

# **Metal & X-ray Detectable Plastics**

# Innovations for the food processing industry!

Röchling Engineering Plastics is proud to offer detectable plastics in Polystone® P (UHMW-PE), Sustarin® C (Acetal), and SUSTAPEEK machinable stock shapes. These materials are specifically manufactured to be visible to X-ray and metal inspection technology. Food processing, medical, and packaging companies can now comply with FDA and industry specific regulations.

# Image of an X-rayed chicken breast Polystone® M XDT (UHMW-PE) SUSTARIN® C (Acetal) Standard UHMW Note: It is the responsibility of the user to test and approve the detection of this product due to

variations in metal detection and X-ray detection systems and required sensitivity settings. Röchling's XDT product line has been proven to be detectable with a particle size as small as a 2mm cube at



X-ray detectable machined parts



Metal detectable machined parts

	Polystone® M XDT (UHMW-PE)	SUSTARIN® C (Acetal)	SUSTAPEEK® XDT (PEEK)
Metal Detectable	$\checkmark$	$\checkmark$	_
X-ray Detectable	$\checkmark$	$\checkmark$	$\checkmark$

## **MDT & XDT Applications**

speeds up to 250 feet per minute.

- Scraper blades
- Bearings
- Mixer components
- Guides
- Rollers
- SprocketsAgitators
- Wear-stripsBushings
- Gears
- Pharmaceutical packaging
- Pillow blocks



The materials can be detected in sizes as small as 2 mm³, allowing for focus on prevention of contamination.



### **RÖCHLING ENGINEERING PLASTICS**

903 Gastonia Technology Parkway | Dallas, NC 28034 USA P: 704.922.7814 | E: info@roechling-plastics.us

For more information, contact your local Röchling Engineering Plastics sales professional today.



# **Metal & X-ray Detection Equivalence Charts**

# Polystone® M MDT (UHMW-PE) & SUSTARIN® C MDT (Acetal)

Stainless Steel	Polystone® M MDT	Stainless Steel	SUSTA <b>rin® C MDT</b>
(Sphere mm)	(Cubed mm)	(Sphere mm)	(Cubed mm)
0.80	2.33	1.00	2.45
1.00	2.66	1.10	2.80
1.10	3.00	1.20	3.15
1.20	3.33	1.50	3.50
1.50	4.00	1.58	4.20
1.60	4.33	1.90	4.55
1.80	5.00	2.20	5.25
2.00	5.33	2.40	5.60

# Polystone® M XDT (UHMW-PE) & SUSTARIN® C XDT (Acetal)

Stainless Steel	Polystone® M XDT	Stainless Steel	SUSTA <b>rin® C XDT</b>
(Sphere mm)	(Cubed mm)	(Sphere mm)	(Cubed mm)
0.60	2.40	0.60	0.83
0.70	2.80	0.70	0.96
0.80	3.20	0.80	1.10
0.90	3.60	0.90	1.24
1.00	4.00	1.00	1.38
1.10	4.40	1.10	1.51
1.20	4.80	1.20	1.65
1.50	6.00	1.50	2.06

Note: This test was designed and conducted by Mettler Toledo to provide an estimate for the size of SUSTARIN® C MDT or Polystone® M MDT that could be detected in any food source using Safeline Metal or X-ray Detectors.

When the Stainless Steel standard detection size is known, it is reasonable to expect the corresponding equivalent conductive material of SUSTARIN® C MDT or Polystone® M MDT can also be detected in the same product environment.



# Röchling Detectable materials are suggested for use in production of the following products:

- Frozen and prepared foods
- Baby food
- Soup and chili
- Snack foods
- Chips and tortillas
- Cereals
- Cheese
- Candies and chocolates
- Pastries
- Pet food



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