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Technical drawing of a mechanical part with dimensions. The part is symmetrical about a horizontal centerline. The total width is 200. The central rectangular hole has a width of 140 and a height of 100. The part has a total height of 100. The top and bottom flanges have a thickness of 10. The side flanges have a thickness of 20. The part is supported by two triangular supports labeled 'A' at the ends. A 90° angle is indicated for the top flange.

Technical drawing of a mechanical part (Fig. 1.10) showing front and side views with dimensions. The front view (top) shows a central rectangular block with a width of 160 and a height of 220. It is flanked by two cylindrical sections with a diameter of 220. The total width of the part is 220. The side view (bottom) shows the profile of the part with a total height of 160. The dimensions are: 10, 20, 160, 20, 10 (top horizontal dimensions); 20, 10 (top vertical dimensions); 160, 220 (middle horizontal dimensions); 20, 10 (bottom vertical dimensions); 220 (bottom horizontal dimension); and 160 (left vertical dimension). A circular feature with a diameter of 220 is indicated on the side view.

Technical drawing of a mechanical part (Fig. 1.10) showing front and side views with dimensions. The front view (top) shows a central rectangular block with a width of 180 and a height of 240. It is flanked by two cylindrical sections with a diameter of 180. The total width is 240, and the total height is 200. The side view (bottom) shows the profile of the part, indicating a radius of 80 for the curved ends. Dimensions include 10, 20, 180, 20, 10, 20, 10, 180, 240, 20, 10, 20, 10, 240, and 80.

Technical drawing of a mechanical part, a shaft-hub assembly, showing dimensions and a 90-degree rotation.

The drawing shows a shaft with a central hole and a hub with a central hole. The shaft has a diameter of 20 mm and a length of 260 mm. The hub has an outer diameter of 260 mm and an inner diameter of 20 mm. The shaft is inserted into the hub. The drawing includes a 90-degree rotation symbol and a section line A-A.

Dimensions:

- Shaft diameter: 20
- Hub outer diameter: 260
- Hub inner diameter: 20
- Shaft length: 260
- Hub length: 200
- Shaft hole diameter: 10
- Hub hole diameter: 10
- Shaft hole position: 10, 20, 200, 20, 10
- Hub hole position: 10, 20, 200, 20, 10

Section line A-A is shown on the left and right sides of the drawing.

Figura 10: Corte transversal de un muro de contención de 12m de altura. El muro tiene un espesor de 20 cm y está revestido internamente. La base está sobre un lastro de concreto magro de 5 cm de espesor. El muro está apoyado sobre un varil de 15 cm de altura. La parte superior del muro está cubierta por una laja de tampa.

Diagrama de detalle de la junta de dilatación en un muro de concreto armado. Se muestra un corte transversal de la junta con un espesor de 12 cm. El muro está reforzado con varillas de acero (VAR) y tiene un revestimiento interno (REVESTIMIENTO INTERNO) con un espesor mínimo de 20 mm (MIN. 20). La junta está sellada con una junta de tampa (JUNTA DE TAMPA) y una junta de dilatación (JUNTA DE DILATACION). El muro está apoyado sobre un lastro de concreto magro (LASTRO DE CONCRETO MAGRO) y un lastro de grava (LASTRO DE GRAVA).

Technical drawing of a square plate with dimensions and hole specifications:

- Overall Dimensions:** The plate is square with side lengths of 6 units.
- Hole Specifications:** There are four holes, each with a diameter of $\varnothing 10$. The specification "C/15 C=206" indicates a center-to-center distance of 15 units between adjacent holes along both horizontal and vertical axes.
- Dimensions and Spacing:**
 - The distance from the left edge to the first hole center is 2 units.
 - The distance between the first and second hole centers is 4 units.
 - The distance from the last hole center to the right edge is 2 units.
 - The total width is 6 units.
 - The distance from the bottom edge to the first hole center is 2 units.
 - The distance between the first and second hole centers vertically is 4 units.
 - The distance from the last hole center to the top edge is 2 units.
 - The total height is 6 units.

Technical drawing of a rectangular plate with a circular hole. The plate has overall dimensions of 234 mm in width and 246 mm in height. The hole has a diameter of 10 mm. The dimensions are specified as follows:

- Overall width: 234 mm (13 N3 ϕ 10 C/15 C=246)
- Overall height: 246 mm (13 N3 ϕ 10 C/15 C=246)
- Distance from left edge to hole center: 2 mm (N3)
- Distance from hole center to right edge: 2 mm (N4 ϕ 15)
- Distance from left edge to hole center: 2 mm (N3)
- Distance from hole center to right edge: 2 mm (N4 ϕ 15)
- Distance from left edge to hole center: 2 mm (N3)
- Distance from hole center to right edge: 2 mm (N4 ϕ 15)
- Distance from left edge to hole center: 2 mm (N3)
- Distance from hole center to right edge: 2 mm (N4 ϕ 15)

TABELA DE AÇO					
ELEMENTO	N	Ø	QUANT.	COMP. UNIT.	COMP. TOTAL
Ø 0.60	1	8	66	172	11352
	2	8	66	170	11220
	3	10	36	146	5256
	4	10	24	66	1584
Ø 0.80	1	8	56	212	11872
	2	8	56	210	11760
	3	10	40	186	7440
	4	10	16	106	1696
Ø 1.00	1	8	240	232	55680
	2	8	240	230	55200
	3	10	176	206	36256
	4	10	64	126	8064
Ø 1.20	1	8	34	252	8568
	2	8	34	250	8500
	3	10	24	226	5424
	4	10	8	146	1168
Ø 1.50	1	8	36	272	9792
	2	8	36	270	9720
	3	10	26	246	6396
	4	10	8	166	1328
FIXAÇÃO TAMPAO	1	6.3	30	320	95940
	2	6.3	135	22	19920

RESUMO DO AÇO CASO		
Ø	COMP. TOTAL	PESO kg,(+10%)
6.3	1158.60	319
8	1936.64	852
10	746.12	517
TOTAL		1688 kg

Diagrama de uma junta de tubo com uma junta de solda. O tubo é fixado a uma laje. A junta de solda é feita com uma bolsa de solda. A instrução indica: "QUEBRAR A BOLSA DO TUBO JUNTO A CX".

ESC. 1: 20

20

10

TAMPRA TD-600

N6

2 N1 Ø 6.3 C/15 C=320

5 N2 Ø 6.3 C/30 C=22

5 N12

- 1 - DIMENSÕES EM CENTÍMETROS;
- 2 - CONCRETO ESTRUTURAL CLASSE C20 ($f_{ck}=20$ MPa);
- 3 - CONCRETO MAGRO CLASSE C10 ($f_{ck}=10$ MPa);
- 4 - RECOBRIMENTO DA ARMADURA: 3,0cm;
- 5 - ALVENARIA DE TIJOLOS MACIÇOS 1 VEZ, ASSENTADOS E REVESTIDOS
COM ARGAMASSA DE CIMENTO E AREIA TRAÇO 1:3.

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