

Technical drawing of a bridge structure, showing two views: a side elevation and a plan view.

**Side Elevation:**

- Overall length: 455
- Height: 50
- Slope: 80/60
- Main span: 6 N1 Ø 12.5 C=555
- Abutment: (4R) N2 Ø 12.5 C=495
- Bridge deck width: 2x3 Ø 12.5
- Bridge piers: P20, P21
- Bridge abutments: N3, N4

**Plan View:**

- Overall width: 457
- Bridge deck width: 2x3 Ø 12.5
- Bridge piers: P20, P21
- Bridge abutments: N3, N4
- Bridge deck width: 2x4 N4 Ø 8 C=115
- Bridge deck width: 2x2 Ø 6.3
- Bridge deck width: 2x2 Ø 5 Ø 6.3 C=105
- Bridge deck width: 2x2 Ø 12.5 C=495

6 Ø 12.5

3x2 Ø 12

50

6 N6 Ø 6.3 C=226

[illegible]

Technical drawing of a rectangular plate. The top view shows a rectangle with a width of 16 and a height of 16. It features 16 holes arranged in a 4x4 grid. The holes are specified as 3 Ø 16 and 4 Ø 12.5. A dimension of 4x2 Ø 6.3 is indicated for the inner holes. The side view shows a rectangle with a width of 15 and a height of 55. Below the drawing, the text "36 N16 Ø 5 C=155" is present.

Technical drawing of a rectangular plate. The top view shows a rectangle with dimensions 12.5 (width) and 16 (height). It features 2 holes of diameter 10 (2 Ø 10) and 3 holes of diameter 16 (3 Ø 16). A detail view shows a 4x4 grid of holes with a pitch of 6.3 (4x4 Ø 6.3). The bottom view shows a rectangle with dimensions 15 (width) and 55 (height). The material is 1 N16, thickness is 5, and the weight is C=155.

Technical drawing of a rectangular plate. The top view shows a rectangle with dimensions 15 (width) and 55 (length). There are four holes along the top edge, each with a diameter of 6.3. The distance between the centers of these holes is 12.5. The distance from the center of the first hole to the left edge is 16. The distance from the center of the last hole to the right edge is 12.5. The bottom view shows a rectangle with dimensions 15 (width) and 55 (length).

1 N16 Ø5 C=155

Technical drawing of a rectangular plate. The top view shows a rectangle with dimensions 16 (width) and 10 (height). It features two rows of holes: two holes of diameter 16 (2 Ø 16) and one hole of diameter 10 (1 Ø 10) in the top row, and two holes of diameter 10 (2 Ø 10) in the bottom row. The distance between the center of the two holes in the top row is 6.3 (4x2 Ø 6.3). The side view shows a rectangle with dimensions 15 (width) and 55 (height).

N11 Ø 6.3 C=156

Technical drawing of a rectangular plate. The plate has a width of 15 and a height of 55. It features a 3x2 grid of holes. The top row of holes has a diameter of  $\varnothing 16$ . The bottom row of holes has a diameter of  $\varnothing 10$ . The distance between the centers of the two rows of holes is  $4 \times 2 \varnothing 6.3$ .

2 N12  $\varnothing 5$  C=155

Technical drawing of a cable tray system layout. The drawing shows a main horizontal cable tray with several vertical and horizontal branches. Key components and labels include:

- Tray Sections:**
  - Top section: 2 N2 Ø 10 C=280 (length 238), 2 N3 Ø 10 C=195 (length 153), 2 N1 Ø 6.3 C=265 (length 169).
  - Bottom section: 2 N8 Ø 10 C=730 (length 715), 1 N9 Ø 10 C=295 (length 137).
- Vertical Connections:**
  - Left side: 2 N5 Ø 16 C=560 (length 261), 1 N6 Ø 16 C=355 (length 157).
  - Right side: 2 N7 Ø 10 C=160 (length 130), 2 N4 Ø 6.3 C=370 (length 233).
- Tray Segments and Dimensions:**
  - Segment 1: 4 Ø 10, 44 Ø 5, 2 Ø 6.3, 3 Ø 10 (length 30).
  - Segment 2: 2 Ø 16, 3 Ø 16, 2 Ø 6.3, 2 Ø 10 (length 30).
  - Segment 3: 3 Ø 12.5 (length 721).
- Labels and Markings:**
  - 20/50 (twice, with arrows pointing to specific tray sections).
  - P30 and P32 (with arrows pointing to specific tray sections).
  - vs-14 (at the bottom right).

Technical drawing of a mechanical part. The top view shows a rectangular plate with dimensions 30 x 16. The side view shows a rectangular plate with dimensions 45 x 15. The part has two sets of three holes, each with a diameter of 10 (3 Ø 10). The holes are spaced 16 units apart. The part is labeled with '0 N12 Ø 5 C=135'.

Technical drawing of a double-leaf folding door system (Doppelfalttür) in a closed position. The drawing shows two main views: a top view and a side view.

**Top View Dimensions:**

- Total width: 145
- Leaf width: 90
- Gap: 15
- Rollers: 4 N2 Ø 10 (C=195), 2 N1 Ø 6.3 (C=420)

**Side View Dimensions:**

- Total height: 306
- Leaf height: 30
- Gap: 19
- Rollers: 4 Ø 10, 2 Ø 6.3, 206 Ø 6.3

**Additional Labels:**

- P29 (hinge/stop)
- (costola) (rib)
- 2x6 N5 Ø 6.3 (C=637)
- 643 (dimension)
- 2 N3 Ø 16 (C=703)
- 3 N3 Ø 16 (C=703)

Technical drawing of a rectangular plate. The top view shows a rectangle with dimensions 25 (width) and 55 (height). The bottom view shows a rectangle with dimensions 25 (width) and 55 (height). The top view also shows 4 holes with diameter 10 (4 Ø 10) and 5 holes with diameter 16 (5 Ø 16). The bottom view shows 6 holes with diameter 6.3 (6x2 Ø 6.3).

[illegible]

Technical drawing of a rectangular plate. The top view shows a rectangle with a width of 6 Ø 16 and a height of 6x2 Ø 6.3. The side view shows a rectangle with a width of 25 and a height of 55. The bottom view shows a rectangle with a width of 6 Ø 16 and a height of 2 Ø 6.3. The drawing is labeled with N10 Ø 6.3 and C=176.

Technical drawing of a rectangular plate. The top view shows a rectangle with dimensions 16 (width) and 63 (height). It features 4 holes of diameter Ø 16 along the top edge and 4 holes of diameter Ø 10 along the bottom edge. A central slot is 6x2 units wide and 6.3 units high. The side view shows a rectangle with dimensions 25 (width) and 55 (height).

N10 Ø 6.3 C=176

Diagrama de uma barra de aço com as seguintes dimensões e fórmulas:

- Quantidade de barras:** 2 N
- Diâmetro do barra em milímetros:** Ø 10
- Comprimento do barra em centímetros:** C=360
- Posição do ferragem:** 2X2
- Quantidade de barras de armadura de pele em cada lado da viga:** N4
- Armadura de pele em ambos os lados da viga:** C=215
- Posição do barra:** 2X2
- Comprimento total do barra em centímetros:** C=215
- Diâmetro do barra em milímetros:** Ø 10
- Quantidade de estribos:** 16
- Diâmetro do estribos em milímetros:** N2
- Esposamento dos estribos em centímetros:** Ø 15
- Comprimento total do estribo em centímetros:** C=100
- Posição do estribo:** 16

<b>Materiais:</b>	<b>Recobrimentos:</b>
- Açø.....: CA50 e CA60	- Vigas.....: 2,5cm
- Concreto Estrutural.....: 30 MPa (300 kgf/cm²)	- Pilares.....: 2,5cm
- Deve ser mantido cura úmida do concreto por 7 dias	- Lajes.....: 2,0cm
- Deve ser mantido o encimento por no mínimo por 21 dias	- Sapatas.....: 5,0cm
- S6 poderão ser executadas paredes após 28 dias da concretagem	
- Deve ser utilizado espaçadores plásticos para garantir o recobrimento dos elementos	
- Todas as cotas em centímetros, exceto cotas de níveis que estão em metros	