
International Standard



4782

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

Industrial wire screens and woven wire cloth — Diameters of metal wire

Tamis et tissus métalliques industriels — Diamètres des fils métalliques

First edition — 1981-07-15

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UDC 621.928.028.3 : 669.426

Ref. No. ISO 4782-1981 (E)

Descriptors : wire, wire cloth, metal products, diameters, mass.

Foreword

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International Standard ISO 4782 was developed by Technical Committee ISO/TC 24, *Sieves, sieving and other sizing methods*, and was circulated to the member bodies in January 1980.

It has been approved by the member bodies of the following countries :

Canada	Japan	Switzerland
France	Netherlands	United Kingdom
Germany, F.R.	Portugal	USA
India	Romania	USSR
Ireland	South Africa, Rep. of	
Italy	Spain	

No member body expressed disapproval of the document.

Industrial wire screens and woven wire cloth — Diameters of metal wire

1 Scope and field of application

This International Standard specifies the diameters of wire to be used for the manufacturing of industrial wire screens and woven wire cloth. It is applicable to metal wires from 25 to 0,020 mm diameter.

2 References

ISO 3, *Preferred numbers — Series of preferred numbers*.

ISO/R 388, *ISO metric series for basis thicknesses of sheet and diameters of wire*.

ISO 497, *Guide to the choice of series of preferred numbers and of series containing more rounded values of preferred numbers*.

3 Diameters

Table 1 lists the diameters of wire according to the R 10 and R 20 series of ISO/R 388, with the addition of the 0,030 mm value of the R 40 series. Diameters in bold type (R 10 series) should be given preference.

Table 1 — Diameters of metal wire and linear densities for steel wire

Diameter of wire <i>d</i>	Linear density ¹⁾ ρ_1						
mm	kg/km	mm	kg/km	mm	kg/km	mm	kg/km
		10,00	617	1,000	6,2	0,100	0,062
		9,00	499	0,900	5,0	0,090	0,050
		8,00	395	0,800	3,9	0,080	0,039
		7,10	311	0,710	3,1	0,071	0,031
		6,30	245	0,630	2,4	0,063	0,024
		5,60	193	0,560	1,9	0,056	0,019
		5,00	154	0,500	1,5	0,050	0,015
		4,50	125	0,450	1,2	0,045	0,012
		4,00	98,6	0,400	1,0	0,040	0,010
		3,55	77,7	0,355	0,78	0,036	0,008
		3,15	61,2	0,315	0,61	0,032	0,006
		2,80	48,3	0,280	0,48	0,030	0,006
		2,50	38,5	0,250	0,39	0,028	0,005
25,0	3 853	2,24	30,9	0,224	0,31	0,025	0,004
22,4	3 094	2,00	24,7	0,200	0,25	0,022	0,003
20,0	2 466	1,80	20,0	0,180	0,20	0,020	0,002
18,0	1 998	1,60	15,8	0,160	0,16		
16,0	1 578	1,40	12,1	0,140	0,12		
14,0	1 208	1,25	9,6	0,125	0,096		
12,5	963	1,12	7,7	0,112	0,077		
11,2	773						

1) For plain or carbon steel, the material density $\rho = 7 850 \text{ kg/m}^3$ (see clause 4).