



All TAKE-APART PIXY Phantoms Feature:

- Realistic Supine, Lateral, and Oblique Positioning
- Shoulders Rotate 360° and Open 180° Sideways
- Elbows and Knees Bend 90°
- Full Head Rotation
- Limbs and Head are Detachable at Joints
- Segmented Joints Allow for Approximate Human Articulation and Flexibility
- Organs Accept Contrast Media



Applications:

- RSD Phantoms are the **Ideal Substitutes** for Human Patients when Teaching and Training Radiological (X-Ray and CT) Technologists
- **Unlimited Repetition** of Most Views for Which Patients Cannot be Used
- Used for Optimizing Image Quality and Radiation Dose Exposure
- Provide **Valid Feedback** to Evaluate Trainee Performance
- Used to **Benchmark and Trend** Image Quality Performance
- Used to Develop **New Imaging Protocols**
- Highly Customizable – Including **Custom Pathology and Injury**

Anatomy:

- | | | |
|---------|--------------|-----------------|
| Stomach | Gall Bladder | Urinary Bladder |
| Kidneys | Rectum | Sigmoid Flexure |



Repeatable. Durable. Necessary.

Radiology Support Devices, Inc., represents over 30 years of product innovation, development, and testing to deliver the finest human equivalent radiological subjects. As the original standard, our phantoms have proven to be consistent and reliable devices that endure the most rigorous use.

SIZE (based on an average ADULT SIZED FEMALE)

LENGTH	156 cm 5 ft 1 in
WEIGHT	48 kg 105 lbs

MATERIAL

MATERIAL	DENSITY (g/cc)
RSD SOFT TISSUE OPAQUE	1.08
RSD SOFT TISSUE TRANSPARENT	1.10
RSD CORTICAL BONE	1.18

RSD SOFT TISSUE

Energy (MeV)	mean HU	Calculated μ	μ (ICRU 44)	% difference	Ratio
00.08	60.30	0.1948	0.1932	0.0080	0.9921
00.10	52.88	0.1797	0.1795	0.0015	0.9985
00.12	57.10	0.1717	0.1709	0.0044	0.9956
00.14	52.95	0.1623	0.1624	0.0007	1.0007
00.20	--	0.1477	0.1439	0.0261	0.9746
00.30	--	0.1245	0.1246	0.0004	1.0004
00.60	--	0.0950	0.0941	0.0101	0.9900
00.80	--	0.0825	0.0826	0.0013	1.0013
01.00	--	0.0744	0.0743	0.0018	0.9982
02.00	--	0.0520	0.0519	0.0018	0.9982
03.00	--	0.0351	0.0357	0.0171	1.0174
06.00	--	0.0288	0.0291	0.0088	1.0088
08.00	--	0.0252	0.0255	0.0098	1.0099
10.00	--	0.0229	0.0232	0.0149	1.0151
15.00	--	0.0203	0.0203	0.0015	0.9985
20.00	--	0.0189	0.0189	0.0017	1.0017

RSD CORTICAL BONE

Energy (MeV)	mean HU	Calculated μ	μ (ICRU 44)	% difference	Ratio
00.08	1365	0.4345	0.4280	0.0151	0.9851
00.10	1048	0.3496	0.3562	0.0184	1.0188
00.12	0977	0.3211	0.3274	0.0191	1.0195
00.14	0902	0.2932	0.2986	0.0180	1.0184
00.20	--	0.2511	0.2513	0.0009	1.0009
00.30	--	0.2155	0.2137	0.0084	0.9916
00.60	--	0.1596	0.1598	0.0011	1.0011
00.80	--	0.1403	0.1402	0.0010	0.9990
01.00	--	0.1274	0.1261	0.0106	0.9895
02.00	--	0.0883	0.0885	0.0017	1.0017
03.00	--	0.0611	0.0625	0.0229	1.0235
06.00	--	0.0512	0.0525	0.0246	1.0253
08.00	--	0.0468	0.0474	0.0120	1.0121
10.00	--	0.0446	0.0444	0.0039	0.9962
15.00	--	0.0410	0.0409	0.0016	0.9984
20.00	--	0.0393	0.0397	0.0102	1.0103

Linear Attenuation Data:

Monte Carlo simulation was used to calculate linear attenuation coefficients as a function of beam. Monte Carlo results were validated with linear attenuation coefficients derived from Hounsfield Unit measurements at discreet energy levels. RSD Phantom material linear attenuation data was compared to NIST data using ICRU Report 44 compositions of human tissues. NIST data was interpolated when necessary.

TAKE-APART PIXY MODEL NUMBERS:

RS-103	OPAQUE	Organs & Fill Ports
RS-103T	TRANSPARENT	Organs & Fill Ports
RS-104	OPAQUE	Organs; NO Fill Ports
RS-104T	TRANSPARENT	Organs; NO Fill Ports
RS-105	OPAQUE	NO Organs; NO Fill Ports
RS-105T	TRANSPARENT	NO Organs; NO Fill Ports

PLEASE CONTACT RSD FOR CUSTOM ORDERS AND REFURBISHMENT



RS-103 with organs