

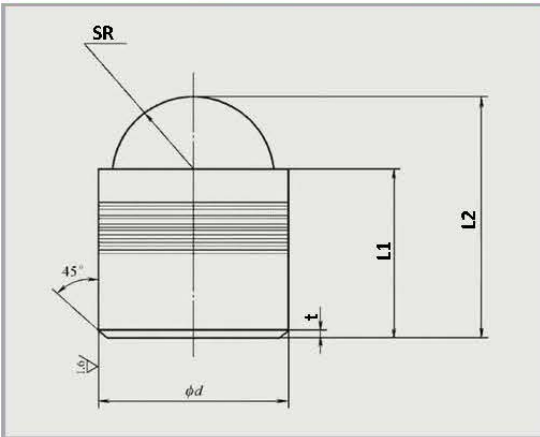
WINMAN DIMENSION AND TOLERANCE OF BALL UP - TYPE PLUG



MATERIALS FOR MOUNTING HOLE

There should be no such flaws as porosity, shrinkage cavity and crack in materials for mounting hole. The material for mounting hole may be gray cast iron, nodular cast iron, carbon steel or alloy steel, copper or copper alloy, and high-strength aluminum alloy. Mechanical properties of the materials should conform to the following requirements.

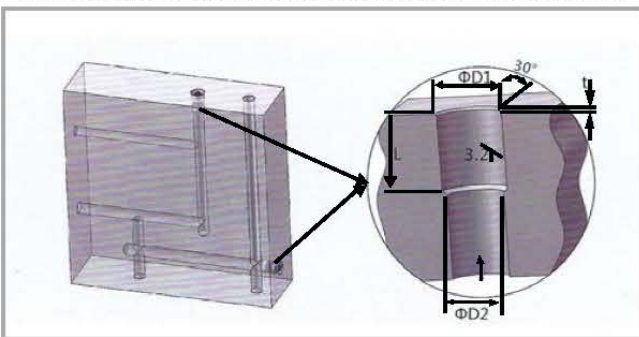
- a) its tensile strength should be 250 MPa ~ 1000 MPa
- b) its rigidity should be ± 150 HBW ~ 250 HBW



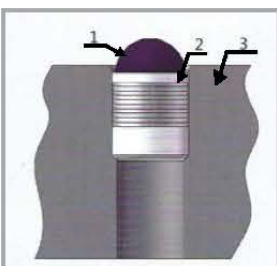
d		L1		L2		t	SR
Basic size	Tolerance zone	Basic size	Tolerance zone	Basic size	Tolerance zone		
3.2	f8 ^a	3.4	± 0.15	4.7	± 0.15	0.3	1.185
4		4.2		5.7			1.500
5		5.7		7.5			2.000
6		6.7		9			2.500
7		7.8		10.3			3.000
8		8.7		12.2			3.500
9		10.2		13			4.000
10		11.2		15.8			4.500
12	± 0.2	13.2	± 0.2	18.6	± 0.2	0.5	5.500
14		15.2		21.5			6.350
16		17.2		23.8			7.150

THE PROCESSING TECHNOLOGY OF MOUNTING HOLE

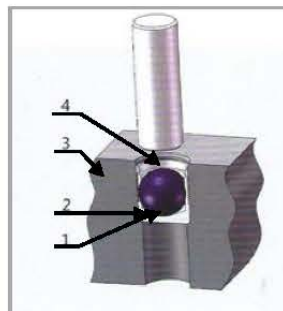
The first processing of mounting hole should be drilling, then reaming.



D1		D2		L		t
Basic size	Tolerance zone	Basic size	Tolerance zone	Basic size	Tolerance zone	
3.2	+0.04 0	2.5	0 -0.5	4.2	+0.3 0	0.5
4		3		5		
5		4		6.5		
6		5		7.5		
7		6		8.5		
8		7		9.5		
9		8		11		
10		9		12		
12	+0.5 0	10.5	+0.5 0	14	+0.5 0	0.7
14		12.5		16		
16		14.5		18		



1-steel ball; 2-housing; 3-workpiece
a) the ball up-type plug being placed into the mounting hole



1-steel ball; 2-housing; 3-workpiece; 4-The locating place of the punch
b) To pound the steel ball into the bottom of the housing

MOUNTONG METHOD

The ball up - type plug should be mounted in the following way:

a) Reasonable dimension and location of the mounting hole should be set:

1-Wall thickness of the mounting hole should not be less than the aperture D;

2-For the parallel precision hole, if there is, its wall thickness should be over the aperture D.

b) Check the mounting hole in regards of such flaws as porosity, shrinkage cave and crack, and in case that any such flaws are found, the ball up - type plug may not be mounted.

c) Rinse the mounting hole and the ball up - type plug with acetone.

d) ;During mounting the ball up - type plug, first the plug should be placed into the mounting hole, then pound the bottom of the housing.