FEEDING SYSTEM

Pellet feeder PS10 (40 - 400 kW)

In pellet use the pellet screw can be replaced with a PS10pellet feeder. PS10 is composed of a feeding screw, a cell feeder and a burner screw which are chain steered by one motor. The system allows for more even fuel feeding and also provides one extra back fire protection. PS10 is also equipped with a powder extinguishing system.

PS10 can be combined with BioJet-, HakeJet- and Multi-Jet-burners in power range of 40-400 kW. In Arimatic 500 pellet steering centres the PS10 is operated by a frequency controller.

Pellet feeder PS13 (500 - 1500 kW)

PS13 is composed of a separate cell feeder and a burner screw which are steered by separate motors. PS13 can be combined with BioJet- and MultiJet-burners in power range of 500-1500 kW. In Arimatic 500/AM1001 pellet steering centres the PS13 is operated by frequency controllers.



Sizing the Feeding Screws

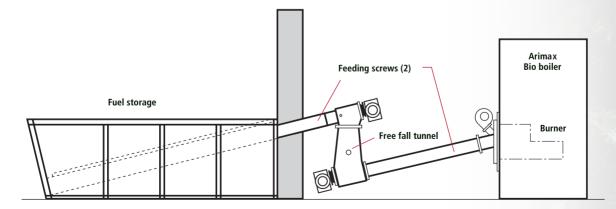
The feeding screws in Ariterm bio burning systems are made of steel. They are tough and designed to take the strain caused by different fuels. The right choice of screws is essential for the faultless functioning of the bio feeding system.

In a two-screw system there is more leeway in positioning the boiler and the storage in relation to each other. The free fall funnel can also be ordered with special measurements, enabling the designing of the device positions to fit the existing assembly space.

Two-screw Feeding System

The two-screw system is recommended because of its better burn back protection. The free fall funnel between the screws forms a flame-retarding fuel-free space between the storage and the burner. The funnel, along with the rising burner screw, enables the formation of a water seal in a burn back situation.

The transmission of the feeding screws is dimensioned according to the size of the screws and the chosen fuel. The motors and gears are maintenance-free worm gears and conical cylinder gears.



The recommended maximum length of the screws is 5 m. The minimum lengths of different systems can be found in the reference drawings in the brochure (p. 34-45).