

ASTM E747-84a / ASME SE747-97a Wire Penetrameters

Specification:

ASTM E747-84a and ASME SE747-97a wire type penetrameters consist of a series of six parallel wires of different thicknesses, 25 or 50mm long, encapsulated between two thin sheets of transparent, flexible PVC. Lead characters identify the thickness of the thickest wire and material group. The letters ASTM are also included.

ASTM Material Classification

IQI Group	Wire Material
Group 1	Stainless Steel
Group 2	Aluminium Bronze (Not Available)
Group 3	Inconel
Group 4	Copper
Group 01	Titanium
Group 02	Aluminium
Group 03	Magnesium (Not Available)

Set A- for Fe, Cu, Al, Ti & In For material thickness 4mm - 12.5mm

Set No	Wire No	Dia mm	Dia Ins
A	1	0.08	0.0032
A	2	0.10	0.0040
A	3	0.13	0.0050
A	4	0.16	0.0063
A	5	0.20	0.0080
A	6	0.25	0.0100

Set A - Available with Wire Length either 25mm or 50mm

Set B - for Fe, Cu, Al, Ti & In For material thickness 12.5mm - 40.5mm

Set No	Wire No	Dia mm	Dia Ins
B	1	0.25	0.010
B	2	0.33	0.013
B	3	0.4	0.016
B	4	0.51	0.020
B	5	0.64	0.025
B	6	0.81	0.032

Set B - Available with Wire Length either 25mm or 50mm

Set C- for Fe, Cu, Al, Ti & In For material thickness 40.5mm - 125mm

Set No	Wire No	Dia mm	Dia Ins
C	1	0.81	0.032
C	2	1.02	0.040
C	3	1.27	0.050
C	4	1.60	0.063
C	5	2.03	0.080
C	6	2.50	0.100

Set C - Available with Wire Length either 25mm or 50mm

Set D- Only available in Fe, for material thickness 125mm - 400mm

Set No	Wire No	Dia mm	Dia Ins
D	1	2.50	0.100
D	2	3.20	0.128
D	3	4.06	0.160
D	4	5.10	0.200
D	5	6.40	0.250
D	6	8.00	0.320

Set D - Available only in 50mm Wire Length

A "Certificate of Conformity" is available for each penetrometer set.