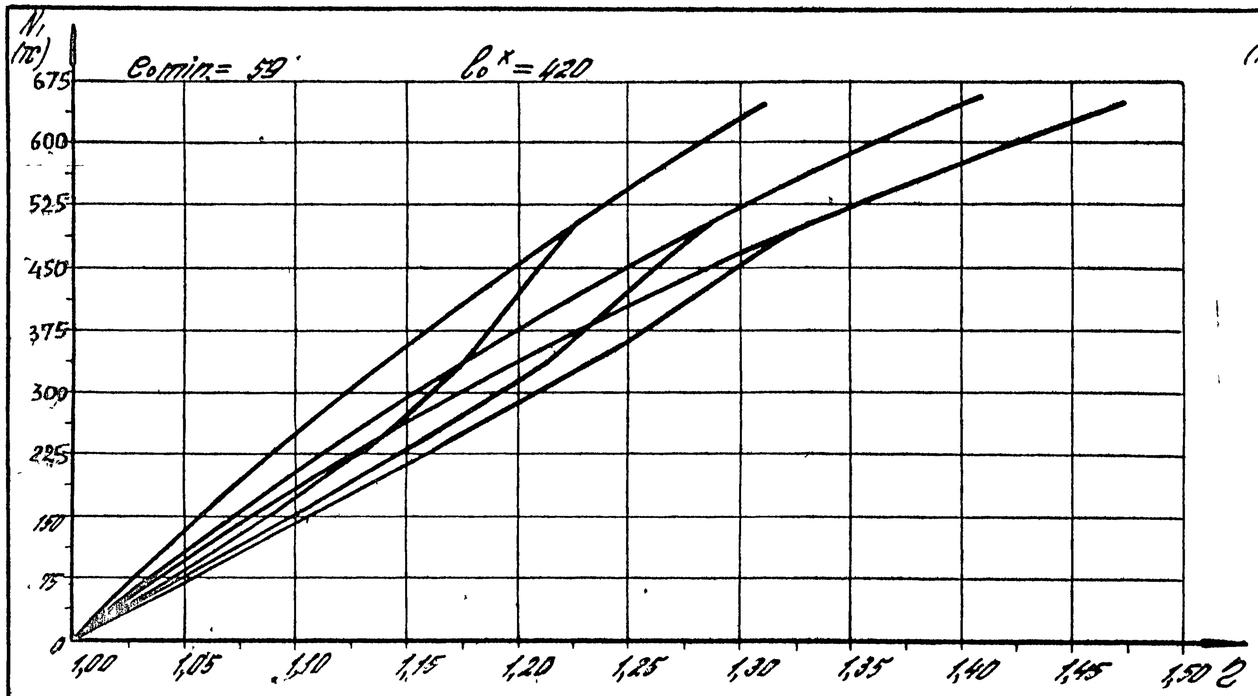
Лист 226

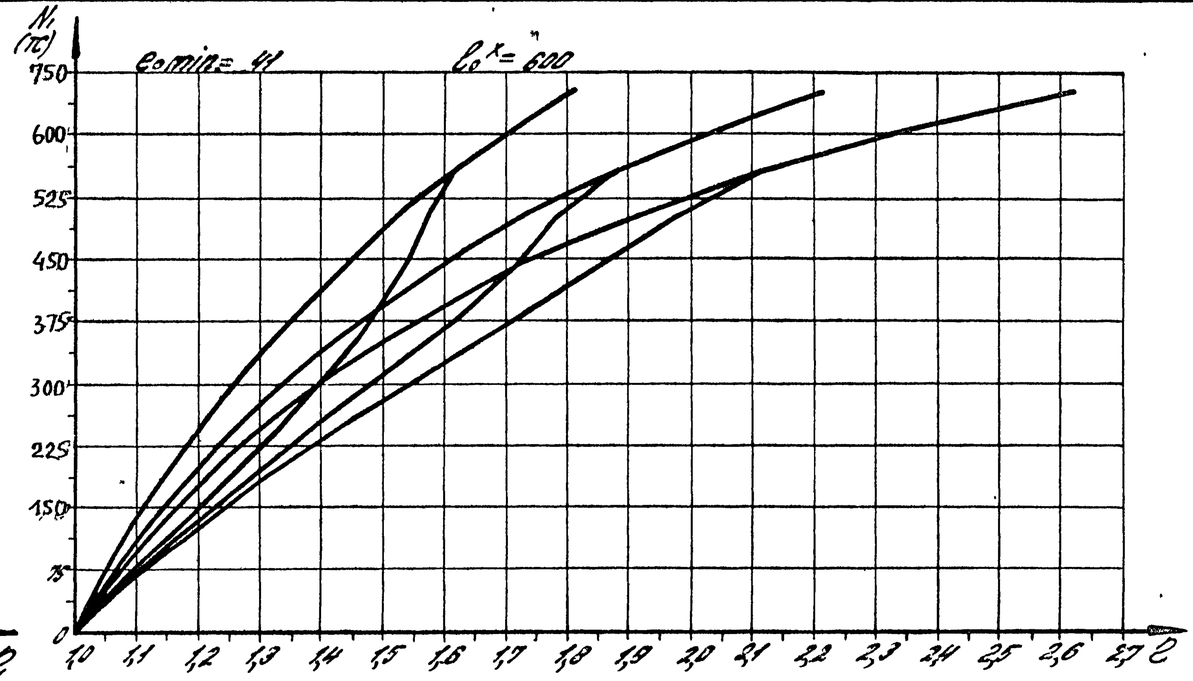


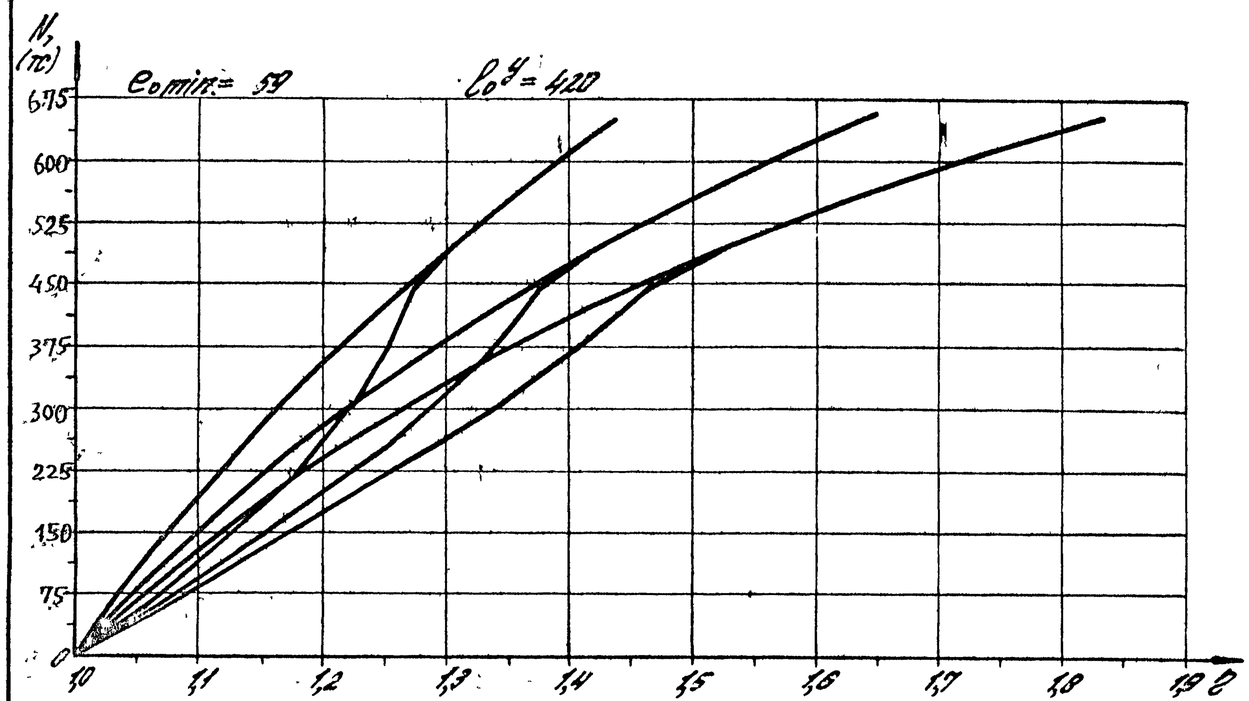
Класс бетона В40 ($R_в$=246,4 кгс/см^2 при учете $\gamma_{в2}$=1,10)

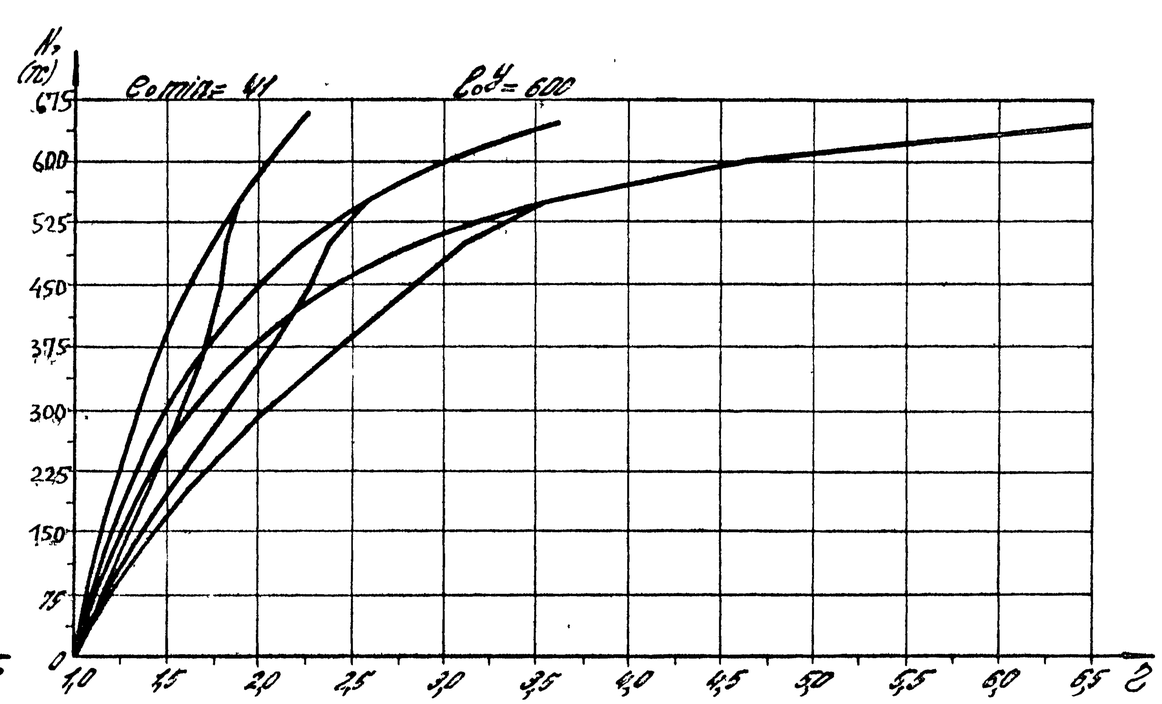
1.020-1/87. 0-6 – 3 ПЗ

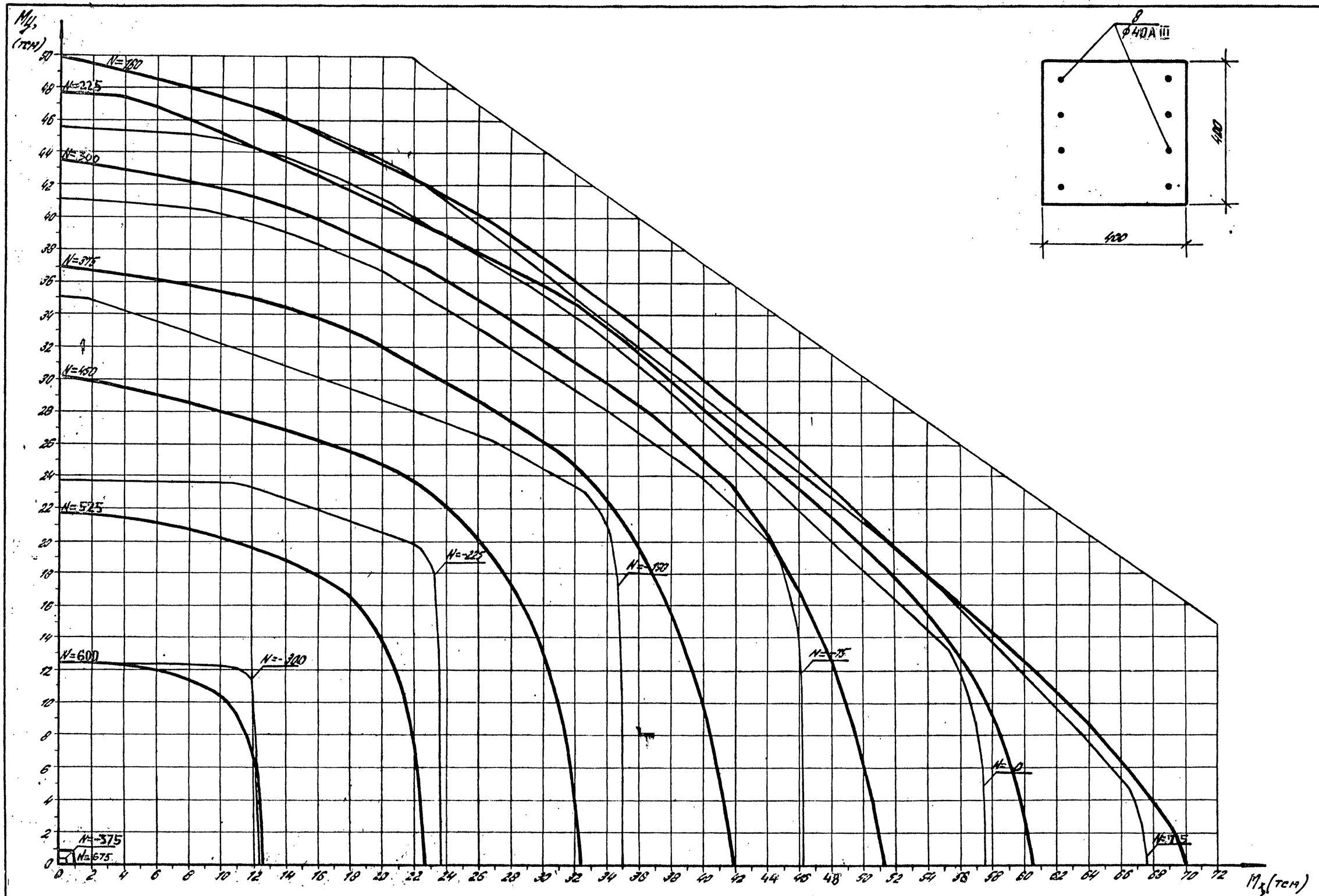
Лист 227


N1 (тс)
Comin.= 59
l_{0}^{x} = 420
675
600
525
450
375
300
225
150
75
0
1,00 1,05 1,10 1,15 1,20 1,25 1,30 1,35 1,40 1,45 1,50 e

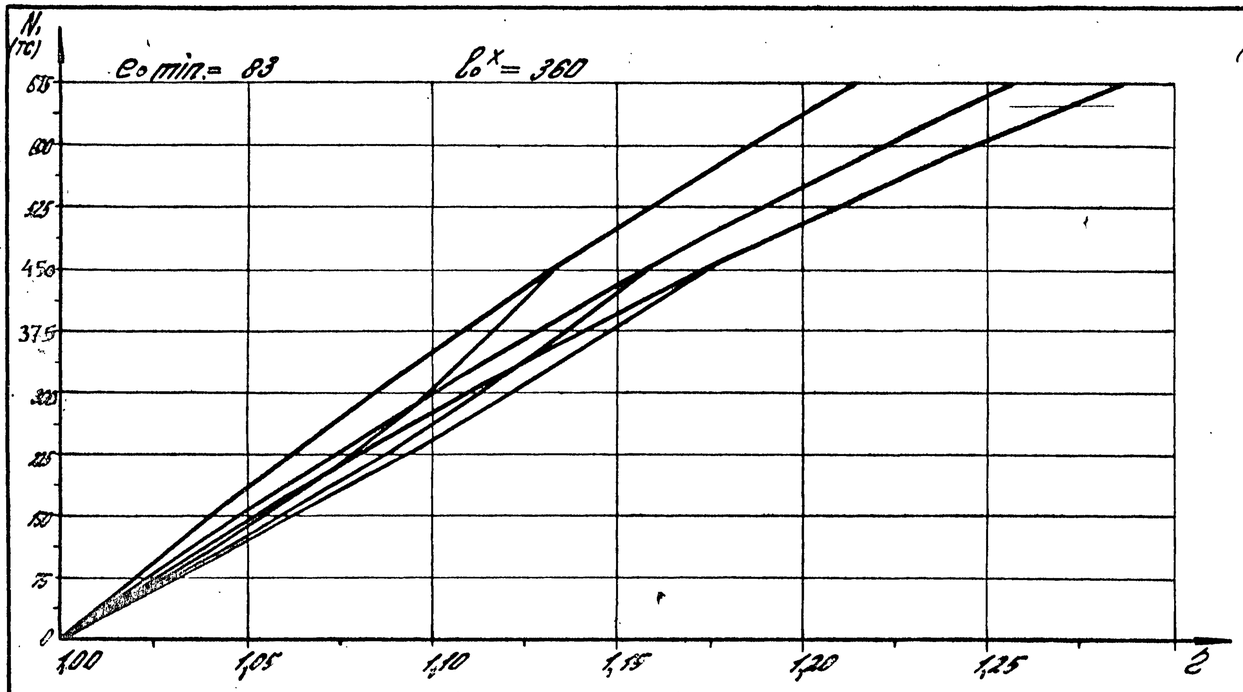

N1 (тс)
Comin.= 41
l_{0}^{x} = 600
750
600
525
450
375
300
225
150
75
0
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 e

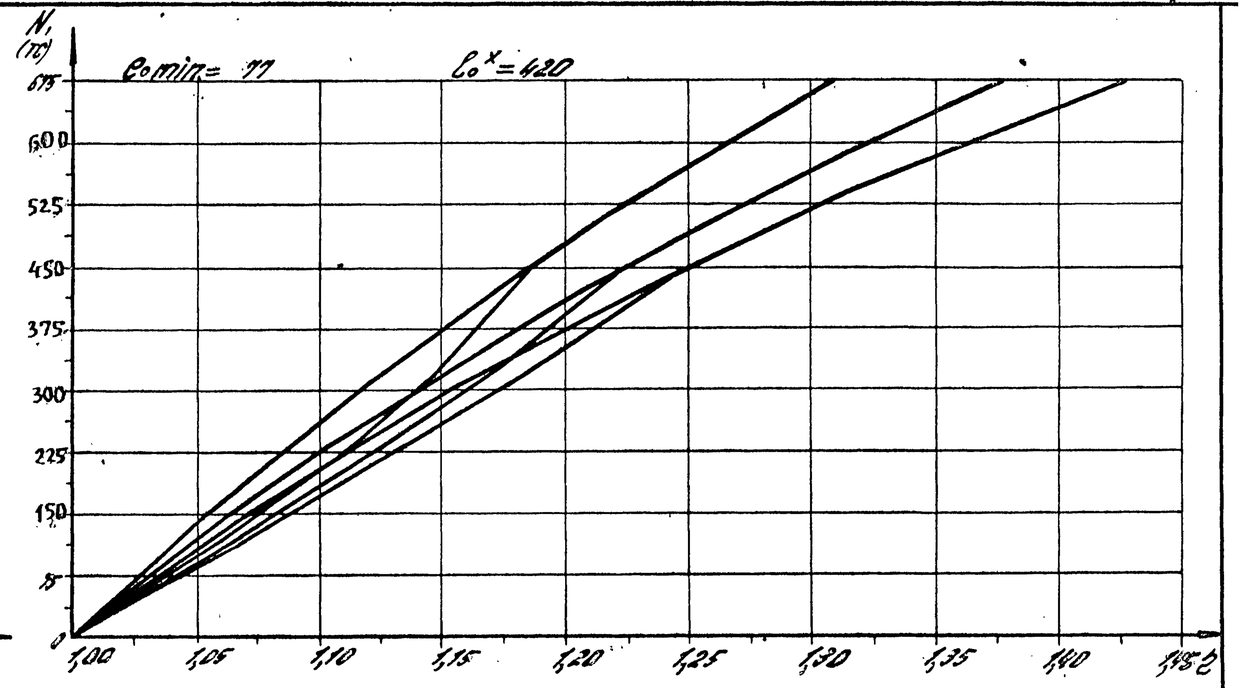

N2 (тс)
Comin.= 59
l_{0}^{y} = 420
675
600
525
450
375
300
225
150
75
0
10 11 12 13 14 15 16 17 18 19 e

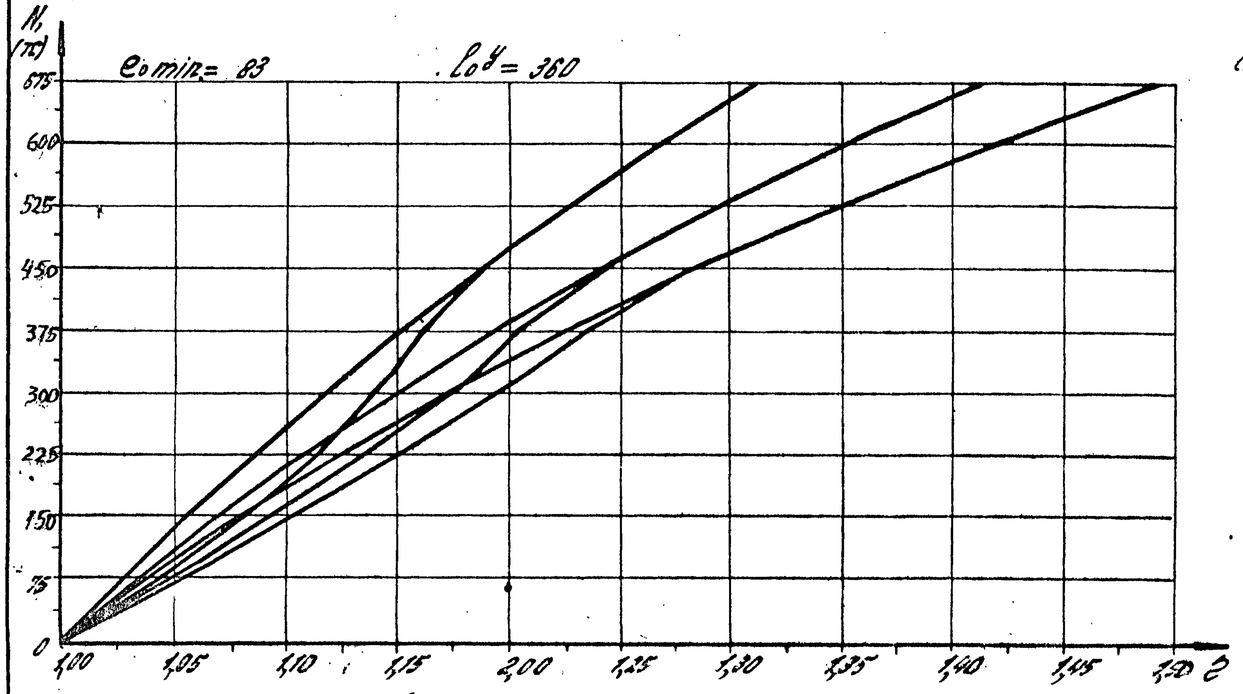

N2 (тс)
Comin.= 41
l_{0}^{y} = 600
675
600
525
450
375
300
225
150
75
0
10 15 20 25 30 35 40 45 50 55 60 65 e

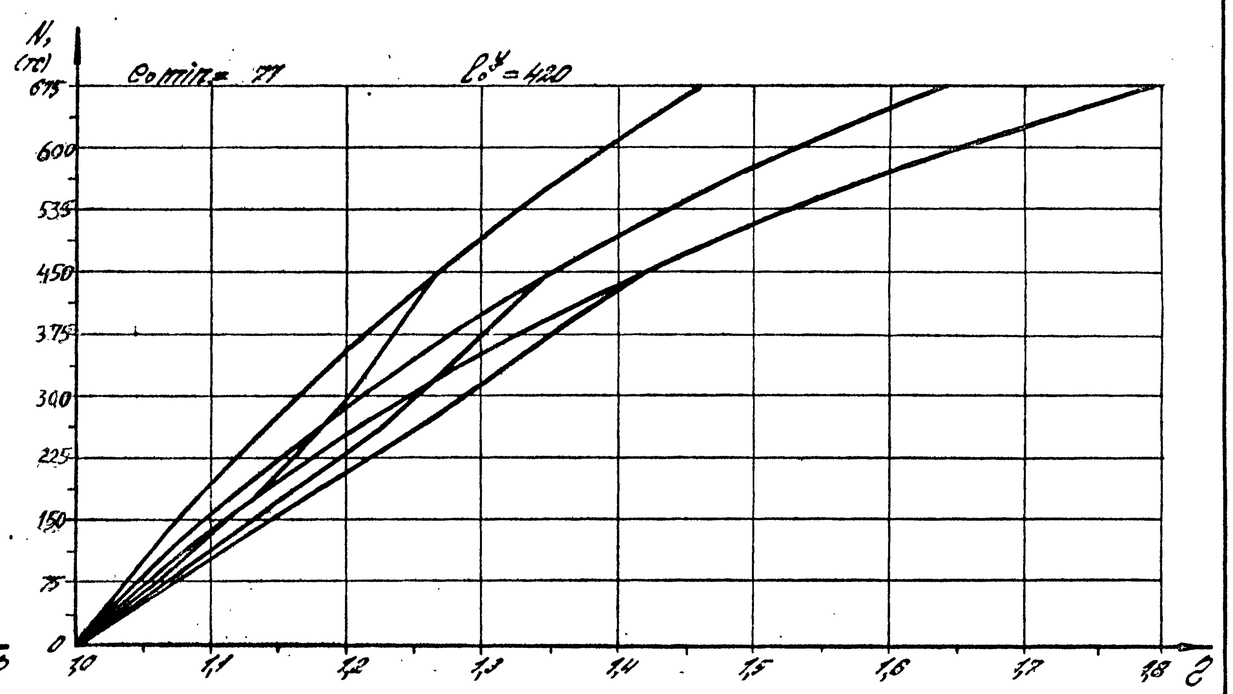


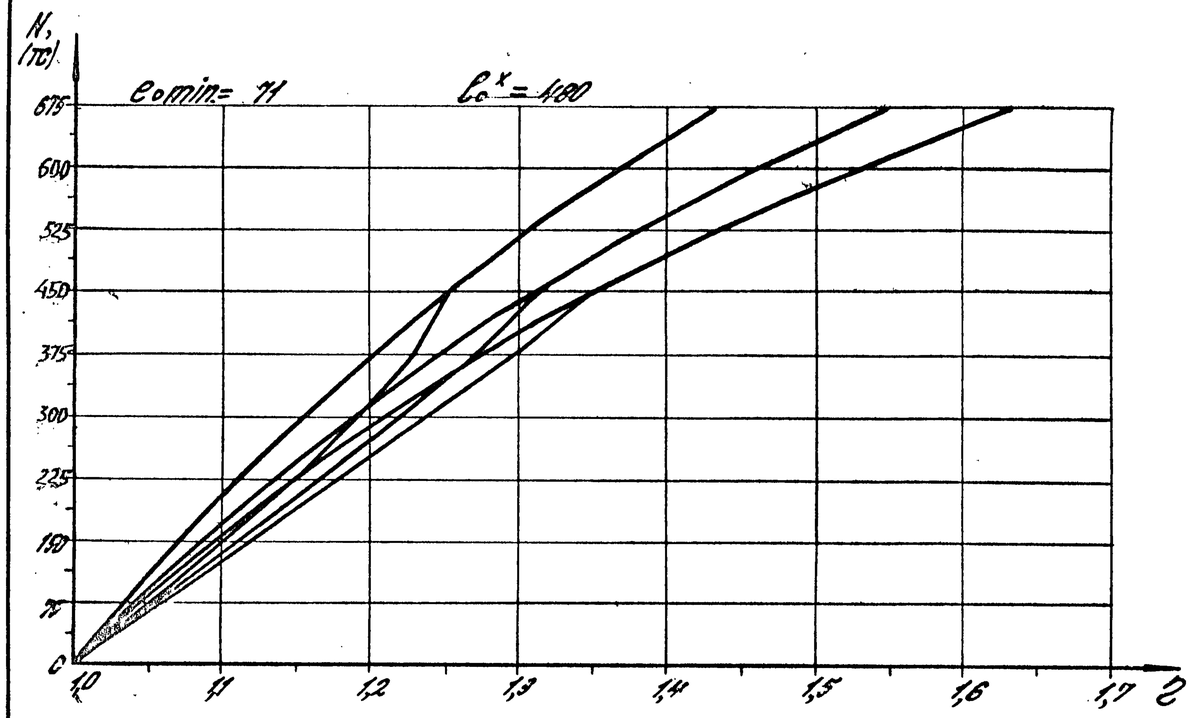
Класс бетона В40 (R_B = 201,6 кгс/см² при учете γ_{b2} = 0,9)

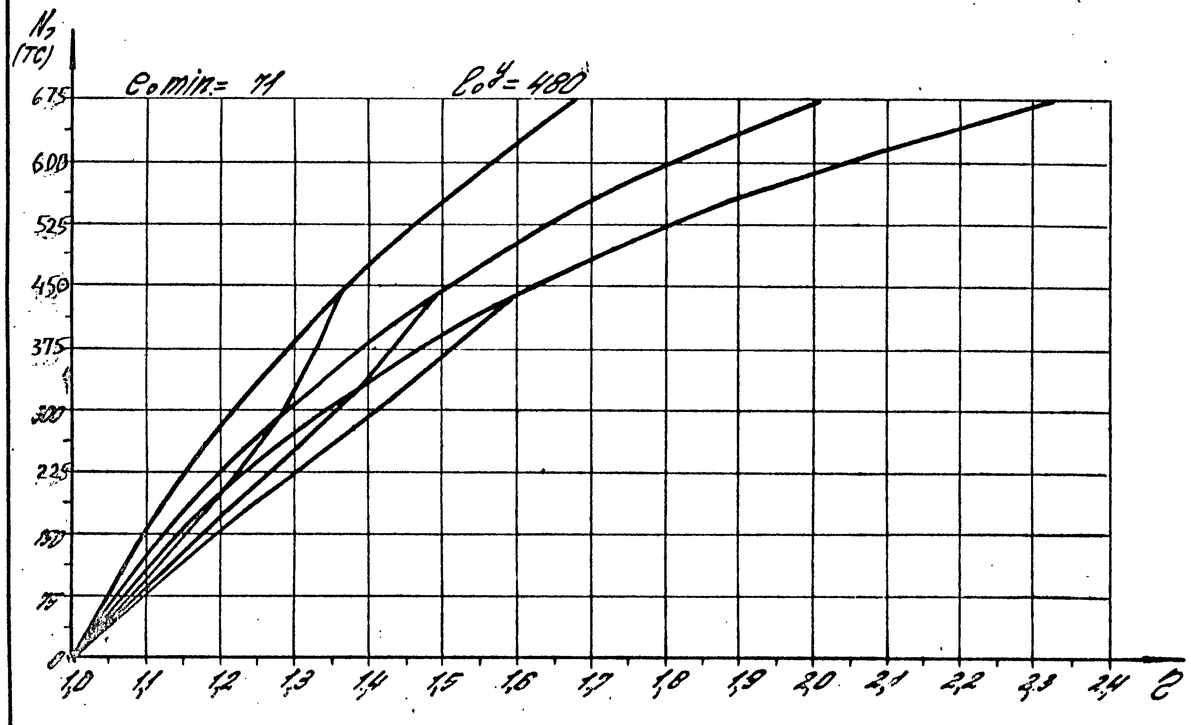

N, (тс)
e₀ min = 83
l₀ˣ = 360
675
600
525
450
375
300
225
150
75
0
1,00
1,05
1,10
1,15
1,20
1,25
e

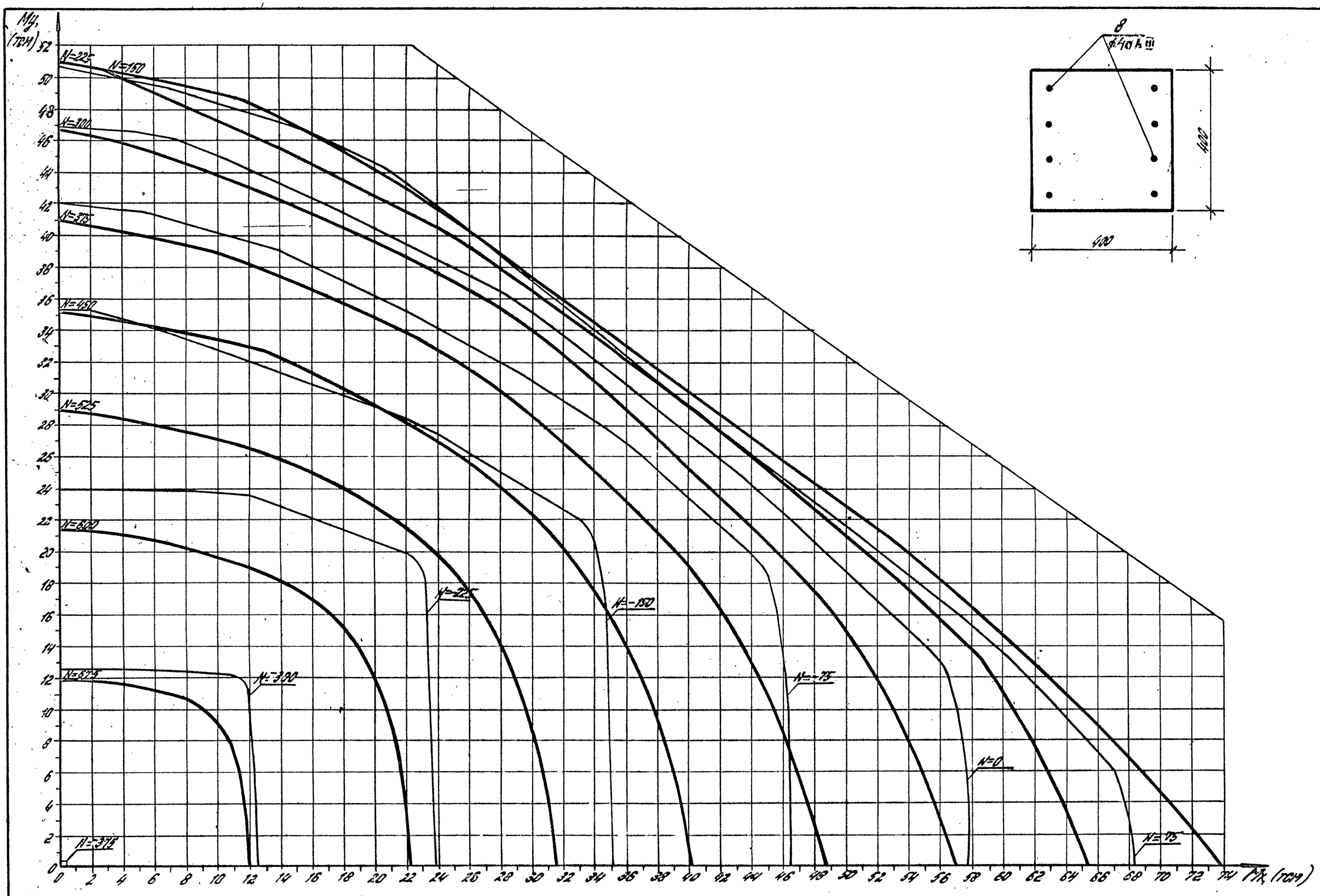

N, (тс)
e₀ min = 77
l₀ˣ = 420
675
600
525
450
375
300
225
150
75
0
1,00
1,05
1,10
1,15
1,20
1,25
1,30
1,35
1,40
1,45
e


N, (тс)
e₀ min = 83
l₀ʸ = 360
675
600
525
450
375
300
225
150
75
0
1,00
1,05
1,10
1,15
2,00
1,25
1,30
1,35
1,40
1,45
1,50
e

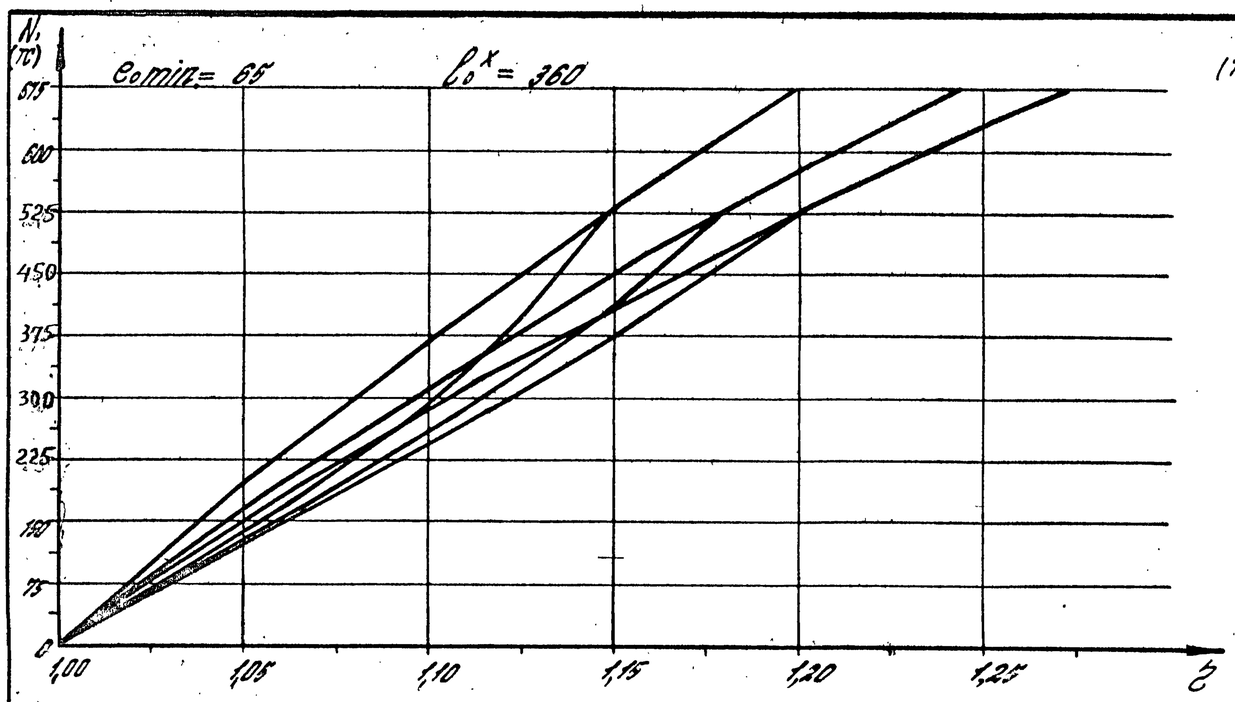

N, (тс)
e₀ min = 77
l₀ʸ = 420
675
600
535
450
375
300
225
150
75
0
1,0
1,1
1,2
1,3
1,4
1,5
1,6
1,7
1,8
e

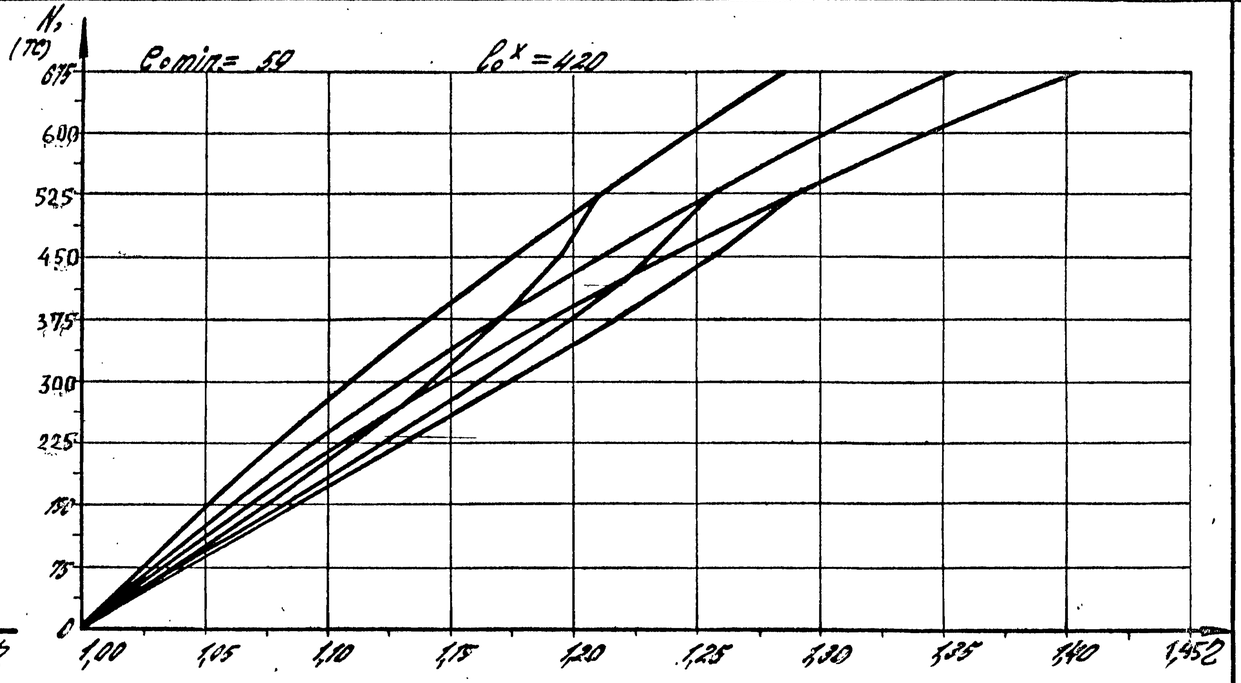

N, (тс)
e0min= 11
Lo x = 480
675
600
525
450
375
300
225
150
75
0
1,0
1,1
1,2
1,3
1,4
1,5
1,6
1,7
e

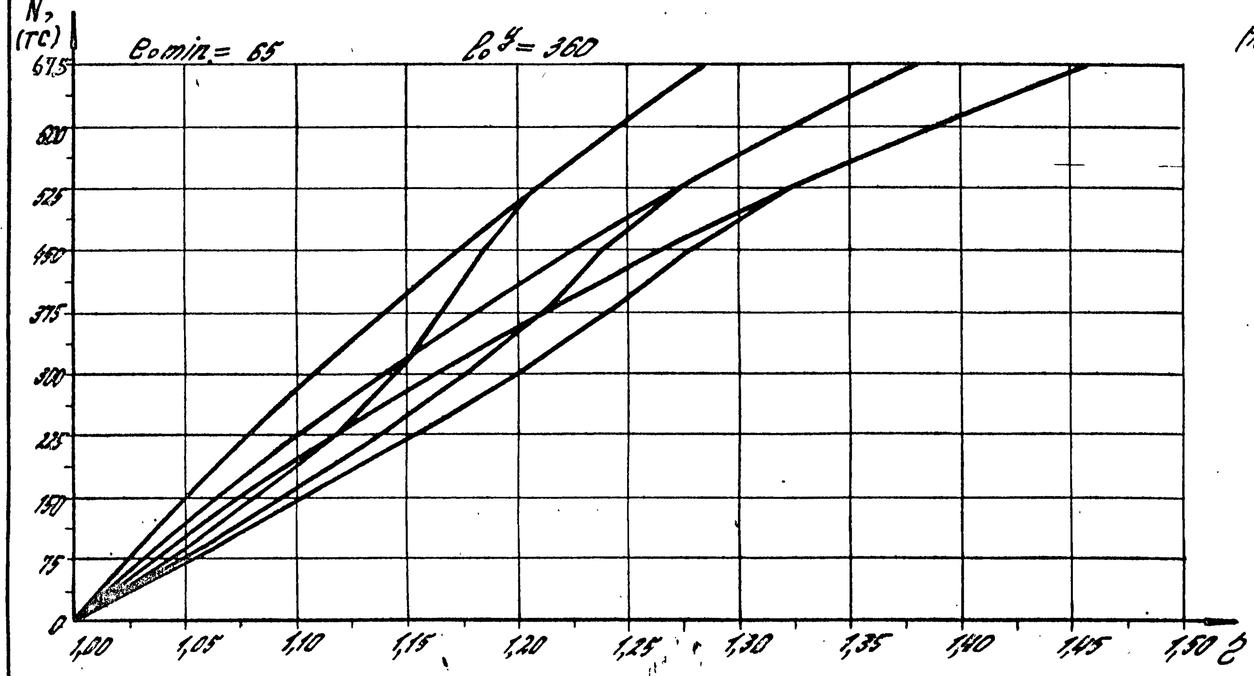

N, (тс)
e0min= 11
Lo y = 480
675
600
525
450
375
300
225
150
75
0
1,0
1,1
1,2
1,3
1,4
1,5
1,6
1,7
1,8
1,9
2,0
2,1
2,2
2,3
2,4
e

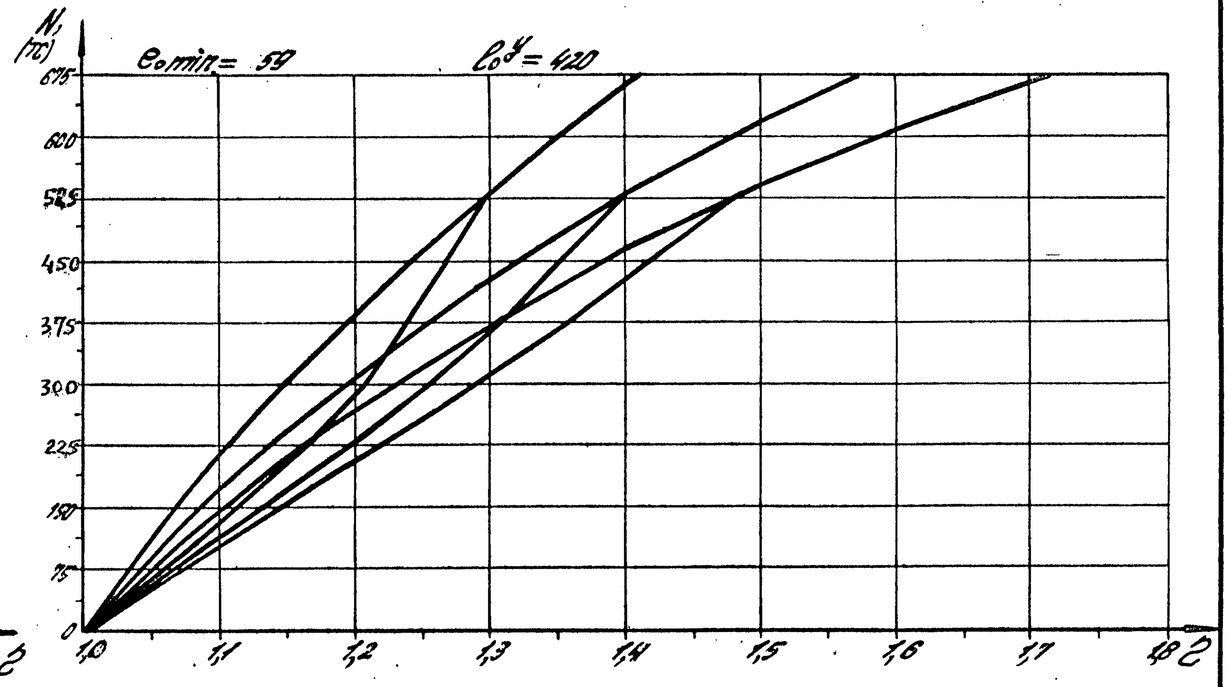


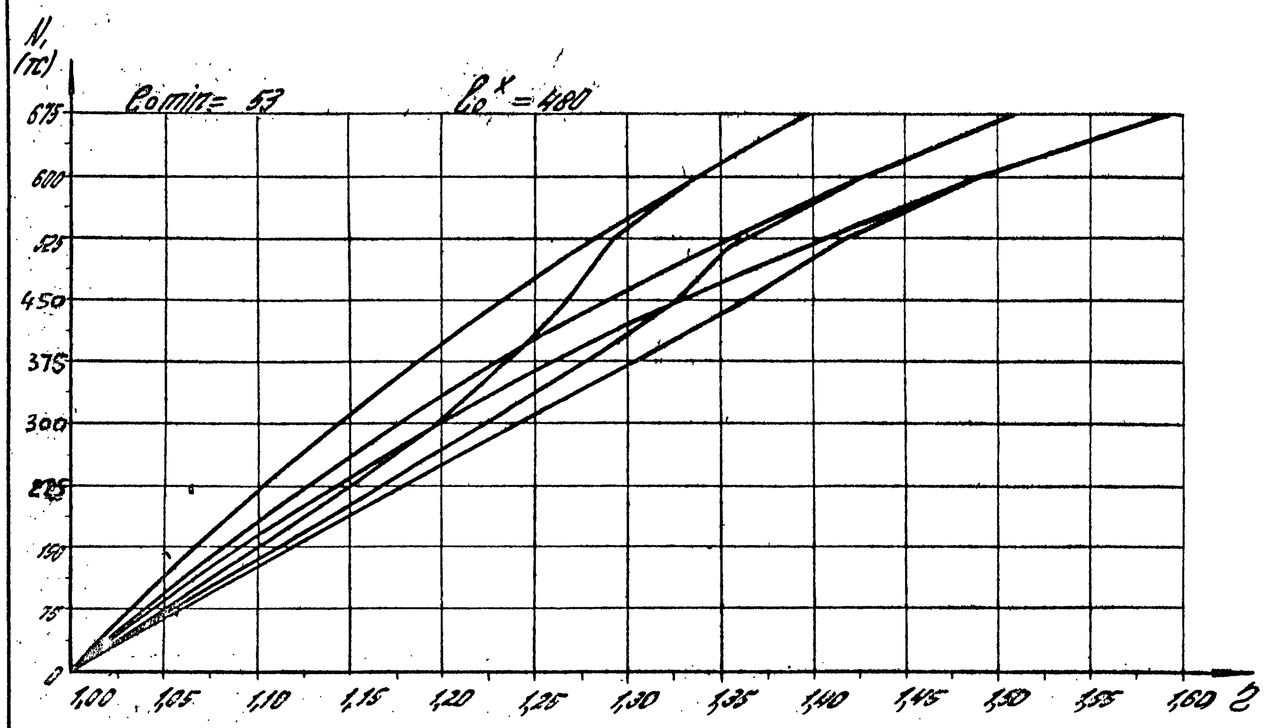
Класс бетона В40 (R_B = 246,4 кгс/см² при учете γ_{B2} = 1,10)

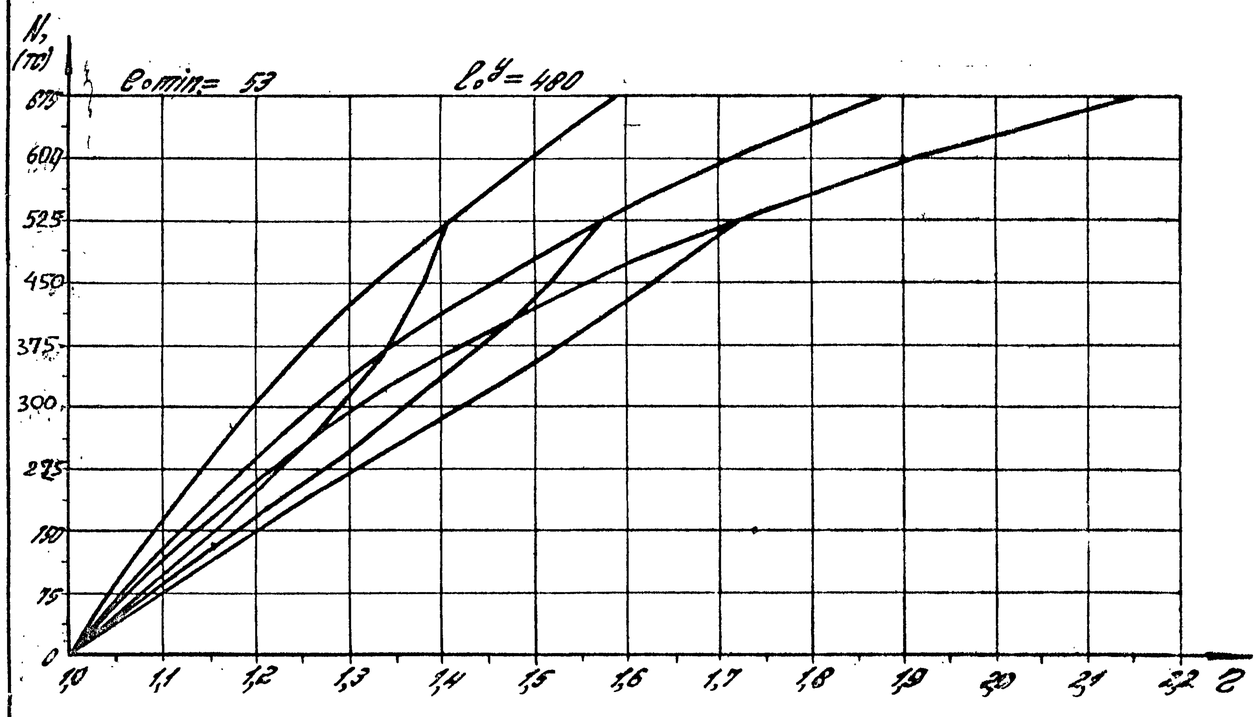

N, (тс)
e₀min = 65
e₀ˣ = 360
675
600
525
450
375
300
225
150
75
0
1,00
1,05
1,10
1,15
1,20
1,25
e

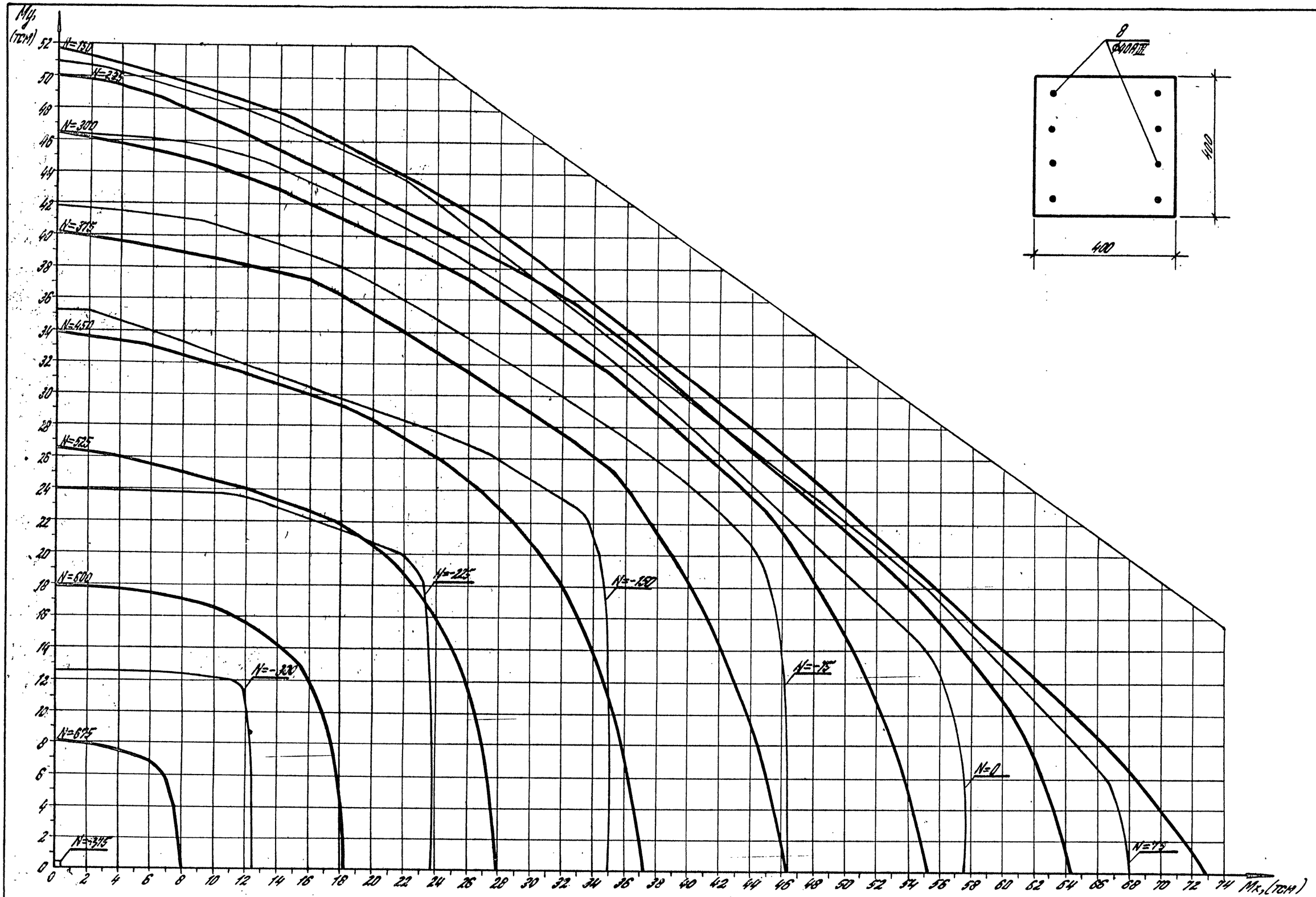

N, (тс)
e₀min = 59
e₀ˣ = 420
675
600
525
450
375
300
225
150
75
0
1,00
1,05
1,10
1,15
1,20
1,25
1,30
1,35
1,40
1,452


N, (тс)
e₀min = 65
e₀ʸ = 360
675
600
525
450
375
300
225
150
75
0
1,00
1,05
1,10
1,15
1,20
1,25
1,30
1,35
1,40
1,45
1,50
e


N, (тс)
e₀min = 59
e₀ʸ = 420
675
600
525
450
375
300
225
150
75
0
1,0
1,1
1,2
1,3
1,4
1,5
1,6
1,7
1,8
e


N, (тс)
e₀min= 53
e₀ˣ = 480
675
600
525
450
375
300
225
150
75
0
1,00
1,05
1,10
1,15
1,20
1,25
1,30
1,35
1,40
1,45
1,50
1,55
1,60
e


N, (тс)
e₀min= 53
e₀ʸ = 480
675
600
525
450
375
300
225
150
75
0
1,0
1,1
1,2
1,3
1,4
1,5
1,6
1,7
1,8
1,9
2,0
2,1
2,2
e

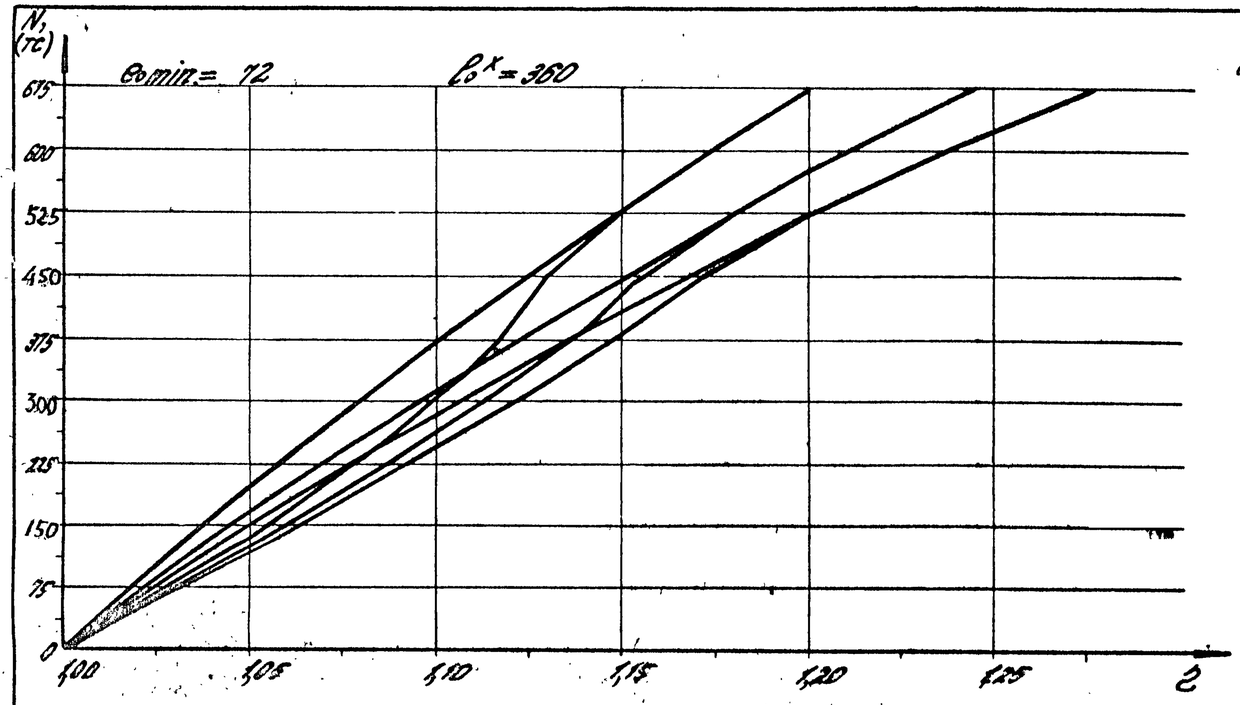


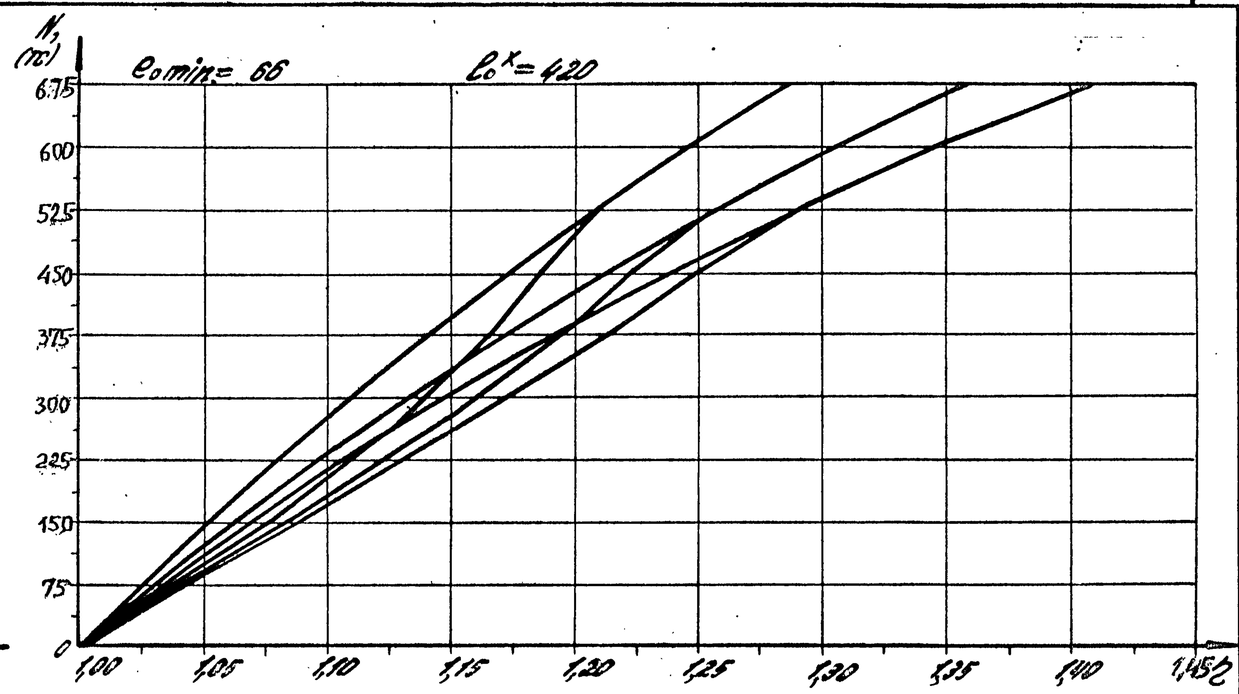
Класс бетона В45 (R_B = 229,5 кгс/см² при учете γ_{B2} = 0,9)

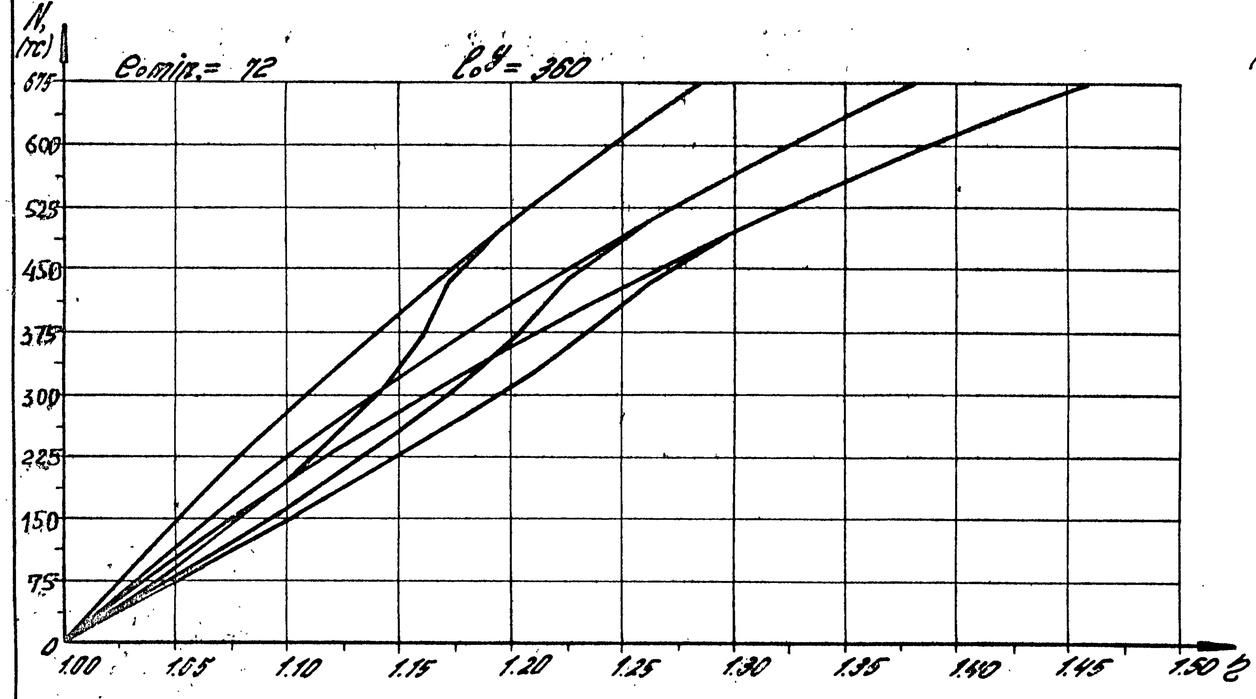
1.020-1/87.0-6-3 ПЗ

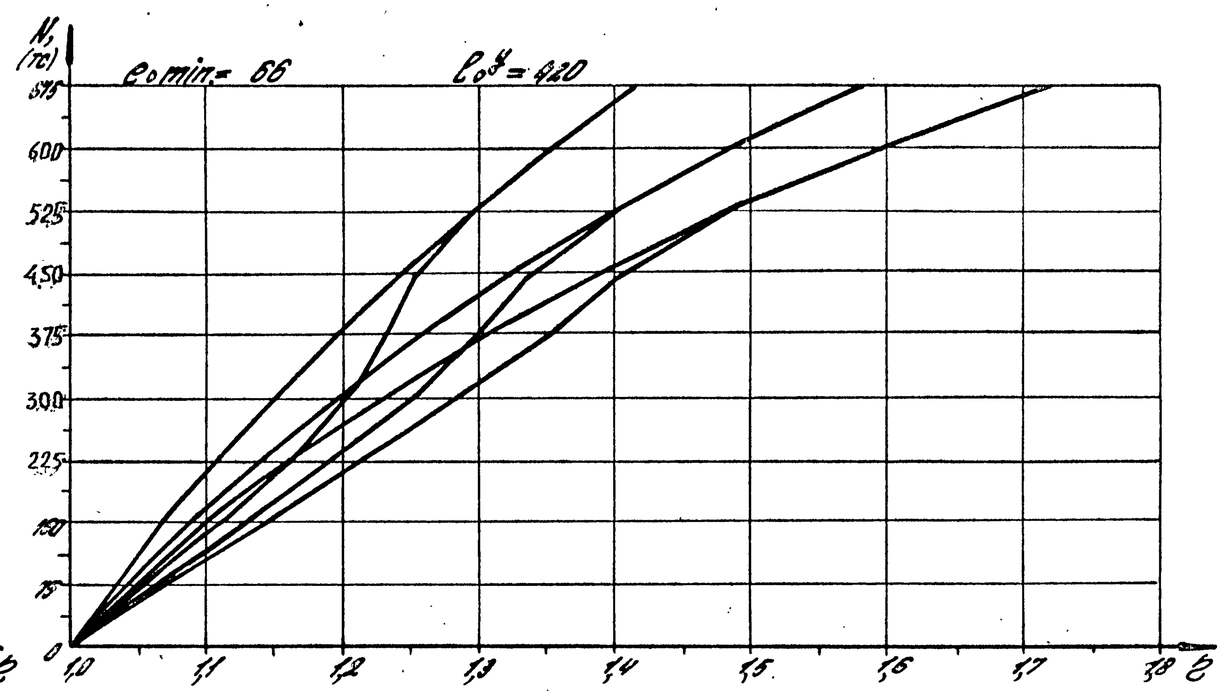
Лист 235

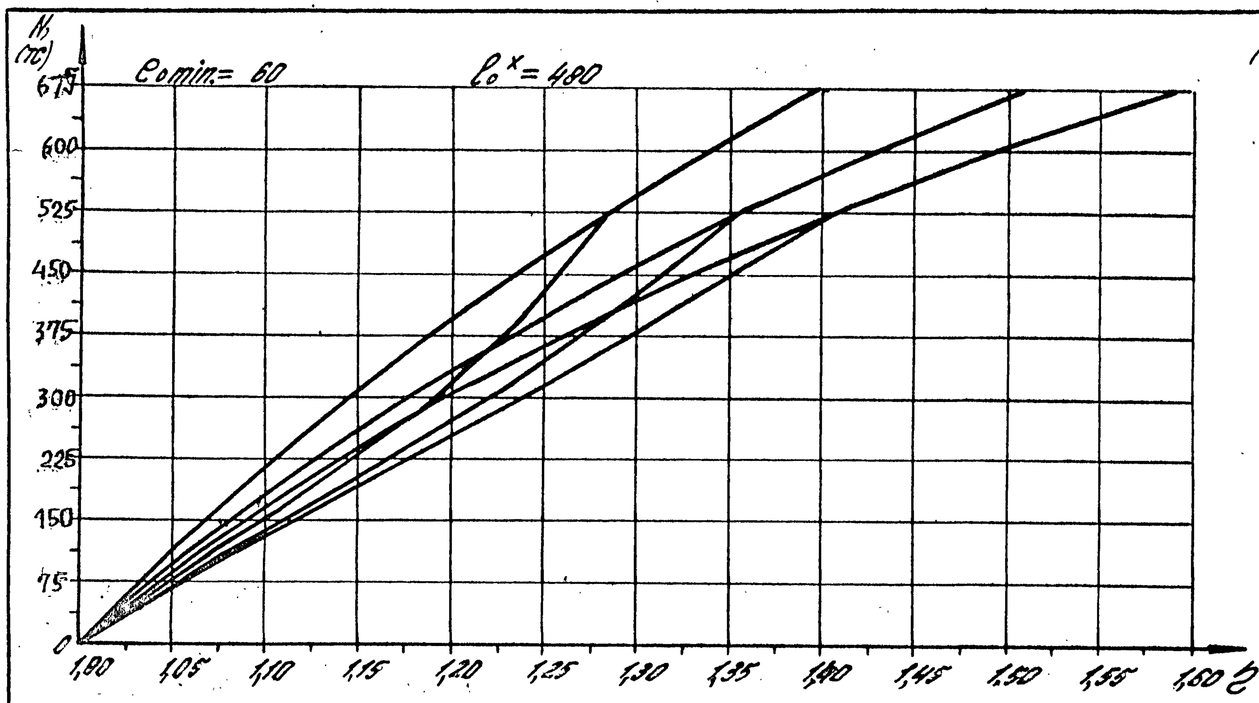
24788-03. 41

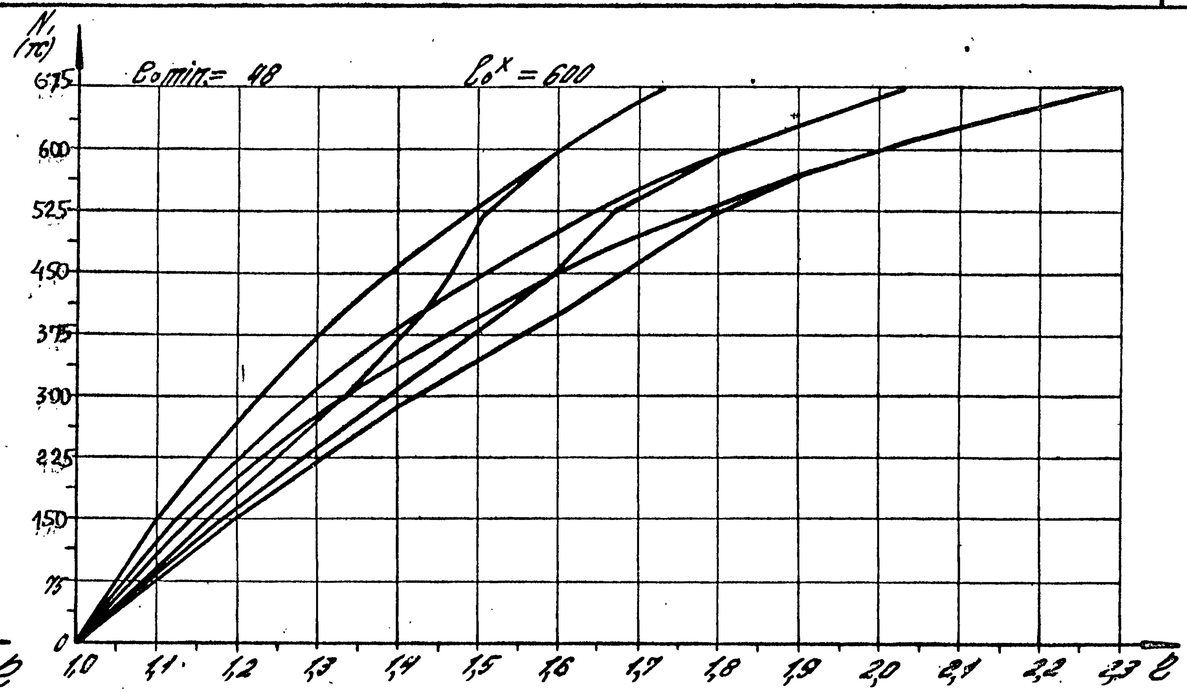

N, (тс)
e₀min = 72
l₀ˣ = 360
675
600
525
450
375
300
225
150
75
0
1,00
1,05
1,10
1,15
1,20
1,25
e

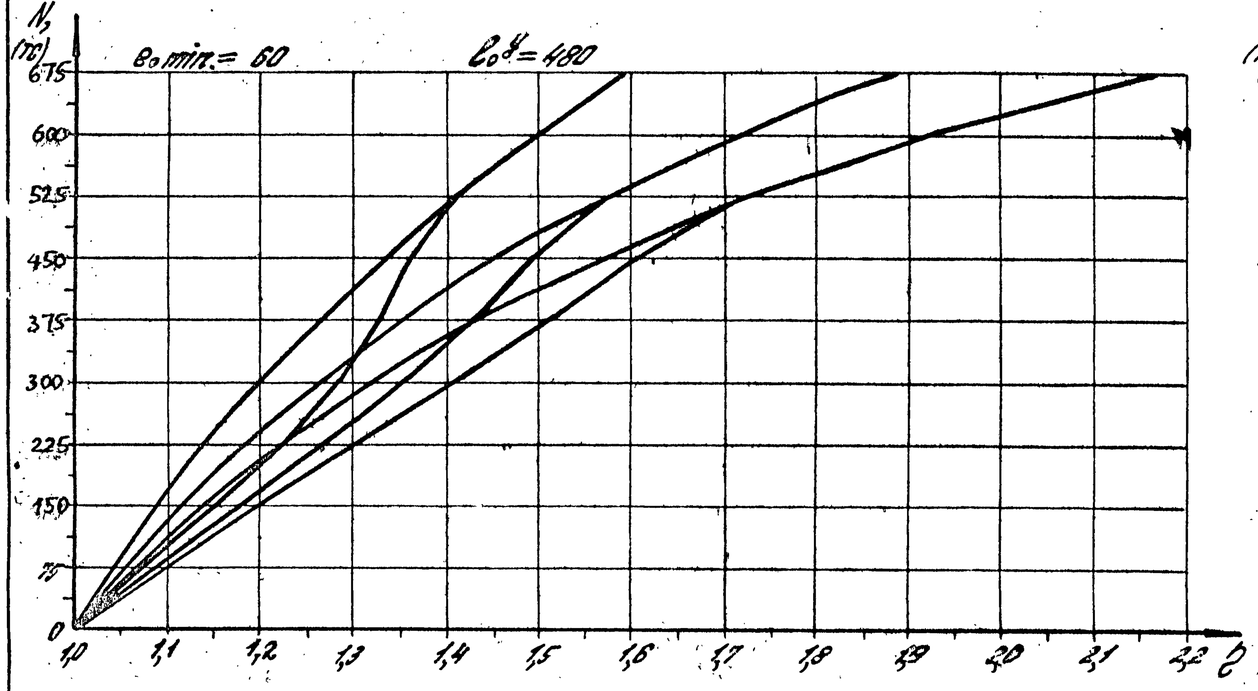

N, (тс)
e₀min = 66
l₀ˣ = 420
675
600
525
450
375
300
225
150
75
0
1,00
1,05
1,10
1,15
1,20
1,25
1,30
1,35
1,40
1,45
e

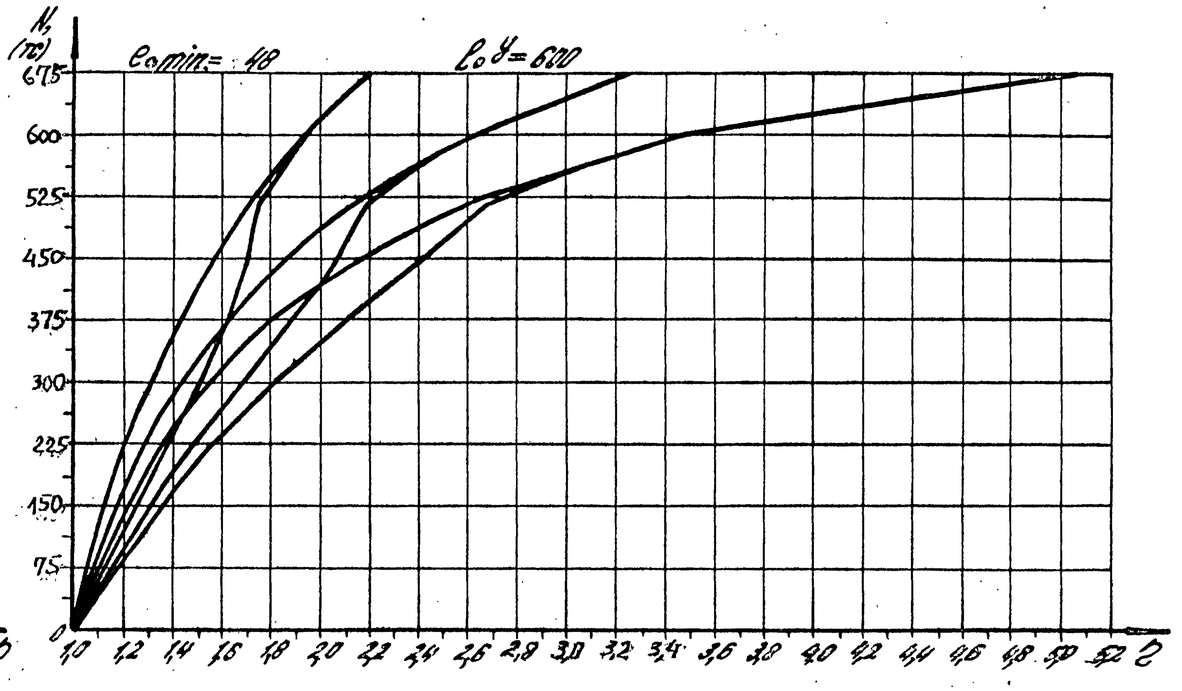

N, (тс)
e₀min = 72
l₀ʸ = 360
675
600
525
450
375
300
225
150
75
0
1.00
1.05
1.10
1.15
1.20
1.25
1.30
1.35
1.40
1.45
1.50
e

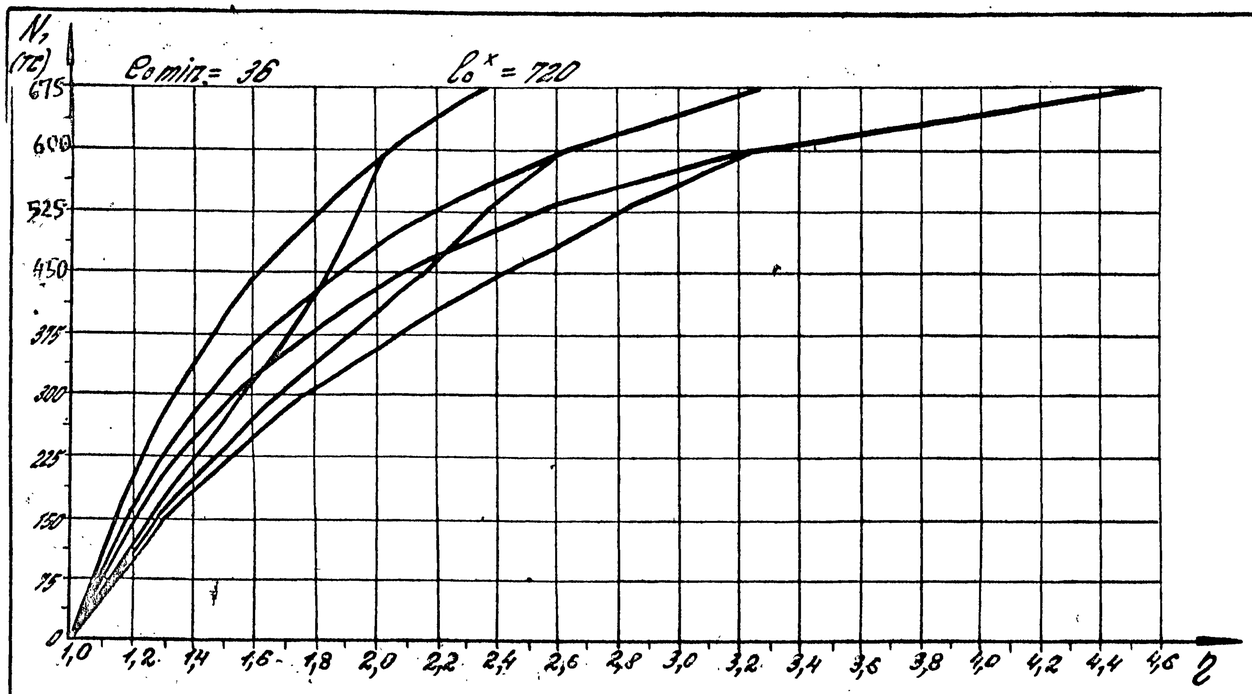

N, (тс)
e₀min = 66
l₀ʸ = 420
675
600
525
450
375
300
225
150
75
0
1,0
1,1
1,2
1,3
1,4
1,5
1,6
1,7
1,8
e

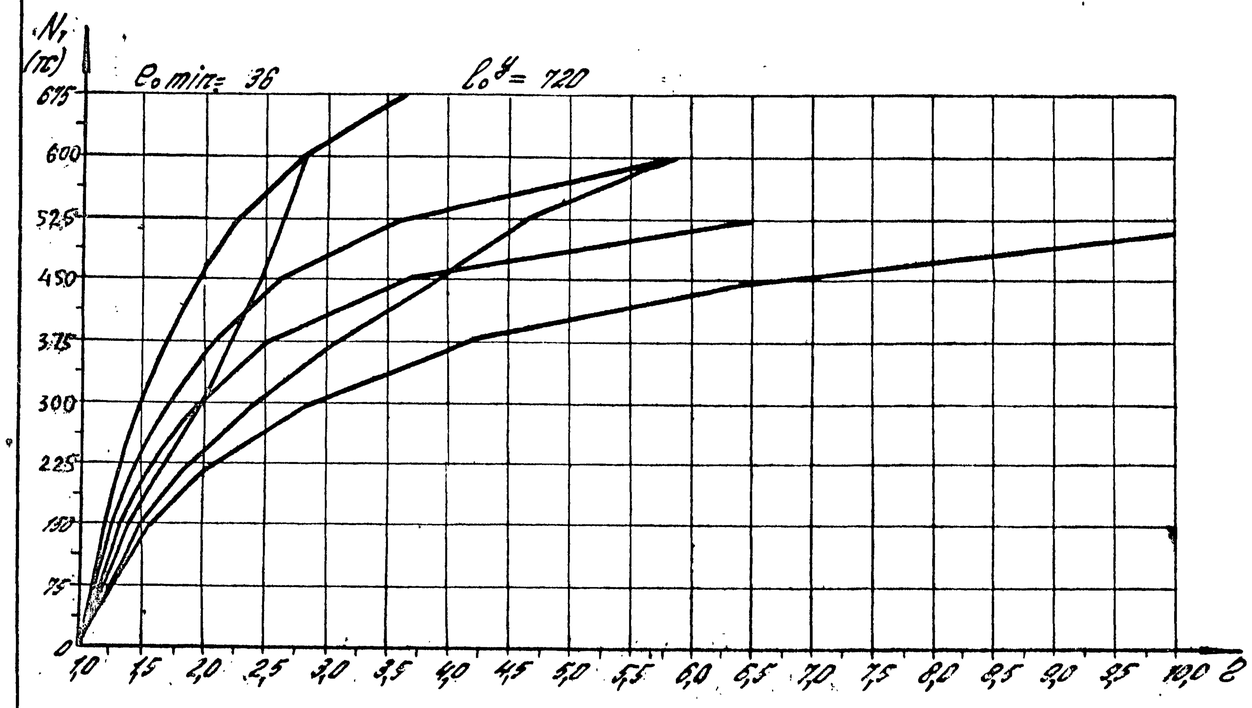

N, (тс)
e₀min.= 60
l₀ˣ = 480
675
600
525
450
375
300
225
150
75
0
1,00 1,05 1,10 1,15 1,20 1,25 1,30 1,35 1,40 1,45 1,50 1,55 1,60 e

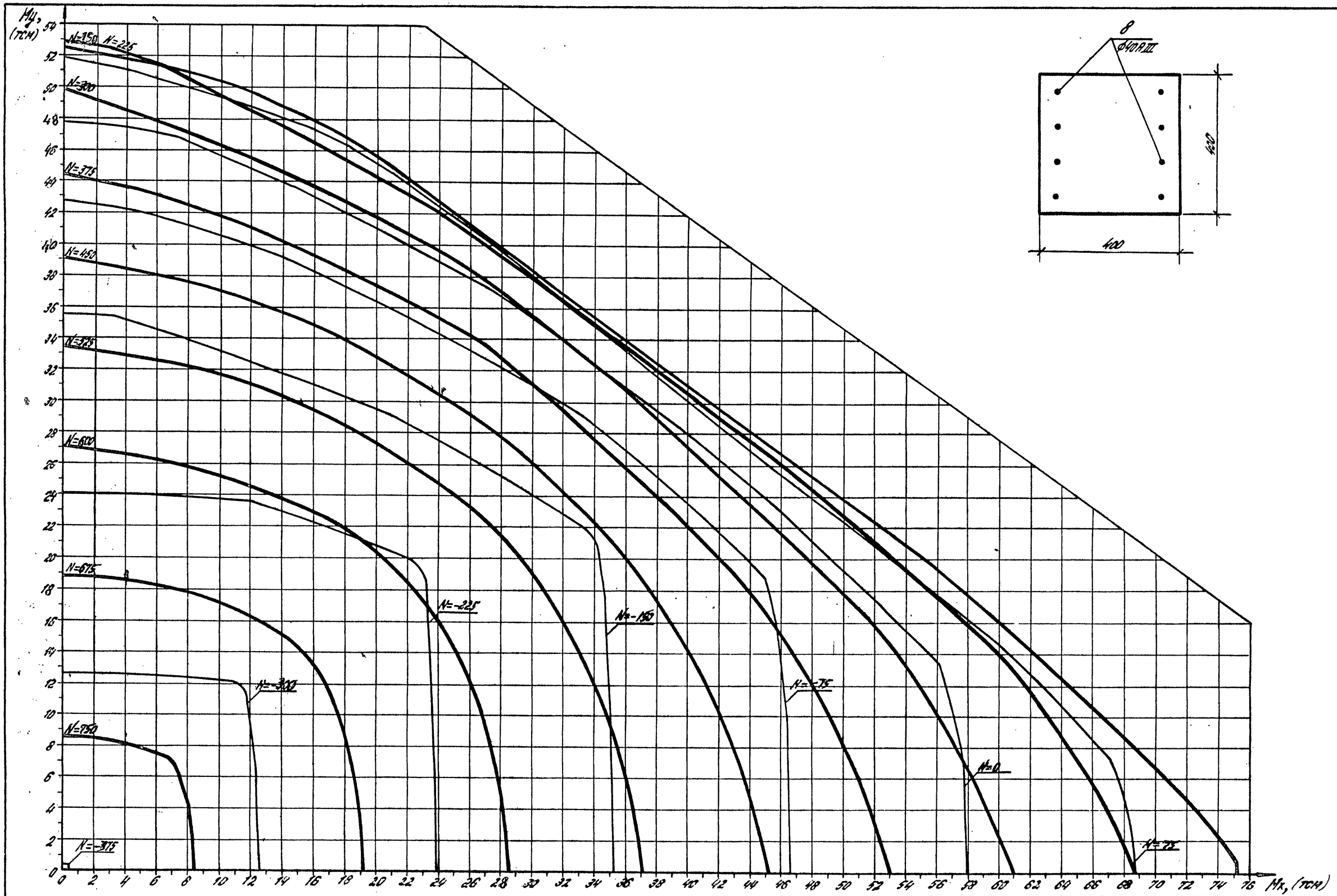

N, (тс)
e₀min.= 48
l₀ˣ = 600
675
600
525
450
375
300
225
150
75
0
1,0 1,1 1,2 1,3 1,4 1,5 1,6 1,7 1,8 1,9 2,0 2,1 2,2 2,3 e


N, (тс)
e₀min.= 60
l₀ᵘ = 480
675
600
525
450
375
300
225
150
75
0
1,0 1,1 1,2 1,3 1,4 1,5 1,6 1,7 1,8 1,9 2,0 2,1 2,2 e


N, (тс)
e₀min.= 48
l₀ᵘ = 600
675
600
525
450
375
300
225
150
75
0
1,0 1,2 1,4 1,6 1,8 2,0 2,2 2,4 2,6 2,8 3,0 3,2 3,4 3,6 3,8 4,0 4,2 4,4 4,6 4,8 5,0 5,2 e


N, (тс)
e₀ min = 36
l₀ˣ = 720
675
600
525
450
375
300
225
150
75
0
1,0 1,2 1,4 1,6 1,8 2,0 2,2 2,4 2,6 2,8 3,0 3,2 3,4 3,6 3,8 4,0 4,2 4,4 4,6 e

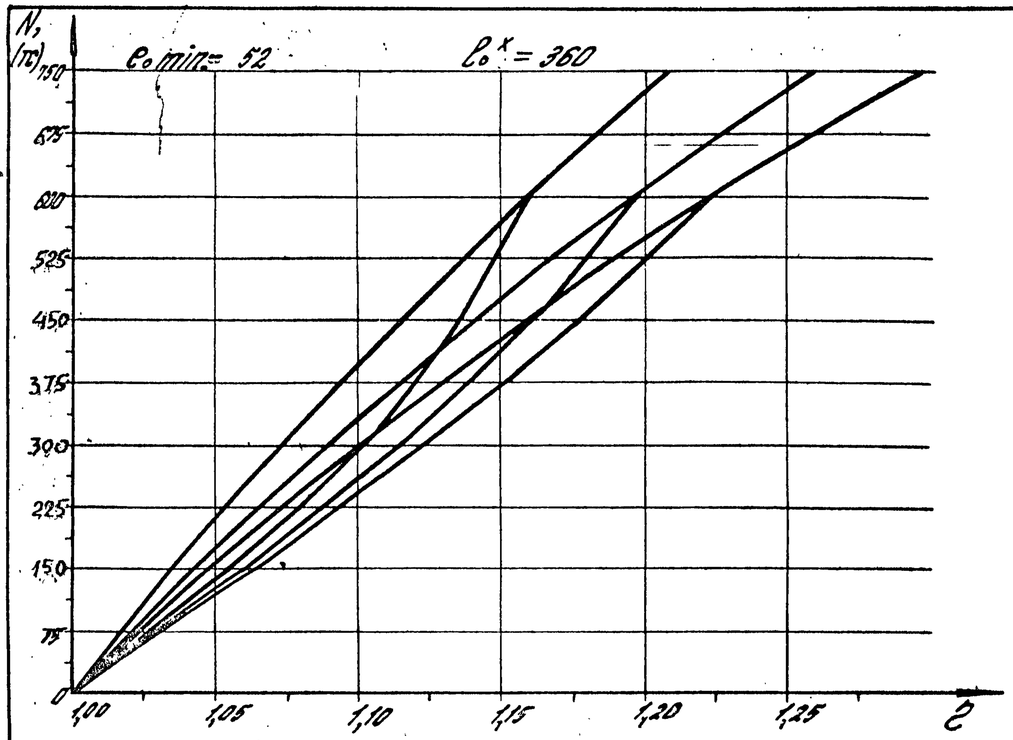

N, (тс)
e₀ min = 36
l₀ʸ = 720
675
600
525
450
375
300
225
150
75
0
1,0 1,5 2,0 2,5 3,0 3,5 4,0 4,5 5,0 5,5 6,0 6,5 7,0 7,5 8,0 8,5 9,0 9,5 10,0 e

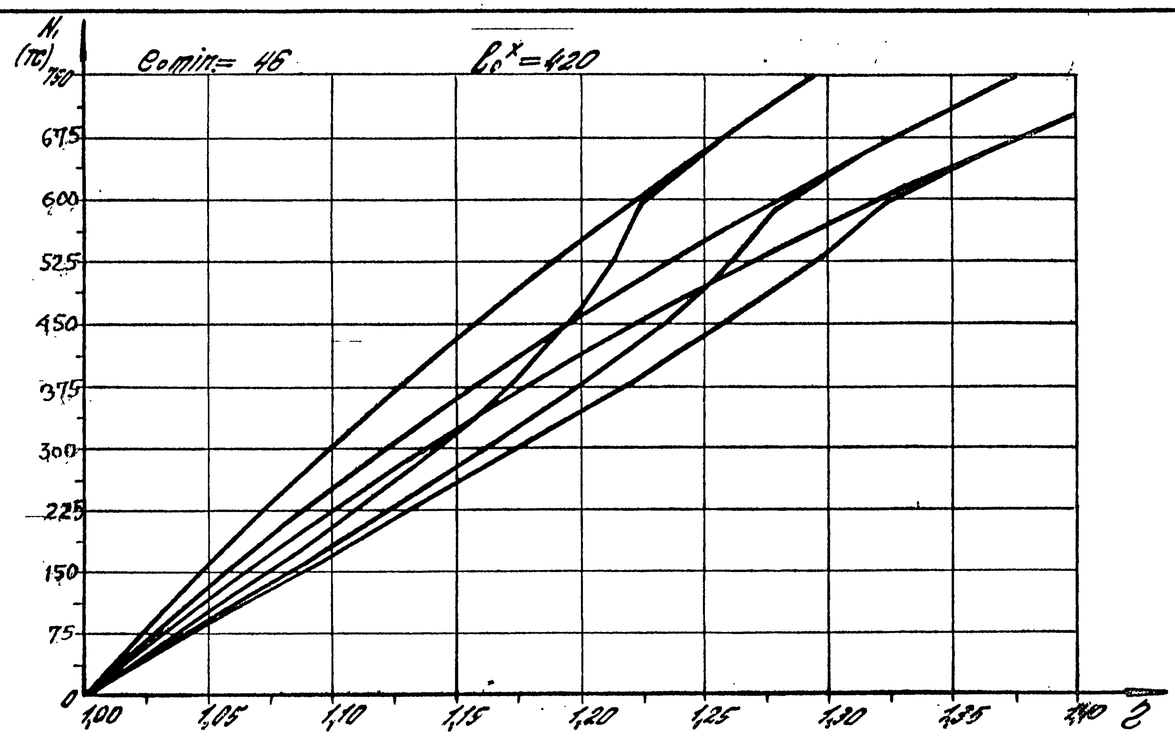


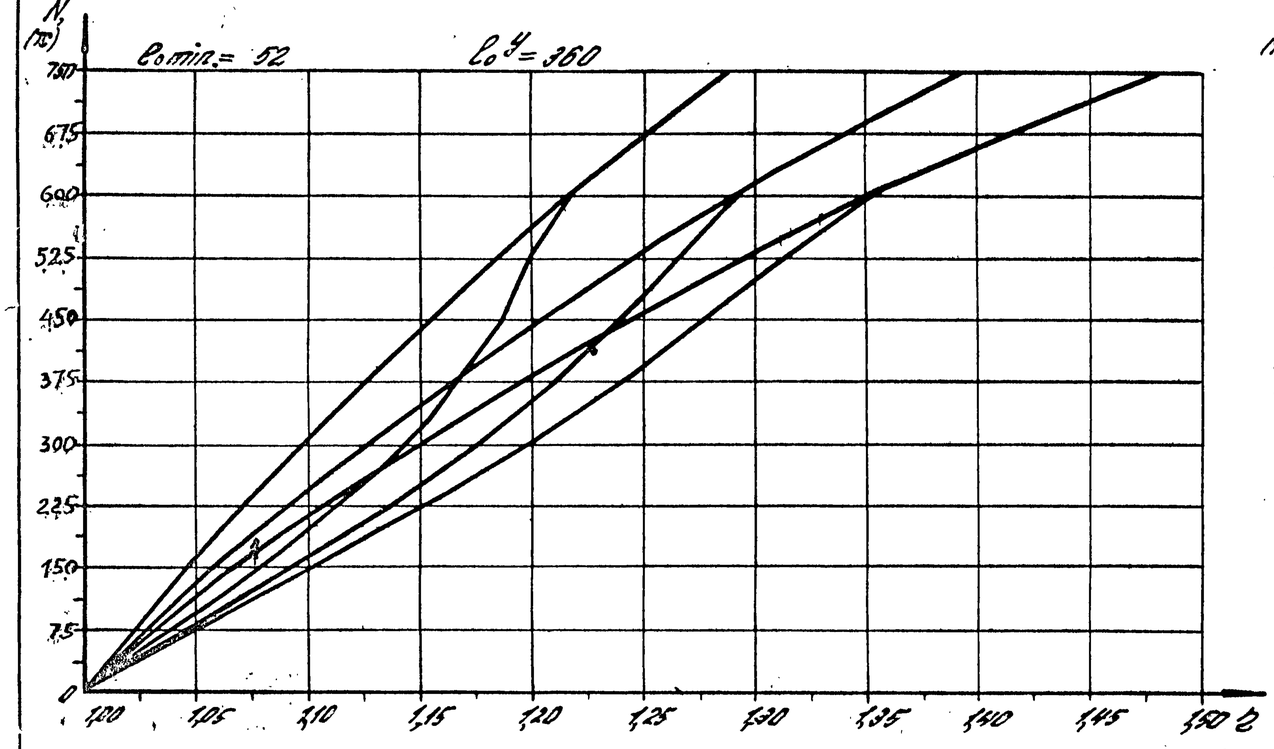
Класс бетона В45 (R_B = 280,5 кгс/см² при учете γ_{b2} = 1,10)

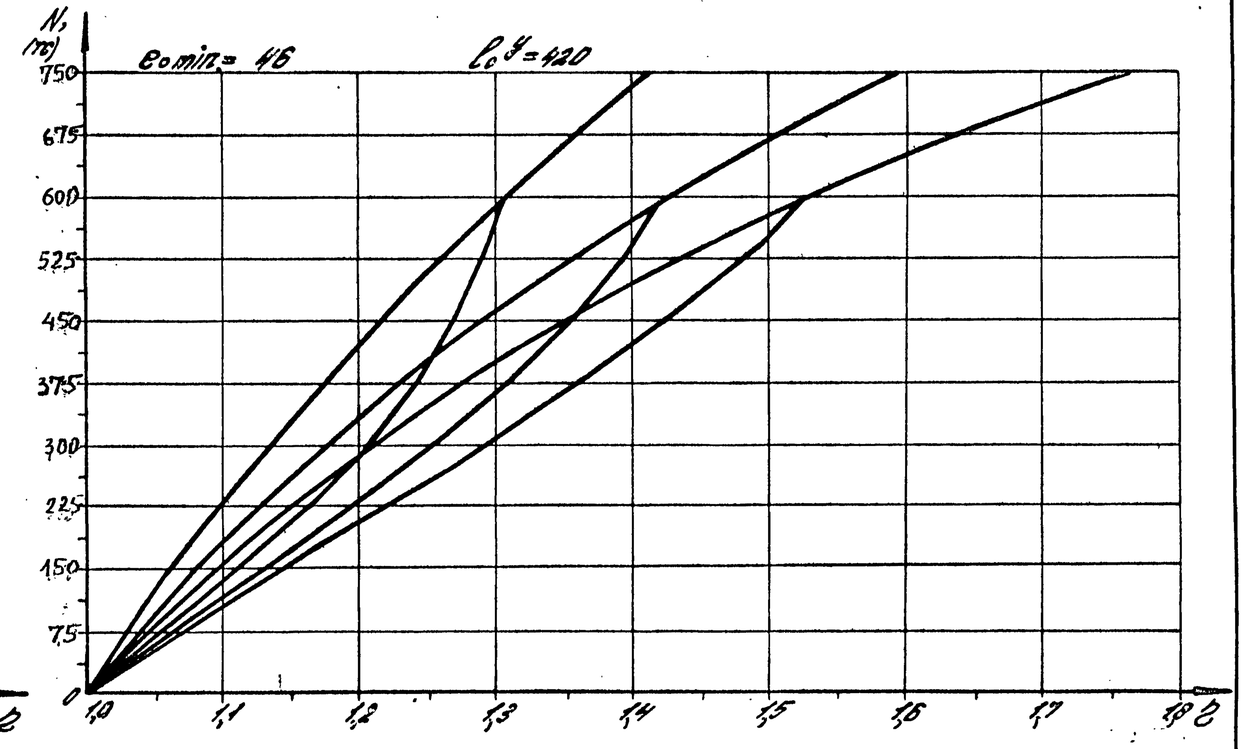
1.020-1/87. 0-6-3 ПЗ

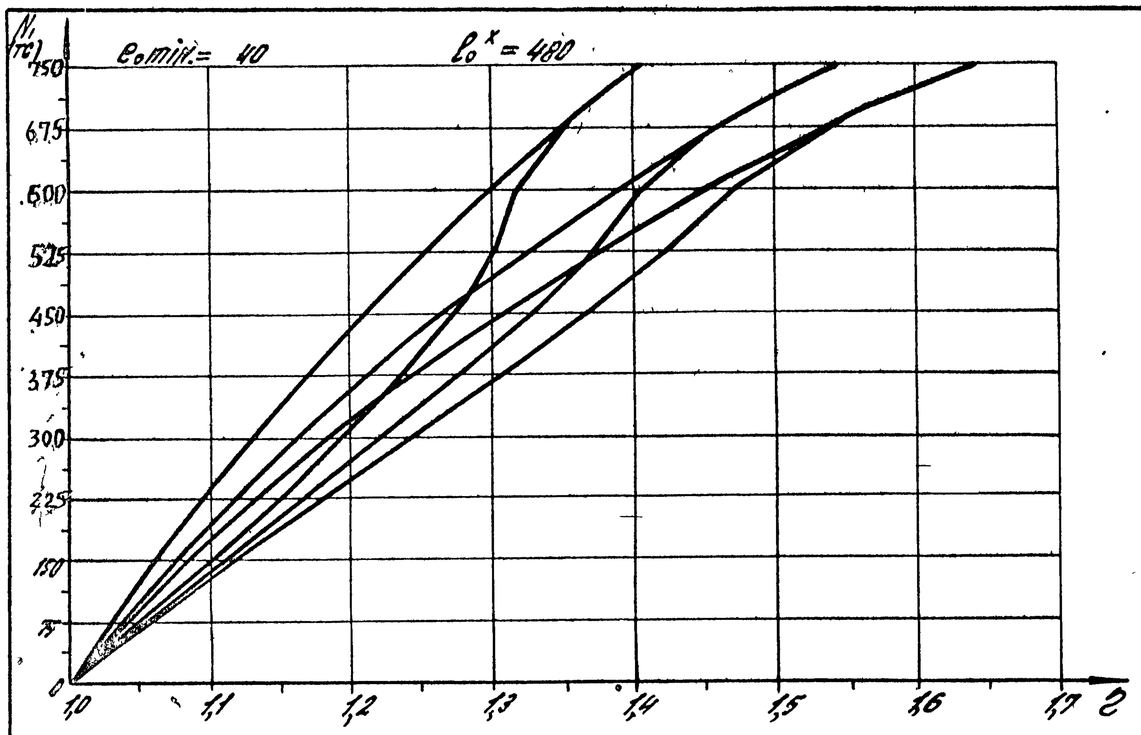
Лист 239

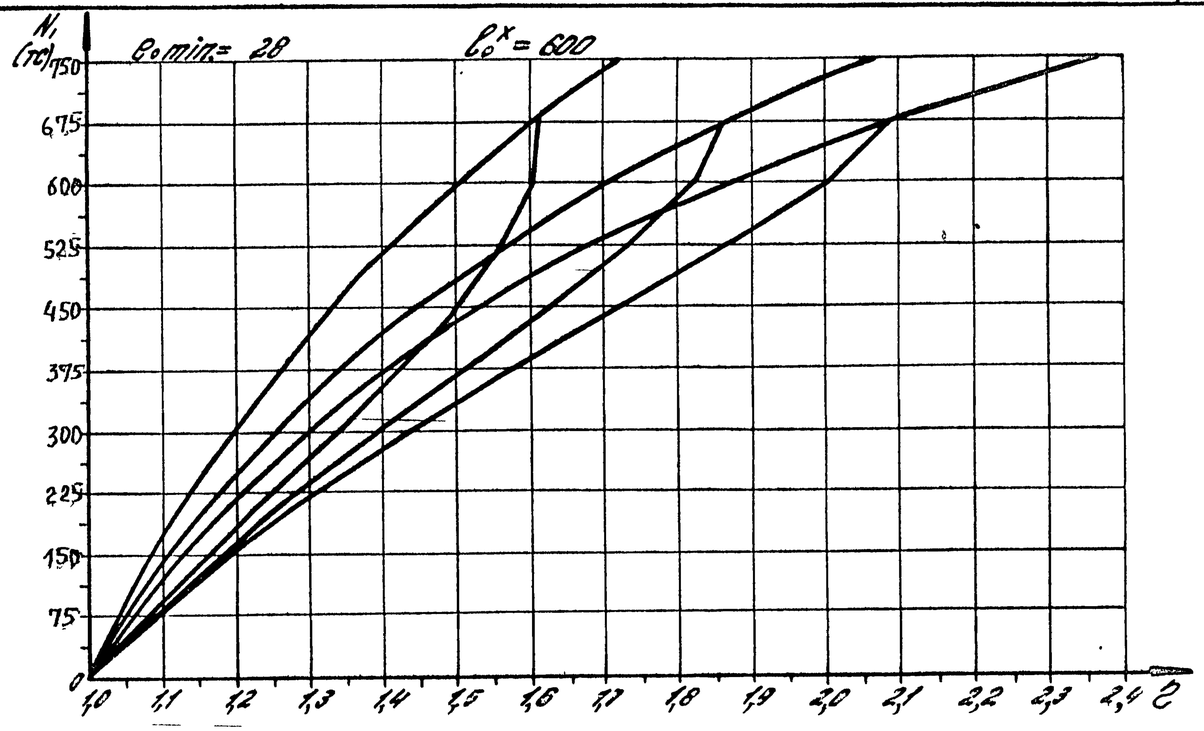

N, (тс)
e₀min= 52
e₀ˣ = 360
750
675
600
525
450
375
300
225
150
75
0
1,00
1,05
1,10
1,15
1,20
1,25
e

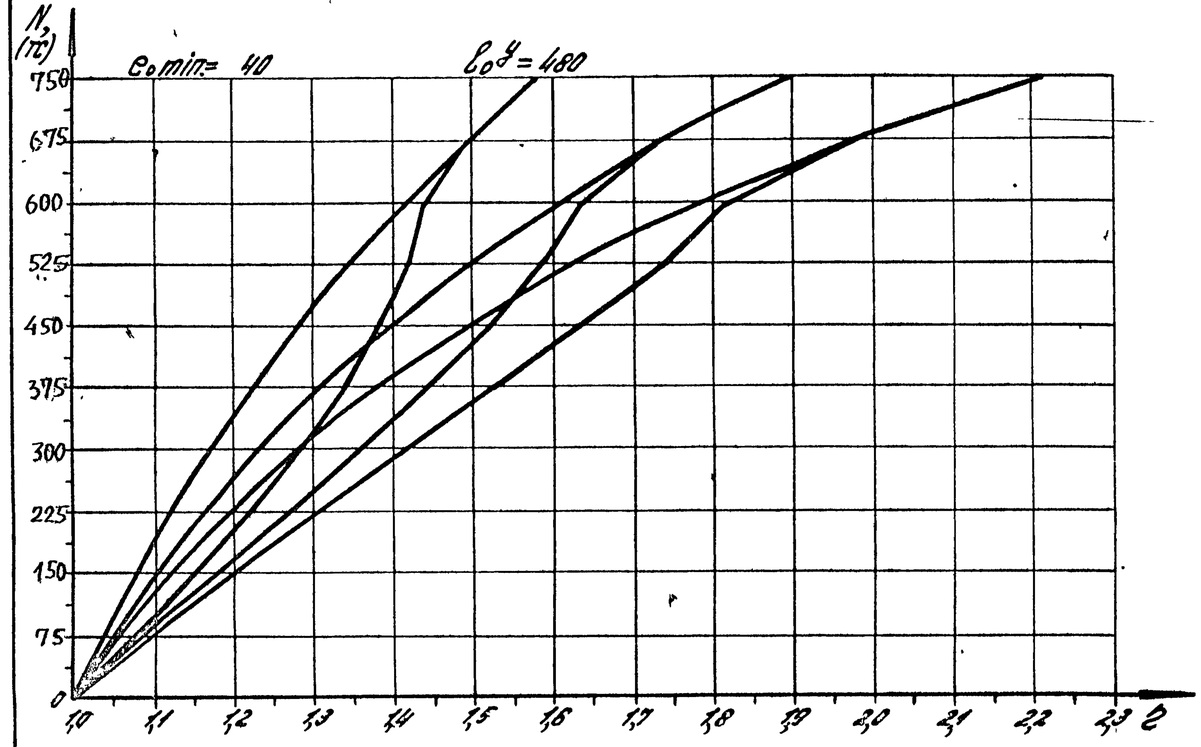

N, (тс)
e₀min= 46
e₀ˣ = 420
750
675
600
525
450
375
300
225
150
75
0
1,00
1,05
1,10
1,15
1,20
1,25
1,30
1,35
1,40
e

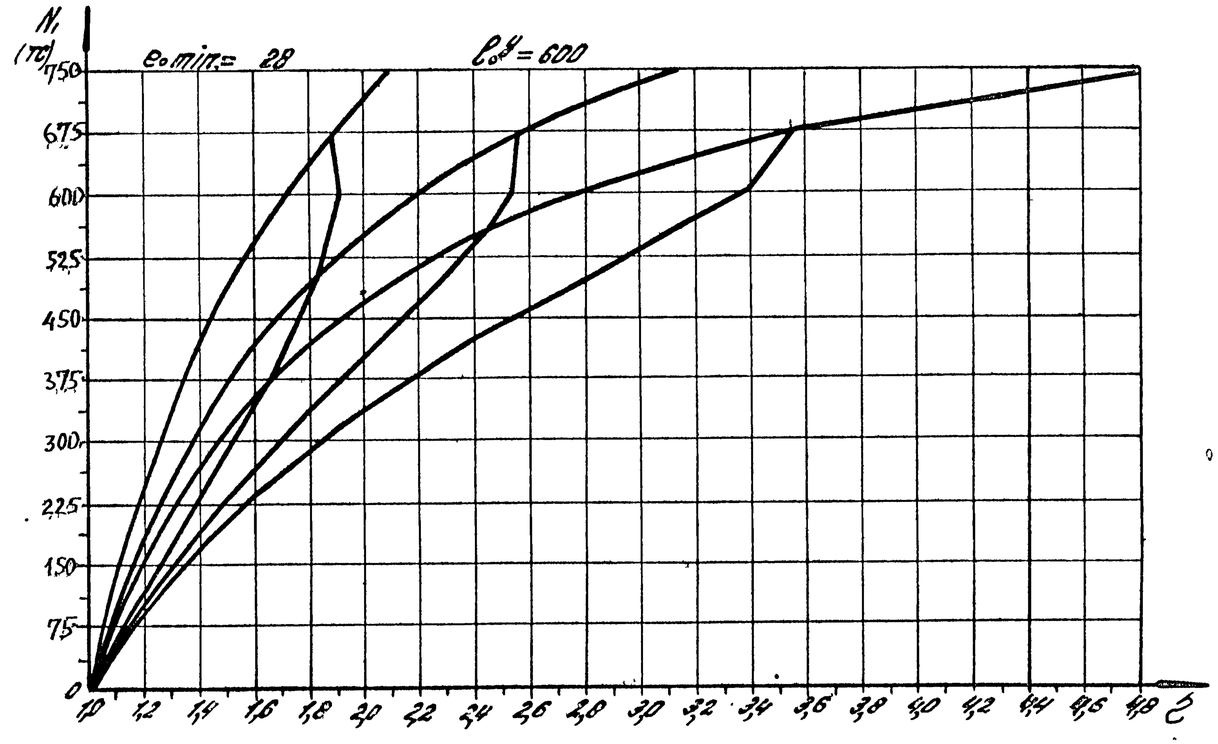

N, (тс)
e₀min= 52
e₀ʸ = 360
750
675
600
525
450
375
300
225
150
75
0
1,00
1,05
1,10
1,15
1,20
1,25
1,30
1,35
1,40
1,45
1,50
e

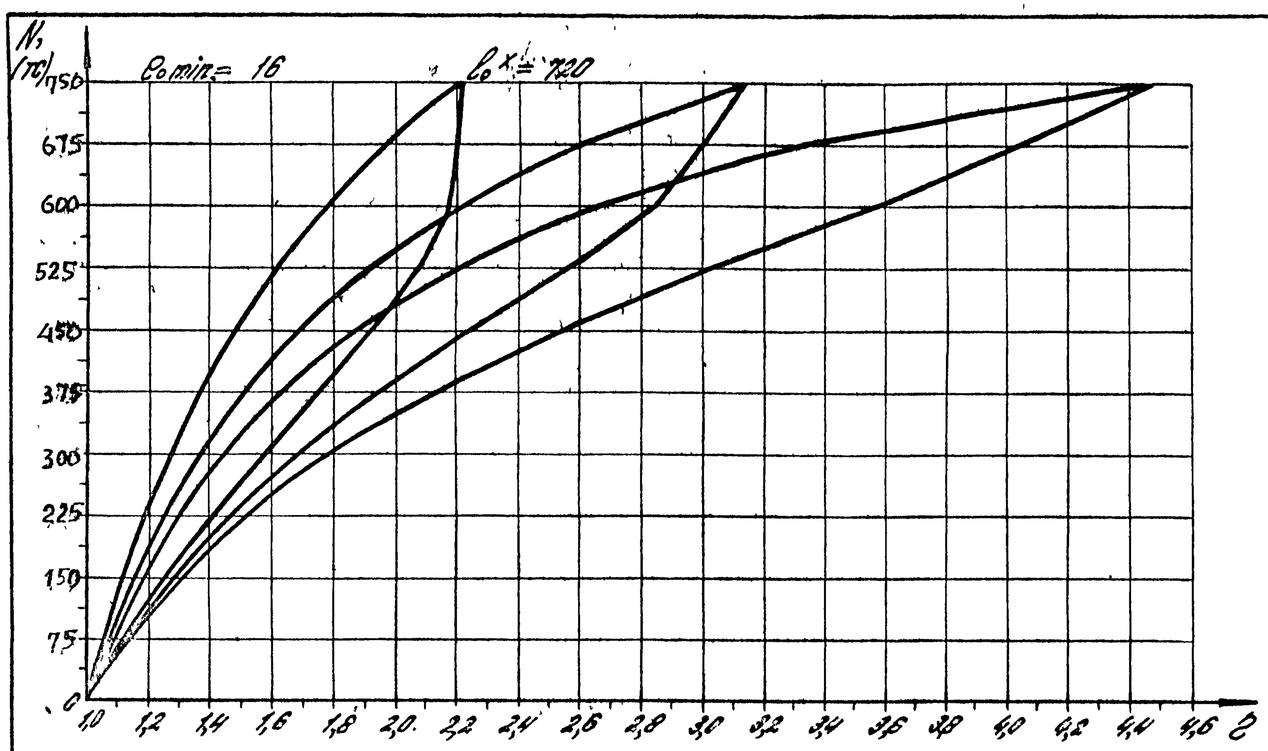

N, (тс)
e₀min= 46
e₀ʸ = 420
750
675
600
525
450
375
300
225
150
75
0
1,0
1,1
1,2
1,3
1,4
1,5
1,6
1,7
1,8
e

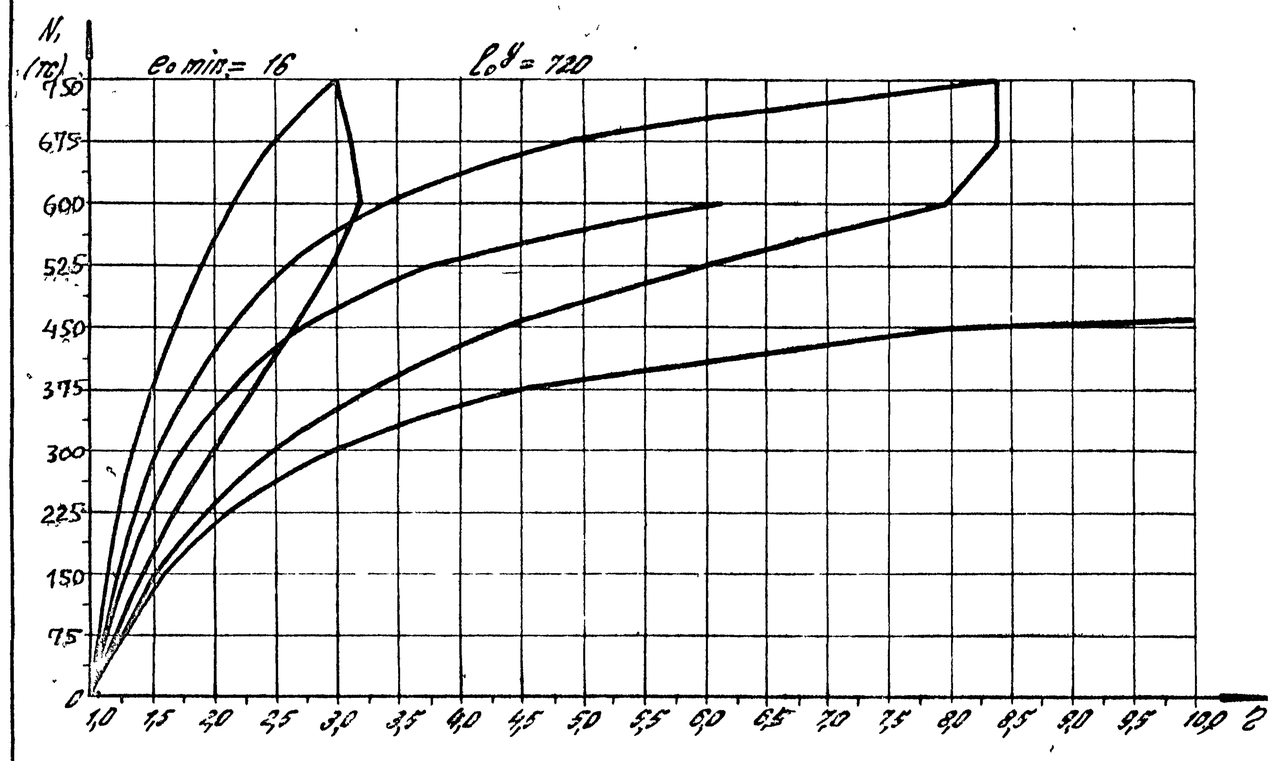

N1 (тс)
e0 min = 40
l0x = 480
150
675
600
525
450
375
300
225
150
75
0
1,0
1,1
1,2
1,3
1,4
1,5
1,6
1,7
e


N1 (тс)
e0 min = 28
l0x = 600
150
675
600
525
450
375
300
225
150
75
0
1,0
1,1
1,2
1,3
1,4
1,5
1,6
1,7
1,8
1,9
2,0
2,1
2,2
2,3
2,4
e


N2 (тс)
e0 min = 40
l0y = 480
750
675
600
525
450
375
300
225
150
75
0
1,0
1,1
1,2
1,3
1,4
1,5
1,6
1,7
1,8
1,9
2,0
2,1
2,2
2,3
e


N1 (тс)
e0 min = 28
l0y = 600
750
675
600
525
450
375
300
225
150
75
0
1,0
1,2
1,4
1,6
1,8
2,0
2,2
2,4
2,6
2,8
3,0
3,2
3,4
3,6
3,8
4,0
4,2
4,4
4,6
4,8
e


N, тс/пзд
e0 min = 16
l0 x = 720
675
600
525
450
375
300
225
150
75
0
1,0 1,2 1,4 1,6 1,8 2,0 2,2 2,4 2,6 2,8 3,0 3,2 3,4 3,6 3,8 4,0 4,2 4,4 4,6 e


N, (тс)
e0 min = 16
l0 y = 720
675
600
525
450
375
300
225
150
75
0
1,0 1,5 2,0 2,5 3,0 3,5 4,0 4,5 5,0 5,5 6,0 6,5 7,0 7,5 8,0 8,5 9,0 9,5 10,0 e