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Technology Application and Promotion Institute (TAPI)

DOST Compound, Gen. Santos Avenue Bicutan, Taguig City

Tel.: (632) 837-6188 • Fax: (632) 838-1127 website: http://www.tapi.dost.gov.ph





Sample souvenir items



DEPARTMENT OF SCIENCE AND TECHNOLOGY

METALS INDUSTRY RESEARCH AND DEVELOPMENT CENTER



Gen. Santos Ave., Bicutan, Taguig City

837 - 0431 to 38



837 - 0479



mirdc@dost.gov.ph



www.mirdc.dost.gov.ph

MICRO CUPOLA FURNACE



DEPARTMENT OF SCIENCE AND TECHNOLOGY
METALS INDUSTRY RESEARCH AND DEVELOPMENT CENTER



Simplicity in Operation



State of the art refractory systems

High performance refractory systems for minimal maintenance between campaigns, long campaign periods and high melt tonnage between refractory changes.



Simple design and construction

Low cost fabrication, repair and maintenance.



Full control operation

Full instrumentation in blast air pressure and volume for repeatable results and operational flexibility.



Low cost operation

Minimal power requirement of the 2HP pressure blower.

Micro Cupola at a Glance

Specifications:

Inside Diameter: 250 mm Total Height: 2690 mm Shell Refractory Thickness: 64 mm

Blower: 2HP 220V 3Phase

Number of Nozzles: Blast Air Pressure Control: Yes Number of Stack:

Performance and Requirements:

Melt Rate: ~ 180 kg / hr

Tap Weight: ~ 30 kg / tap / 10 min

*Cost per kg Melt: $\sim P 80 / kg$

(decreasing at longer campaigns)

> 1.5", < 3" Coke Sizes: Charge Sizes: up to 3" sizes Starting Bed Coke: ~ 30 kg

* May change relative to cost of production materials.



Educational Tool

Low cost - investment can be as low as P 200K!

Low maintenance - spout repair and bottom sand

replacement only in between heats.

Low operational cost - only 30 kg of starting bed coke.