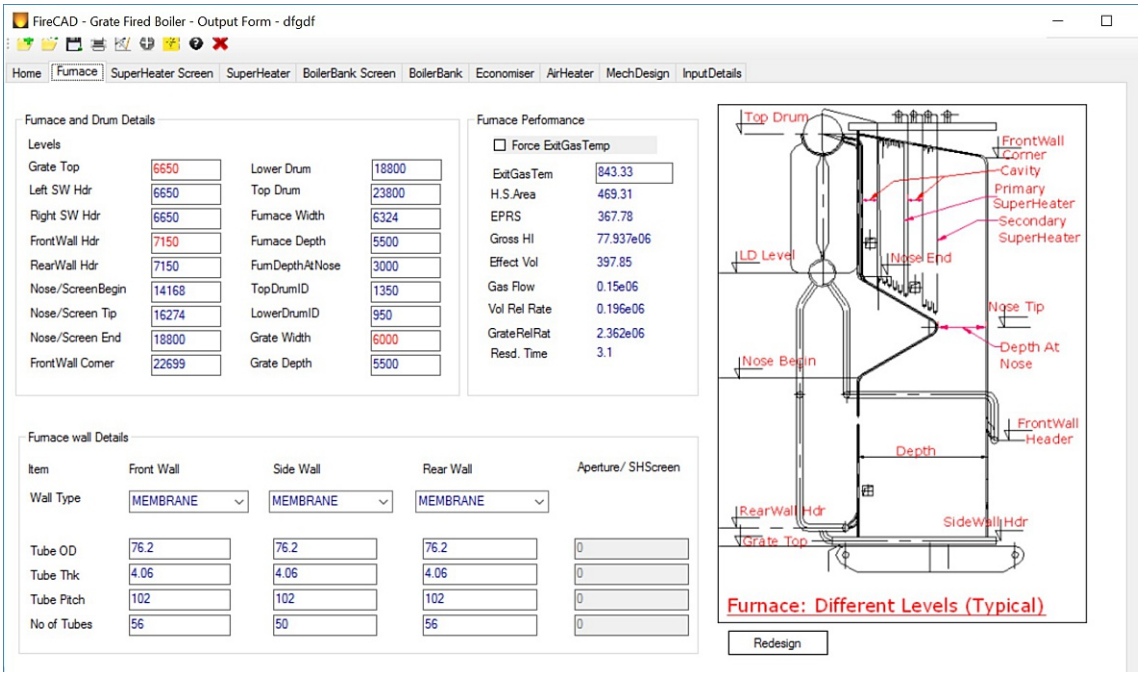
250,000 kg/hr Biomass Boiler designed using FireCAD

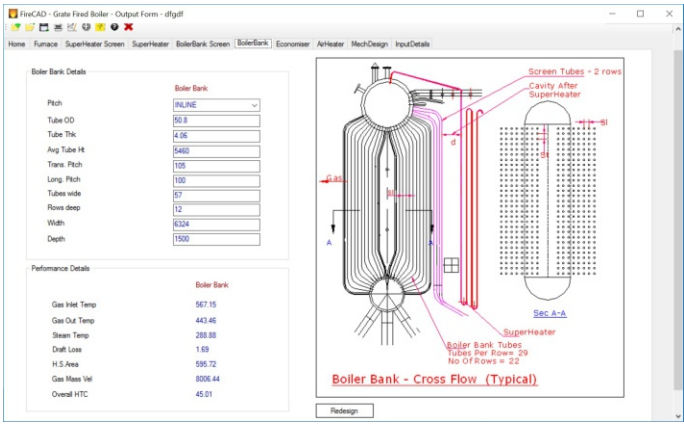
FireCAD Technologies

FireCAD advantage

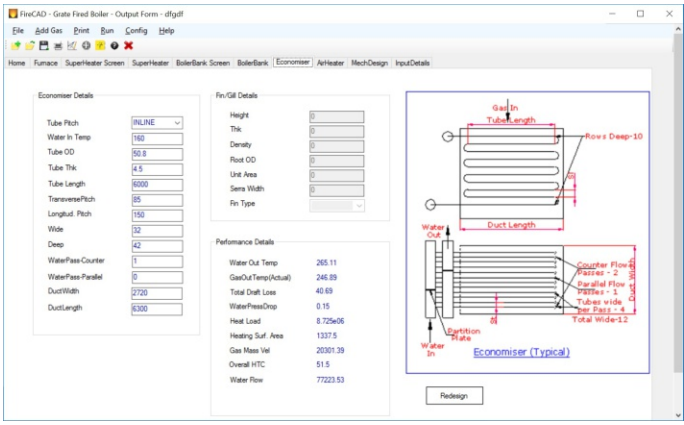


FireCAD is extensively tested and has been in use for 14 years by many reputed Boiler manufacturers and Consultants across 30 countries.

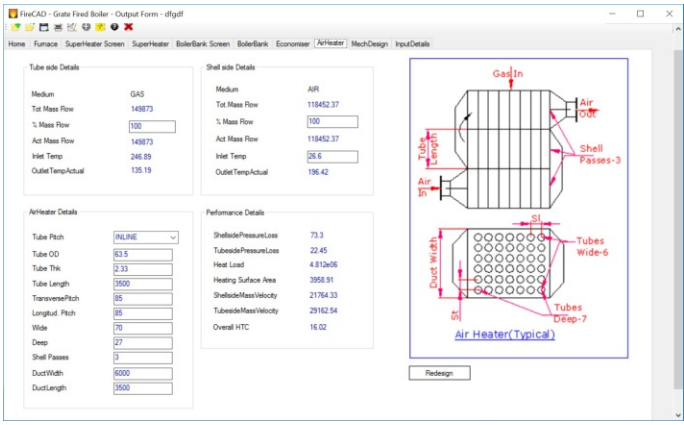
The software helps us in designing more energy efficient Boilers and gaurantee the Boiler performance at different loads. The World's largest Biomass Boiler was designed using FireCAD. There are dozens of FireCAD Designed Boilers running successfully in India and several hundreds across the Globe.



BoilerBank



Economiser



AirHeater

FireCAD Client's List

Saskatoon Boiler Manufacturing co Ltd., Canada
Alpha Omega ltd., Indonesia
Cannon Boiler Works Inc, USA
The McBurney Corp, USA
Garma Gostar Co., Iran
Vea AB, Sweden
Zenith Thermal Equipment Pvt.Ltd., India
Descon Engineering Ltd., Pakistan
Proodos Industrial Boilers, Greece
Viitos-Metalli, Finland
McKillup Engineering, Inc, USA
PT. Bukaka, Indonesia
MMI Boiler Mgmt Pte Ltd., Singapore
Idaho National Engg & Environ Lab, USA
Simon India Ltd, India
Hurst Boiler & Welding Co.,Inc, USA
ATS Express, LLC, USA
Del-Tech Industries Inc.,Canada
Recovery Heat Engg S.A. de C.V, Mexico
PT. Dinamika Energ Nusantara, Indonesia
Eco-wat A/S,Bulgaria
Thermodesign Inc, Canada
Stm Master Equip Térmicos Ltda, Brazil
Snow Removal Systems, Inc, USA
Lointek, S.L,SPAIN
PT Mitra Adyaniaga, INDONESIA
SBP. Ltd, INDIA
Combustion Control ltd, New Zealand
Advance Boilers, Malaysia
Rota Muh.Mak.Ins.Ltd., Turkey
Gresham's Eastern Pvt Ltd, Pakistan
EASCO Boiler Corp.,USA
Industrial Boilers Pvt Ltd.,PAKISTAN
Dreifus & Zuccato Eng Associados Ltda., Brazil
Walchandnagar Industries Ltd, India
Politeknik Negeri Ujung Pandang, Indonesia
Indutapas Ltda, Colombia
Vickers Hoskins (M) Sdn Bhd, Malaysia
TECNOTRACK VAPOR INDUSTRIA, Venezuela
PT. Fajar Mas Murni, Indonesia
MECET, S.L., SPAIN
Man Made Textiles Research Association, INDIA
Pacific Rim Technologies ,USA
Velath Engineering Works, UAE
SAACKE ROSSPLET S.A., ARGENTINA
Mackenzie Industries Sdn. Bhd., MALAYSIA
W.K. Crone B.V., NETHERLANDS
A-Power Systems Oy, FINLAND
Ducova Inc, CANADA
Laboratorium Termodinamika, INDONESIA
The Alstrom Corporation, USA
Mimsan Ltd. Þti, TURKEY
SIPL,INDIA
Energy Technology Centre, INDONESIA
Stewart Thermal, United Kingdom
AESYS Technologies, USA
PT. Grand Kartech, Indonesia
Heavy Mechanical Complex , Pakistan
PALA-INTERSTATE, LLC , USA
Stein Atkinson Stordy Engg Ltd, UK
Petra Boilers sdn bhd, Malaysia
BFI Boilers, Canada
ISI SANAYI A.S. , Turkey
Fortuna Boiler Engineers GmbH , Germany
Steam and Control systems, INC, USA
Bersey Limited Sirketi, Turkey
Hi-Tech Engineering Corporation, India
Holland Ketelbouw,Netherlands
Ideal Combustion, Canada
Delran Electromecanica, Mexico
Holman Boiler Works Inc., USA
Santes Ltd, Turkey
Coulter Engg Services Ltd , New Zealand
PETROBRAS , Brazil
SOGECAL, Spain
DanaTech, Inc. , USA
Agder Biocom, Norway
English Boiler & Tube, Inc., USA
Locke Equipment Sales Comp, Inc., USA
Calderas Equipos Cambiadores de Calor, Mexico
EnergyPack Boilers Pvt Ltd, India
Alternative Petroleum Technologies, USA
HEPHAESTUS BOILER MAKERS & ENGG, Greece
Energy Pak (K) Ltd, Kenya
CHEMTECH SERVIÇOS DE ENGENHARIA , Brazil
VR ingenieria, Colombia S.A.
pt. Metalindo Erabuana Engg , Indonesia
Ferroli S.p.A. , Italy
Advance Boiler Services , New Zealand
Nasr Boilers, Syria
Ideal Combustion, Canada
Pt.Zug Industry, Indonesia
Daekyung Machinery & Engineering Co., Ltd.,Korea
TUBATSE CONSULTING ENGINEERS, South Africa
JGC Philippines, Inc., Philippines
Filter AS ,ESTONIA
United Nations Industrial Development Organization, Austria
ERALP KAZAN VE ENERJİ TEKNOLOJİLERİ, TURKEY
Wasco Energy, Malaysia
GPE Technical Services, Netherlands
DanPower, Brazil
Instrumentation Engineers, Kenya
PT. ATMINDO, Indonesia
Boustead Maxitherm Energy Pte Ltd, Indonesia
ANINGAS-ERGOS SA JOAQUIM CANE
BALLART, Spain
Tecnintegral S.A.S., Colombia
SAS_Thermal, United Kingdom

.. more at **www.firecad.net**

FireCAD design range:

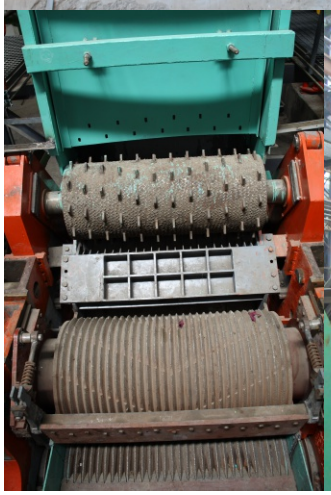
- Grate Fired Boilers
- Fire Tube Boilers
- Water Tube Pkg Boilers
- FBC Boilers
- Heat Recovery Boilers
- Superheaters
- Economisers
- Airheaters
- Solid / Oil / Gas fired

Sugar Plants

Turnkey Solutions

Sugar and Cogen Plants

We have developed inhouse design, engineering, manufacturing and execution capabilities to excute upto a capacity of 7500TCD. We already desinged Roller Mills of size Dia 45" x Length 90". We have designed and executed one of worlds largest Biomass Travelling Grate Boiler of 250,000 kg/hr capacity in Thailand.



Centrifugals

Bagasse and Coal Handling Systems

•We have designed large bagasse handling systems for sugar plants specially for cogeneraton projects. The system consists of mechanically spreading surplus bagasse in the storage yard and simultaneous reclamation of the same for the boiler feed as an when required.

Sugar Driers

Sugar Cane Mills

• Our Mills are designed to meet best of the performance efficiencies
• Antifriction bearings for all carrier shafts to reduce wear & tear
• Rake elevator and inter rake carriers have special chain tightening arrangement
• Vertical Set, King Boltless type with push-pull screw for quick & easy setting and operation
• Sturdy design of head stocks capable of accommodating bigger roller diameters
• Mills are easily adaptable for future expansion by fittings pressure feeders.

Evaporators and Vaccum Pans

• Falling film and rising film type evaporator bodies.
• The calandria and distribution of tubes are designed to ensure adequate outflow of non-condensable gases.
• Tangential steam entry for effective steam distribution.
• Centrifugal type internal save-all with poly-baffle type entrainment separator for complete separation of juice particles.
• Single entry multijet condensers to ensure minimum water requirement at condensing station.
• Welded evaporator body and bottom saucer to eliminate leakages and reduce maintenance.

Spray Pond

Centrifugals

Steam Generators

Steam Generators

We are pioneers in Single Drum Boiler technology which we introduced in Indian Sugar Industry eight years ago. Our team has designed and excuted Boilers from 20 TPH up to 250 TPH steam capacities and up to 110 bar and 540 degC successfully.

Product Range:

- Biomass Boilers on Travelling Grate up to 300,000 kg/hr, 125 bar and 540 degC
- FBC Boiler up to 200,000 Kg/hr
- CFBC Boilers up to 400,000Kg/hr
- Oil/Gas Fired Boilersup to 400,000Kg/hr
- Waste Heat Recovery Boilers for Sponge Iron Plants,Cement,Coke Calc and MSW
- Small Package Oil/Gas/Coal Fired Boilers from 5,000 Kg/hr onwards
- Cogen Power Plants and Captive Power Plants up to 75 MW
- Biomass fuels, Coal, Oil and Gaseous fuel firing

Advantages of our boilers

- Single Drum Boilers which are very responsive to load changes
- High Efficiency
- Optimised design
- Multi-fuel capabilities
- Vast experience of the Engineering and Project teams

Control Panels

Partial list of the Projects designed and executed by Our Team

- 250,000 Kg/hr @ 67 bar, 500 ºC -50 MW- Ruampol Bio-Power , Thailand
- 120,000 Kg/hr @ 87 bar, 520 ºC -20 MW- Baramati Agro Ltd., India
- 60,000 Kg/hr @ 67 bar, 510 ºC - 7 MW- Samruddhi Sugars Ltd., India
- 180,000 Kg/hr @ 110 bar, 540 ºC-40 MW- Shri Saikrupa Sugars Ltd, India
- 70,000 Kg/hr @ 67 bar, 510 ºC - 12MW- Jakraya Sugar Ltd., India
- 85,000 Kg/hr @ 87 bar, 515 ºC - 15 MW- Shivshakti Sugars Ltd.., India
- 50,000 Kg/hr @ 67 bar, 510 ºC - 3 MW- Shri Shivsagar Sugar., India
- 60,000 Kg/hr @ 72 bar, 510 ºC - 10 MW- Aryan Sugars Ltd., India
- 110,000 Kg/hr@ 110 bar, 540 ºC-20 MW- MH Shetkari Sugars Ltd., India
- 100,000 Kg/hr@ 87 bar, 515 ºC- 18 MW- Soubhagya Lakshmi Sugars, India
- 90,000 Kg/hr@ 45 bar, 440 ºC- 15 MW- Kibos Sugars, Kenya
- 55,000 Kg/hr@ 72 bar, 510 ºC- 10 MW- Sitaram Sakhar Karkhana , India
- 75,000 Kg/hr@ 72 bar, 510 ºC-14 MW- Udgiri Sugar & Power Ltd., India

Cooling Tower

Furnace Panels

FireCAD Technologies was founded in 2002.

Our Mission

At FireCAD, our mission is to provide affordable, reliable and energy efficient technologies for process and power industry which wil benefit the customers and reduce impact on the environment.

Our Quality Policy

We practice continual Improvement to achieve customer satisfaction by providing Customer-Centric, Cost-effective, Timely and Qualitative Engineering solutions.

FireCAD Technologies

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