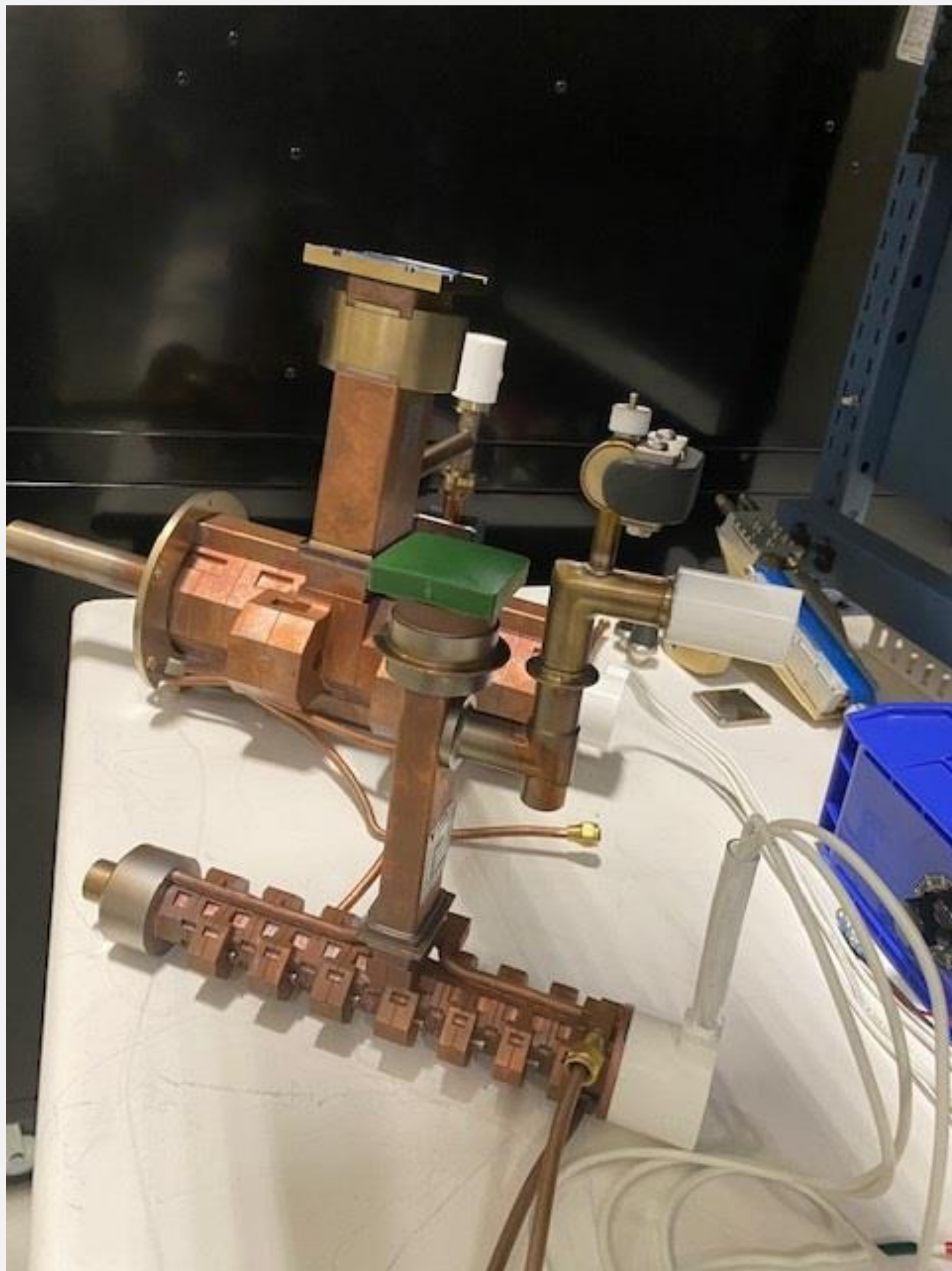


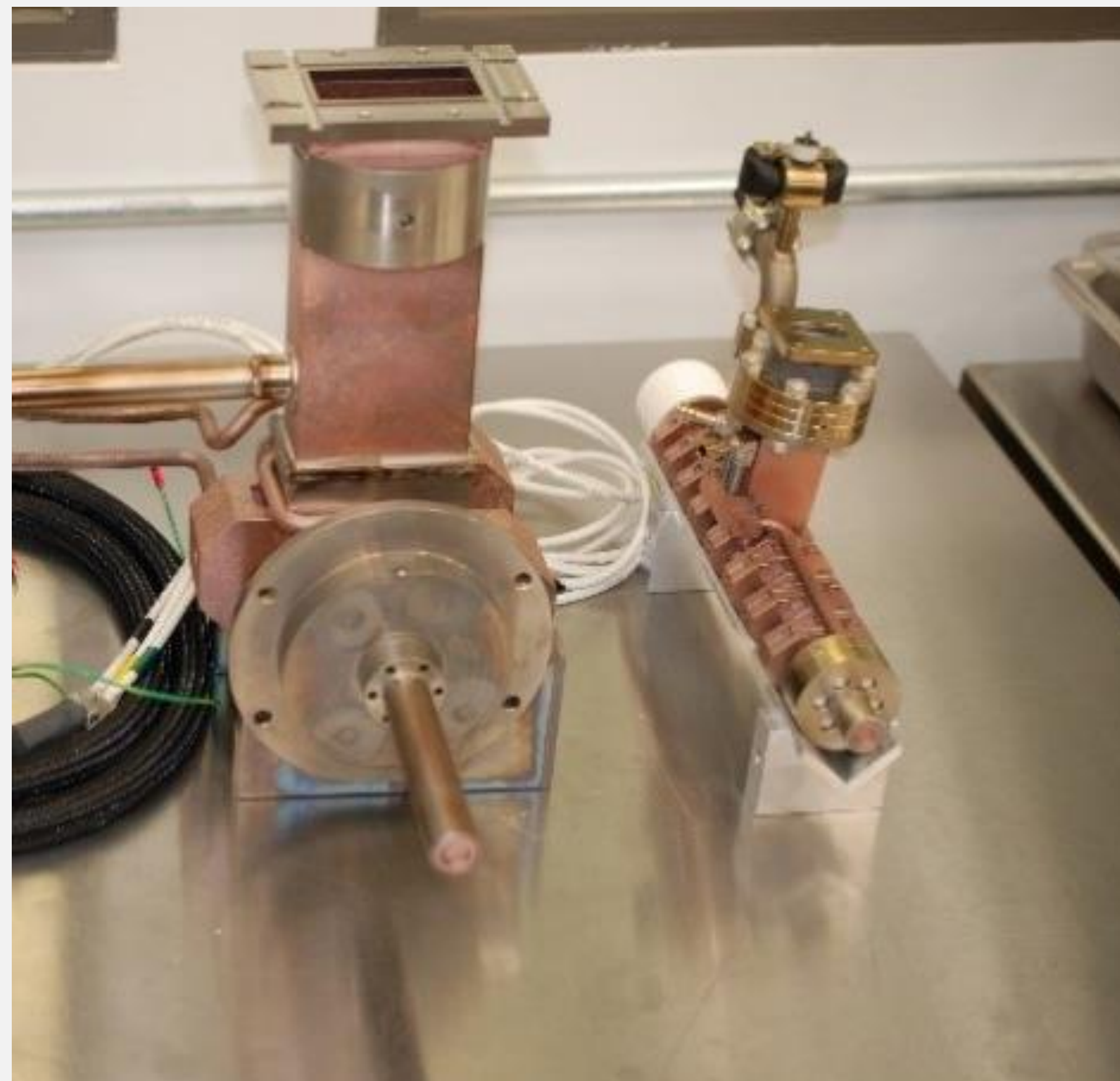
NEW X-BAND AND S-BAND LINEAR ACCELERATORS AT VAREX IMAGING

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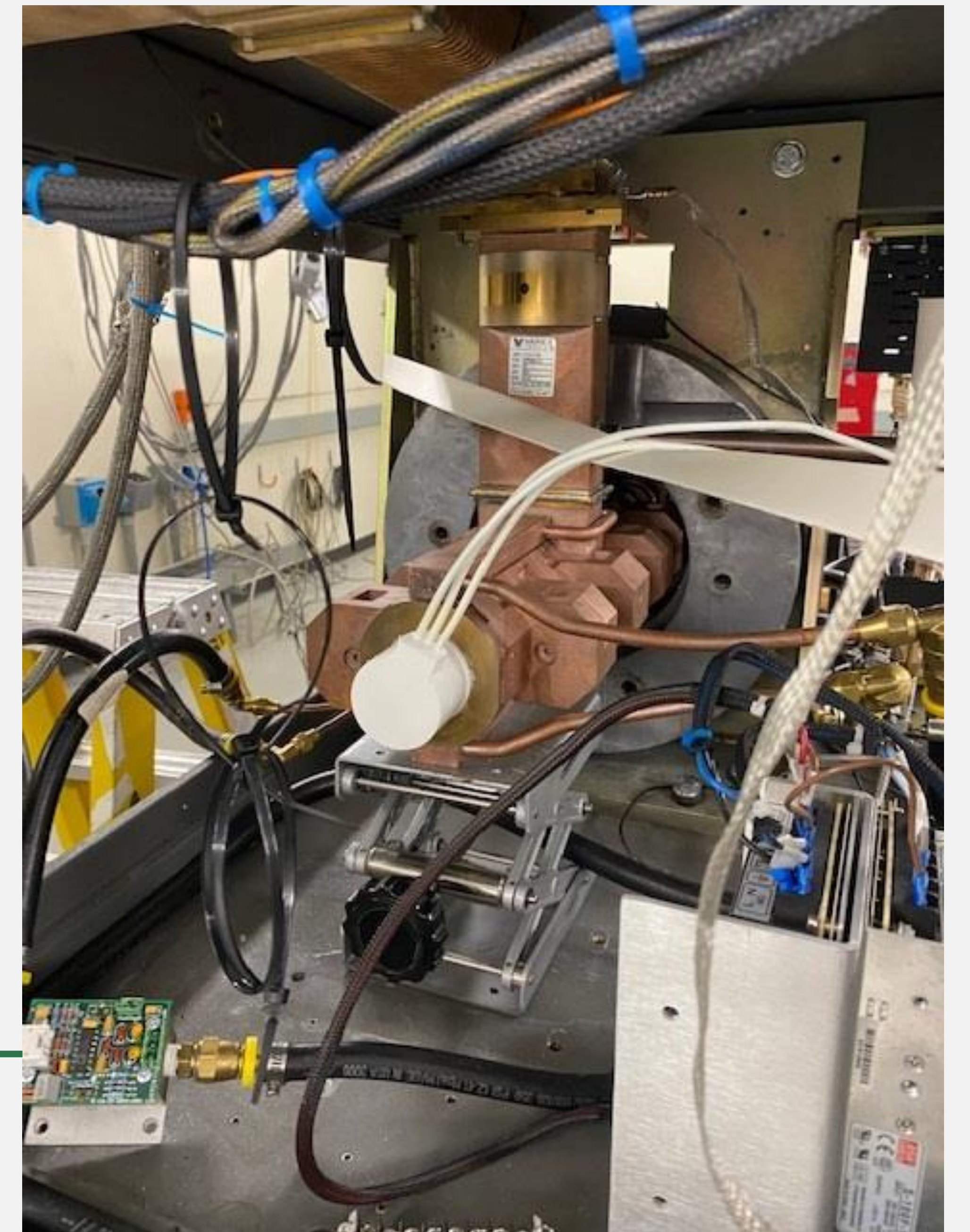
We have designed, built, and high-power tested the advanced linear accelerators equipped with our new 3 MeV X-Band Accelerator Beam Centerline ABC-3-X-T-X and a reduced spot (RS) S-Band ABC-7ER-S-T-RS-X with broad 3 MeV to 8 MeV energy regulation, which demonstrated excellent performance and superior beam quality. Our joint Varex team is immensely proud of these recent accomplishments and would like to share the news with the community.



Top: ABC-6-S-O-T-X
Bottom: ABC-3-X-O-T-X



Upper: Size difference of 3 MeV S-Band accelerator 3 MeV X-Band accelerator



Left: S-band ABC-7-S-O-T-X, designed to operate in a broad energy range from 3 MeV to 8 MeV delivering record dose rates up to 1300 R/min@1 m from target

Parameter	Units	S-Band			X-Band
		ABC-3-S-O-T-X	ABC-6-S-O-T-X	ABC-7-S-O-T-X	ABC-3-X-O-T-X
Energy, W	-	-	-	-	-
Nominal, W_{nom}	MeV	<u>3</u>	<u>6</u>	<u>7</u>	<u>2.5</u>
Minimum, W_{min}		<u>3</u>	<u>4</u>	<u>3</u>	<u>2.5</u>
Maximum, W_{max}		<u>4.5</u>	<u>6</u>	<u>8</u>	<u>3</u>
Maximum Dose Rate, R	-	-	-	-	-
at W_{nom}	R/m/m ²	<u>300</u>	<u>1000</u>	<u>1300</u>	<u>50</u>
at W_{min}		<u>300</u>	<u>600</u>	<u>50</u>	<u>50</u>
at W_{max}		<u>500</u>	<u>1000</u>	<u>1200</u>	<u>20</u>
Typical Spot Size, FWHM	mm	<u>2</u>	<u>1.5</u>	<u>1.5</u>	<u>1.5</u>
Typical E-Gun Voltage	kV	<u>8</u>	<u>8</u>	<u>8</u>	<u>12</u>

Conclusions:

We have completed a line of triode-electron gun based new ABCs for our new products. While there will always be continuous improvement of any products, these new ABCs are ready to be used on new linear accelerator subsystems or shipped to our customers for use in their subsystems. Mean-while, we are happy to report that along with the growing design and production of our standard and new

models, we have some exciting new ground-breaking products scheduled to be designed and tested. Please continue to follow our publications and do not hesitate to contact us for any new projects you have in mind. We would love to support you at any time.