ECLIPSE®

Innovative Thermal Solutions

CALFER DE MÉXICO®
CONTROLES AUTOMÁTICOS INDUSTRIALES

DISTRIBUIDOR AUTORIZADO

Typical Applications for gun style:

- Industrial Drying and curing ovens
- Automotive paint drying ovens
- Baking/Food Processing
- Thermal Fluid Heaters
- Water Bath Vaporizer
- Metals (Curing, Drying)
- Incinerations

Typical Industries:

- Automotive & General Finishing
- Food and Beverage
- Petro/Petrochemical
- Building Materials
- Glass (annealing)
- Indirect air heating
- Metals Finishing

Ratio Matic

Low Temp Gun Style: RatioMatic, Eclipse Brandt

Description: Packaged air heating burner that features simple operation and robust, reliable performance.

Specs:

- 14 Sizes from 0.5 to 30 MMBtu/h (135 to 8000kW)
- Packaged Blower Available on All Sizes (60Hz)
- From 21:1 Up to 90:1 Turndown , depending on sizes
- Modulates air/ gas with ratio regulator , compensates dirty air filter
- Modulating with High Excess Air on Turndown
- Standard Emissions, NOx: 60 to 80 ppm (high fire) CO: 60 to 80 ppm (high fire)
- Natural Gas, Propane, Butane
- Max Process Temp: 1900°F (1038°C)

Ratio Air

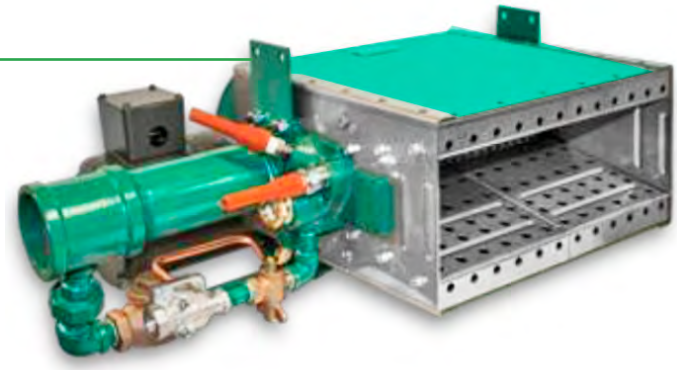
Low Temp Gun Style: RatioAir

Description: A packaged velocity burner that allows a wide range of fuels and flame speeds of up to 500 ft/s (150 m/s)

Specs:

- 11 Sizes from 0.25 to 20 MMBtu/h (250 to 5330kW)
- Based on the ThermJet Platform
- Packaged Blower Available on All Sizes (60Hz)
- 30:1 Turndown
- Modulates air/gas with Ratio Regulator Controlled , simple
- Alloy, Ceramic, or Refractory Combustor Options
- Standard Emissions
- Natural Gas, Propane, Butane, Landfill gas, Low Btu Gases
- Max Process Temp: 2800°F (1538°C)

AirHeat v1



Low Temp Line Style: AirHeat v1

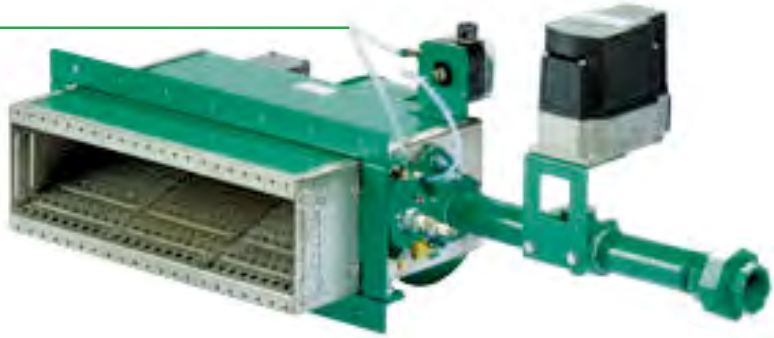
Description: compact modular burner with robust, reliable performance, and stable operation in many duct velocities. Industry standard for generating large volumes of hot air for a wide range of industrial heating applications.

Specs:

- ForcedDraught,FixedAir
- NozzleMixing
- 0.8or1.0MMBtu/hperFoot(260kw/300mm) - Straights,Tees,andCrosses
- 40:1Turndown
- StandardEmissions
- NaturalGas,Propane
- Max Downstream Temp: 1500°F (815°C)

Typical Applications: • FoodProcessing/Baking • IndustrialDrying(BuildingMaterials,Ceramics,Textiles) • AutomotiveFinishing • GeneralFinishing • DryOffandCuringOvens • Atleast50,000+installedbase, AHmostpopularlineburner.

AirHeat v2



Low Temp Line Style: AirHeat v2

Description: line burner that provides simple, reliable operation plus extremely low CO emissions in a compact/modular design.

Specs:

- Forced Draught, Fixed Air
- Nozzle Mixing
- 1M Btu/h per Foot (260 kW/300 mm)
- Straights with Limited Tees & Crosses
- Gas manifolds available in Aluminum, Cast Iron, and Ni-plated C.I. - 40:1 Turndown
- Standard NOx, Low CO Emissions
- Natural Gas, Propane
- Max Downstream Temp: 1500°F (815°C

Typical Applications: • FoodProcessing/Baking • IndustrialDrying(BuildingMaterials,Ceramics,Textiles) • AutomotiveFinishing • GeneralFinishing • DryOffandCuringOvens • Atleast50,000+installedbase, AHmostpopularlineburner.

ThermJet

High Therm Direct Fired

Description: High velocity, direct fired furnace burner that is easy to set up, reliable, has robust performance, and is designed to fire an intense stream of hot gases through a high velocity nozzle. The high velocity improves temperature uniformity, product quality, and system efficiency.

Typical Applications:

- Metals – Tempering, Reheating, Hardening, Melting, Annealing, Forging, Ladle Heaters
- Incinerators / Thermal Oxidizers
- Ceramics
- Hot Air Generators

Specs:

- • 14 Sizes from 0.15 to 20 MMBtu/h (40 to 5275kW)
- Up to 50:1 Turndown with fixed air (10:1 on Ratio)
- Modulation with High Excess Air at Low Fire
- Direct Spark Ignition – All Sizes
- Flamerod Sensing up to 2 MMBtu/h
- Preheated Combustion Air Capability (1000°F/540°C)
- Alloy, Ceramic, or Refractory combustor
- Standard Emissions
- Flame Speeds up to 680 ft/s (207 m/s)
- Natural Gas, Propane, Butane, Coke Oven Gas, Other Gases on Request
- Max Furnace Temp: 2800°F (1540°C)

Sales Tips/Success Stories:

- Staged air nozzle – helps to lower NOx (compared to other high velocity, direct fired burners in the market)
- Can accept very high excess air (2000%+)
- Very large ignition and flammability zone
- Integrated orifice plates – small physical size for the amount of output
- Burns multiple fuels with the same nozzle
- Huge installed base - close to 100,000 globally

ECLIPSE®
Innovative Thermal Solutions

CALFER DE MÉXICO®
CONTROLES AUTOMÁTICOS INDUSTRIALES
DISTRIBUIDOR AUTORIZADO

TFB Tube Firing Burner

High Therm Indirect Fired

Description: TFB provides an intense, adjustable length flame with a unique swirling action that improves tube temperature uniformity; when paired with the Bayonet Ultra Recuperator and E-Jector burner efficiency is improved up to 65%, and NOx reduced by 50%.

Typical Applications:

- Metals – Tempering, Hardening, Annealing, Galvanizing • Liquid Heating

Specs:

- Standard for multi-bend tube applications in heat treat furnaces
- Many OEM :Surface Combustion, JL Becker, Can-Eng, San-Yung,
- Fuel savings of up to 40%
- Many installation in Mexico, Colombia and Brazil
- Schaeffer in Irapuato , continuous Normalizing furnace (Automotive parts)
- Especialidades Termicas , Heat treater , many types applications

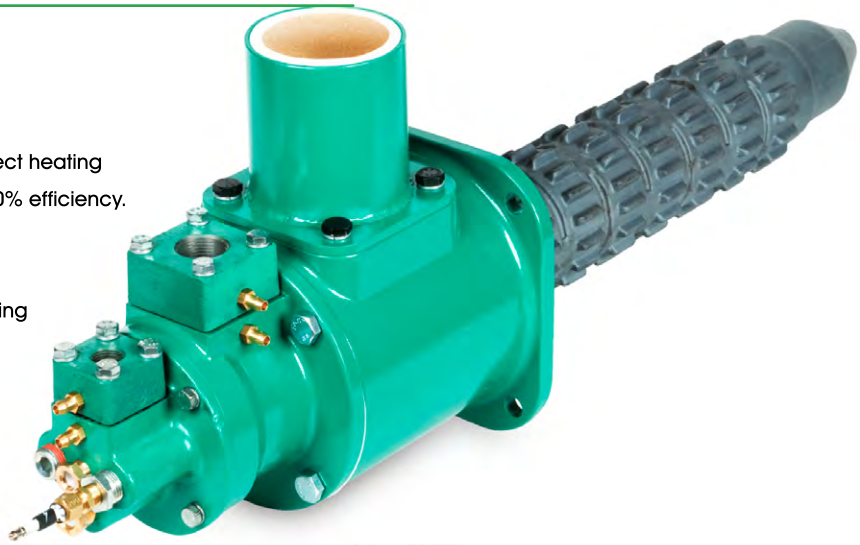
Sales Tips/Success Stories:

- 3 Sizes from 300 to 2000 kBtu/h (80 to 530kW)
- 30:1 or more Turndown
- Long, Spiraling Flame
- Natural Gas, Propane, Butane
- Max Furnace Temp 1900 F (1040 C) with PCA up to 550 C
- Bayonet Ultra (BU) Recuperator:
  - 3” to 6” (76 to 152mm) ID Tubes with Larger Sizes possible
  - Air Cooled Housing
  - Max Process Temp 2100 F (1090 C)
  - Burner efficiency improved up to 65%
- E-Jector FGR Device for Low NOx
  - Sizes from 4” to 6” (102 to 152mm)
  - NOx reduced by 50%

ECLIPSE®
Innovative Thermal Solutions

CALFER DE MÉXICO®
CONTROLES AUTOMÁTICOS INDUSTRIALES
DISTRIBUIDOR AUTORIZADO

SER Single Ended Recuperative Burner



High Temp Self Recuperative

Description: Compact, self recuperative burner for indirect heating applications. It is easy to set up, and can achieve up to 70% efficiency.

Typical Applications:

- Metals – Tempering, Hardening, Annealing, Galvanizing Heat Treating, Continuous Lines

Specs:

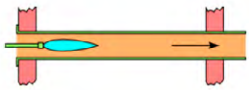
- Standard Emissions
- TJSR Platform with a Radiant Tube
- 3 sizes from 140 to 300 kBtu/h (37 to 80kW)
- Three Tube Sizes
  - 4.5" (114mm)
  - 6" (152mm)
  - 8" (203mm)
- 10:1 Turndown
- Internally insulated
- Up to 70% Efficiency HHV
- Max Furnace Temp: 1850°F (1010°C)
- Ceramic Recuperator Only; Metallic or Ceramic Outer Tubes

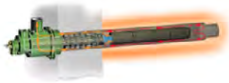
Sales Tips/Success Stories:

- SER-type burners are the standard in most batch furnaces and strip lines (driven by Europe)
- Ipsen, Beavermatic, Lindberg, have standardized on SER designs
- Installed at Altos Hornos , Steel hot Roll continuous furnace
- Compania Manufacturera , Irapuato, Heat Treating furnace
- Apisa Fastener , Botton carburizing furnaces
- Very easily adaptable to furnaces that were at one time electrically heated
- Because of the uniformity of the tube, all burners can be installed on one side of the furnace, which helps save floor space needed for maintenance
- Compared to the W-Tube and U-Tube applications, single tube
  - Maintenance is easier
  - Lost production time is reduced
  - Working environment just outside of furnace is cooler
  - Materials allow for longer tube life (SiC is 4-5 years vs. 18 months for W/U Tube).

Batch Furnace SERv3600

Aluminum Holding Tank





Altos Hornos , 185 Burners installation , 35 % fuel savings

ECLIPSE®
Innovative Thermal Solutions

CALFER DE MÉXICO®
CONTROLES AUTOMÁTICOS INDUSTRIALES
DISTRIBUIDOR AUTORIZADO

TJSR Therm-Jet Self Recuperative

High Temp Self Recuperative

Description: TJSR is a direct fired, self recuperative burner that combines a high velocity flame with fuel saving recuperation providing improved furnace efficiency and reduced fuel consumption.

Typical Applications:

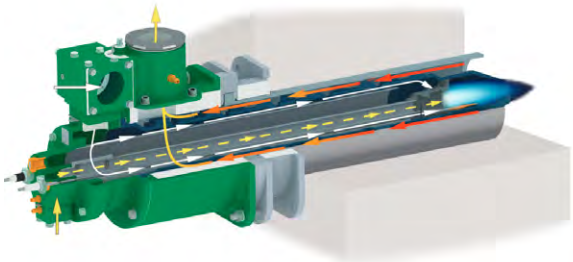
- Metals (Heat Treating, Tempering, Hardening, Melting)

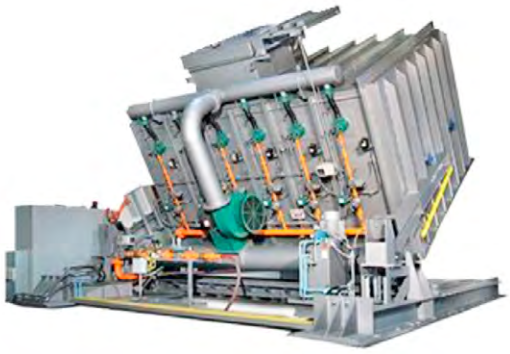
Specs:

- Therm-Jet Self Recuperative
- 4 Sizes from 200 to 1000 kBTU/h (53 to 270kW)
- Integral Eductor – Single Air Inlet
- Ceramic Recuperator Only
- Internally insulated
- 10:1 Turndown
- High Velocity from 498 to 551 ft/s (152 to 168 m/s) • Nozzle based on ThermJet Design
- Standard Emissions
- Max Furnace Temp: 2200°F (1200°C)

Sales Tips/Success Stories:

- Tremec – replaced Tempest(NA) two Normalizing
- 18 TJSR, 20 % fuel savings
- De Acero , Puebla – steel cord reheating furnaces, 12 TJSR , 24 % fuel savings
- Insertec, Ladle preheating in Aluminum (Automotive)
- Kohler , 15 TJSR Heat treater furnace





ECLIPSE®
Innovative Thermal Solutions

CALFER DE MÉXICO®
CONTROLES AUTOMÁTICOS INDUSTRIALES
DISTRIBUIDOR AUTORIZADO

Control BV manual y autómatico

Descripción del producto

Las válvulas de mariposa Eclipse están diseñadas para controlar el flujo de aire y de gas en todos los tipos de sistemas de combustión. No deben utilizarse como válvulas de cierre herméticas.

Tips disponibles

Las válvulas están disponibles tanto para control manual como automático para tamaños de tubería desde 1/2" hasta 8". De paso pleno, paso reducido, y para construcciones con alta caída de presión, están disponibles dependiendo de tamaño y de la conexión de la tubería.

Mostrado con palanca opcional

Conexiones roscadas

Desde 1/2" hasta 4" las válvulas están disponibles tanto para roscas NPT como para roscas de Rc. Las válvulas de 6" y de 8" son válvulas de mariposa tipo wafer, diseñadas para ser intercaladas entre las bridas de las tuberías de conexión.

Discos

Equipado con obturadores biselados o no-biselados, según la tabla de selección.

Indicación

Todas las válvulas de mariposa Eclipse ofrecen una placa de indicación fácil de leer y una ranura en el extremo del
Eclipse Paso pleno & Paso reducido
eje para proporcionar indicación visual de la posición del disco.

Control

Las válvulas de mariposa manuales de hasta 4" tienen una cubierta de ajuste (dial) para fijar la posición del obturador. Un tornillo de fijación asegura la cubierta en el ajuste deseado.
Las válvulas de mariposa de control automático pueden ser montadas con una palanca opcional. Esto permite su integración con gran variedad de controladores de posición.
Las válvulas de mariposa tipo wafer manuales se ajustan mediante el giro de un brazo de control. Este brazo puede ser fijado a la placa indicadora para asegurar su posición.

ECLIPSE®
Innovative Thermal Solutions

CALFER DE MÉXICO®
CONTROLES AUTOMÁTICOS INDUSTRIALES
DISTRIBUIDOR AUTORIZADO

Válvulas de compuerta

Válvulas de control de aire manuales

Válvulas

Válvulas de orificio ajustable

Ajuste preciso del flujo del gas.

Válvulas de verificación de tipo disco

Previene el flujo reverso de gas o aire.

Válvulas de mariposa

En paquete BV-Pak

Con actuador

Directorio

Contáctanos

LADA 800 0125 742
www.calfer.com.mx

CALFER DE MÉXICO®
CONTROLES AUTOMÁTICOS INDUSTRIALES

CALFER DE MÉXICO, S.A. DE C.V.

CASA MATRIZ
Poniente 134 #404, Col. Nueva Vallejo, Alcaldía Gustavo A. Madero,
C.P. 07750, Ciudad de México.
Tel. 55 5078 1200 ventas@calfer.com.mx

CDMX 55 5078 1200
ventas@calfer.com.mx
Poniente 134 No. 404. Col. Nueva Vallejo.
CP. 07750, Gustavo A. Madero, Ciudad de México.

Monterrey 81 8057 5274 al 76
monterrey@calfer.com.mx
Calle Vicente Guerrero Norte No. 1601.
CP. 64570, Monterrey, Nuevo León.

Guadalajara 33 3825 5577
guadalajara@calfer.com.mx
Av. Federalismo Sur #416, Col. Centro.
C.P. 44100, Guadalajara, Jalisco.

Querétaro 442 212 9318 y 5644
queretaro@calfer.com.mx
Zacarias Oñate No. 7-A. Col. Cimatario.
CP. 76030, Querétaro, Querétaro.

Toluca 728 688 2002 y 2080
toluca@calfer.com.mx
Miguel Alemán Aeropuerto 160.
CP. 52106, Toluca de Lerdo, Estado de México.
Dentro de Plaza Alemán Local 116 y 117.

Puebla 222 248 8311 y 99
ventaspuebla@calfer.com.mx
Diagonal Defensores de la República No. 64.
Corredor Industrial la Ciénega.
CP. 72260, Puebla, Puebla.
Dentro de Plaza Fuertes Local 4.

Tampico 83 3245 5908
tampico@calfer.com.mx
Home Office

Tampico #2 833 1811 588
tampico2@calfer.com.mx
Calle Belisario Dominguez #114, Col. Del Pueblo
C.P. 89318. Tampico, Tamaulipas

FRISA

FRISA Controles Especiales FRISA S.A de C.V.
55 5512 9363 y 9403
ventas.frisa@controlesfrisa.com.mx
Balderas No. 72 Local 7. (Entrada por Victoria No.111
Local 7). CP. 06050, Cuauhtemoc, Ciudad de México.

CALFER NAUCALPAN
CONTROLES AUTOMÁTICOS INDUSTRIALES

NAUCALPAN Calfer Naucalpan S.A de C.V.
55 5362 7871 al 75
ventas.nau@calfernaucalpan.com.mx
Av. Dr. Gustavo Baz Prada No. 175. Unidad Adolfo López
Mateos. CP. 54070, Tlalnepantla, Estado de México.

COMQSA

COMQSA Constructora Mexicana de Quemadores S.A
México 55 5560 5505
comqsa@calfer.com.mx
www.comqsa.wix.com/comqsa
Calle Nueva No. 192. Fraccionamiento Industrial la Perla.
CP. 53348, Naucalpan, Estado de México.

COMQSA Constructora Mexicana de Quemadores S.A
Monterrey 81 8375 4836 y 38 / 81 1916 3926
comqsa.ventasmty@calfer.com.mx
www.comqsa.wix.com/comqsa
Av. Francisco I. Madero #850 Ote. Col. Centro, C.P. 64000,
Monterrey, N.L. *Entre Dr. Jose Ma. Coss y Mariano Arista*

¡Síguenos en Redes Sociales!
@ CalferMx