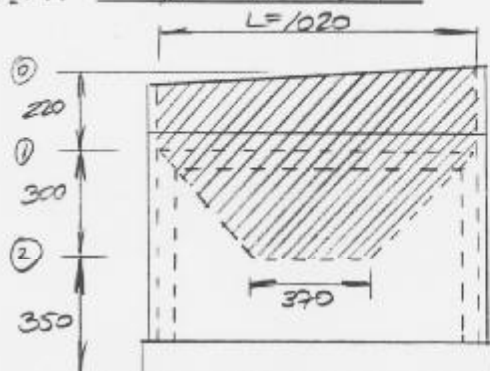


## 24.4.- VIGA CABEZAL



	EEACT	EEeq	EEsis	(TON/M <sup>2</sup> )
0	-	0.33	1.59	
1	1.15	"	1.19	
2	3.40	"	0.64	

	EACT	ESL	ESIS	(TON/M)
0	-	-	6.92	
1	1.27	0.84	3.87	
2	8.84	1.98	1.12	

CARGAS:

C/SIMPLE APOYO  
- EMPOTRAMIENTO

CASO ESTÁTICO:  $q_1 = 1.27 + 0.84 = 2.11 \text{ TON/M}$  }  $\times 1.69$   
 $q_2 = (8.84 - 1.27) + (1.98 - 0.84) = 8.71 \text{ "}$

$\Rightarrow$  C/SIMPLE APOYO :  $M^+ = 46.4 + 127.6 = 174.0 \text{ TON-M}$   
 C/EMP. :  $M^- = 30.9 + 79.8 = 110.6 \text{ "}$   
 ( $L = 9.2$ )

CASO SÍSMICO: SISTEMA TAB :  $7.67 \times 2.5 \times 11 \times 0.15 = 31.7/3 = 10.6 \text{ TON}$   
 SISTEMA ① :  $2.5 \times (1.7 \times 0.25 + 0.5 \times 1.0) \times 0.15 = 0.35 \text{ T/M}$   
 SISTEMA ② :  $2.5 \times 0.5 \times 0.75 \times 0.15 = 0.14 \text{ TON/M}$   
 $2.5 \times 2.5 \times 0.5 \times 0.15 = 0.47 \text{ "}$

$P = 10.6 \times 1.3 \Rightarrow$  SISTEMA ② =  $0.61 \text{ TON/M}$

$q_{1sis} = 1.69 \times 1.27 + 1.3 \times (6.92 - 3.87 + 0.35 + 0.14) = 6.74 \text{ TON/M}$   
 $q_{2sis} = 1.69 \times 7.57 + 1.3 \times (3.87 - 1.12 + 0.47) = 17.0 \text{ "}$   
 $\Rightarrow$  C/SIMPLE APOYO :  $M^+ = 71.3 + 120.0 + 31.7 = 223 \text{ TON-M}$   
 C/EMP. :  $M^- = 47.5 + 74.9 + 16.0 = 138.3 \text{ "}$   
 ( $L = 9.2$ )

$M_{dis}(+) = 223 \text{ TON-M}$  }  $A_s = 69.9 \text{ cm}^2$   
 $d = 93 \text{ cm}$  }  $(10 \phi 16 @ 20$   
 $b = 100 \text{ cm}$  }  $+ 8 \phi 28 @ 20)$

$M_{dis}(-) = 133 \text{ TON-M}$  }  $A_s = 32 \text{ cm}^2$   
 $d = 93 \text{ cm}$  }  $(5 \phi 16 @ 20 +$   
 $b = 300 \text{ "}$  }  $5 \phi 28 @ 10)$

