

expire			7/18/2027	10/2/2034	6/10/2038	9/26/2038	9/26/2038	9/26/2038	8/4/2037	10/24/2039	4/17/2039	10/24/2039	4/9/2039	7/23/2040	5/2/2042	4/9/2039
										140 kV	140 kV		HPC	140 kV	11659645	
					140 kV, 120kV, MoxMed	V, X, sushi	V, X, sushi	ground same end, V shaped, bipolar	MoxMicro and MOX HPC	(1) separate tube and PS shields. (8) tube shield. (18) shielded PS	method		v-77 meca-ame w/ tapered base. (20) Target & anode are 97- 99.75 wt% W & 0.25-3 wt% La2O3.	Transp insul between window & ground plate. (1) AlN or BN. (7) Curved shape.	Low Cost	140kV Ultrem window
Top Level Tube Assembly Number	Bare Tube Number	Bare Tube Type	32542 cathode optic	32625 Dual Tube for Filament	32668 Shielded X- Ray Tube	32693 Non-Planar VM	32693 CON Non-Planar VM	32704 Bipolar VM	32672 Non- Planar VM	32698 Voltage Shield	32698 CON Voltage Shield	32698 CON2 X-Ray Source Voltage Shield	32699 CON X- Ray Tube Heat Sink and Target Material	32711 X-Ray Tube Insulation	32731 Monolithic X-ray Source Casing	32711 CON X-Ray Tube Insulation, Window, and Focusing Plate
TSR-B3008-RH2	ASM00439-RH2	Magnum	x													US11587757
TSR-B5008-RH2	ASM00439-RH2	Magnum	x													
TSR-B5008-W01	ASM00439-W01	Magnum	x													
TUB00015-1	ASM00395-AG1	Magnum	x													
TUB00041-1	ASM00439-AG1	Magnum	x													
TUB00041-2	ASM00439-W01	Magnum	x													
TUB00041-6	ASM00439-TA1	Magnum	x													
TUB00041-AG2	ASM00439-AG2	Magnum	x													
TUB00041-RH3	ASM00439-RH3	Magnum	x													
TUB00045-AG1	ASM00439-AG1	Magnum	x													
TUB00045-AG2	ASM00439-AG2	Magnum	x													
TUB00045-AU1	ASM00439-AU1	Magnum	x													
TUB00045-PD1	ASM00439-PD1	Magnum	x													
TUB00045-RH2	ASM00439-RH2	Magnum	x													
TUB00045-RH3	ASM00439-RH3	Magnum	x													
TUB00045-W01	ASM00439-W01	Magnum	x													
TUB00046-CR5	ASM00671-CR5	Side Window, Round	x													
TUB00046-CU5	ASM00671-CU5	Side Window, Round	x													
TUB00046-M05	ASM00671-M05	Side Window, Round	x													
TUB00046-W05	ASM00671-W05	Side Window, Round	x													
TUB00050-AG1	ASM00439-AG1	Magnum	x													
TUB00050-AG2	ASM00439-AG2	Magnum	x													
TUB00050-AU1	ASM00439-AU1	Magnum	x													
TUB00050-PD1	ASM00439-PD1	Magnum	x													
TUB00050-RH2	ASM00439-RH2	Magnum	x													
TUB00050-RH3	ASM00439-RH3	Magnum	x													
TUB00050-W01	ASM00439-W01	Magnum	x													
TUB00053-2	ASM00439-W01	Magnum	x													
TUB00056-AG1	ASM00439-AG1	Magnum	x													
TUB00056-AU1	ASM00439-AU1	Magnum	x													
TUB00056-PD1	ASM00439-PD1	Magnum	x													
TUB00056-RH2	ASM00439-RH2	Magnum	x													
TUB00056-W01	ASM00439-W01	Magnum	x													
TUB00060-1	ASM00395-AG1	Magnum	x													
TUB00060-2	ASM00395-W01	Magnum	x													
TUB00060-6	ASM00395-TA1	Magnum	x													
TUB00060-6	ASM00395-TA1	Magnum	x													
TUB00060-6A	ASM00395-TA1	Magnum	x													
TUB00061-1	ASM00395-AG2	Magnum	x													
TUB00063-6	ASM00371-6	Magnum	x													
TUB00064-1	ASM00439-AG2	Magnum	x													
TUB00067-7	ASM00439-RH3	Magnum	x													
TUB00068-1	ASM00439-AG2	Magnum	x													
TUB00076-AG1	ASM00439-AG1	Magnum	x													
TUB00076-AG2	ASM00439-AG2	Magnum	x													
TUB00076-AU1	ASM00439-AU1	Magnum	x													
TUB00076-PD1	ASM00439-PD1	Magnum	x													
TUB00076-RH2	ASM00439-RH2	Magnum	x													
TUB00076-RH3	ASM00439-RH3	Magnum	x													
TUB00076-W01	ASM00439-W01	Magnum	x													
TUB00078-AG1	ASM00439-AG1	Magnum	x													
TUB00078-AG2	ASM00439-AG2	Magnum	x													
TUB00078-AU1	ASM00439-AU1	Magnum	x													
TUB00078-PD1	ASM00439-PD1	Magnum	x													
TUB00078-RH2	ASM00439-RH2	Magnum	x													
TUB00078-RH3	ASM00439-RH3	Magnum	x													
TUB00078-W01	ASM00439-W01	Magnum	x													
TUB00082-AG1	ASM00439-AG1	Magnum	x													
TUB00082-AG2	ASM00439-AG2	Magnum	x													
TUB00082-AU1	ASM00439-AU1	Magnum	x													
TUB00082-PD1	ASM00439-PD1	Magnum	x													
TUB00082-RH2	ASM00439-RH2	Magnum	x													
TUB00082-RH3	ASM00439-RH3	Magnum	x													
TUB00082-W01	ASM00439-W01	Magnum	x													
TUB00083-AG1	ASM00439-AG1	Magnum	x													
TUB00083-AG2	ASM00439-AG2	Magnum	x													
TUB00083-RH2	ASM00439-RH2	Magnum	x													
TUB00084-1	ASM00439-AG2	Magnum	x													
TUB00085-7	ASM00475-7	Magnum	x													
TUB00089-1	ASM00439-AG2	Magnum	x													
TUB00090-2	ASM00371-2	Magnum	x													
TUB00097-AG1	ASM00439-AG1	Magnum	x													
TUB00097-AG2	ASM00439-AG2	Magnum	x													
TUB00097-AU1	ASM00439-AU1	Magnum	x													
TUB00097-PD1	ASM00439-PD1	Magnum	x													
TUB00097-RH2	ASM00439-RH2	Magnum	x													
TUB00097-RH3	ASM00439-RH3	Magnum	x													
TUB00097-W01	ASM00439-W01	Magnum	x													
TUB00098-AG1	ASM00439-AG1	Magnum	x													
TUB00098-AG2	ASM00439-AG2	Magnum	x													
TUB00098-W01	ASM00439-W01	Magnum	x													
TUB00103-AU4	ASM00566-AU4	Magnum	x													
TUB00103-TA1	ASM00439-TA1	Magnum	x													
TUB00104-AG4	ASM00566-AG4	Magnum	x													
TUB00104-AU4	ASM00566-AU4	Magnum	x													
TUB00107-AG2	ASM00439-AG2	Magnum	x													
TUB00107-AG4	ASM00566-AG4	Magnum	x													
TUB00107-AU4	ASM00566-AU4	Magnum	x													
TUB00107-RH3	ASM00439-RH3	Magnum	x													
TUB00107-TA1	ASM00439-TA1	Magnum	x													
TUB00107-W01	ASM00439-W01	Magnum	x													
TUB00108-AG2	ASM00439-AG2	Magnum	x													
TUB00108-RH3	ASM00475-7	Magnum	x													
TUB00108-TA7		Magnum	x													
TUB00108-W01	ASM00371-2	Magnum	x													
TUB00110-AG4	ASM00565-AG4	Magnum	x													
TUB00110-AU4	ASM00565-AU4	Magnum	x													
TUB00111-AG4	ASM00565-AG4	Magnum	x													
TUB00111-AU4	ASM00565-AU4	Magnum	x													
TUB00112-AG2	ASM00395-AG2	Magnum	x													
TUB00112-AU1	ASM00395-AU1	Magnum	x													
TUB00120-AG2	ASM00439-AG2	Magnum	x													

			US7529345	US9240303	US10453643	US10499484	US10945329	US10616986	US10178748	US10964507	US11195687	US11545333	US11081311	US11152184		US11587757
TUB00120-RH2	ASM00439-RH2	Magnum	x													
TUB00121-XXX	ASM00371-1	Magnum	x													
TUB00121-XXX	ASM00371-7	Magnum	x													
TUB00123-AU4	ASM00566-AU4	Magnum	x													
TUB00123-AU4	ASM00566-AU4	Magnum	x													
TUB00123-TA1	ASM00439-TA1	Magnum	x													
TUB00124-AU4	ASM00566-AU4	Magnum	x													
TUB00125-AG1			x													
TUB00125-AG2			x													
TUB00125-AU1			x													
TUB00125-CR6			x													
TUB00125-CU6			x													
TUB00125-MO6			x													
TUB00125-PD1			x													
TUB00125-RH2			x													
TUB00125-RH3			x													
TUB00125-RH7			x													
TUB00125-TA1			x													
TUB00125-TA7			x													
TUB00125-Ti6			x													
TUB00125-W01			x													
TUB00125-W06			x													
TUB00125-W07			x													
TUB00130-RH3	ASM00439-RH3	Magnum	x													
TUB00130-RH3-40	ASM00439-RH3	Magnum	x													
TUB00140-AG2	ASM00698-AG2	MAGpro	x	x												
TUB00140-CR6	ASM00698-CR6	MAGpro	x	x												
TUB00140-CU6	ASM00698-CU6	MAGpro	x	x												
TUB00140-MO6	ASM00698-MO6	MAGpro	x	x												
TUB00140-RH3	ASM00698-RH3	MAGpro	x	x												
TUB00140-Ti6	ASM00698-Ti6	MAGpro	x	x												
TUB00140-W06	ASM00698-W06	MAGpro	x	x												
TUB00141-AG2	ASM00698-AG2	MAGpro	x	x												
TUB00141-CR6	ASM00698-CR6	MAGpro	x	x												
TUB00141-CU6	ASM00698-CU6	MAGpro	x	x												
TUB00141-MO6	ASM00698-MO6	MAGpro	x	x												
TUB00141-RH3	ASM00698-RH3	MAGpro	x	x												
TUB00141-Ti6	ASM00698-Ti6	MAGpro	x	x												
TUB00141-W06	ASM00698-W06	MAGpro	x	x												
TUB00142-AG2	ASM00698-AG2	MAGpro	x	x												
TUB00142-CR6	ASM00698-CR6	MAGpro	x	x												
TUB00142-CU6	ASM00698-CU6	MAGpro	x	x												
TUB00142-MO6	ASM00698-MO6	MAGpro	x	x												
TUB00142-RH3	ASM00698-RH3	MAGpro	x	x												
TUB00142-Ti6	ASM00698-Ti6	MAGpro	x	x												
TUB00142-W06	ASM00698-W06	MAGpro	x	x												
TUB00143-AG2	ASM00698-AG2	MAGpro	x	x												
TUB00143-CR6	ASM00698-CR6	MAGpro	x	x												
TUB00143-CU6	ASM00698-CU6	MAGpro	x	x												
TUB00143-MO6	ASM00698-MO6	MAGpro	x	x												
TUB00143-RH3	ASM00698-RH3	MAGpro	x	x												
TUB00143-Ti6	ASM00698-Ti6	MAGpro	x	x												
TUB00143-W06	ASM00698-W06	MAGpro	x	x												
TUB00144-AG2	ASM00698-AG2	MAGpro	x	x												
TUB00144-CR6	ASM00698-CR6	MAGpro	x	x												
TUB00144-CU6	ASM00698-CU6	MAGpro	x	x												
TUB00144-MO6	ASM00698-MO6	MAGpro	x	x												
TUB00144-RH3	ASM00698-RH3	MAGpro	x	x												
TUB00144-Ti6	ASM00698-Ti6	MAGpro	x	x												
TUB00144-W06	ASM00698-W06	MAGpro	x	x												
TUB00145-AG2	ASM00698-AG2	MAGpro	x	x												
TUB00145-CR6	ASM00698-CR6	MAGpro	x	x												
TUB00145-CU6	ASM00698-CU6	MAGpro	x	x												
TUB00145-MO6	ASM00698-MO6	MAGpro	x	x												
TUB00145-RH3	ASM00698-RH3	MAGpro	x	x												
TUB00145-Ti6	ASM00698-Ti6	MAGpro	x	x												
TUB00145-W06	ASM00698-W06	MAGpro	x	x												
TUB00146-AG2	ASM00698-AG2	MAGpro	x	x												
TUB00146-CR6	ASM00698-CR6	MAGpro	x	x												
TUB00146-CU6	ASM00698-CU6	MAGpro	x	x												
TUB00146-MO6	ASM00698-MO6	MAGpro	x	x												
TUB00146-RH3	ASM00698-RH3	MAGpro	x	x												
TUB00146-Ti6	ASM00698-Ti6	MAGpro	x	x												
TUB00146-W06	ASM00698-W06	MAGpro	x	x												
TUB00147-AG2	ASM00698-AG2	MAGpro	x	x												
TUB00147-CR6	ASM00698-CR6	MAGpro	x	x												
TUB00147-CU6	ASM00698-CU6	MAGpro	x	x												
TUB00147-MO6	ASM00698-MO6	MAGpro	x	x												
TUB00147-RH3	ASM00698-RH3	MAGpro	x	x												
TUB00147-Ti6	ASM00698-Ti6	MAGpro	x	x												
TUB00147-W06	ASM00698-W06	MAGpro	x	x												
TUB00148-AG2	ASM00698-AG2	MAGpro	x	x												
TUB00148-CR6	ASM00698-CR6	MAGpro	x	x												
TUB00148-CU6	ASM00698-CU6	MAGpro	x	x												
TUB00148-MO6	ASM00698-MO6	MAGpro	x	x												
TUB00148-RH3	ASM00698-RH3	MAGpro	x	x												
TUB00148-Ti6	ASM00698-Ti6	MAGpro	x	x												
TUB00148-W06	ASM00698-W06	MAGpro	x	x												
TUB00153-SA-W06	ASM00698-W06	MAGpro	x	x												
TUB00153-SI-W06	ASM00698-W06	MAGpro	x	x												
TUB00154-SA-CR6	ASM00698-CR6	MAGpro	x	x												
TUB00154-SA-W06	ASM00698-W06	MAGpro	x	x												
TUB00154-SI-CR6	ASM00698-CR6	MAGpro	x	x												
TUB00154-SI-W06	ASM00698-W06	MAGpro	x	x												
TUB00155-SA-CR6	ASM00698-CR6	MAGpro	x	x												
TUB00155-SA-W06	ASM00698-W06	MAGpro	x	x												
TUB00155-SI-CR6	ASM00698-CR6	MAGpro	x	x												
TUB00155-SI-W06	ASM00698-W06	MAGpro	x	x												
TUB00156-W06	ASM00698-W06	MAGpro	x	x												
TUB00156-W06	ASM00698-W06	MAGpro	x	x												
TUB00160-AG2	ASM00439-AG2	Magnum	x													
TUB00160-AU4	ASM00439-AU4	Magnum	x													
TUB00160-RH3	ASM00439-RH3	Magnum	x													
TUB00160-W07	ASM00439-W07	Magnum	x													
TUB00161-AG2	ASM00439-AG2	Magnum	x													
TUB00161-RH3	ASM00439-RH3	Magnum	x													
TUB00161-W07	ASM00439-W07	Magnum	x													
TUB00162-W01	ASM00439-W01	Magnum	x													
TUB00170-RH3	ASM00439-RH3	Magnum	x													
TUB00170-TA7	ASM00439-TA7	Magnum	x													
TUB00171-RH3	ASM00439-RH3	Magnum	x													
TUB00172-RH3	ASM00439-RH3	Magnum	x													
TUB00V50-AG1	ASM00439-AG1	Magnum	x													
TUB00V50-AG2	ASM00439-AG2	Magnum	x													
TUB00V50-AU1	ASM00439-AU1	Magnum	x													

			US7529345	US9240303	US10453643	US10499484	US10945329	US10616986	US10178748	US10964507	US11195687	US11545333	US11081311	US11152184		US11587757
TUB00V50-PD1	ASM00439-PD1	Magnum	x													
TUB00V50-RH2	ASM00439-RH2	Magnum	x													
TUB00V50-RH3	ASM00439-RH3	Magnum	x													
TUB00V50-RH7	ASM00439-RH7	Magnum	x													
TUB00V50-W01	ASM00439-W01	Magnum	x													
TUB00200-W08					x	x	x	x		x	x	x				
TUB00201-W08					x	x	x	x		x	x	x				
TUB00202-W08					x	x	x	x		x	x	x				
TUB00205-W08					x	x	x	x		x	x	x				
TUB00209-W08					x	x	x	x		x	x	x				
Tub00219-W08					x	x	x	x		x	x	x				
TUB00222-W05									x	x	x	x				
TUB00183-BY-W05													x			
TUB00184-BY-W05													x			
TUB00185-AZ-W05													x			