

Vacuum Centrifugal Casting Machine for Titanium Alloys

TCE12-Ti

MACHINE, ACCESSORIES and OPTIONS	
<i>Item</i>	<i>Description</i>
TCE12-Ti Class A	Titanium Vacuum Centrifugal Casting Machine as per above specification - 400 g Ti with PC based monitoring system for process variables acquisition and casting run reports creation - PC and monitor (21 inches) included.
20 kW generator (Optional)	20 kW generator at the place of the standard 12 kW
Customization (Optional)	Machine upgrade for crucible up to 600 g Ti
Oxygen Analyzer (Optional)	Oxygen Analyzer to record in real-time the ppm value of the residual oxygen content in the vacuum chamber during the casting cycle.
Fiber Optic Dual Band Pyrometer (Optional)	IR dual band "IRTEK - MARATHON" fiber-optic small spot pyrometer - (as a replacement of the standard TOPCAST single band pyrometer already included in the machine price)
Chiller CH15 - 6700 Frig/h (Optional)	Water-cooling system - see par 4.8



Topcast s.r.l. - VAT IT 01751020510
Loc. San Zeno, strada C, 6/D - 52100 Arezzo (Italy)
Tel: 0575 441341 - Fax: 0575 441222
e-mail: info@topcast.it

TCE12-Ti Class A

Vacuum Centrifugal Casting Machine for Titanium Alloys - Technical Specification

5.0 PERFORMANCE & CAPABILITIES

- Casting Arm Speed Range
 - variable from 0 to 445 RPM
- Vacuum Pump Down Rate
 - 5 minutes or less to reach a vacuum pressure level of 5×10^{-2} millibar or lower as measured in the casting chamber in a empty chamber / clean condition
- Induction Heater Power:
 - 12 KVA
 - 20 KVA (Optional)
- Ti max crucible capacity
 - 400 g Ti with standard crucible (100 cc)
 - 600 g Ti with customized crucible (160 cc - pls see pricetable)
- Alloys can be melted:
 - Ti
 - Stainless Steel
 - Au
 - Pt
- Mould and Flask limits
 - Max diam 130 mm
 - Max length 180 mm
 - Max weight a the arm 6 kg
- Melt Temperature Sensor:
 - IR optical pyrometer - Range: 1400 - 2000 °C
 - Rotating thermocouple type N - Range: 0 - 1250 °C - (Optional)
- Melt time for 400 g of Titanium based alloy charge, 1700 Degrees C, in 7 minutes or less.