IMMERSION HEATERS FOR AGGRESSIVE BATHS, RG RANGE.

Immersion heaters for aggressive baths in the RG range are used for heating the different types of substances and solutions of a chemical or electrolytic, surface-coating process

General characteristics

- Heating element manufactured with high-quality ceramic support and Ni-Cr alloy resistive wire
- Head in EPDM for all models with sheath Ø25, Ø30 and Ø33 mm and also for models with lead sheath in Ø52 mm.
- Bakelite head with IP65 protection degree for the porcelain models of Ø40 mm and all models with sheath Ø52 mm except for models with lead sheath.
- 2 or 3 wire silicone hose lead + Earth of 1500 mm long (for different lengths of lead, indicate on the order)
- Class I electric heater
- Standardised voltages: ~230 V; 2~400 V; 3~400 V
- Sheath material:

Titanium	→	Ø25 mm / Ø52 mm	**Pyrex**	→	Ø52 mm
Quartz	→	Ø25 mm / Ø30 mm	**Teflon**	→	Ø52 mm
AISI 316L	→	Ø33 mm / Ø52 mm	**Lead**	→	Ø52 mm
Porcelain	→	Ø40 mm			

Applications

Chemical baths for:

- Degreasing
- Bead-polishing
- Polishing
- Phosphate-plating
- Electro-polishing
- Zinc-plating
- Cadmium-plating
- Copper-plating
- Nickel-plating
- Chrome-plating
- Silver-plating
- Gold-plating
- Fixing
- Colouring

Method of use

- The immersion heater is supplied without any control elements, the user having to connect the different electrical circuits and drives to start the immersion heater running.
- Periodically check the air-tightness of the head to make sure there is no deterioration of the internal connections due to corrosive actions of vapours or liquids.
- The immersion heater has a mark which signals the heated zone. To ensure correct functioning, it is vital that this mark is always completely submerged
- For its electrical connection, it must be submerged in the bath.
- To remove it from the bath, it must be disconnected electrically and left for 15 minutes or until the heating element has cooled down.
- Before installing the immersion heater, check that the sheath material is suitable for the type of bath in which it is to be submerged. To do so, and only as a guideline, we show below a table with the recommended sheath materials per type of bath. The final choice may be based on working conditions, recommendations by the corrosive material manufacturer, or else, on a preliminary test. SANTI ESCOIN HOMS cannot be held responsible for potential problems caused by corrosion, as different working conditions and other factors, often unknown, can modify the efficiency of the sheath.

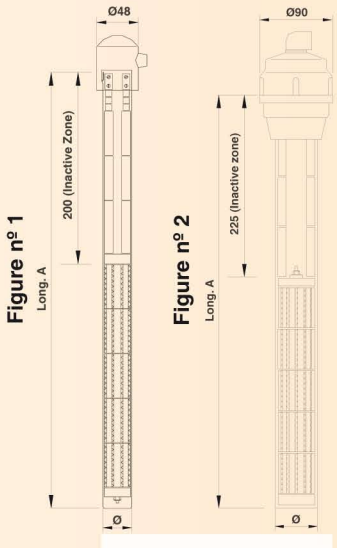
	Titanium	Quartz	Stainless Steel AISI 316L	Porcelain	Pyrex	Lead
Electro-acid shining		X		X	X	X
Cadmium	X		X			
Alkaline copper	X		X			
Acid copper	X	X		X	X	X
Colouring			X			
Special chrome						X
Sulphuric chrome						X
Sulphurous chrome	X	X		X	X	
De-greasing	X		X			
Aggressive de-greasing		X		X	X	
Staining steel electro-polishing		X		X	X	
Aluminium electro-polishing		X		X	X	X
Fixing		X		X	X	X
Phosphate-plating	X		X			
Shiny nickel-plating			X			
Silver-plating	X	X		X	X	
Gold		X		X	X	
Alkaline zinc	X		X	X	X	
Salts for thermal treatments (nitrates – sodium nitrates)			X			

NOTE

The special characteristics of Teflon make it able to work in a wide range of corrosive liquids, and would therefore be suitable for any of the baths indicated in the table included.
The exception is to be found in baths with hydrofluoric acid or solutions with fluoride base. In these cases, Teflon is NOT appropriate

Standar models

Figure nº	Ø sheat	Sheat material	Long. A in mm							
			500	525	600	750	800	900	1000	1200
1	Ø25	TITANIUM	1000 W	--	--	--	2000 W	--	3000 W	--
1	Ø30	QUARTZ	1000 W	--	--	--	2000 W	--	3000 W	--
1	Ø33	AISI 316L	1000 W	--	--	--	2000 W	--	3000 W	--
2	Ø40	PORCELAIN	1000 W	--	--	--	2000 W	--	3000 W	--
2	Ø52	TITANIUM AISI 316L PYREX	--	1000 W	1000 W 1500 W 2000 W 2500 W 3000 W	2000 W	2000 W 2500 W 3000 W	3000 W	3000 W 3500 W	3000 W 3500 W
		TEFLON	--	800 W	--	1600 W	--	2400W	--	--
1		LEAD	--	800 W	--	1600 W	--	2400W	--	--



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