

Reference plants for the use of Biomass



Extraction from the Total List of References

15 plants thereof as EPC

Biomass Cogeneration Plant Hannover-Stoecken, Germany
BEH Bioenergie Hannover GmbH



Thermal input	:	90	MW
Steam capacity	:	102	t/h
Steam pressure	:	71	bar
Steam temperature	:	461	°C
Electrical power	:	19	MW
Fuel	:	Waste wood A3- A4	
Scope	:	EPC-T	
Year of commissioning	:	2024	

E-wood Energiecentrale NV, Beveren, Belgium
E-Wood Energiecentrale NV



Thermal input	:	71,3	MW
Steam capacity	:	86	t/h
Steam pressure	:	73	bar
Steam temperature	:	453	°C
Electrical power	:	20	MW
Fuel	:	Waste wood A3- A4, various biomasses	
Scope	:	EPC	
Year of commissioning	:	2022	

Biomass Power Plant Rambervillers, France
Egger Panneaux & Décors



Thermal input	:	55	MW
Steam capacity	:	55	t/h
Steam pressure	:	80	bar
Steam temperature	:	500	°C
Electrical power	:	9,6	MW
Fuel	:	Waste wood (A1-A4), fresh wood, wood dusts, natural gas	
Scope	:	Boiler Island	
Year of commissioning	:	2018	

Biomass Power Plant Widnes, Great Britain
Burmeister & Wain Energy A/S (BWSC)



Thermal input	:	70	MW
Steam capacity	:	81,7	t/h
Steam pressure	:	80	bar
Steam temperature	:	468	°C
Electrical power	:	20,2	MW
Fuel	:	Waste wood A1 - A4, fuel oil	
Scope	:	Boiler Island	
Year of commissioning	:	2016	

Biomass Power Plant Speyside, Great Britain
Estover Energy Ltd.



Thermal input	:	46	MW
Steam capacity	:	52	t/h
Steam pressure	:	95	bar
Steam temperature	:	510	°C
Electrical power	:	12,5	MW
Fuel	:	Fresh wood	
Scope	:	EPC	
Year of commissioning	:	2016	

Biomass Power Plant Kauai, Hawaii, USA
Green Energy Team LLC



Thermal input	:	27,3	MW
Steam capacity	:	32	t/h
Steam pressure	:	79	bar
Steam temperature	:	477	°C
Electrical power	:	6,7	MW
Fuel	:	Fresh wood	
Scope	:	EPC	
Year of commissioning	:	2015	

Biomass Power Plant Radauti, Romania

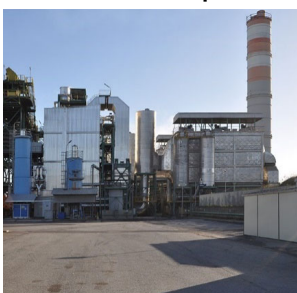
Fritz Egger GmbH & Co.



Thermal input, max.	:	83	MW
Thermal input (grate/dust)	:	78/10	MW
Steam capacity	:	55	t/h
Steam pressure	:	71	bar
Steam temperature	:	465	°C
Hot gas extraction	:	43	MW
Electrical power	:	15	MW
Fuel	:	Waste wood A1-A4, wood residues	
Scope	:	Chute to Stack	
Year of commissioning	:	2013	

Biomass Power Plant II, Crotone, Italy

Biomasse Italia S.p.A.



Thermal input	:	2 x	48	MW
Steam capacity	:	2 x	56,5	t/h
Steam pressure	:		92	bar
Steam temperature	:		522	°C
Electrical power	:		31,5	MW
Fuel	:	Fresh wood, olive residues, palm kernel shells		
Scope	:	Boiler Island		
Year of commissioning	:	2012		

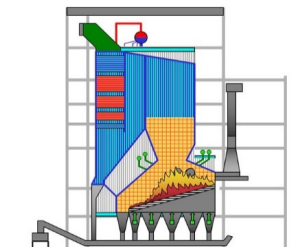
Biomass Cogeneration Plant II, Ulm, Germany

Fernwärme Ulm GmbH



Thermal input	:	25	MW
Steam capacity	:	28	t/h
Steam pressure	:	79	bar
Steam temperature	:	480	°C
Electrical power	:	5	MW
Fuel	:	Fresh wood, waste wood A1-A2	
Scope	:	Chute to Stack	
Year of commissioning	:	2012	

Korindo Biomass Power Plant, Korindo, Indonesia (License)
Techno SK



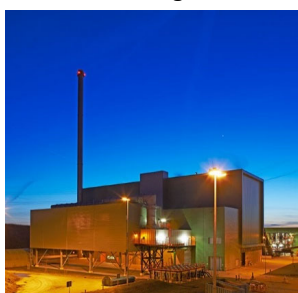
Thermal input	:	27	MW
Steam capacity	:	32	t/h
Steam pressure	:	45	bar
Steam temperature	:	440	°C
Fuel	:	Wood chips	
Scope	:	Boiler Island	
Year of commissioning	:	2012	

AVR-Afvalverwerking, Rozenburg, The Netherlands
N. V. Afvalverwerking Rijnmond



Thermal input	:	72	MW
Steam capacity	:	82	t/h
Steam pressure	:	68	bar
Steam temperature	:	465	°C
Electrical power	:	22	MW
Fuel	:	Waste wood A1-A4	
Scope	:	EPC	
Year of commissioning	:	2008	

Biomass Power Plant BEC Twence, Hengelo, The Netherlands
Twence Holding B.V.



Thermal input	:	73	MW
Steam capacity	:	80	t/h
Steam pressure	:	68	bar
Steam temperature	:	465	°C
Electrical power	:	20	MW
Fuel	:	Waste wood A1-A4	
Scope	:	EPC	
Year of commissioning	:	2007	

Biomass Power Plant Eberswalde, Germany
1Heiz Energie GmbH (formerly HOKAWA Eberswalde GmbH)



Thermal input	:	65	MW
Steam capacity	:	68	t/h
Steam pressure	:	82	bar
Steam temperature	:	482	°C
Electrical power	:	20	MW
Fuel	:	Fresh wood	
Scope	:	EPC	
Year of commissioning	:	2006	

Biomass Power Plant Unterradlberg, Austria
Fritz Egger GmbH & Co.



Thermal input	:	40	MW
Steam capacity	:	45	t/h
Steam pressure	:	60	bar
Steam temperature	:	452	°C
Electrical power	:	10	MW
Fuel	:	Wood residues (s), grinding dust, waste wood	
Scope	:	Chute to Stack	
Year of commissioning	:	2006	

Biomass Power Plant II, Wismar, Germany
Fritz Egger GmbH & Co.



Thermal input	:	40	MW
Steam capacity	:	45	t/h
Steam pressure	:	66	bar
Steam temperature	:	452	°C
Electrical power	:	6,5	MW
Fuel	:	Wood residues (s), grinding dust, waste wood, natural gas	
Scope	:	Chute to Stack	
Year of commissioning	:	2006	

BMK Lünen, Germany

BMK Biomassekraftwerk Lünen GmbH



Thermal input	:	67	MW
Steam capacity	:	80	t/h
Steam pressure	:	68	bar
Steam temperature	:	462	°C
Electrical power	:	20	MW
Fuel	:	Waste wood A1-A4	
Scope	:	EPC	
Year of commissioning	:	2006	

BVA Hagen Kabel, Hagen, Germany

BVA Hagen-Kabel GmbH



Thermal input	:	2 x	43	MW
Steam capacity	:	2 x	45	t/h
Steam pressure	:		60	bar
Steam temperature	:		452	°C
Electrical power	:		20	MW
Fuel	:	Waste wood A1-A4		
Scope	:	EPC		
Year of commissioning	:	2005		

Biomass Power Plant Ulm, Germany

Fernwärme Ulm GmbH



Thermal input	:	57,2	MW
Steam capacity	:	64	t/h
Steam pressure	:	64	bar
Steam temperature	:	452	°C
Electrical power	:	8,6	MW
Fuel	:	Waste wood A1-A4, natural gas, fuel oil	
Scope	:	EPC	
Year of commissioning	:	2004	

Biomass CHP Plant Elsterwerda, Germany

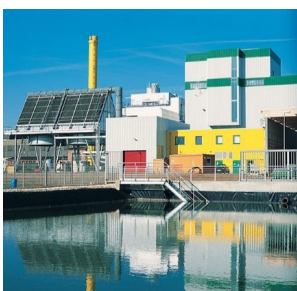
Danpower (formerly Advice2Bau Bau Controlling & Management GmbH, Düsseldorf (KITG))



Thermal input	:	44	MW
Steam capacity	:	50	t/h
Steam pressure	:	66	bar
Steam temperature	:	452	°C
Electrical power	:	12	MW
Fuel	:	Waste wood A1-A2, natural gas, fuel oil	
Scope	:	EPC	
Year of commissioning	:	2004	

Wood CHP Plant Silbitz, Germany

Plambeck Neue Energien AG



Thermal input	:	25,8	MW
Steam capacity	:	28	t/h
Steam pressure	:	45	bar
Steam temperature	:	425	°C
Electrical power	:	5,6	MW
Fuel	:	Waste wood A1-A2	
Scope	:	EPC	
Year of commissioning	:	2003	

Biomass Power Plant II, Bando d'Argenta, Italy

Carlo Gavazzi Impianti S.p.A.



Thermal input	:	2 x	43,6	MW
Steam capacity	:	2 x	46	t/h
Steam pressure	:		73	bar
Steam temperature	:		493	°C
Electrical power	:	2 x	11	MW
Fuel	:	Fresh wood		
Scope	:	Boiler Island		
Year of commissioning	:	2002		

Biomass Power Plant I, Crotone, Italy

Biomasse Italia S.p.A.



Thermal input	:	43,6	MW
Steam capacity	:	46	t/h
Steam pressure	:	73	bar
Steam temperature	:	493	°C
Electrical power	:	11	MW
Fuel	:	Fresh wood	
Scope	:	Boiler Island	
Year of commissioning	:	2002	

Biomass Power Plant Bazeilles, France

Unilin S.A.



Thermal input	:	62	MW
Steam capacity saturated steam	:	26	t/h
Design pressure	:	16	bar
Steam temperature	:	200	°C
Hot gas to the dryer	:	28	MW _{th}
Thermal oil heater	:	12	MW _{th}
Steam generator	:	17,7	MW _{th}
Fuel	:	Grinding dust, granules, fibre, bark, wood	
Scope	:	Boiler Island	
Year of commissioning	:	2002	

Biomass Power Plant Baruth, Germany
Kunz Holding GmbH & Co



Thermal input	:	2 x	40	MW
Steam capacity boiler 1 + 2 each	:		46	t/h
Steam pressure, each	:		95	bar
Steam temperature, each	:		450	°C
Fuel	:	Waste wood A1-A4, grinding dust, granules		
Thermal input	:		30	MW
Steam capacity boiler 3	:		34	t/h
Steam pressure	:		95	bar
Steam temperature	:		480	°C
Fuel	:	Grinding dust		
Scope	:	Chute to Stack		
Year of commissioning	:	2002		

Biomass Power Plant Baena, Spain
Oleicola El Tejar



Thermal input	:		105	MW
Steam capacity	:		110	t/h
Steam pressure	:		64	bar
Steam temperature	:		455	°C
Electrical power	:		25	MW
Fuel	:	Olive residues		
Scope	:	EPC		
Year of commissioning	:	2002		

Glunz, Nettgau Span, Germany
Sonae Arauco Deutschland AG (formerly Glunz AG)



<u>Hot gas generator</u>	:			
Thermal input	:		43	MW
Hot gas temperature to the dryer	:		820	°C
Fuel	:	Grinding dust, barks and rest wood		
Scope	:	Boiler Island		
Year of commissioning	:	2001		

Glunz, Nettgau OSB, Germany
Sonae Arauco Deutschland AG (formerly Glunz AG)



<u>Hot gas generator</u>	
Thermal input	: 62 MW
Hot gas temperature to the dryer	: 820 °C
Fuel	: Grinding dust, barks and rest wood
Scope	: Boiler Island
Year of commissioning	: 2001

Biomass Power Plant I, Unterradlberg, Austria
Fritz Egger GmbH & Co



Thermal input	: 40 MW
Steam capacity	: 56,3 t/h
Steam pressure	: 95 bar
Saturated steam temperature	: 317 °C
Electrical power	: - MW
Fuel	: Grinding dust, granules, barks and waste wood
Scope	: Boiler Island
Year of commissioning	: 2000

Biomass Power Plant I, Wismar, Germany
Fritz Egger GmbH & Co.



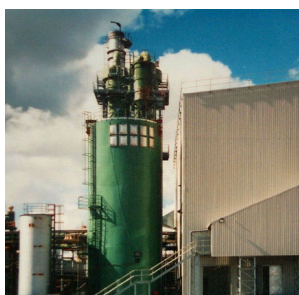
Thermal input	: 40 MW
Steam capacity	: 56,3 t/h
Steam pressure	: 95 bar
Saturated steam temperature	: 317 °C
Electrical power	: - MW
Fuel	: Grinding dust, granules, rest wood
Scope	: Boiler Island
Year of commissioning	: 1999

Biomass Power Plant, Suolahti, Finland
Kumpuniemen Voima Oy



Thermal input	:	29,5	MW
Steam capacity	:	33	t/h
Steam pressure	:	45,5	bar
Steam temperature	:	483	°C
Electrical power	:	-	MW
Fuel	:	Grinding dust, barks, rest wood from production	
Scope	:	Boiler Island	
Year of commissioning	:	1999	

Cowie Biomass Facility, Cowie, Great Britain
Norbord Europe Ltd. (formerly Caberboard Ltd.)



Thermal input	:	21	MW
Steam capacity	:	27,5	t/h
Steam pressure	:	19	bar
Saturated steam temperature	:	210	°C
Electrical power	:	-	MW
Fuel	:	Grinding dust, granules, wood chips Burner: oil and gas	
Scope	:	Boiler Island	
Year of commissioning	:	1998	

Biomass CHP Plant Wismar, Germany
Ilim Nordic Timber GmbH & Co. KG (formerly Klausner Nordic Timber)



Thermal input	:	32	MW
Steam capacity	:	36	t/h
Design pressure	:	58	bar
Steam temperature	:	450	°C
Electrical power	:	5	MW
Fuel	:	Bark, rest wood, wood from production	
Scope	:	EPC	
Year of commissioning	:	1998	