

Wire Type Image Quality Indicators to EN 462-1

The European standard, which was introduced in 1994, replaces well-known national standards such as DIN 54 109 and BS 3971. The wire diameters and system of numbering follow the previous DIN practice. IE-NDT Ltd manufactures EN 462-1 IQIs in steel, aluminium, copper and models W6, W10 and W13 in titanium.

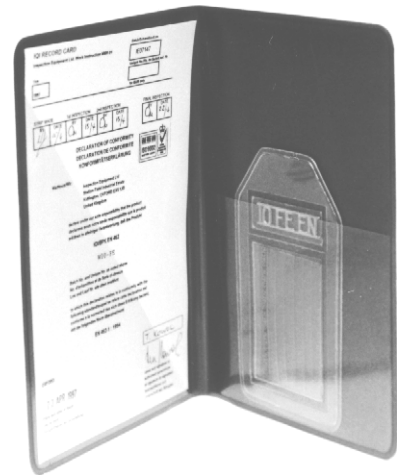
Description. Wire type IQIs to EN 462-1:1994 manufactured by IE-NDT Ltd. comprise seven parallel wires 10, 25 or 50mm long, which are encapsulated in thin, transparent plastic along with a radio-opaque identification plaque. Each IQI is supplied in a wallet. For ease of recognition, the wallet carries stickers showing the IQI model and wire length it contains. These are colour coded:

<i>Blue</i>	<i>Yellow</i>	<i>Red</i>	<i>White</i>
Steel	Aluminium	Copper	Titanium

Encapsulation. The wires in models W1, W6 and W10 as well as W13 in FE and CU are encapsulated in thin PVC. Because of the low radiation energy normally appropriate when models W13AL and W13TI are used, these wires are encapsulated in thin, less radiation absorbent polythene (complies with Standard requirement 4.2).

Identification. Most models are encapsulated with cast, white metal identification plaques. To avoid distracting glare when viewing radiographs containing a W13AL or W13TI model, these identification plaques are made of thin copper on a GRP substrate (complies with Standard requirement 4.3).

Quality Assurance. Manufacturing, including inspection, follows a written procedure, which forms part of a Quality Management System registered according to ISO 9002. Each IQI carries a unique batch number. The Declaration of Conformity provides a complete manufacturing history as well as a printout showing the measured diameter of each wire.



The official description of an IQI reads, for example, **IQI EN W10 FE 50**. This means an IQI containing wire W10 to W16 in steel with a wire length of 50mm.

- 10.24.50 IQI EN W1 FE 50
- 10.24.51 IQI EN W1 CU 50
- 10.24.52 IQI EN W1 AL 50
- 10.24.53 IQI EN W6 FE 50
- 10.24.54 IQI EN W6 FE 25
- 10.24.55 IQI EN W6 FE 10
- 10.24.56 IQI EN W6 CU 50
- 10.24.57 IQI EN W6 CU 25
- 10.24.58 IQI EN W6 CU 10
- 10.24.59 IQI EN W6 AL 50
- 10.24.60 IQI EN W6 AL 25
- 10.24.61 IQI EN W6 AL 10
- SPEC IQI EN W6 TI 50
- 10.24.62 IQI EN W10 FE 50
- 10.24.63 IQI EN W10 FE 25
- 10.24.64 IQI EN W10 FE 10
- 10.24.65 IQI EN W10 CU 50
- 10.24.66 IQI EN W10 CU 25
- 10.24.67 IQI EN W10 CU 10
- 10.24.68 IQI EN W10 AL 50
- 10.24.69 IQI EN W10 AL 25
- 10.24.70 IQI EN W10 AL 10
- 10.24.71 IQI EN W10 TI 50
- 10.24.72 IQI EN W10 TI 25
- 10.24.73 IQI EN W10 TI 10
- 10.24.74 IQI EN W13 FE 50
- 10.24.75 IQI EN W13 FE 25
- 10.24.76 IQI EN W13 FE 10
- 10.24.77 IQI EN W13 CU 50
- 10.24.78 IQI EN W13 CU 25
- 10.24.79 IQI EN W13 CU 10
- 10.24.80 IQI EN W13 AL 50
- 10.24.81 IQI EN W13 AL 25
- 10.24.82 IQI EN W13 AL 10
- 10.24.83 IQI EN W13 TI 50
- 10.24.84 IQI EN W13 TI 25
- 10.24.85 IQI EN W13 TI 10

Model				Wire No.	Ø mm	Comments on Availability from Inspection Equipment Ltd.
W1	W6	W10	W13			
40 - 160mm*	12,5 - 50mm*	5 - 20mm*	2,5 - 10mm*	W1	3,20	IQI EN 462-W1 in CU, FE and AL 50mm wire length only
				W2	2,50	
				W3	2,00	
				W4	1,60	IQI EN 462-W6 in CU, FE and AL 10, 25 and 50mm wire length
				W5	1,25	
				W6	1,00	
				W7	0,80	IQI EN 462-W10 in CU, FE, TI and AL 10, 25 and 50mm wire length
				W8	0,63	
				W9	0,50	
				W10	0,40	IQI EN 462-W13 in CU, FE, TI and AL 10, 25 and 50mm wire length
				W11	0,32	
				W12	0,25	
				W13	0,20	*Typical specimen thickness range for guidance only
				W14	0,16	
				W15	0,125	
				W16	0,100	
				W17	0,080	
				W18	0,063	
				W19	0,050	

IQI RECORD CARD
Inspection Equipment Ltd Work Instruction No. MWI-01

Batch/Echantillon/Los: **IE09189**
Unique No./No. de Serie/Lauf Nr. []
Year: **1999** for BAM only

STRIP MADE BY	DATE	1st INSPECTION BY	DATE	2nd INSPECTION BY	DATE	FINAL INSPECTION BY	DATE
[Signature]	22/4	[Signature]	29/4	[Signature]	25/4	[Signature]	27/4

DECLARATION OF CONFORMITY
DECLARATION DE CONFORMITE
KONFORMITÄTSERKLÄRUNG

Inspection Equipment Ltd
Station Field Industrial Estate
Kuslington, OXFORD OX5 1JD
United Kingdom

ISO 9002 REGISTERED COMPANY

declare under our sole responsibility that the product
declares sous notre seule responsabilité que le produit
erklären in alleiniger Verantwortung, daß das Produkt

IQI/BPK EN 462
W10 TI

Batch No. and Unique No. as noted above
No. d'échantillon et de Serie ci-dessus
Los und Lauf Nr. wie oben erwähnt

to which this declaration relates is in conformity with the
following standard/auquel se réfère cette déclaration est
conforme à la norme/au das sich diese Erklärung bezieht,
mit der folgenden Norm übereinstimmt

EN 462-1, 1984		
1	Ø. 0,320	M
2	Ø. 0,127	M
3	Ø. 0,159	M
4	Ø. 0,192	M
5	Ø. 0,251	M
6	Ø. 0,326	M
7	Ø. 0,399	M

OXFORD
27 APR 1999
Place and date of issue
Ort und Datum der Ausstellung

T. Kowal
[Signature]
name and signature of
authorized person/nom
et signature du signataire
autorisé/Name und
Unterschrift des Befugten