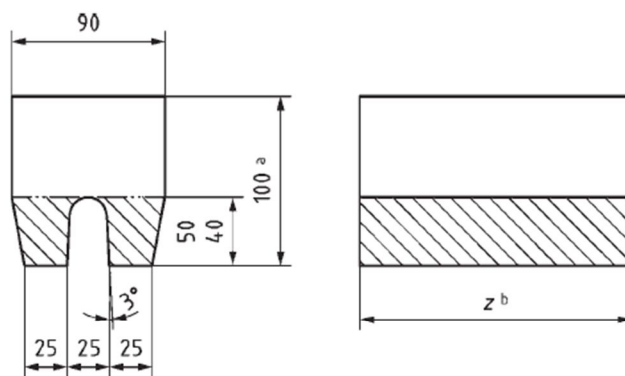


Allegato 1: Geometria campioni

O/CAVA Meccanica S.p.A.
UNIstore - 2012 - 368525

EN 1563:2011 (E)

Dimensions in millimetres



Key

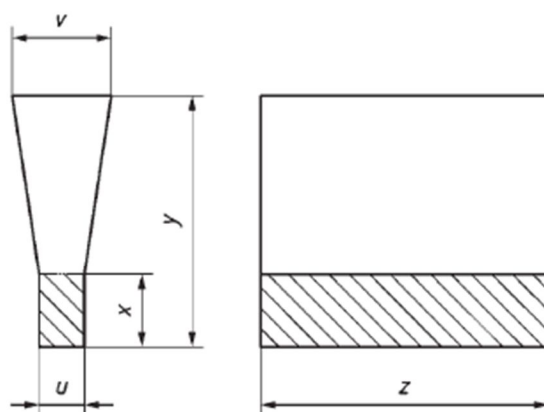
- ^a For information only.
- ^b The length z shall be chosen to allow a test piece of dimensions shown in Figure 5 to be machined from the sample.

The thickness of the sand mould surrounding the samples shall be at least 40 mm.

Figure 1 — Separately cast or side-by-side cast samples — Option 1: U-shaped sample

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Dimensions in millimetres



Dimension	Type			
	I	II	III	IV
u	12,5	25	50	75
v	40	55	100	125
x	25	40	50	65
y^a	135	140	150	175
z^b	A function of the test piece length			

^a For information only.

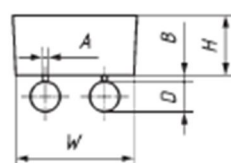
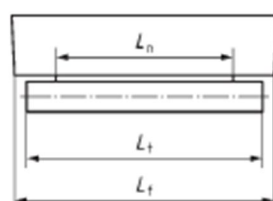
^b z shall be chosen to allow a test piece of dimensions shown in Figure 5 to be machined from the cast sample.

The thickness of the sand mould surrounding the samples shall be at least:

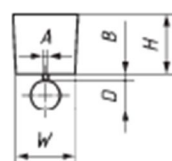
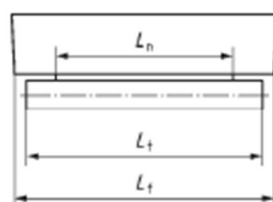
- 40 mm for types I and II;
- 80 mm for type III and IV.

Figure 2 — Separately cast or side by side cast samples — Option 2: Y-shaped sample

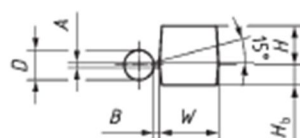
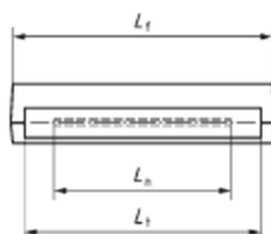
Dimensions in millimetres



Type a



Type b



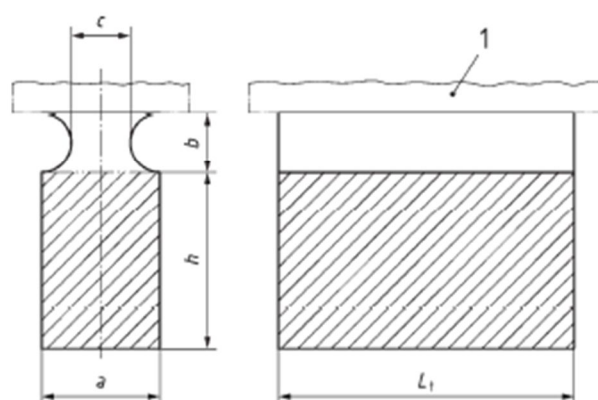
Type c

Type	A	B	D	H	H _b	L _t	L _n	L _t	W
a	4,5	5,5	25	50	—	L _t + 20	L _t - 50	a	100
b	4,5	5,5	25	50	—	L _t + 20	L _t - 50		50
c	4,0	5,0	25	35	15	L _t + 20	L _t - 50		50
^a L _t shall be chosen to allow a test piece of dimensions shown in Figure 5 to be machined from the cast sample.									

The thickness of the sand mould surrounding the samples shall be at least 40 mm.

Figure 3 — Separately cast or side-by-side cast samples — Option 3: Round bar-shaped sample

EN 1563:2011 (E)



Key

1 casting

Dimensions in millimetres

Type	Relevant wall thickness of castings t	a	b max.	c min.	h	L_t
A	$t \leq 12,5$	15	11	7,5	20 to 30	a
B	$12,5 < t \leq 30$	25	19	12,5	30 to 40	
C	$30 < t \leq 60$	40	30	20	40 to 65	
D	$60 < t \leq 200$	70	52,5	35	65 to 105	

^a L_t shall be chosen to allow a test piece of a dimension shown in Figure 5 to be machined from the cast sample.

The thickness of the sand mould surrounding the samples shall be at least

- 40 mm for types A and B;
- 80 mm for type C and D.

If smaller dimensions are agreed, the followings relationships apply:

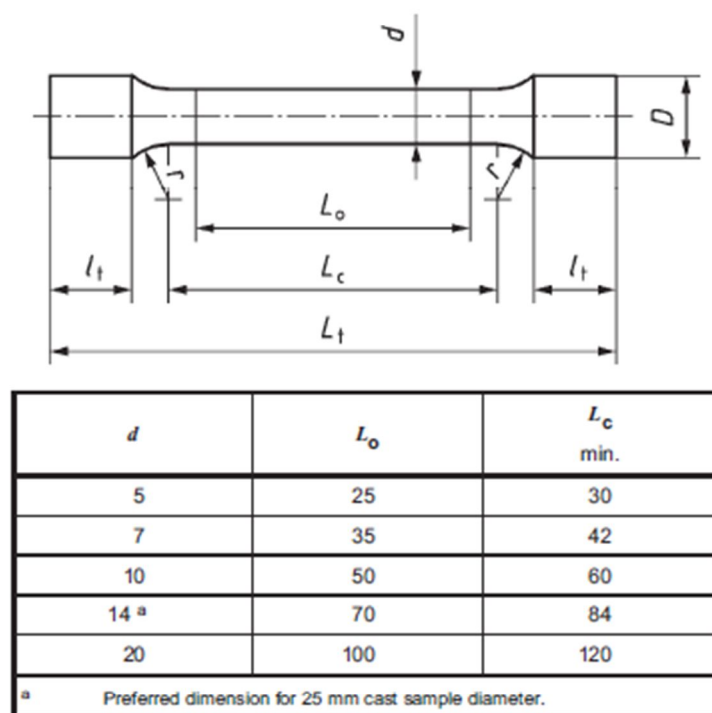
$$b = 0,75 \times a$$

$$c = 0,5 \times a$$

Figure 4 — Cast-on samples

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Dimensions in millimetres



where

- L_o is the original gauge length, i.e. $L_o = 5 \times d$;
- d is the diameter of the test piece along the gauge length;
- L_c is the parallel length, $L_c > L_o$ (in principle, $L_c - L_o \geq d$);
- L_t is the total length of the test piece, which depends on L_o ;
- r is the transition radius, which shall be at least 4 mm.

NOTE The method of gripping the ends of the test piece, together with their length l_t may be agreed between the manufacturer and the purchaser.

Figure 5 — Tensile test piece

9.2 Impact test

The impact test shall be carried out on three Charpy V-notched impact test pieces (see Figure 6) in accordance with EN ISO 148-1:2010, using test equipment with an appropriate energy to determine the properties correctly.

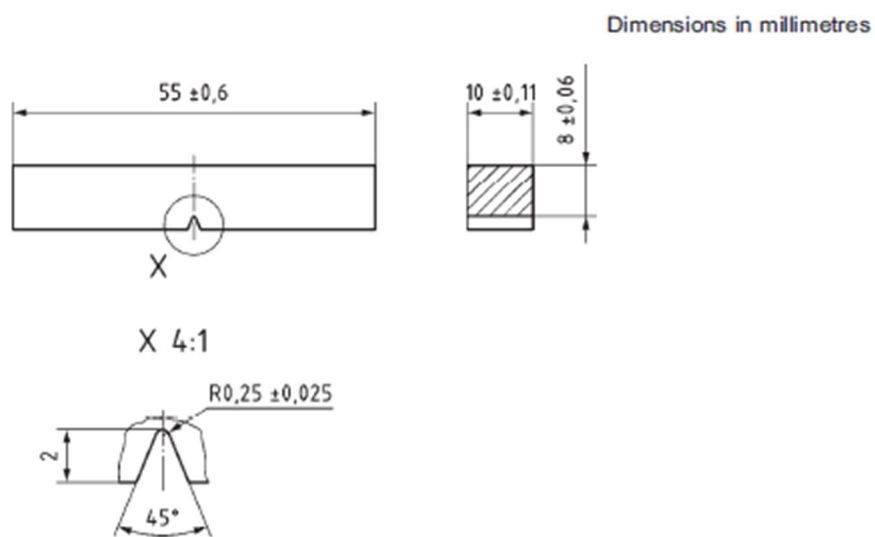


Figure 6 — Charpy V-notched impact test piece