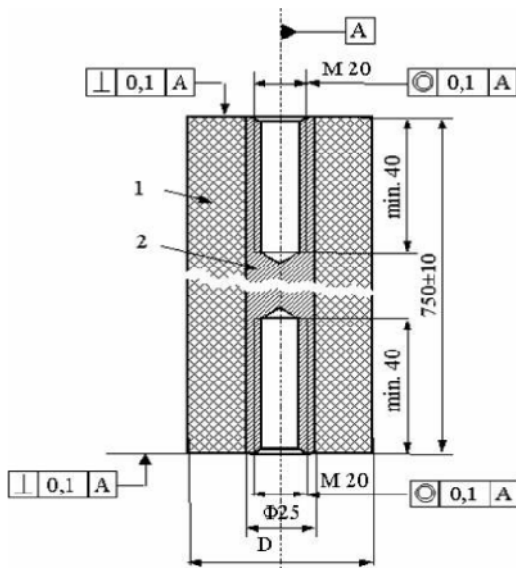


Injection anodes for cathodic protection systems / ground plates for three-phase electroenergetic system

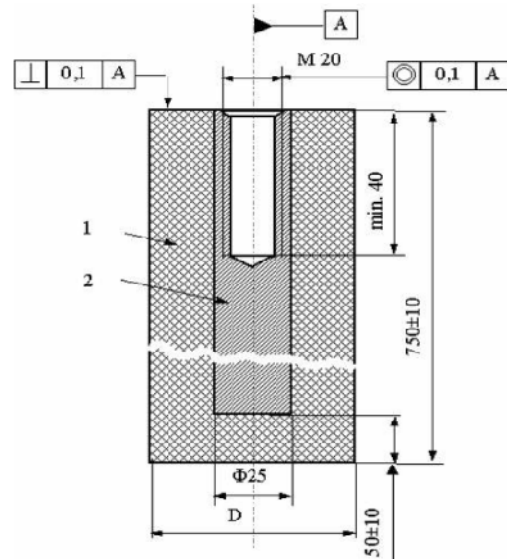
DESCRIPTION:

Metallic modules are destined to obtain performant injection anodes and ground plates with low dispersion resistance and high corrosion resistance (high durability).

Different versions:



Modul Fe/Si armat „curent”
1-masă activă; 2-armătură.



Modul Fe/Si armat „terminal”
1-masă activă; 2-armătură.

FeSi alloy modules are annotated with: MA x y z, where:

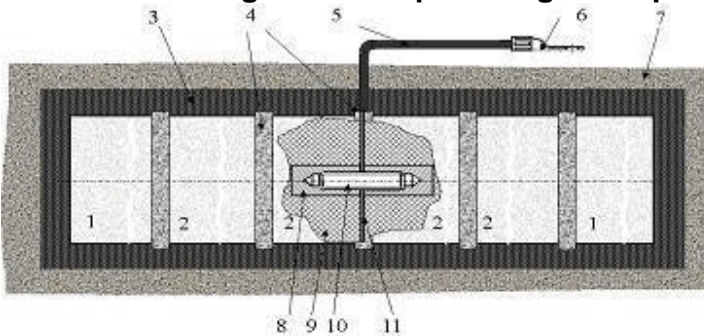
x - type of module: current „c” or terminal „t”;

y - concentration in Si of active mass „a” for 12.5÷14.0%Si or „b” for 14.0÷15.5%Si;

z - outside diameter (mm) of modules (60 or 80).

Example: - MAca60 - anodic module of „c” type (current), with Si content variant „a” (12.5÷14.0%), having an outside diameter of 60mm.

Horizontal setting of anodic plate or ground plate:



1 - module "terminal"; 2 - module "current"; 3 - coke bed + bentonite; 4 - insulation with polymeric resin; 5 - cable / strip joint; 6 - joint; 7 - soil; 8 - reinforcement; 9 -Fe-Si alloy; 10 - dowel pin; 11 - contact element; 12 - screw nut.

Technical Characteristics:

Active mass:

Tip modul		Masa activă min. [kg]		Masa totală max./min. [kg]	
		D = 60mm	D = 80mm	D = 60mm	D = 80mm
MA tip x,	x = „c”	12,10	23,50	15,80 / 15,35	27,30 / 26,45
„a” și „b”	x = „t”	12,13	23,53	15,77 / 15,32	27,27 / 26,42

Maximum impurities accepted in active mass of metallic modules:

C	Mn	P	S	Cr	Mo	Ni	Cu	Sn	Ti
1,30	0,790	0,114	0,0430	0,310	0,250	0,060	0,0880	0,0760	0,0350

Specific (maximum) anodic dissolution of anodic mass in different electrolytes:

Tip modul	Dizolvarea anodică specifică - D_A - maximă* [kg/A·an], în soluțiile:				
	0,1%NaCl+0,5%Na ₂ SO ₄	1% NaCl	3% NaCl	5%Na ₂ SO ₄	1%NaCl+5%Na ₂ SO ₄
MA var. „a”	0,510	0,550	0,690	0,520	0,630
MA var. „b”	0,480	0,650	0,750	0,490	0,580

Technical advantages:

- Uniform distribution of current lines by active anodic mass;
- Low rate of anodic dissolving;
- Low dispersion resistance;
- Removal of degradation risk (fissure) during the manoeuvre;
- Easy junction of modules - low costs at implementation.

Users:

Distributors of natural gas, distributors of oil products, distributors of electrical energy.