

Technical drawing of a road cross-section. The drawing shows a two-lane road with a total width of 25.0m (2 x 12.5m). The road surface is 15/50 camber. The road is bordered by a 1.0m wide shoulder on each side. The road is shown with a 10% camber. The drawing includes details for the road surface, drainage, and surrounding infrastructure like the 'P54' structure and '1 N4' road.

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Technical drawing of a railway track layout, showing multiple tracks, stations, and infrastructure. The drawing includes labels for stations (e.g., 15/50, 15/50, 15/50, 15/50, 15/50), track numbers (e.g., 2 N1, 2 N2, 2 N3, 2 N4, 2 N5, 2 N6, 2 N7), and various infrastructure elements like bridges (P32, P26, P21, P18, P13, P9) and signals (R4, R8). Dimensions and track lengths are provided throughout the drawing.

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Technical drawing of a mechanical part, likely a shaft or axle, showing dimensions and cross-sections.

**Main View Dimensions:**

- Overall length: 16
- Central section diameter:  $24 \pm 0.3$
- End section diameter:  $8 \pm 0.2$
- Section labels: (48), 30/35
- Part numbers: P108, P96

**Corte A (Cross-section):**

- Shaft diameter:  $24 \pm 0.3$
- Bearing diameter: 30
- Section label: Corte A

**Table of Dimensions and Tolerances:**

Item	Dimension	Tolerance	Material
1	24 ± 0.3	± 0.3	20Cr
2	8 ± 0.2	± 0.2	20Cr
3	8 ± 0.2	± 0.2	20Cr
4	16	± 0.1	20Cr
5	30/35	± 0.1	20Cr
6	24 ± 0.3	± 0.3	20Cr
7	8 ± 0.2	± 0.2	20Cr
8	8 ± 0.2	± 0.2	20Cr
9	16	± 0.1	20Cr
10	30/35	± 0.1	20Cr
11	24 ± 0.3	± 0.3	20Cr
12	8 ± 0.2	± 0.2	20Cr
13	8 ± 0.2	± 0.2	20Cr
14	16	± 0.1	20Cr
15	30/35	± 0.1	20Cr
16	24 ± 0.3	± 0.3	20Cr
17	8 ± 0.2	± 0.2	20Cr
18	8 ± 0.2	± 0.2	20Cr
19	16	± 0.1	20Cr
20	30/35	± 0.1	20Cr
21	24 ± 0.3	± 0.3	20Cr
22	8 ± 0.2	± 0.2	20Cr
23	8 ± 0.2	± 0.2	20Cr
24	16	± 0.1	20Cr
25	30/35	± 0.1	20Cr
26	24 ± 0.3	± 0.3	20Cr
27	8 ± 0.2	± 0.2	20Cr
28	8 ± 0.2	± 0.2	20Cr
29	16	± 0.1	20Cr
30	30/35	± 0.1	20Cr
31	24 ± 0.3	± 0.3	20Cr
32	8 ± 0.2	± 0.2	20Cr
33	8 ± 0.2	± 0.2	20Cr
34	16	± 0.1	20Cr
35	30/35	± 0.1	20Cr
36	24 ± 0.3	± 0.3	20Cr
37	8 ± 0.2	± 0.2	20Cr
38	8 ± 0.2	± 0.2	20Cr
39	16	± 0.1	20Cr
40	30/35	± 0.1	20Cr
41	24 ± 0.3	± 0.3	20Cr
42	8 ± 0.2	± 0.2	20Cr
43	8 ± 0.2	± 0.2	20Cr
44	16	± 0.1	20Cr
45	30/35	± 0.1	20Cr
46	24 ± 0.3	± 0.3	20Cr
47	8 ± 0.2	± 0.2	20Cr
48	8 ± 0.2	± 0.2	20Cr
49	16	± 0.1	20Cr
50	30/35	± 0.1	20Cr
51	24 ± 0.3	± 0.3	20Cr
52	8 ± 0.2	± 0.2	20Cr
53	8 ± 0.2	± 0.2	20Cr
54	16	± 0.1	20Cr
55	30/35	± 0.1	20Cr
56	24 ± 0.3	± 0.3	20Cr
57	8 ± 0.2	± 0.2	20Cr
58	8 ± 0.2	± 0.2	20Cr
59	16	± 0.1	20Cr
60	30/35	± 0.1	20Cr
61	24 ± 0.3	± 0.3	20Cr
62	8 ± 0.2	± 0.2	20Cr
63	8 ± 0.2	± 0.2	20Cr
64	16	± 0.1	20Cr
65	30/35	± 0.1	20Cr
66	24 ± 0.3	± 0.3	20Cr
67	8 ± 0.2	± 0.2	20Cr
68	8 ± 0.2	± 0.2	20Cr
69	16	± 0.1	20Cr
70	30/35	± 0.1	20Cr
71	24 ± 0.3	± 0.3	20Cr
72	8 ± 0.2	± 0.2	20Cr
73	8 ± 0.2	± 0.2	20Cr
74	16	± 0.1	20Cr
75	30/35	± 0.1	20Cr
76	24 ± 0.3	± 0.3	20Cr
77	8 ± 0.2	± 0.2	20Cr
78	8 ± 0.2	± 0.2	20Cr
79	16	± 0.1	20Cr

Technical drawing of a mechanical part, likely a shaft or axle, showing dimensions and material specifications.

**Side View Dimensions:**

- Overall length: 770
- Central section length: 714
- End section length: 35
- Central section diameter: 30/35
- End section diameter: 35
- Support dimensions: 10 N1 ± 20 C=770
- Material: 2ACAN, 2 3ACAN, 15 15

**Corte A-A (Cross Section):**

- Section length: 37
- Section diameter: 37
- Support dimensions: 10 N1 ± 20 C=770
- Material: 2ACAN, 2 3ACAN, 15 15

**Additional Dimensions:**

- End section diameter: 35
- End section length: 35
- End section material: 2ACAN, 2 3ACAN, 15 15

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Technical drawing of a mechanical part, showing a side view and a cross-section labeled "Corte A".

**Side View Dimensions:**

- Top diameter:  $R15$
- Top radius:  $R=15$
- Length from left face to center of first hole:  $744$
- Distance from center of first hole to center of second hole:  $351$
- First hole:  $10 \text{ } N1 \pm 0.20 \text{ } C=600$
- Second hole:  $30/35$
- Distance from center of second hole to right face:  $40$
- Distance from left face to center of third hole:  $10 \pm 0.20$
- Distance from center of third hole to center of fourth hole:  $4 \pm 16$
- Distance from center of fourth hole to right face:  $10 \pm 0.20$
- Bottom diameter:  $R=4$
- Bottom radius:  $R=4$
- Length from left face to center of fifth hole:  $747$
- Distance from center of fifth hole to center of sixth hole:  $2 \text{ } N2 \pm 0.16 \text{ } C=795$
- Distance from center of sixth hole to right face:  $2 \text{ } N3 \pm 0.16 \text{ } C=750$

**Corte A Dimensions:**

- Top width:  $30$
- Top radius:  $17$
- Inner width:  $4$
- Inner radius:  $30$
- Bottom width:  $30$
- Bottom radius:  $4 \pm 0.16$

**Notes:**

- $2x45 \text{ } N4 \pm 0.5 \text{ } C=109$

Technical drawing of a mechanical part, likely a shaft or axle, showing a side view and a cross-section labeled "Corte A".

**Side View Dimensions:**

- Top diameter: 631
- Length segments: 2 N1, 12.5, 15/35, 15/35, 2 N2, 12.5
- Material: C=660
- Internal features: (ELE), (ELE), (ELE)
- Internal diameters: 632, 631
- Internal length segments: 17, 6.3, 17, 6.3
- Internal diameters: 34 N3, 6.3 C=96
- Internal length segments: 2: 12.5, 2: 12.5, 2: 12.5, 2: 12.5
- Internal diameters: P14, P10, V101
- Internal length segments: 97, 100, 60

**Corte A Dimensions:**

- Top diameter: 20
- Length: 2
- Material: 34 N3, 6.3 C=96
- Internal diameter: 30

RESUMO DE AÇO			
AÇO	BIT	COMPR	PESO
	mm	m	kgf
60A	5	682	105
50A	6,3	1067	261
50A	10	123	76
50A	12,5	113	109
50A	16	305	481
50A	20	398	980
Peso Total	60A =		105 kgf
Peso Total	50A =		1907 kgf

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