

Radioflex

Portable Industrial X-ray Inspection Apparatus

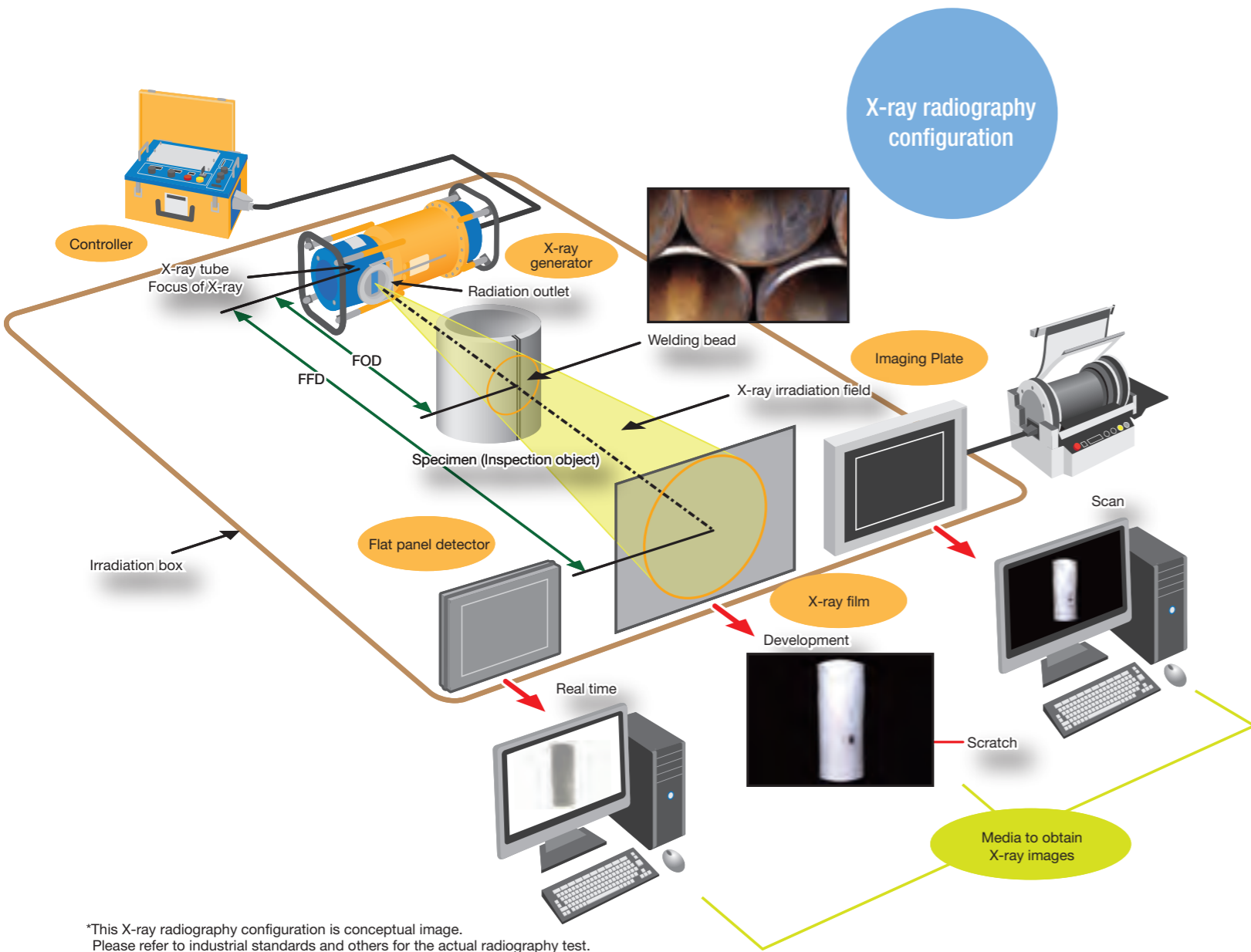


New feature of X-ray imaging environment with enhanced operationality and safety

Radio-flex

"Radioflex" series are the most reliable portable X-ray inspection apparatus. We meet your various needs of non-destructive inspection, such as inspections of pipes at various plant, building maintenance, cement core at building, welding of light alloy and connection of synthetic resin.

X-ray radiography configuration



*This X-ray radiography configuration is conceptual image. Please refer to industrial standards and others for the actual radiography test.

Simple operation based on direct settings*

The rotary encoder setting for X-ray tube voltage and exposure time enables easy adjustment of optimal exposure condition.

*RF-EGM2 Series, RF-300M2F

Reduced operating time with optimum aging mode*

Automatic aging mode will start when 8 hours have passed after the last stop. Unnecessary aging times are eliminated because the current kV setting is used for the aging.

*RF-EGM2 Series: Max voltage is used for automatic aging when stop period exceeds 30 days.

Power-saving mode enables use in limited-power environments*

New feature enables switch from standard-power (STD) to power-saving mode (LOW) when power supply capacity is limited.

*RF-EGM2 Series

Safe operation assured by a variety of safety functions

Various safety functions provide inspections with reassurance.

- Safety key-switch
- Interlock mechanism
- Buzzer alarm function

System configuration

X-ray generator, controller, accessories, remote controller (with 20m cable) Please refer to page 6 for the details of accessories.

*RF-EGM2 series





Portable Industrial X-ray Inspection Apparatus

Radioflex RF-200SPS

RF-200SPS is optimum X-ray radiographic tool for on-site inspection especially located in a narrow area or at a high place.

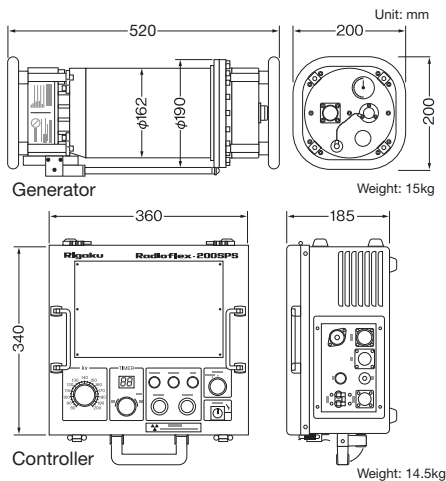


Robustness,
Easy operation



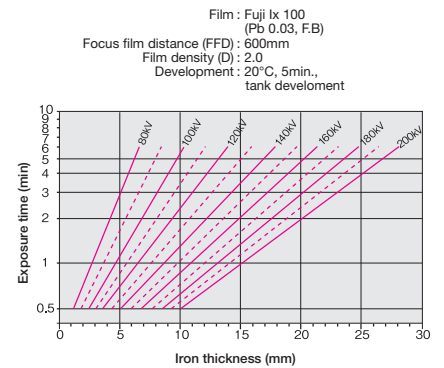
Excellent workability at
tough testing environment

RF-200SPS



Tube Voltage	80-200kV
Tube Current	3mA fix
Duty cycle	100% (6min. -10°C to +40°C)
X-ray tube	Ceramic X-ray tube Focal spot size (nominal) 2.0mm×2.0mm
Inherent filter	Aluminum 2mm + Beryllium 1mm
Dimensions	Generator 200(W)×200(D)×520(H)mm
	Controller 360(W)×340(D)×185(H)mm
Weight	Generator 15kg
	Controller 14.5kg
Power supply	Single phase AC 190-240V 50/60Hz
Power consumption	1kVA
Generator insulation	SF6 insulation gas
Generator cooling	Forced air cooling by radiator

Reference exposure chart



Made to order

RF-100GSB

Tube Voltage	20-100kV 20-50kV in steps of 2.5kV 50kV-100kV in steps of 5kV
Tube Current	5mA
Duty cycle	100% (6min. -10°C to +40°C)
X-ray tube	Glass X-ray tube Focal spot size (nominal) 1.5mm×1.5mm
Inherent filter	-
Dimensions	Generator 262(W)×262(D)×570(H)mm
	Controller 425(W)×380(D)×245(H)mm
Weight	Generator 22kg
	Controller 21.5kg
Power supply	Single phase AC 190V-240V 50/60Hz
Power consumption	1.0kVA
Generator insulation	SF6 insulation gas
Generator cooling	Forced air cooling by radiator

Panoramic Type Portable X-ray Unit

Radioflex RF-300M2F

RF-300M2F is a panoramic portable unit with flat target.

It works effectively for inspection of circumferential weld for large dia. steel pipe.



Panoramic Radiation

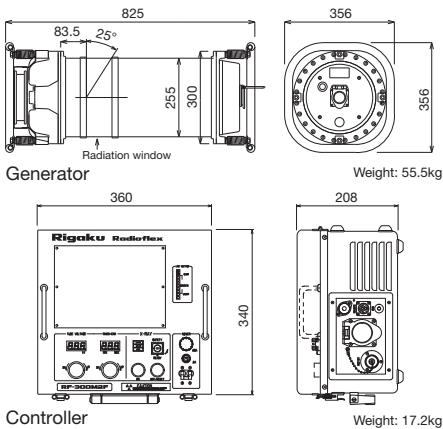
Inspection of large dia. steel pipe welds

Focus on fields

Robustness, Easy operation

RF-300M2F

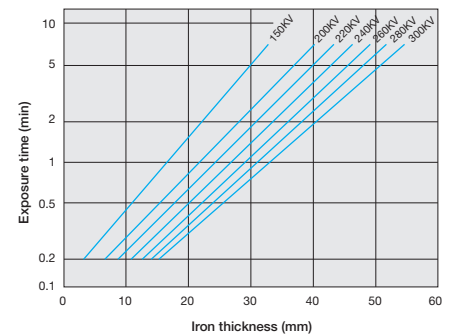
Unit: mm



Tube Voltage	150-300kV in steps of 2kV
Tube Current	5mA
Duty cycle	100% (6min. -10°C to +40°C)
X-ray tube	Glass X-ray tube Focal spot size (nominal) 2.5mm×2.5mm
Inherent filter	Aluminum 2.5mm (case) + Copper 1mm (tube)
Dimensions	Generator 356(W)×356(D)×825(H)mm
	Controller 360(W)×340(D)×208(H)mm
Weight	Generator 50.2kg without the cover for directional
	55.5 kg with the cover for directional
Controller	17.2kg
Power supply	Single phase AC 190V-240V 50/60Hz
Power consumption	4kVA
Generator insulation	SF6 insulation gas
Generator cooling	Forced air cooling by radiator

Reference exposure chart

Film : Fuji Ix 100
Intensifying screen : Lead foil intensifying screen 0.03×2 (front bag)
Focus film distance (FFD) : 600mm
Film density (D) : 2.0
Development : 20°C, 5min, tank development



Accessories

	RF-EGM2 Series	RF-200SPS	RF-100GSB (made to order)	RF-300M2F
Power cable	1pc. (3-pin plug attached, 20m long)	1pc. (3-pin plug attached, 20m long)	1pc. (3-pin plug attached, 20m long)	1pc. (3-pin plug attached, 20m long)
Low-voltage cable	1pc. (9-pin plug attached, 20m long)	1pc. (10-pin plug attached, 20m long)	1pc. (9-pin plug attached, 20m long)	1pc. (9-pin plug attached, 20m long)
Spare fuse	25A 2pcs. (10.3mmφ×38mm) 2A 2pcs. (6.4mmφ×30mm)	2A 2pcs. (6.4mmφ×30mm)	10A 2pcs. (10.3φ×38mm) 2A 2pcs. (6.4φ×30mm) 1A 1pcs. (6.4φ×30mm)	25A 2pcs. (10.3mmφ×38mm) 2A 2pcs. (6.4mmφ×30mm)
Spare lamp	-	3pcs. (mA, Ready, X-Ray)	3pcs.	-
Interlock key	2pcs.	2pcs.	-	2pcs.
Grounding rod	Option	Option	Option	Option
X-ray generation indication lamp (External connection type)	Option (3m cable attached)	1set (3m cable attached)	1set (3m cable attached)	1set (15m cable attached)
X-ray generation indication lamp (Embedded type)	1pc.	-	-	-
X-ray direction indicator	1 set (X-ray focus-to-film distance 600mm type)	1 set (X-ray focus-to-film distance 600mm type) (Option except Japan)	1 set (X-ray focus-to-film distance 600mm type)	1 set (X-ray focus-to-film distance 600mm type)
Unidirectional radiation cover	-	-	-	1pc.
Slit	RF-200EGM2: Lead plate, 104mmφ×t3.5mm Window 26×63mm 1pc Lead plate, 104mmφ×t3.5mm Window 54×63mm 1pc RF-250EGM2: Lead plate, 104mmφ×t6mm Window 28×71mm 1pc Lead plate, 104mmφ×t6mm Window 61×71mm 1pc RF-300EGM2: Lead plate, 113mmφ×t10mm Window 26×74mm 1pc Lead plate, 113mmφ×t10mm Window 63×74mm 1pc	-	Lead, 76mmφ×t3.0mm Window 20×40mm Lead, 76mmφ×t3.0mm Window 40×40mm	-

*Radiation port cover is included only for RF-100GSB

Related products

CR-1012 (mobile type imaging plate scanner)

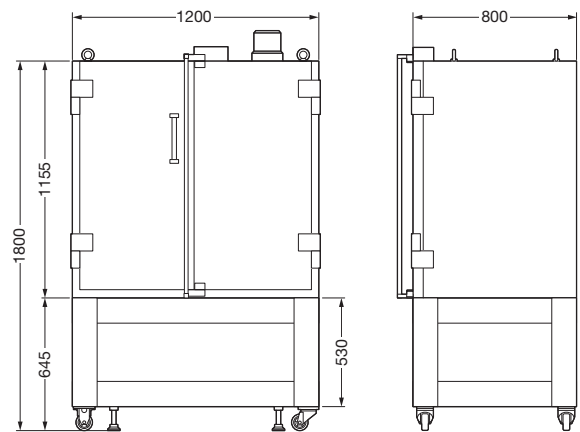


CR-1012 is a scanner for imaging plates, for industrial X-ray inspection apparatus. Its compact size and light weight make it highly mobile. It does not need a PC in order to scan images. Simple operation, and no chemicals required, reduces load on operators and the environment in field operations.

Specifications

Reading pitch	100μm, 50μm, 25μm* (*Windows7 only)
Output format	DICOM (16 bit), BMP (8bit RGB)
Effective max reading size	244×295mm (IP size: 252×303mm)
Reading time	90sec@100μm, 164sec@50μm (in case of IP size 252×303mm)
Unit size	480(W)×360(D)×390(H)mm
Weight	35kg
Power supply	AC 120V ±10% 0.5kW or AC 220V ±10% 0.5kW
Option	Carrying case, IP holder, IP, Cassette

Irradiation Box



Unit: mm

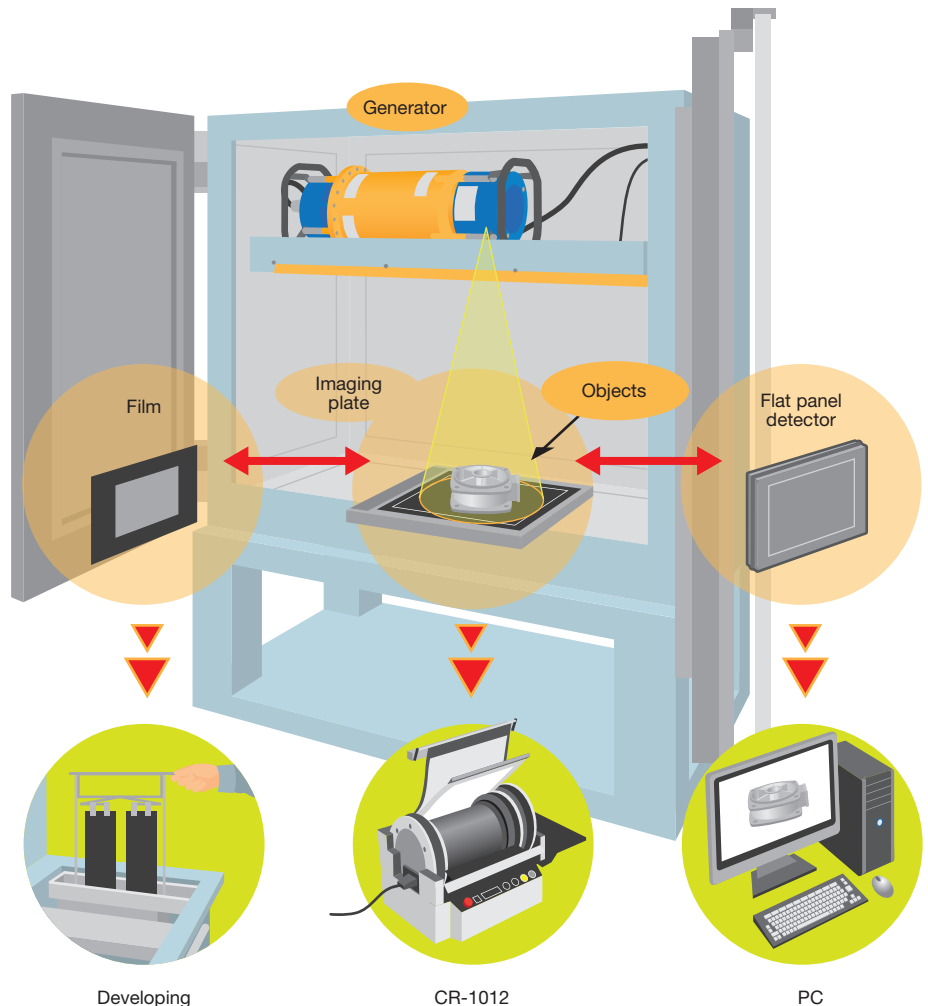
The irradiation box is designed for safe and reliable X-ray radiography testing. Various sizes are available on request, to meet customer requirements.

Specifications

X-ray leakage	Shield capability: 1μSv/h or less
Standard features	Interlock with door switch of X-ray controller
	Electro-magnetic lock
	Lighting inside box
Options	Casters for mobility, adjuster bolts for fixing (may not be fitted in some cases, owing to box shape, weight, etc.)
	X-ray generation indicator lamp

*Size of irradiation box can be customized depending on purpose and space, etc.

System image



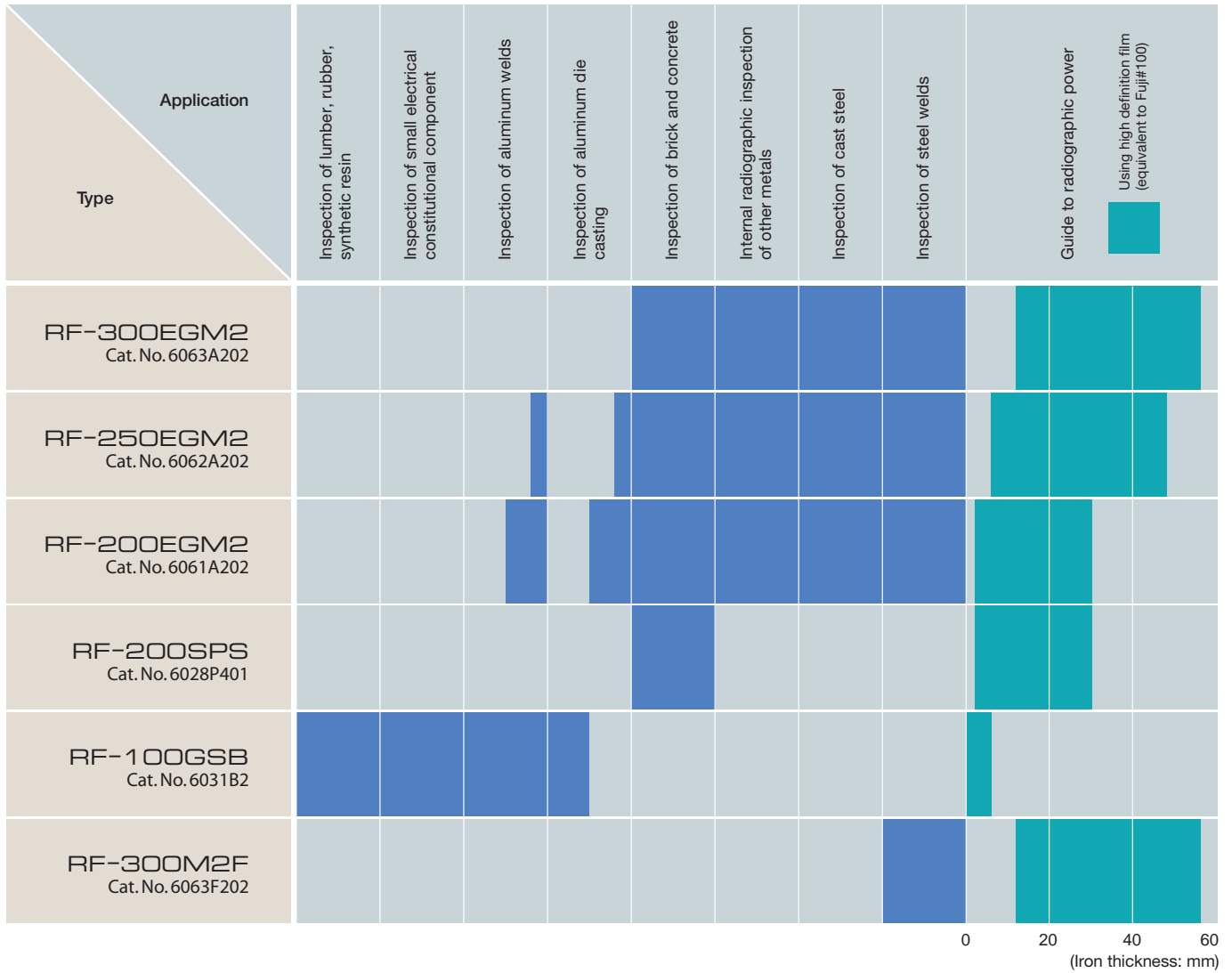
Customized systems are proposed, based on customer needs, by selecting optimum X-ray source, detection media and sample stage, to suit the purpose and applications.

System setting example

X-ray source	100kV-300kV
Detect medium	Film, IP FPD
Sample stage	X-Y, X-Y-Z
Irradiation box	Various size and shield capacity

Radioflex

Application of each model



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Specations subject to change without notice.



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