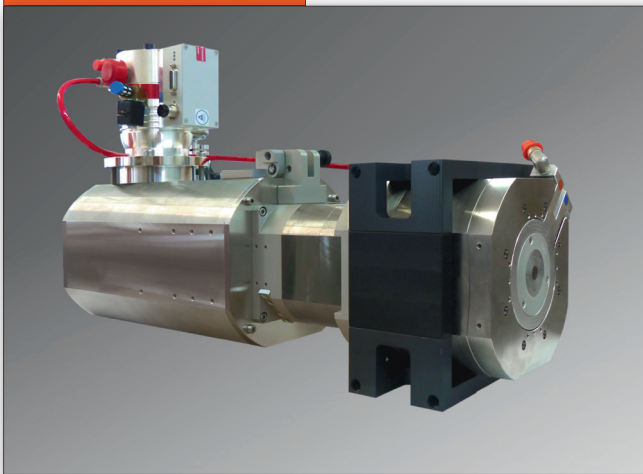


MICROFOCUS X-RAY TUBES

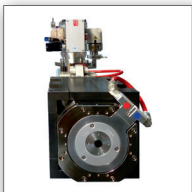
PRODUCT LINE TCHE PLUS



Product image



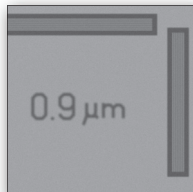
Microfocus X-ray tube XWT-225-TCHE Plus with optional cooling of tube head



Microfocus X-ray tube XWT-160-TCHE Plus



Filter holder and set of filters



JIMA resolution 0.9 µm

Images show options

Technical data

Data	Product line TCHE Plus			
	160	190	225	240
Max. voltage (kV)	160	190	225	240
Min. voltage (kV)	20	20	20	20
Max. current (mA)	1.0	1.0	1.0	1.0
Min. current (mA)	0.05	0.05	0.05	0.05
Max. power, target (Watt)	50	50	50	50
JIMA resolution (µm)	0.9	0.9	0.9	0.9
Tube type	Transmission			
Target type	High Energy			
Target material (substrate/active layer)	Diamond / Tungsten			
Min. focus-object-distance (FOD, mm)	0.30	0.30	0.30	0.30
Opening angle (approx. °)	160	160	160	160
Mounting length incl. 90° HV plug (mm)	719	719	810	902
Tube weight (approx. kg)	37	37	58	58
Operation Mode	Target power range (W)	JIMA resolution range (µm)		
Submicron	0.1 - 1.5	0.9 - 1.5		
Microfocus	1.0 - 10.0	1.5 - 4.0		
High Power	10.0 - 50.0	3.0 - 35.0		

Highlights

- ▶ JIMA resolution 0.9 microns (µm)
- ▶ Three modes of operation: *Submicron*, *Microfocus*, *High Power*
- ▶ The X-ray tubes provide outstanding 50 Watt target power
- ▶ Automatic tube calibration for optimum performance
- ▶ Easy maintenance with adjusted ready-to-use click-in cathodes and automatic tube venting
- ▶ Unlimited lifetime

See our new catalogue **Options and Accessories** to find additional auxiliary equipment for your X-RAY WorX tube.

Scope of delivery

- ▶ Open microfocus X-ray tube with transmission target, turbo vacuum pump, vacuum gauge, and electronic drive unit
- ▶ High voltage generator and high voltage cable
- ▶ Pre-vacuum pump with vacuum hose
- ▶ Tube controller, power supplies, and safety relays on 19" mounting panels
- ▶ Set of cables for electrical connection of X-ray tube and components
- ▶ Spare parts case, documentation, and operating software

Product Line TCHE Plus

JIMA resolution

High Energy target		Voltage [kV]					
		60	100	150	190	225	240
Sub-micron	0.5	0.9	0.9	0.9	0.9	0.9	0.9
	1.0	0.9	0.9	0.9	0.9	0.9	0.9
	1.5	1.5	0.9	0.9	0.9	0.9	0.9
Microfocus	1.0	2.0	2.0	2.0	2.0	2.0	2.0
	2.0	2.0	2.0	2.0	2.0	2.0	2.0
	3.0	2.0	2.0	2.0	2.0	2.0	2.0
	5.0	3.0	2.0	2.0	2.0	2.0	2.0
	7.0	3.0	2.0	2.0	2.0	2.0	2.0
	10.0	4.0	2.0	2.0	2.0	2.0	2.0
High Power	10.0	7.0	5.0	4.0	3.0	3.0	3.0
	17.5	10.0	7.0	6.0	6.0	6.0	6.0
	25.0	15.0	10.0	7.0	7.0	7.0	7.0
	50.0	35.0	15.0	15.0	15.0	15.0	15.0

JIMA resolution in microns (μm)

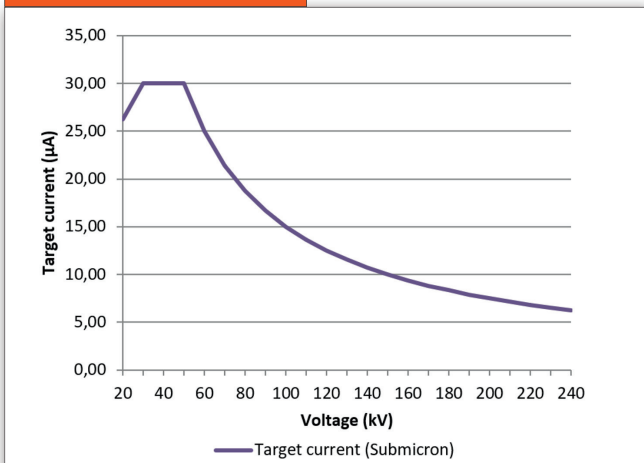
JIMA resolution

High Resolution Diamond target*		Voltage [kV]					
		60	100	150	190	225	240
Sub-micron	0.5	0.8	0.6	0.5	0.5	0.5	0.5
	1.0	1.0	0.6	0.5	0.5	0.5	0.5
	1.5	1.5	0.6	0.5	0.5	0.5	0.5
Microfocus	1.0	1.5	1.5	1.5	1.5	1.5	1.5
	2.0	1.5	1.5	1.5	1.5	1.5	1.5
	3.0	1.5	1.5	1.5	1.5	1.5	1.5
	5.0	2.0	1.5	1.5	1.5	1.5	1.5
	7.0	2.0	1.5	1.5	1.5	1.5	1.5
	10.0	3.0	1.5	1.5	1.5	1.5	1.5
High Power	10.0	7.0	5.0	4.0	3.0	3.0	3.0
	17.5	10.0	7.0	6.0	6.0	6.0	6.0
	25.0	15.0	10.0	7.0	7.0	7.0	7.0
	50.0	35.0	15.0	15.0	15.0	15.0	15.0

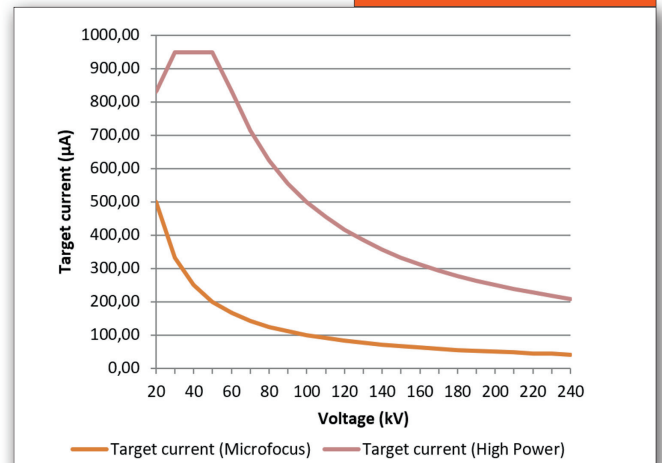
JIMA resolution in microns (μm)

*Option, resolution achievable with additional tube head cooling

Power rating chart



Power rating chart



Tube dimensions

