

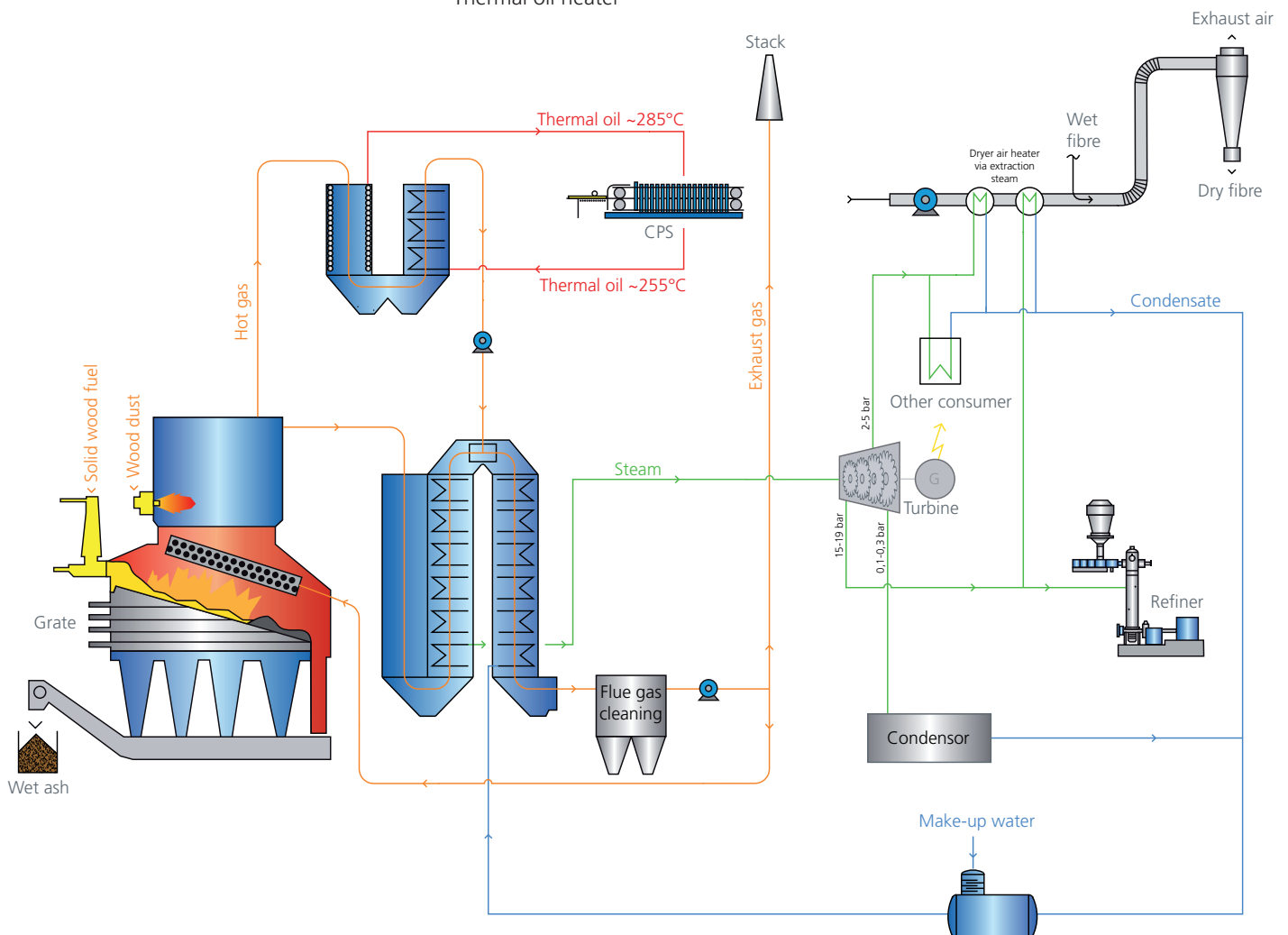
## Dieffenbacher Energy Systems

Efficient and Reliable: Complete plants from one source

### In-house capabilities:

**Combustion calculations, complete plant engineering and design, pipe stress analysis and a high degree of own designed components:**

- Air cooled reciprocating grates with sizes from 10–150 m<sup>2</sup>
- Fuel feeding chutes
- Hydraulic units
- Dust burners / injection units with staged combustion air supply
- Thermal oil heater
- Steam boiler
- Pump skids and control circuits
- Tanks
- Emergency cooling units
- Combustion chamber and duct work
- Control system



Example: Co-generation plant integrated in an MDF-plant



### Any fuel

Any wooden fuel, from wood dust to oversized chips, from dry to wet material

### Any consumers

- Hot gas for different dryer types: low and high temperature, with and without air recirculation, direct and indirect dryers with thermal oxidation of waste vapors
- Combined heat and power processes with best heat recovery
- Thermal oil, steam and hot water with waste heat boilers
- Steam with low-maintenance thermal oil heated steam generators

### Dieffenbacher Energy plants start-ups since 2011:

Product	Company	Country	Combustion Total	Combustion Grate		Energy generation Flue gas	Energy generation Thermal Oil	Energy generation Steam	Power generation	Start up
			[MW]	[MW]	[m <sup>2</sup> ]	[MW]	[MW]	[MW]	[MWel]	
OSB	Kronospan I	Belarus	57	55	81	43	12			2014
OSB	Kronospan II	Belarus	57	55	81	43	12			2014
PB	Dyatkovo	Russia	40	35	54	25	13			2014
PB	Tomlesdrev	Russia	55	45	62	38	14			2014
Lumber	Sierra Pacific	USA	96	96	106			83	30	2014
MDF	Mostovdrev	Belarus	56	41	62	21	35			2014
Pellets	Westervelt Pellets	USA	30	30	42	27				2013
MDF	Kastamonu	Turkey	75	45	62	40	35	23		2012
Lumber	Westervelt Lumber	USA	25	25	35			20	7,5	2012
PB	Sumitomo Veco	Vietnam	30	21	30	25	4			2011
MDF	Swedspan	Poland	60	49	62	16	5	36	5,4	2011

Please contact us for further information:

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