

Coatings

Type	Type of crucibles	Application		Furnace Type	Availability	Max Metal Temp
		Alloys	Usefulness			
PD Coating						
Al ₂ O ₃ Coating	All non-impregnated crucibles	Al Alloys Precious Metal Zinc distillation	Reduce dross adhesion. Limit metal contamination	All Types of Furnaces	Germany-now China - now India - now Brazil - now	1600°C
PRO Coating						
Al ₂ O ₃ Coating with phosphate bond	All crucibles	Al (99.999%) Al Alloys Zinc distillation Precious Metal	Reduce dross adhesion. Limit metal contamination	All Types of Furnaces	Germany now China - now India - now Brazil - 2015	1600°C
FL Coating						
Low melting point glaze with LTP finishing	Clay-bonded crucibles Not impregnated	Al & Al Alloys using a lot of fluxes	Reduce flux attack on crucible material	All types of furnaces	Germany - now China - now	1000°C
STAR Coating						
BN with Nano ZrO ₂	Clay-bonded crucibles (is-pressed and rib-formed)	Al (99.999%) Al Alloys precious metals (TBD)	May provide superior dross adhesion reduction in aluminium. Limit metal contamination	All types of furnaces	Germany - now China - 2016 India - 2015 Brazil - 2018	1000°C
SiCH Coating						
Micronized SiC with SiC bond	All types of crucibles	Cu & Cu Alloys Si-Metal Precious Metal	Increase erosion resistance. Limit metal contamination	All types of furnaces	Germany - now China - 2016 India - 2015 Brazil - 2016	1600°C
Si₃N₄ Coating						
Si ₃ N ₄ Coating with nano-binder	All crucibles	Zinc distillation, Pure copper melting	Reduce dross adhesion, Limit metal contamination	All Types of Furnaces	Germany – Now; China – 2016 India - 2017 Brasil - 2017	1500°C