

INTEC Engineering

INTEC solid fuel firing



INTEC Energy Systems - solutions for heat and power generation

Since its foundation in 1995, INTEC Engineering GmbH is a family owned, globally operating company with headquarters and workshop in Germany and a dense network of offices, representations and partners all over the world.

INTEC designs, manufactures and supplies customized plants and individual components for industrial process heat supply and renewable power generation. INTEC covers a wide range of applications in many different industries and also provides commissioning, aftersales and maintenance services.



The INTEC team

Experienced and motivated employees are the foundation of every successful company. INTEC is proud of its employees who implement innovative engineering for plant technology. Our pioneering spirit is contagious because we rely on fair, open and positive interaction with each other. Success and security are most evident in the economic categories. The economy and the profitability of our technology result in sustainable customer relationships.

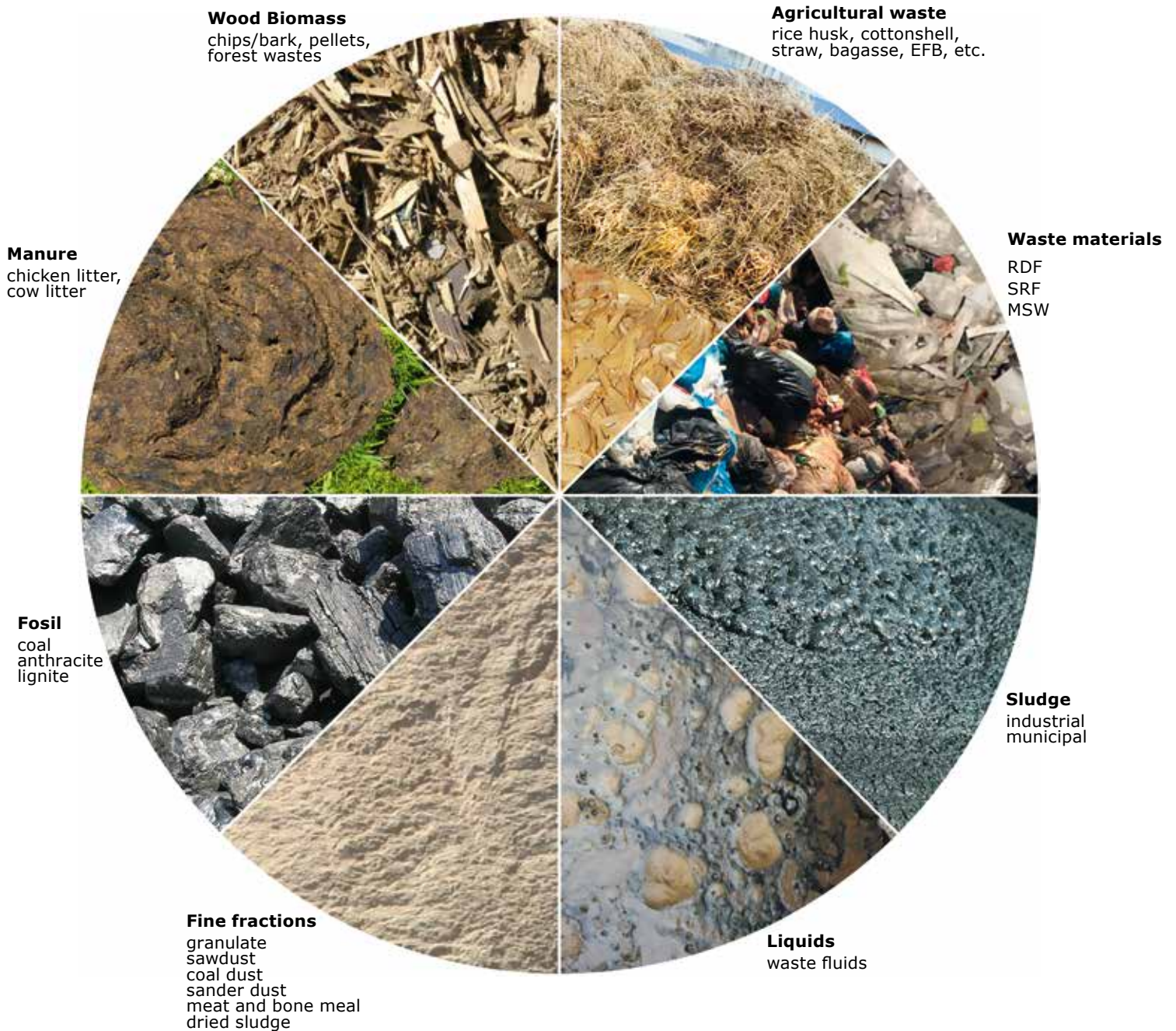


Made in Germany

INTEC develops thermal utilization technologies for all fuels

INTEC continuously develops various firing systems for burning biomass e.g. wood chips, bark, wood dust, grain husks, empty fruit bunches, as well as RDF, sludge, MSW and even coal.

- **Grate firing**
4 - 90 MW
- **Fluidised bed firing**
2 - 90 MW
- **Dust firing**
3 - 50 MW



INTEC - customized combustion technologies

Its wide range of combustion technologies enables INTEC to deliver solutions for almost every fuel and every customer's requirement.

INTEC - step grate combustion

The genuine INTEC step grate is characterized by its robust design, high maintainability and great fuel flexibility. Its design can be individually adapted to conditions such as fuel and output.

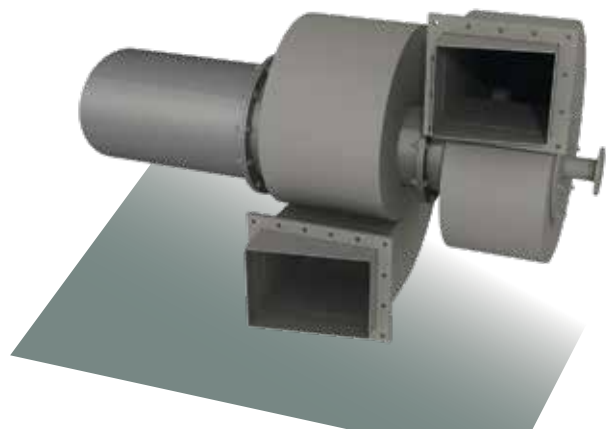
In general, all INTEC grate bars have a high wear resistance to abrasion and temperature. Our combustion concept VRCS guarantees low emissions of CO and NOx.



INTEC - dust firing

Combineable with any solid fuel firing system or as a stand-alone unit, the dust firing system can also be operated in combination with gas or oil.

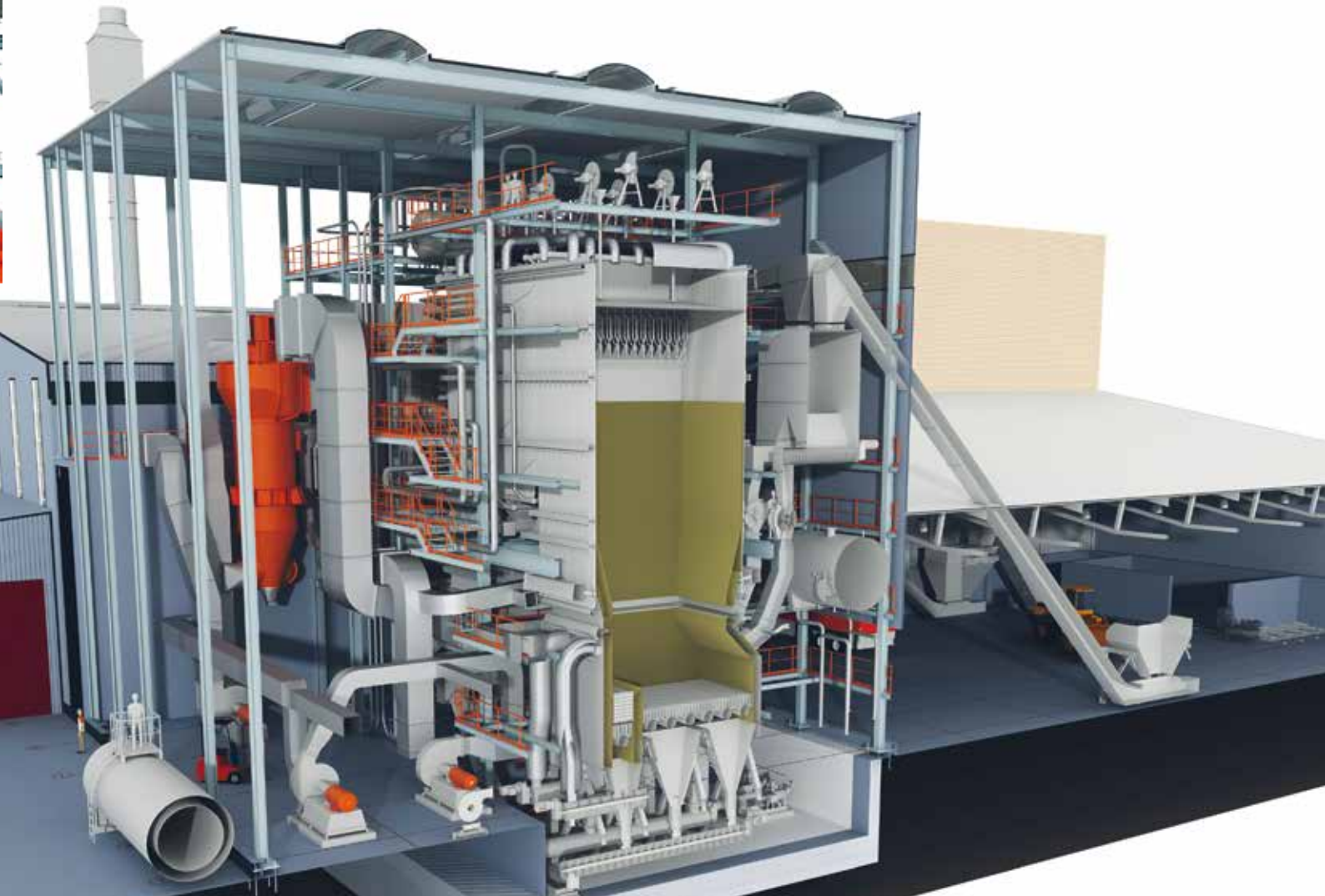
In the case of industrial burners, we guarantee optimum combustion control while reducing emissions and the risk of clinker in the combustion area.



INTEC - fluidized bed incineration

The INTEC fluidized bed firing system is suitable for all kinds of solid fuels, especially for fuels for which grate firing reaches its limits. An innovative concept enables additional thermal utilisation from the bed ash.

Fluidized bed combustion is characterized by low NO_x emissions. In case of problematic fuel components, the flue gas cleaning costs can be reduced considerably by using additives already in the combustion chamber.

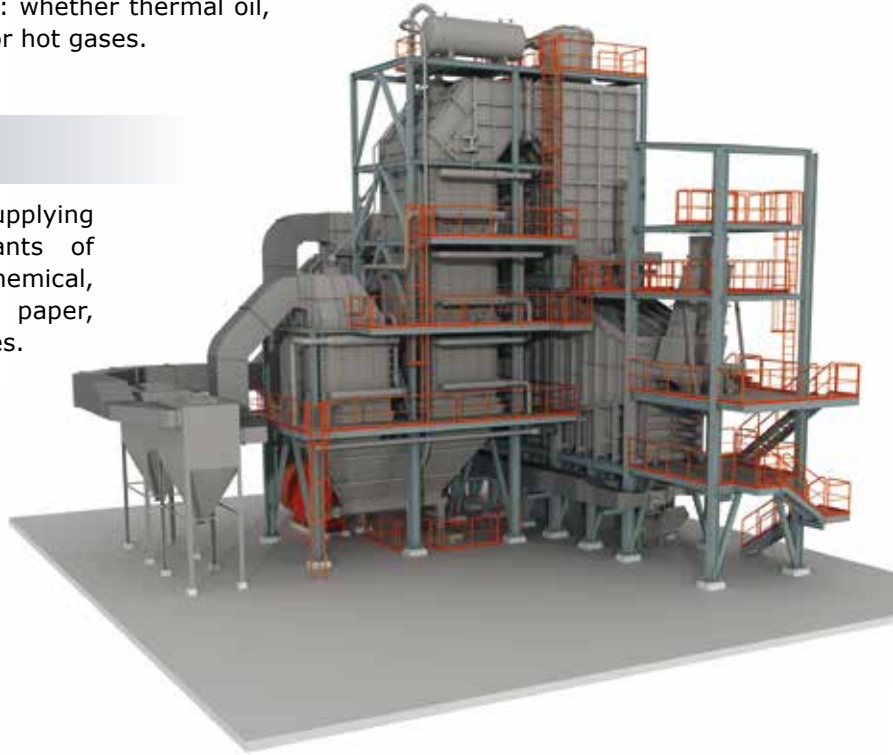
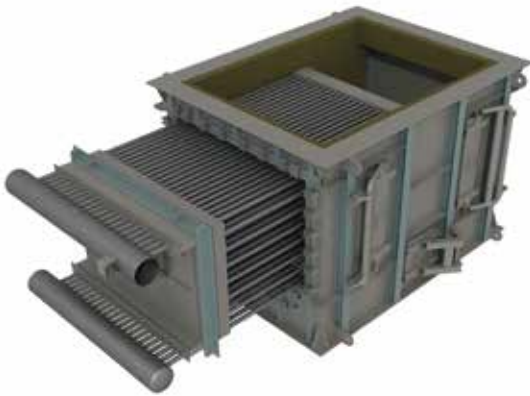


INTEC - heat and waste heat applications

INTEC offers the optimal solution for every need: whether thermal oil, saturated steam, superheated steam, hot water or hot gases.

INTEC - thermal oil heaters

Thermal oil heaters by INTEC are used for supplying pressureless process heat to industrial plants of various industries such as wood, textile chemical, oleochemical, petrochemical, plastics, pulp and paper, solar power, marine equipment and food industries.



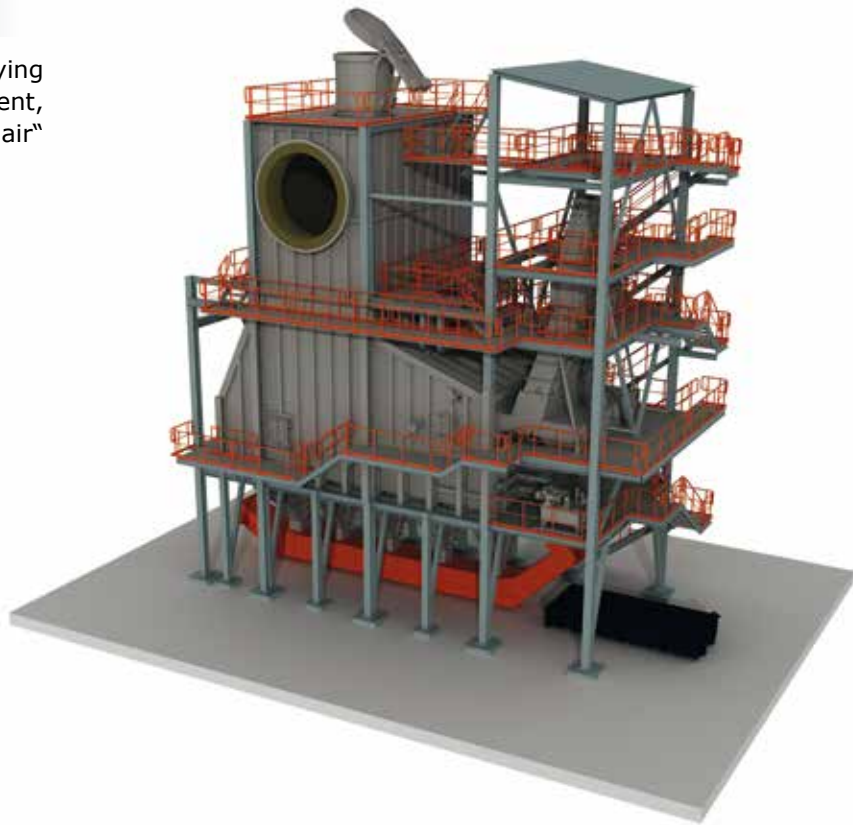
INTEC - hot water and steam generation systems

Our natural circulation boilers are characterized by robust constructions individually adapted to the respective fuel. Intelligent engineering avoid corrosion already in the planning phase, and - where not otherwise possible - corrosion protection coatings help against wear.



INTEC - hot gas generation

Classic hot gas generators are designed for drying processes. Depending on the respective requirement, the hot gases can also be provided as "clean air" applications via recuperators up to 550°C.



INTEC - waste heat recovery systems

In many production processes, waste heat is continuously generated as an unnecessary loss.

Starting from 200°C waste gas temperature, INTEC heat recovery systems can supply your production with hot water, steam, hot gases, hot thermal oil or electricity.



INTEC - plant modules

INTEC is able to present solutions for almost all requirements relating to thermal utilisation.

This makes INTEC a unique partner worldwide and your „One-Stop Supplier!“ for mono combustion plants or highly complex systems, into which all components can be integrated.

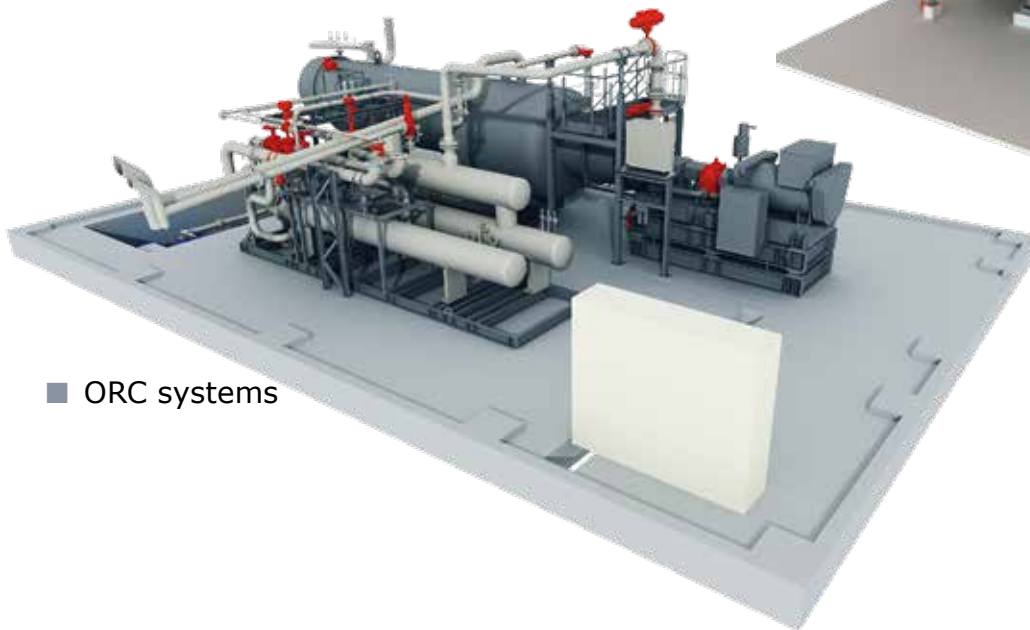
■ Steam turbines



■ Thermal oil systems



■ ORC systems



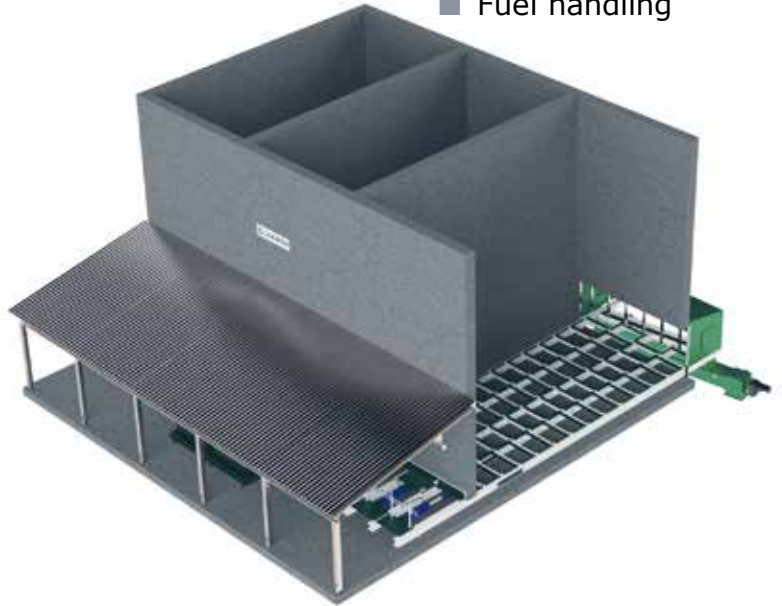
Advantages of INTEC plant modules:

- High flexibility - steam, hot water, thermal oil or hot gases
- Customized solutions
- Robust designs with smallest footprints
- Highest efficiency
- Inhouse service and commissioning

■ Water steam cycle



■ Fuel handling



■ Flue gas cleaning



■ Sludge dryer



■ Secondary control circuits



INTEC plants - heat and power all over the world





INTEC - at home worldwide

Australia Austria Chile Egypt Germany India Indonesia
Iran Israel Japan Lithuania Malaysia Netherlands New Zealand
Norway Pakistan Poland Portugal Russia Singapore Sweden
South-Korea Spain Taiwan Thailand Turkey UAE UK USA Vietnam

INTEC Engineering GmbH

John-Deere-Str. 43
D-76646 Bruchsal, Germany
Phone: +49 7251 93 243 - 0
Fax: +49 7251 93 243 - 99
E-Mail: info@intec-energy.de

INTEC Rohrtechnik GmbH

John-Deere-Str. 41
D-76646 Bruchsal, Germany
Phone: +49 7251 36629-10
Fax: +49 7251 36629-25
E-Mail: rohrtechnik@intec-energy.de

INTEC GMK GmbH

Lilienthalstr. 4
D-18211 Bargeshagen, Germany
Phone: +49 38203 775814
Fax: +49 38203 775820
E-Mail: info@gmk.info

INTEC Energy Systems Sdn. Bhd.

6F-21, IOI Business Park,
Bandar Puchong Jaya,
47170 Puchong, Selangor, Malaysia
Phone: +603 5891 6642
Fax: +603 5879 9824
E-Mail: yap.fw@intec-energy.de

INTEC Heating Solutions Pvt. Ltd.

The Empire Business Centre
Empire Industries Ltd.
414, Senapati Bapat Marg.
Lower Parel Mumbai - 400 013, India
Mobile: +91 (98) 67233008
E-Mail: shankar.periagaram@intec-energy.de

Your representative:



www.intec-energy.com

INTEC products

- Thermal oil heaters
- Molten salt heating units
- Steam and hot water boilers
- Waste heat boilers for different media
- Natural circulation boilers
- Steam generators
- Step grate and fluidized bed firing systems
- Biomass firing system for thermal and electrical power plants
- Complete process heat and power generation systems
- Sewage sludge dryers and municipal sludge incineration plants
- Modular ORC power generation

