

TUBEHEADS FOR BALTEAU GENERATORS AND OEM SYSTEMS

For more than 20 years BALTEAU is proposing a very wide selection of qualified, approved and certified tubeheads for the use in as many applications as those existing in Metallic, Non metallic, Industrial, Art a or even Researches fields.

By selecting the highest grade of components, the safest standards BALTEAU is offering it's customer an unequalled solution to the different beams and outputs requirements. All tubeheads presented in this brochures are tested according to our and to major standards applicable in the different field of applications. No compromises are made and we give you our full guarantee when delivering our tubeheads tested and seasoned, ready to be used off the shelf.

BALTEAU is also offering a calibration service and characteristics checks on demands according to International standards or your precise requirements.

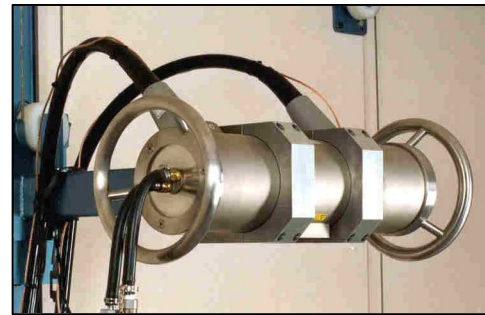
Our tubeheads are not "any" tubeheads...

The tubehead is the ultimate and probably the most important element of your generator. The tubehead will give the generator its final characteristics in terms of output, beam characteristics and distribution. That's the reason why Balteau is offering a large variety of tubeheads that can be recognized and connected to our generators.

TSC series is giving Panoramic 360° beams while TSD are giving Directional beams.

All our tubeheads may be equipped with standard bolted flanges or quick lock flanges for easy tubehead swap or mobile applications.

With a proper tubehead connected to the XSD generator, you can select the beam characteristics you are expecting to perform your



inspections. If you wish to get high sharpness you'll go for a small focal spot size while for high absorbing applications we can provide you with tubeheads with powers up to 4 kW. Of course any of our generators can adapt its parameters automatically to the connected tubehead, no matter it is a Panoramic (TSC) or a Directional tubehead (TSD).

Our tubeheads are generally equipped with dual filaments that can provide the user either different focal spot sizes for wider ranges of applications either two filaments of the same size, as a "spare" alternative in case of breaking. All our housings are meeting or exceeding the International standards about radiation leakage.

Monopolar Tubeheads

Monopolar tubes are giving the user the required flexibility for fixed or mobile installations. These tubes are made out of an insert into a shielded housing with a ceramic HV cone to connect the generator.

Inside the housing the cooling circuit is made of a serpentine tube in which the coolant fluid (water and eventual additive for cold countries) which will remove calories at the very heart of the anode. This ensures a very good and efficient protection of the anode and the target improving also the lifetime of the tube. Connections are quick connectors with direction identification.

The HV connection end can be equipped with a fixed or a quick flange allowing a quick tube change when more than one irradiation techniques are used in the same application.



Specifications

	Max High Voltage	Nominal power	Max current @kV max SF	Max current @kV max LF	Focal Spot IEC336 SF	Focal Spot EN12543 SF	Focal Spot IEC336 LF	Focal Spot EN12543 LF	Max Current SF	Max Current LF	HV connector	Inherent Filtration
	Kv	w	mA	mA	-	d	-	d	mA	mA	-	mm
TSC160	160	1000	6,25	-	3 X 0,3	4 X 0,4	-	-	12	-	R24	~ 5 Al
TSD160/0	160	640 3000	4	19	0,4 X 0,4	1	3 x 3	5,5	15	40	R24	0,8 Be
TSD160/1	160	640 1600	4	10	0,4 X 0,4	1	1,5 x 1,5	3	15	40	R24	0,8 Be
TSD160/2	160	320	2	-	0,2 X 0,2	0,5	-	-	3	-	R24	0,8 Be
TSD160/3	160	640 640	4	4	0,4 X 0,4	1	0,4 x 0,4	1	15	15	R24	0,8 Be
TSD225/0	225	640 3000	2,8	13	0,4 X 0,4	1	3 x 3	5,5	15	30	R24	0,8 Be
TSD225/1	225	640 1600	3	7	0,4 X 0,4	1	1,5 x 1,5	3	15	30	R24	0,8 Be
TSD225/2	225	320	1,4	-	0,2 X 0,2	0,5	-	-	3	-	R24	0,8 Be
HIGH ENERGY TUBEHEADS												
TSD160/4	160	1000	6	-	0,4 X 0,4	1	-	-	35	-	R24	0,8 Be

For more information about tubeheads here above, please ask our corresponding flyer:

FLY-TSC160-0	FLY-TSD160-3
FLY-TSD160-0	FLY-TSD225-0
FLY-TSD160-1	FLY-TSD225-1
FLY-TSD160-2	FLY-TSD225-3

Bipolar Tubeheads

When HV increases, the dielectric strength of even advanced materials is very often not sufficient to provide a good electrical insulation. This is the basic reason for building Bipolar tubes when more than 225kV is expected. These tubes are easily recognizable by the fact that two HV ends are present with a specific Anodic and Cathodic identification. Due to the high difference of potential, the cooling media is always dielectric oil.

BALTEAU is also proposing a wide variety of robust and handfull stands and holders to carry these tubes that are heavy and therefore sometimes hard to handle manually. See our specialists.



Specifications

	Max High Voltage	Nominal power	Max current @kV max SF	Max current @kV max LF	Focal Spot IEC336 SF	Focal Spot EN12543 SF	Focal Spot IEC336 LF	Focal Spot EN12543 LF	Max Current SF	Max Current LF	HV connector	Inherent Filtration
	Kv	w	mA	mA	-	d	-	d	mA	mA	-	mm
TSD320/0	320	1500 4500	4,6	13	1,5 X 1,5	3	3 x 3	5,5	15	30	R24	3 Be
TSD320/2	320	640 1600	2	5	0,8 X 0,8	1,9	1,8 x 1,8	3,6	9	20	R24	3 Be
TSD420/1	420	1500 4000	3,5	9,5	1,5 X 1,5	3	3,5 x 3,5	6,3	8	30	R28	7 Be + 0,5 Cu
TSD420/3	420	960 2250	2,2	5,3	0,8 X 0,8	1,9	1,8 x 1,8	3,6	6	12	R28	7 Be + 0,5 Cu
TSD450/0	450	900 4500	2	10	1,2 X 1,2	2,5	3 x 3	5,5	10	24	R28	5 Be
TSD450/3	450	960 2250	2,1	5	0,8 X 0,8	1,9	1,8 x 1,8	3,6	6	12	R28	7 Be + 0,5 Cu
HIGH ENERGY TUBEHEADS												
TSD320/3	320	800 1800	4,1	4,6	-	0,4	-	1	12	26	R24	3 Be
TSD450/4	450	700 1500	4,1	4,6	-	0,4	-	1	7	15	R28	5 Be

For more information about tubeheads here above, please ask our corresponding flyer:

FLY-TSD320-0	FLY-TSD450-0
FLY-TSD320-2	FLY-TSD450-1
	FLY-TSD450-3

You didn't find what you were looking for ?...

Only a few of our available tubeheads are present in this brochure, we may already have what you require. And if we don't have it, we have the ability to design it for you according your own technical requirement



Specific Directional Tubehead for tyre inspection

Balteau in words...

BALTEAU is a company based and established in Belgium since 1906. The activity of the power transformers successfully turned into the X-ray business in 1932. Years after years BALTEAU has affirmed its leadership leading the technology and setting the foundation of modern X-ray technologies. The first company ever to reach 200, 300 and 400 kV in the past, BALTEAU has today brought to the industry new standards that are consciously safety oriented to allow users to operate equipment safer and easier. BALTEAU is also greatly caring about environment and always uses top grade and specification materials to ensure that the efficiency of the equipment will be at the top of what is technologically achievable.

On the service and spares side, BALTEAU is providing the buyer with an exceptional and unequalled commitment of continuous service all through the life cycle of the product.

Qualified engineers and an extensive worldwide network dedicated to serve our customers is actively participating to the success of our brand and to your possibility of always getting, from the selection of your equipment to its follow up in service, a qualified and professional support.

Balteau in numbers...

BALTEAU has a very long established network in more than 40 countries, some of our agencies are of second generation proving they rely on the quality of our products and that they are totally committed to their business in NDT.

BALTEAU has produced more than 13.000 generators spread in more than 60 countries. We have 3 ranges of products and are the only manufacturer in the world to provide from Crawlers to Systems built into the same factory.

Balteau NDT in names...

Patented names and commercial brandings are:

BALTOSPOT (Portable and Crawlers X-ray equipment)

GFC (Panoramic portable equipment)

CERAM (Pulsed frequency portable equipment)

HAND X (Radio remote control for portable X-ray)

BALTOGRAPH (Stationary X-ray equipment)

XSD (HF CP X mobile and stationary X-ray equipment – High power)

CLD (HF CP X mobile and stationary X-ray equipment – Low power)

BALTOSCOPE (Radioscopic and Digital imaging)

AIS & Systems (Custom made)

Producer

Balteau NDT sa

Voie de Liège, 12
B-4681 Hermalle Sous Argenteau
BELGIUM

Tel.: +32 4 374 75 75

Fax: +32 4 374 75 85

E-mail: balteau@balteau-ndt.com

Website: www.balteau.com

Distributor