

BIGA FINCK TIPUS
E: 1/25

PRE CALCUL BIGA FINCK

q permanent = 24,00 Kg/m² x 2,80 m (superf coberta) = 67,20 Kg/ml
 q neu = 40,00 Kg/m² x 2,80 m = 112,00 Kg/ml 322,00 Kg
 q mant. = 75,00 Kg/m² x 2,80 m = 210,00 Kg/ml
 q vent = 30,00 Kg/ml

M = qF/8 σ = M/W

RASTRELL ISOSTATIC

M_{qp} = (67,20 x (3,25)²) / 8 = 88,72 Kgm
 M_{qm} = (322,00 x (3,25)²) / 8 = 425,14 Kgm
 M_{qw} = (30,00 x (3,25)²) / 8 = 39,60 Kgm

Combinacions d'hipotesis:

	M
I 1,35 Cp	119,77
II 1,35 Cp + 1,50 CM	757,48
III 1,35 Cp + 1,35 CM + 1,35 CW	800,00

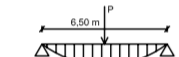
σ = M/W

W = (800,00 x 100,00 x 1,10) / 2.600 = 33,84 cm³

A = 16,10 cm²
 W = 33,25 cm³
 P = 5,83 Kg/m

Perfil Aceralia

Bigueta



Q perm Rastrell 12,67 x 3,25 m = 41,11 Kg
 Coberta 50 Kg/m² x 13,00 m² = 650,00 Kg
 Q variables Neu 40,00 Kg/m² x 13,00 m² = 500,00 Kg
 Mant 75,00 x 13,00 m² = 975 Kg

M_{q perm} = ((41 + 650) / 2) x 3,25 = 1.122,87 Kgm
 M_{q var} = ((500 + 975) / 2) x 3,25 = 2.396,00 Kgm

Combinacions d'hipotesis:

	M
I 1,35 Cp	119,77
II 1,35 Cp + 1,50 CM	5.109,00 Kgm
III 1,35 Cp + 1,35 CM + 1,35 CW	

σ = (5.109,00 x 100) / 249 cm³ = 2.051,00 ≤ 2600 / 1,1

P = 39,00 Kg/m
 W = 249,00 cm³
 A = 49,60 cm²

f = (5 / 384) x ((q x F) / (E x I))
 f = (5 / 384) x ((4,40 Kg/cm x 650) / (2120 cm⁴ x 2,10 x 10⁸ Kg/cm²)) = 2,29 cm!

L / 300 = 21 mm

I = 2120 cm⁴
 E = 2,10 x 10⁸ Kg/cm²

NO COMPLEX!

I = 3516 cm⁴
 A = 58,98 cm²

f = (5 / 384) x ((4,40 Kg/cm x 650) / (3516 cm⁴ x 2,10 x 10⁸ Kg/cm²)) = 1,38 cm!
 SI COMPLEX!

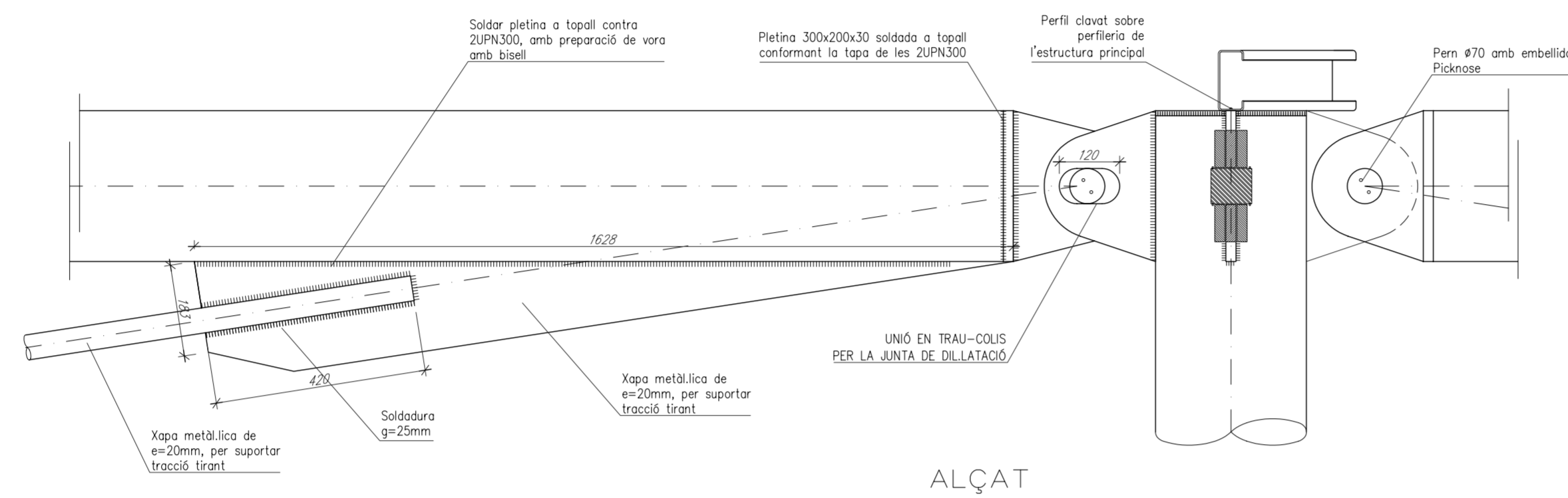
BIGA FINCK

(39 Kg/m x 6,50) x 2 = 507 Kg
 12,63 x 3,25 = 41,040 12,63 x 3,25 = 41,040
 200 x 200 x 8 2 UPN 300

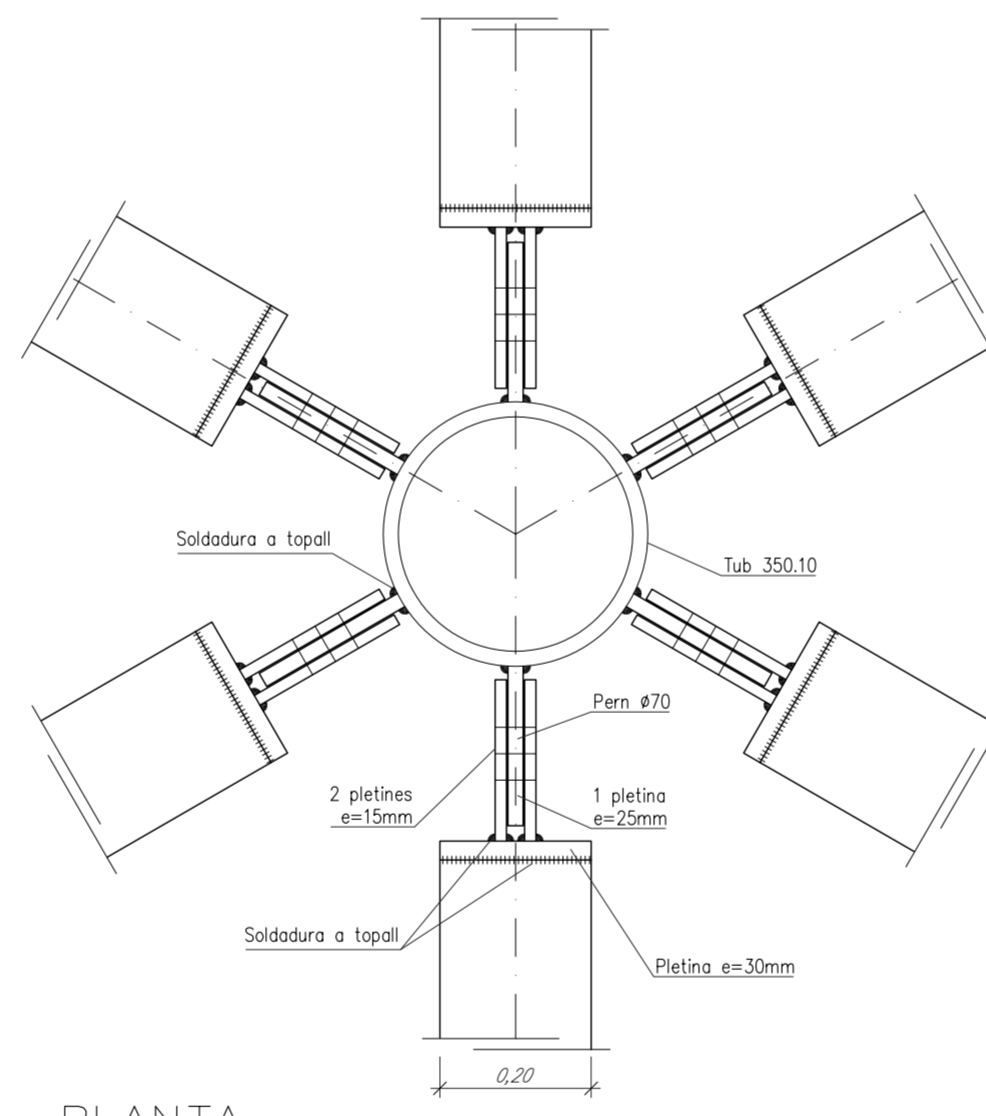
Carregues lineals

Perm: Coberta: 24 Kg/m² x 48 m² = 2.400 / 13 m = 184 Kg/ml
 Variable: Neu: 40 Kg/m² x 48 m² = 1.920 / 13 m = 147 Kg/ml
 Mant: 75 Kg/m² x 48 m² = 3.600 / 13 m = 276 Kg/ml
 Vent: 30 Kg/ml

ENTRADA DE DADES AL WINEVA



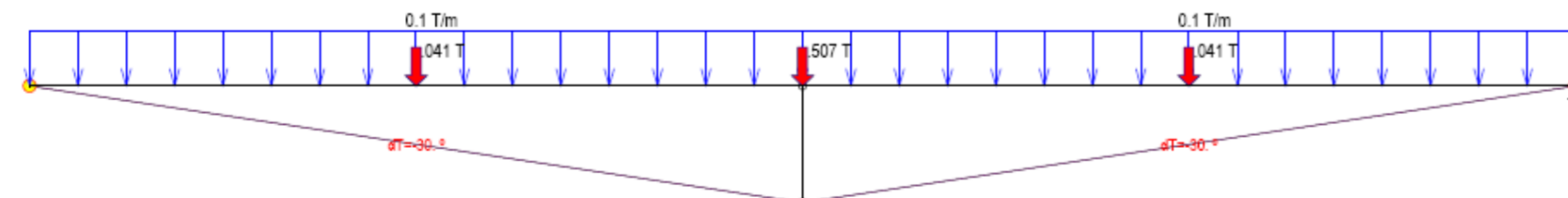
ALÇAT



PLANTA

DETALL ENCONTRE BIGUESFINCK ARTICULADES
 AMB PILAR METÀL·LIC

E: 1/10



ACCIONS APLICADES SOBRE BIGA FINCK

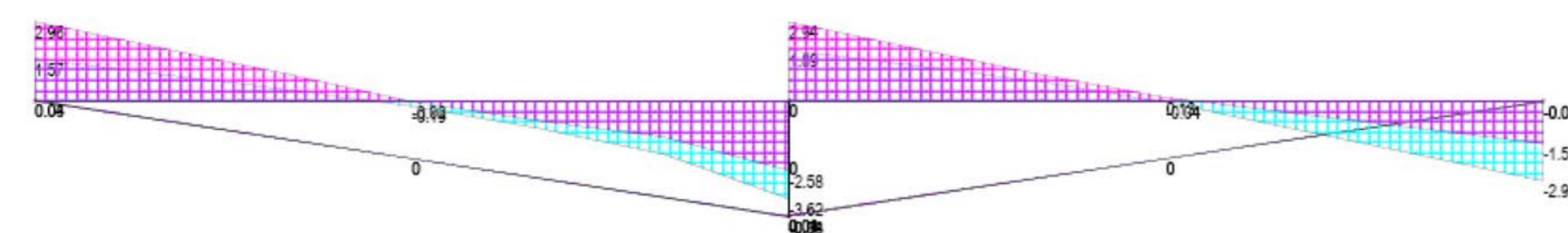


DIAGRAMA DE TALLANTS

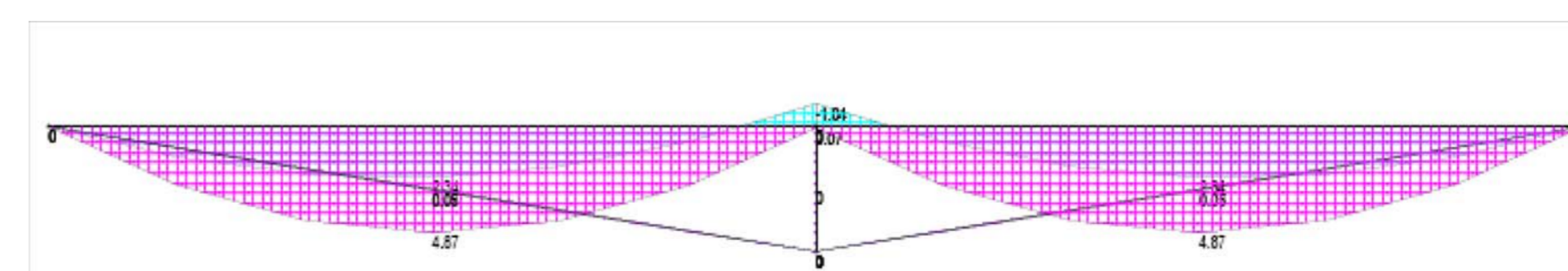


DIAGRAMA DE MOMENTS



DEFORMADA

GEOMETRIA COBERTA ESTRUCTURA METÀL·LICA

E: 1/100

