# **Feeding**



# FEED FISH RELIABLY!

Every fish farmer's primary objective is to rear the fish as quickly and healthily as possible. For optimum growth, it is vital that the fish are fed continuously and regularly. These factors are important in determining water quality and feed conversion rates.

Amateur fish farmers often have the problem of being unable to go to their ponds daily. However, it is important that the fish are fed daily. This can be done easily, and reliably, with pendulum feeders, or feeders with vibrator motors.

On more complex fish farms, a more sophisticated and extensive feeding system is required. The commercial success of the farm is very dependent on the food utilisation and the ability to increase feeding in line with growth. Fish – like people – should receive smaller portions several times a day. In the case of "manual feeding" on large fish farms this means a high labour costs. If 4 to 5 feeds per day are carried out, it is usual to have one worker who's sole duty is to feed the fish.

This results in a high labour cost, and there is no time for other work. Under these circumstances, feed sprayers become cost-effective, and offer economic advantage. Feed sprayers feed the fish automatically, according to the farmer's preferences. This leaves time for other work.

LINN Germany produces a wide range of automatic systems to apply and spread the feed in ponds and tanks. The following pages give full details.























# **Profi Feeder**

The **Profi Feeder** works by the pendulum principle. Feed pellets are released and fall into the water after the pendulum is moved. The fish quickly learn that by knocking against the pendulum they can free the pellets.

The LINN Profi Feeder has a flexible glassfibre pendulum bar – it is flexible and will not break! The quantity of feed dispensed can be adjusted easily and infinitely by twisting the outlet pipe. The amount of food required will depend on the activity of the fish.

In the standard version, feed pellets from 2 – 9 mm can be fed with this pendulum system. For larger feed pellets (3 – 14mm) a special pendulum device is available!

The fish have access to a continuous food supply and eat when they are hungry, resulting in excellent growth.

The **Profi feeder** can save considerable time and effort. Your stock can also

be taken good care of in this way for several days during your absence- giving peace of mind. The feed level can be viewed through the container. Its smooth sides prevent the build up of condensation and feed leading to mould formation. This keeps the feed flowing free without sticking together. Our feed container has been made from polyethylene, features excellent-weather-resistance properties and is UV resistant.

The Profi feeder is available in 6 sizes from 10 to 70 kg capacity. The two new sizes (50 and 70 kg) are equipped with a sliding lid (photo at page 44 or 47).

It can be fastened in a number of ways either to a landing stage or on a swivel arm. We can supply a stainless steel feeder holder and suitable swivel arms for all containers sizes (see page 49)

Try this economical and efficient method of feeding your fish.



Profi-Feeder	Feeder with lid without pendulum	Diameter	Volume in litres
10 kg	approx. 50 cm	max. 32 cm	14
20 kg	approx. 50 cm	max. 38 cm	24
40 kg	approx. 70 cm	max. 48 cm	54
50 kg	approx. 65 cm	max. 56 x58 cm	90
60 kg	approx. 85 cm	max. 58 cm	100
70 kg	approx. 80 cm	max. 56 x58 cm	115

# **Profi Automatic Feeder 5 kg**



Fry feeding

At last! LINN has developed an alternative to clockwork feeders!

The LINN-Automatic Feeder has many applications, including: Fry feeding, Feeding of koi and ornamental fish, Hobby ponds - At an unbeatable price!

The special mechanism of the new feeder has been taken from the established Profi Automatic Feeder, a success for many years. This mechanism ensures that the food is delivered to the fish in the required quantities, intact, and without dusting. The food is delivered by a 'portioning finger', which is driven by a 12V or 230V geared motor. The feeding rate is about 100g per minute- according to the feed quality and size. The feeder can accept sizes from fry feed up to 9mm. This Profi Feeder is deliverable in standard version for 230V.

Also we can deliver a 12 V-version for ponds without electrical current. This version can work with a car battery or a solar panel. The current drain of the Feeder (gear motor and feeding timer) is 1 A per day. A normal car battery has the capacity to power the feeder for 2-3 months before re-charging.

The problems and disadvantages of clockwork feeders, where humidity causes the feed to stick together and go mouldy, are solved. Feeding is programmed to take place intermittently as required. Thus fish don't stay below clockwork feeders which feed continuously. The hopper capacity is 5 kg, so can store enough for several days, and the feed level is visible from outside. For convenience, the lid is attached by a hinge to the hopper. We can deliver this feeder with two different types of holder: a stainless steel holder (standard) or a special holder – please have a look at the photos.

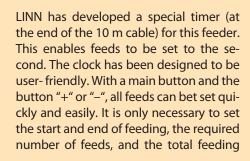




# 12 or 230 V available!







time (minutes or seconds) per day. The feeding programme is then created automatically! This timer control offers the convenience of being able to take into account growth of the fish and raise the feed ration, daily, accordingly. It couldn't be more convenient!





Туре	Height with lid	Diameter	Capacity in litres
5 kg	ca. 37 cm	max. 23 cm	6

# **Profi Automatic Feeder**

Until now, feeding fry has been difficult. Pendulum and vibratory feeders are not very suitable, due to the small particle size of fry feeds.

Alternatively, clockwork feeders offer an apparent solution. However, in the presence of humidity, the feed sticks to the large surface area of the belt, and fungus grows. Consequently, a lot of labour is required to keep it running. In addition, the clockwork mechanism has to be wound up daily.

LINN Germany has solved these problems with the PROFI Automatic feeder.

The special mechanism of the feeder ensures that the food is delivered to the fish, intact, without dusting, and in the required quantities. The ration is dispensed by portioning fingers, that are operated by a 12 or 230v geared motor. The portion of feed depends on the feed particle size.

The feed quantity is identical with every feed! It is possible to feed controllably and reliably with this innovation! The food slides easily and there are no spaces in which moisture can form.

The adjustment of the feeding rate is easy with the LINN timer, from intervals of many seconds and longer. So, once the feeder has been adjusted, it is possible to continue feeding automatically for several days without any problems. Changing the feeding intervals is also quick and easy. Read the details about the LINN timer at page 43!

Profi Automatic is deliverable in a 12 or 230 V version.

# LINN-timer for all feeders

Suitable swivel arms for suspension on page 49

# **ADVANTAGES:**

- suitable for fry feed
- exact portion size and feed intervals
- easy adjustment
- Convenient hopper sizes
- no feed caking
- reliable feeding over several days, no wind-up clockwork mechanisms!

# 12 V or 230 V Version

There are two different 230 V models available, according to the feed quantity and particle size: Type 1 or fry feed and smaller amounts of feed or Type 2 for larger feed amounts – see further details in the table.

This feeding mechanism has been combined with 6 sizes of PE food hopper (10 to 70 kg capacity – measures see page 40). Each feeder comes complete with lid.







practical sliding lid at new silo size 50 and 70 kg

	Profi Automatic		
	230 V — Type 1	230 V — Type 2	12 V
Feed per minute	approx. 100 g	approx. 1000 g	approx. 200 g
Feed particle Size	0 – 9 mm	0 – 9 mm	0 – 9 mm

# **Profi Automatic with blower**

This feeder works like the Profi Automatic Feeder, but it can now blow and spread the food.

This version is fitted with a powerful blower (500 Watt), which disperses the feed onto the surface of the raceway or pond. This distributes the feed more widely, and ensures more even growth of the fish. The feed is spread across the pond up to a maximum distance of 5 m. **Profi Automatic** with blower guarantees a maintenance-free and trouble-free operation and virtually abrasion free feed distribution (in contrast to centrifugal discs).

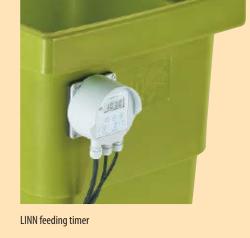
Profi Automatic with blower is also available in 6 sizes from 10 to 70 kg (measures see page 41), working with 230 V mains voltage. All sizes are fitted with 10 m of cable and the highly acclaimed LINN-feeding timer – they are plug and play!

This feeder works with fry feed up to 7 mm.

The smaller sizes (10 and 20 kg) come complete with a stainless steel plate stand. This enables the feeder to be positioned around your pond on a flat surface. The bigger sizes (40 up to 70 kg) come complete with a stainless steel stand.

A flexible hose (2m long) is available, at extra cost, as an optional extra if it is preferred to site the feeder back from the pond, out of sight.





# **ADVANTAGES:**

- powerful blower
- exact portion size and feed intervals
- easy adjustment
- no feed caking
- different hopper sizes



# **Technical**

	Profi Automatic with blower	
	Type 1 Type 2	
Feed per minute	approx. 100 g	approx. 1000 g
Feed particle size	0 – 7 mm	0 – 7 mm



Profi Automatic with blower -20 kg(10 + 20 kg with stainless steel plate stan

# **Feeding**



Profi Feed Sprayer working

lid at 120 and 200 kg with gas shock absorber

LINN feeding timer

# **Profi Feed Sprayer**

The use of higher quality feeds in fish farming demands better feeding technique. Optimal growth of fish and optimal use of feed is only possible with exact rationing of feed, waste-free feeding and multiple daily feeds. It is difficult and expensive to achieve these objectives with manual feeding. In addition, automatic feeding considerably reduces working hours and it makes the work easier!

As a result, **LINN Gerätebau** has developed the **Profi-feed sprayer**. With this device it is possible to spread the feed into the pond without waste. The feed is put into the air-stream of a powerful blower and with the assistance of this air-stream

distance of 8 m. The LINN feed sprayer guarantees a maintenance-free and trouble-free operation and virtually abrasion free feed distribution (in contrast to centrifugal discs).

The **Profi-feed sprayer** is suitable for feed of 2-7 mm. The portioning finger at the outlet of the feed container (specially developed for this use) guarantees a consistent portion, and free flow of the feed. Clogging is virtually impossible. At the outlet of the feed container is a meter with scales. Thus, it is possible to adjust the size of the feed pellet quickly and easily, even when the hopper is full.

The square shape of the feed silos (not 60 kg) facilitates easy, problem-free filling (assisted by a fork-lift truck, if desired).

The lid at the feeder 120 and 200 kg is opened manually and a gas shock absorber conveniently holds it open. In addition there is a stainless steel frame inside in the top of the hopper. This prevents any packaging falling with the food into the hopper.

The new feeders 50 and 70 kg are delivered with practical sliding lid.

All feed sprayers are supplied with a stainless steel frame, facilitating handling around the site.

The **Profi feed sprayer** work with 230 V mains voltage and need only a common socket for the blower and control. So they are plug and play!



200 kg







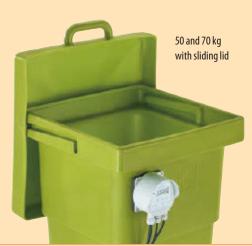


The standard version of the feed spreader is supplied with a LINN feeding clock. This feeding clock with display and operating buttons is mounted in a robust housing directly on the feed silo. Adjustments are easily possible. The desired feedings

per day (beginning and end, number of feedings, total feeding time per day and the growth calculation - if desired) are entered by means of three keys. The total feeding time is automatically distributed evenly over the day.

Of course, the feeders can also be controlled centrally from the PC using our Aqua-Feed software. This is useful for a larger number of feeders on one farm - the feeding clock directly at the container are then no longer required.





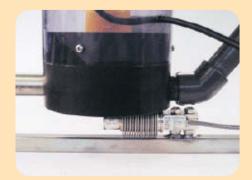
Volume	Size	Filling level	lid
50 kg	56 x 58 cm	95 cm	sliding lid
60 kg	ø 56 cm	105 cm	removable lid
70 kg	56 x 58 cm	108 cm	sliding lid
120 kg	70 x 70 cm	85 cm	hinged lid with gas shock absorber
200 kg	74 x 74 cm	115 cm	hinged lid with gas shock absorber

# **Feeding**



Profi Feed Sprayer working

# Profi feed sprayer with weighing capability



feeding unit with weighing cell



display of the timer shows the feeding programme

This **LINN feed sprayer** is equipped with a robust, waterproof stainless steel weighing cell, and so has the most convenient and precise feeding possibilities! LINN Germany introduces this groundbreaking innovation: Decentralized feed hoppers with individual weight sensitivity and control!

Because the feed is weighed, calculation of the required feed amount from the dispensing time is no longer necessary. The feed sprays exactly the required weight of feed per day, regardless of the size and manufacture of the feed. Switching between feed types and pellet sizes is quick and easy.

The standard version of the Profi feed sprayer with weighing capability is set by the control (described above) next to the feed hopper. Only the required feeding times and the feed weight (per day) need to be adjusted. The rest will be done automatically. The display by the container shows the set feeding times on the right and on the left the remaining feed in the hopper, as well as the set feed amount per day (of course, this is also possible as a centralized control for several containers).



Profi pendulum feeder 40kg with swivel arm

# **Swivel Arm for Fish Feeder**

We offer robust stainless steel swivel arms to simply and safely secure our feeders to your pond. With this swivel arm, you can easily fill your feeder at the edge of your pond before rotating it back over the water to feed your fish.

This arm is compatible with all of our "Profi" pendulum feeders and our 'Profi' automatic feeders from 10 to 70kg!

The swivel arm is available for all container sizes. It is made from stainless steel and is 150cm long. A standpipe (150cm long) is also included, which can either be secured with concrete or screwed into a concrete wall. A clamp can be used to secure the arm to the standpipe - the height can be adjusted by another 50cm by

This allows you to hang the feeder over your pond, and lets it flexibly adapt to site conditions. The swivel arm comes with a locking screw so it can be secured in the right position.

As well as the swivel arm, you'll also need the right feeder holder for your dispenser size. This holder is 50cm long and can be adjusted when being secured to the arm.

The total size of the swivel arm (from standpipe to pendulum) is approx. 180 - 210cm



Feeder holder - for round containers 10/20/40/60 kg



Feeder holder for rectangular containers 50 + 70 kg



Profi pendulum feeder 50kg with swivel arm



Stainless steel swivel arm with standpipe

# **ADVANTAGES:**

- made from stainless steel
- $\bullet \, \text{adjustable}$
- rotation lock