

VMS IX100 Industrial X-ray Film

Technical data sheet

VMS IX100 Industrial X-ray film is a high performance product having superior image quality and is suitable for automatic and manual process chemistry.

The film is imported from Japan and incorporates optimum speed which permits its use in a wide range of NDT applications delivering consistently high quality images for the wide range of materials examined irrespective of the radiation source.

The sensitized coating is on polyester 0.175 mm thick, blue tinted base which has excellent dimensional stability and strength and is suitable for automatic processing.

Features and applications

Features	Applications	Radiation types and Use
<ul style="list-style-type: none"> • Ultra speed • High contrast • Fine grain • Can be used with or without lead screens • Suitable with fluorescent or flouro-metallic screens 	<ul style="list-style-type: none"> • Weldings and castings - metals with medium or higher atomic number • Aircraft construction and maintenance • Ordinance inspections and other types of usage 	<ul style="list-style-type: none"> • Low radiation source - For light metal inspection • High voltage X-ray or Gamma rays - For inspection of thick or high density materials

Relative speed

Relative speed			Film System Class			
X-ray 100KV (without lead)	X-ray 200KV (with lead)	Ir-192 (with lead)	C0-60 (with lead)	ASTM E1815	EN 584-1	ISO 11699-1
100	100	100	100	2	C5	C5

Based on film processed in VMS process chemistry.
Automatic processing: at 28 C for 1.5 mins.
Manual processing: at 20 C for 5 mins.

COLOR SENSITIVITY

Blue sensitive

SAFELIGHT

The film should be handled under a red-orange safelight filter with a 15/20 watt bulb at a distance of not less than 1 meter (3.3 feet).

Operational guide for material type and X-ray equipment

Material		X-ray Tube Voltage (kV)	Co - 60
Type	Thickness - mm		
Light Metals	13 ~ 25	< 50	
	25 ~ 50	< 50 - 80	
	50 ~ 100	50 - 250	
	over 100	120 - 250	
Iron and Steel	0 ~ 6	80 - 150	
	6 ~ 13	120 - 250	
	13 ~ 25	150 - 400	
	25 ~ 50	250 - 400	Co 60
	50 ~ 100	250 - 1000	Co 60
	over 100	1000	Co 60
Bronze	0 ~ 6	80 - 150	
	6 ~ 13	120 - 250	
	13 ~ 25	250 - 400	
	25 ~ 50	250 - 1000	Co 60
	50 ~ 100	1000	Co 60

PROCESSING

Manual

Process solution	Temp.	Duration
VMS Plus Developer	20°C	5 min.
Stop bath	18 - 22°C	30-40 sec.
VMS Plus Fixer	18 - 22°C	5 - 10 min.
Wash with running water	18 - 22°C	> 45 mins.
Drying with wetting agent	18 - 22°C	30 sec.

Auto-processor

Process solution	Temp.	Duration
VMS Plus Developer	28°C	1.5 min.
VMS Plus Fixer	31°C	
Wash water	< 31°C	
Drying	45°C	
Dry to dry time		9 min.

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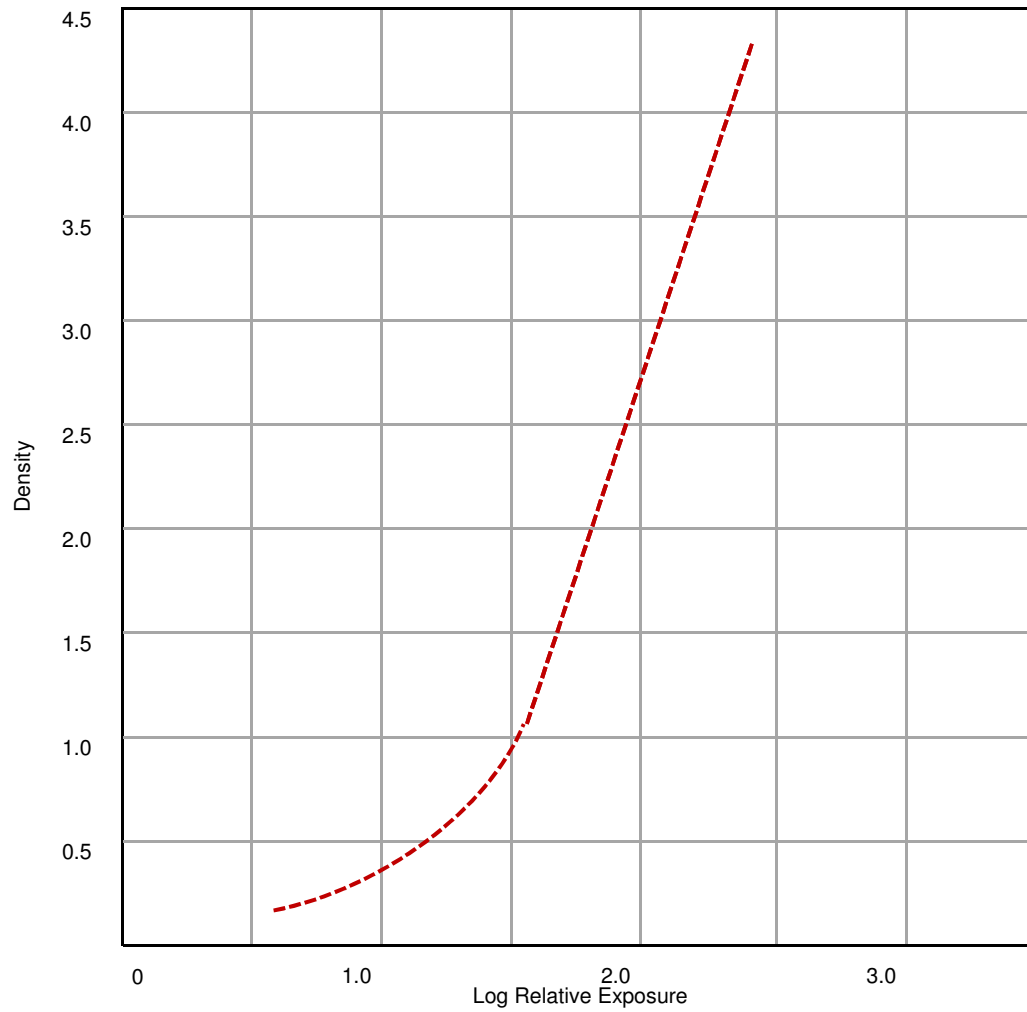
Certifications: ISO 9001:2015, ISO 14001:2015, ISO 13485:2003, CE, OHSAS 18001:2007 and WHO-GMP

I X 100 Characteristic Curve

Performance characteristics

Auto-process:

Exposure: 200Kv / Pb screen. Process: VMS Auto-process chemistry



Performance characteristics

Manual process:
Exposure: 200Kv / Pb screen. Process: VMS Manual process chemistry

