Wood pellet range:

HP14/20/28 P50 P75 P100/120 P150/170/200 P500

	performance range **kW**	max. load **kW**	cons. at max. ** **kg/h**	part load **kW**	cons. at part ** **kg/h**	efficiency **%**
Wood pellet units:						
HP14	4-14	18	2,13	4	0,47	**94,9**
HP20	8-21	28	3,31	8	0,95	**92,8**
HP28	8-28	28	3,31	8	0,95	**91,5**
P50 ECO	15-49	55	6,50	15	1,77	**96,2**
P75 ECO	23-75	85	10,05	23	2,72	**93,4**
P100 ECO	30-100	105	12,41	30	3,55	**95,2**
P120 ECO	36-120	125	14,77	36	4,25	**94,9**
P150 ECO	45-150	155	18,32	45	5,32	**94,0**
P200 ECO	50-190	205	24,23	50	5,91	**93,5**
P500 ECO	150-490	510	60,27	150	17,73	**93,3**

PRODUCT RANGE

WOOD PELLET - TECHNICAL DATA:

TYPE	HP 14	HP 20	HP 28
Max. adjustable boiler temperature (°C)	85	85	85
Permitted operating pressure (bar)	3	3	3
CE labeling acc. To low-voltage directive	CE	CE	CE
Total weight (kg)	200	220	220
DIMENSIONS			
Boiler width (mm)	600	600	600
Boiler depth (mm)	760	760	760
Total depth (mm)	1160	1160	1160
Boiler height (mm)	1035	1035	1035
Boiler tube connection height (mm)	775	775	775
Flow height (mm)	820	820	820
Return height (mm)	240	240	240
Ventialtion height (mm)	775	775	775
Boiler tube connection diameter (mm)	130	150	150
WATER			
Water content (ltr.)	24	38	38
FUEL			
Ash box volume (ltr.)	27,5	27,5	27,5
Requirement:	Önorm M7135	Önorm M7135	Önorm M7135
ASH REMOVAL			
Ash removal	Tilt-grate	Tilt-grate	Tilt-grate
CONNECTIONS			
Flow (inch)	1"	1 ¼	1 ¼
Return (inch)	1"	1 ¼	1 ¼
EMMISION DATA			
Required negative pressure at full load (mbar/Pa)	0 (+/- 0,1)	0 (+/- 0,1)	0 (+/- 0,1)
Required negative pressure at part load (mbar/Pa)	0 (+/- 0,1)	0 (+/- 0,1)	0 (+/- 0,1)
Combustion chamber temperature (°C)	ca. 1000	ca. 1000	ca. 1000
CO at full load (mg/m³)	42	90	136
CO at part load (mg/m³)	114	114	25
NOx at full load (mg/m³)	81	143	163
NOx at part load (mg/m³)	n.g.	n.g.	n.g.
HC at full load (mg/m³)	1	1	2
HC at part load (mg/m³)	2	3	1
Dust at full load (mg/m³)	4	9	11
Dust at part load (mg/m³)	n.g.	n.g.	n.g.
ELECTRIC POWER CONSUMPTION			
Supply needed	230 V	230 V	230 V
Standby (W)	5	5	5
Power consumption at full load in % of full load	0,6	0,6	0,6
Power consumption at part load in % of part load	0,35	0,35	0,35

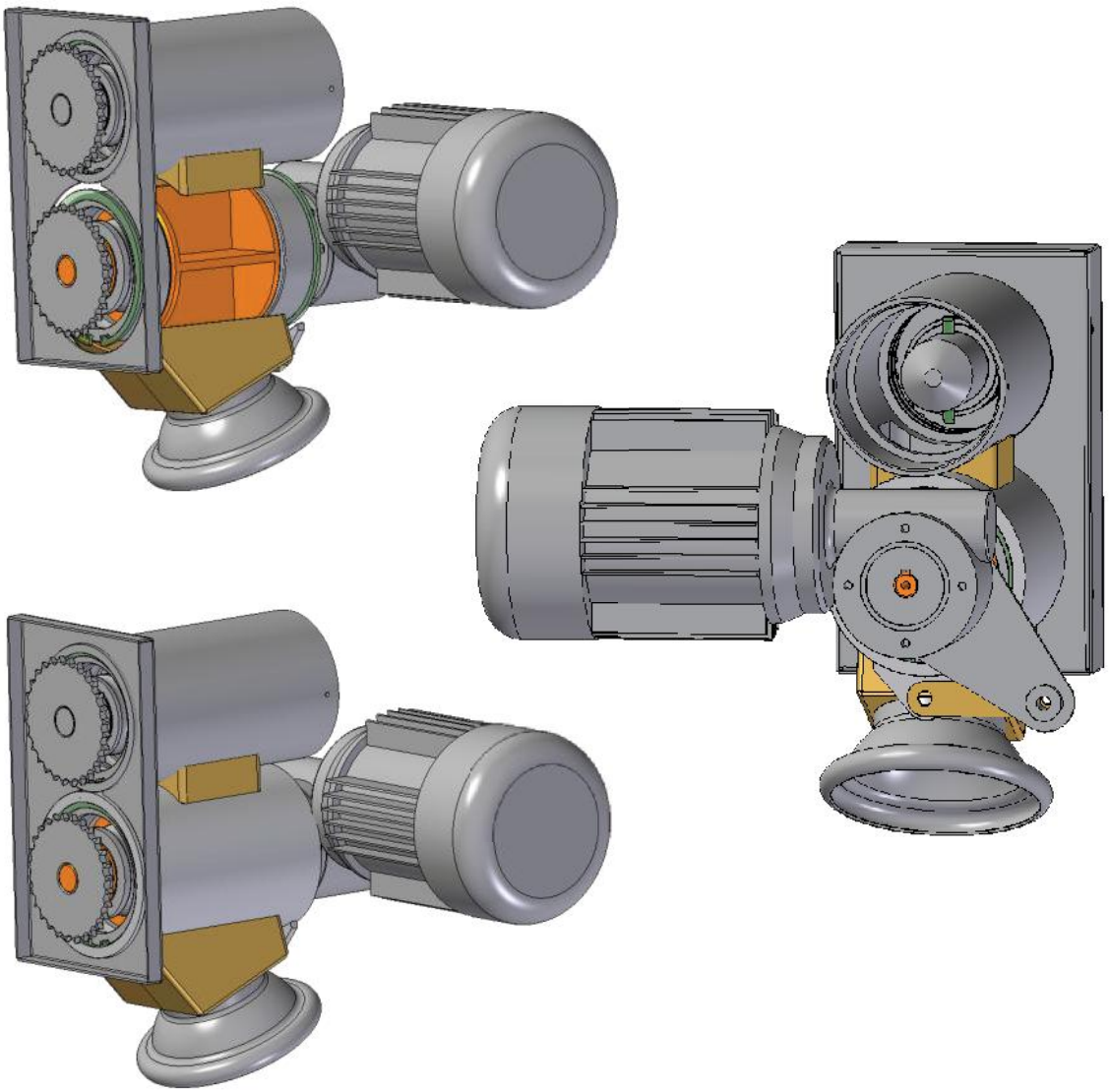
1) exkl. exhaust fan / stoker 2) exkl. chimney box 3) emissions data based on 13 % O2 dry

TYPE	P50 ECO	P100/120	P150/170/200
Max. adjustable boiler temperature (°C)	85	85	85
Permitted operating pressure (bar)	3	3	3
CE labeling acc. To low-voltage directive	CE	CE	CE
Total weight (kg)	400	1050	1320
DIMENSIONS			
Boiler width (mm)	700	760	890
Boiler depth (mm)	914	1355	1511
Total depth (mm)	1017	1435	1606
Boiler height (mm)	1360	1770	1960
Boiler tube connection height (mm)	835	1289	1810
Flow height (mm)	1164	1574	1780
Return height (mm)	365	409	440
Ventialtion height (mm)	835	1289	1780
Boiler tube connection diameter (mm)	180	200	250
WATER			
Water content (ltr.)	55	150	224
FUEL			
Ash box volume (ltr.)	60	60	200
Requirement:	Önorm M7135	Önorm M7135	Önorm M7135
ASH REMOVAL			
Ash removal	Tilt-grate	Step-grate	Step-grate
CONNECTIONS			
Flow (inch)	1 ¼	1 ½	2"
Return (inch)	1 ¼	1 ½	2"
EMMISION DATA			
Required negative pressure at full load (mbar/Pa)	0,1 - 0,3	0,1 - 0,3	0,1 - 0,3
Required negative pressure at part load (mbar/Pa)	0 - 0,1	0 - 0,1	0 - 0,1
Combustion chamber temperature (°C)	ca. 1000	ca. 1000	ca. 1000
CO at full load (mg/m³)	18	48	13
CO at part load (mg/m³)	60	109	255
NOx at full load (mg/m³)	111	108	113
NOx at part load (mg/m³)	93	94	81
HC at full load (mg/m³)	1	1	1
HC at part load (mg/m³)	2	1	9
Dust at full load (mg/m³)	7	10	14
Dust at part load (mg/m³)	7	45	17
ELECTRIC POWER CONSUMPTION			
Supply needed	230 V	230 V	230 V
Standby (W)	6	6	6
Power consumption at full load in % of full load	0,3	0,2	0,2
Power consumption at part load in % of part load	0,2	0,1	0,1

1) exkl. exhaust fan / stoker 2) exkl. chimney box 3) emissions data based on 13 % O2 dry

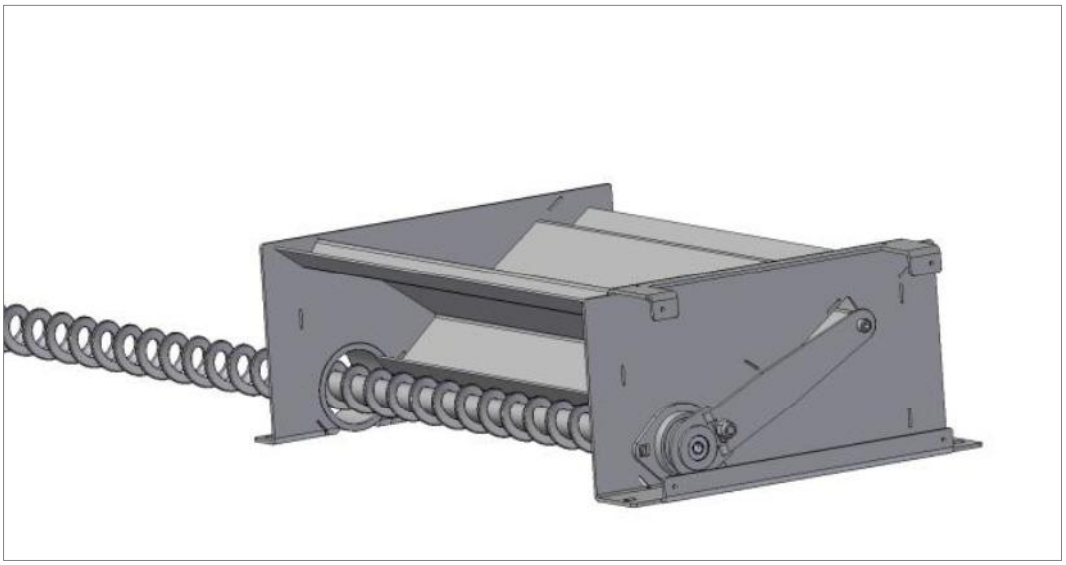
PELLET FEEDING SYSTEM

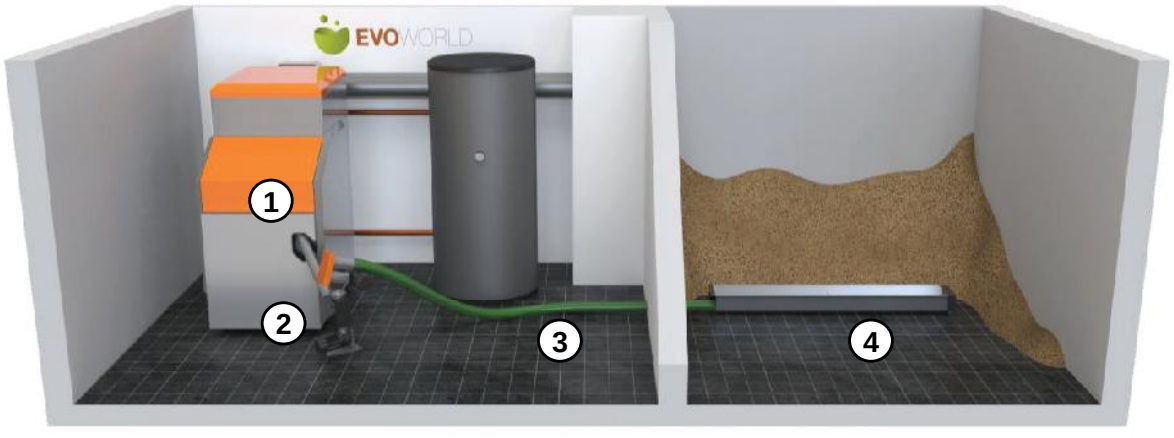
HP14/20/28 and P50



P100/120/150/170/200

PELLET FEEDING SYSTEM





PELLET FEEDING SYSTEM IN GENERAL

• maximum utilization of the storage room due to special construction of the pellet collector

• required space for biomass unit is being reduced to a minimum due to the unique concept of the feeding system (especially the flexible feeding system)

DETAILS OF PELLET FEEDING SYSTEM

Pellet collector:

• eccentric cam action works with collector side funnels to assure free flow of pellets into collector (8 mm open/close function)

• low electrical consumption of the feeding motor because of easy working screw

Screw conveyor:

• flexible feeding system (min. radius is 1,5 m)

• Screw sizes:

14 to 28 kW:	39 mm
50 to 200 kW:	63 mm

Back burn prevention:

• the cell wheel construction isolates gases or sparks that might reach the screw conveyer

• back burn also avoided by dropping fuel into combustion chamber via top feed tube (no direct connection)

• CONSTANT NEGATIVE FURNACE PRESSURE PREVENTS FLARE OUT (CONTROLLED BY NEGATIVE PRESSURE SENSOR)

Needed equipment:

1. EVOWORLD pellet heating system (15-500 kW)
2. cell wheel (safety feature; included in price of heating system)
3. pellet feeding system (up to 20 ft., longer distances with transfer box)
4. pellet collector (5, 8, 11 or 14 ft. long)