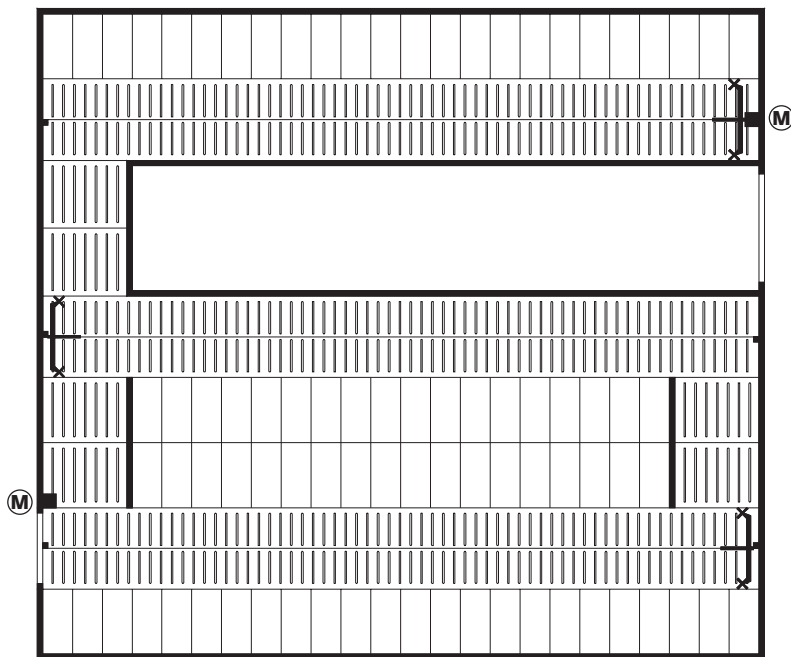
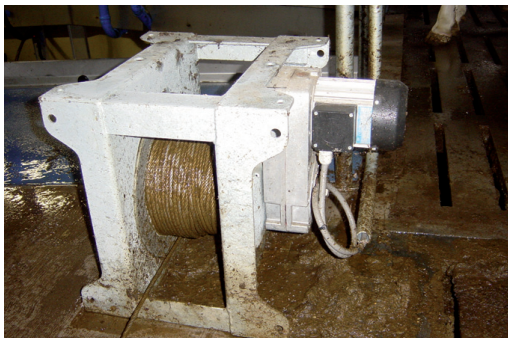


- Drive unit on console



- Rope scraper for grid floors with Spinder PE-rope in a situation with 3 alleys



- Drive unit on concrete floor (cover is disassembled)

Scraper with Spinder PE rope drive

In order to be able to work quickly and efficiently and to promote the welfare of your cows, it is important that passages and cubicles in the barn are clean and dry. For that reason, the proper and rapid removal of manure will be necessary. Moisture and manure on floors may cause sliding and falling and constitute excellent breeding places for pathogenic bacteria. These are often the cause of serious leg and hoof problems. Besides, the manure stuck on the legs of the cows make for dirty stalls and, as a consequence, for dirty udders.

To prevent these problems, Spinder offers a manure-scraper unit consisting of two drive units with drive drum, a number of plastic corner wheels and one or more scrapers that are driven by Spinder PE rope. A very animal-friendly and maintenance-free installation with which the floors can be kept clean and dry.

Important features:

- The system consists of two drive drums, which can be placed both on a console and on the floor;
- The unit is constructed in a heavy and robust manner. Virtually all parts have been hot-dip galvanized;
- The synthetic corner pulleys are maintenance-free;
- Spinder PE rope is an 8 or 10 mm thick synthetic rope with a tensile strength of 6000 and 9000 kg respectively, and a negligible stretch (ca. 3 to 4 %) to ensure a smooth, quiet run of the scraper. The rope has a long service life and is above all very animal-friendly;
- Standard fitted with digital timer, frost protection and emergency stop;
- A suitable solution for every barn, even with unequal passage lengths;
- Most suitable for an odd number of dung passages.

Important advantages:

- Cleaner passages and cleaner livestock;
- Less hoof problems and cleaner stalls;
- Using less sawdust or straw;
- Milking more hygienically and faster with cleaner cows;
- Therefore, a better milk quality.

Dung scrapers

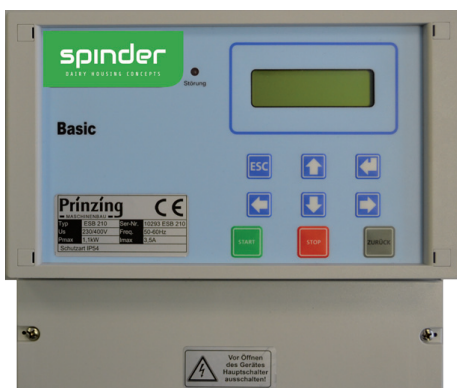
As well as driving a slatted floor scraper, the Spinder PE rope drive can also be used for driving the combi-scrapers.

65.12.105	Drive unit PE-rope on console, 0,75 kW
65.12.155	Drive unit PE-rope for concrete floor, 0,75 kW
65.12.130	Mounting set drive unit for grid floor
65.12.140	Mounting set drive unit for concrete floor
65.12.185	Corner wheel/PE-rope/for grid floor
65.12.180	Corner wheel/PE-rope/for concrete floor
65.12.175	Scraper stop for grid floor
65.12.170	Scraper stop for concrete floor
61.06.042	Control panel, Basic
61.06.026	Main switch
65.84.125	Spinder PE-rope 10 mm, per meter
65.10.200	Scraper, - 200 cm
65.10.250	Scraper, 201 - 250 cm
65.10.300	Scraper, 251 - 300 cm
65.10.350	Scraper, 301 - 350 cm
65.10.400	Scraper, 351 - 400 cm

All Spinder PE rope installations can be controlled using the Prinzing electronic control panels. The operating procedure of the electronic control panels is based on continuously measuring the power consumption of the drive motor. The drive motor is turned off when the set value for maximum traction / power consumption is exceeded.

Important features of the Prinzing control panel:

- Continuous traction measurement by measuring the power consumption from drive motor;
- Automatic or manual setting maximum traction / power consumption;
- Possibility for various values for maximum traction / power consumption with direction of movement forward or in reverse;
- Automatic program start on the freely programmable starting times in the integrated timer;
- Automatic program start via temperature sensor (frost program);
- Connection for external control elements (e.g. push buttons, safety switch strips, emergency stops, etc.) and an external fault signal (siren).



- Electronic control BASIC - ESB210



- Electronic control Comfort - ESC200



- Electronic control Premium - ESC300 includes wireless remote control

Electronic control BASIC - ESB210

- Suitable for one system, consisting of two drive units;
- Turned off when the maximum traction is exceeded;
- Learning programme;
- Automatic adjustment to power fluctuations in the electricity network;
- Choose from manual (push buttons) and fully automatic (timer);
- Max. 20 starting times per day in the timer;
- 2 scraper programmes;
- Adjustable parking position;
- 2 frost programmes;
- The settings will be preserved in the event of a power outage;
- Illuminated display.

Electronic control Comfort - ESC200

Compared to the Basic - ESB210 extended with:

- Animal and obstacle detection;
- Depositing in the centre is possible;
- Moving step by step is possible;
- Connection for the controls of an external relay.

Electronic control Premium - ESC300, with remote control

Compared to the Basic - ESB210 extended with:

- Suitable for up to 6 systems with 2 drive units each;
- Remote control with a range of up to 300 metres;
- Loading terminal for remote control
- Individually programming of each manure removal system;
- Max 24 starting times per day;
- 4 scraper programmes;
- Continuous registration of the entire operation;
- Log file exportable via SD card, read-out e.g. in Excel.



• Rubber star wheel



• Slatted floor scraper

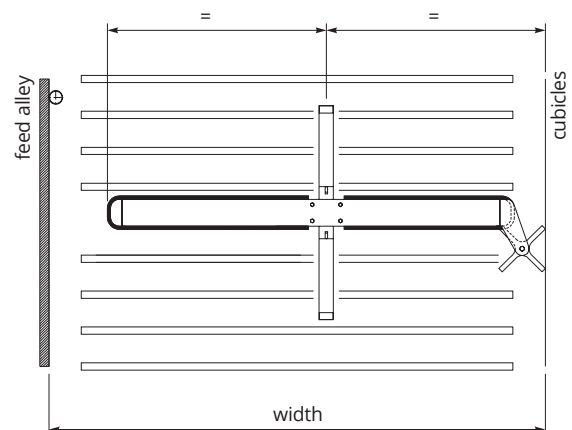
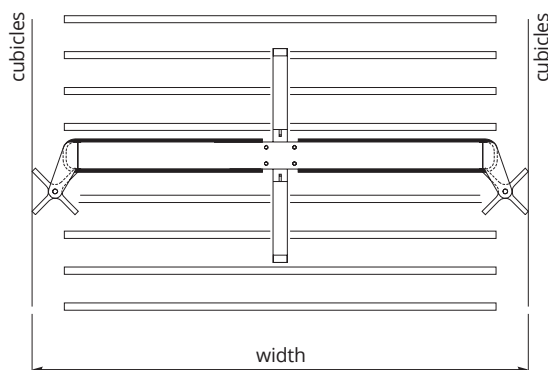
Slatted floor scraper

The scraper is the heart of the slatted floor scraper unit and determines the final scraping results. The Spinder slatted floor scraper has a modular structure. From a basic frame, a suitable scraper can be assembled for each type of slatted floor - with or without a rubber top layer - and for each dung passage.

Important features:

- Basically, no protruding parts that could harm the animals;
- Fully hot-dip galvanized according to ISO 1461: 2009;
- Very accurate depth adjustment by means of 4 adjusting bolts;
- Fitted with special rubber star wheels on the sides of the slatted floor scraper to get around support posts of e.g. the feed front, water mains, etc.;
- No lateral guidance required. On the place where a stall edge starts or ends, the rubber star wheel turns the slatted floor scraper in a flowing movement between or from the side guide;
- From the point of view of animal welfare, it would be recommended to apply a 50 cm shorter slatted floor scraper with one rubber star wheel between the stall floor and the feeding passage;
- The scraper is kept as flat as possible (approx. 12 cm high) for minimal effects on the walking movements of the cows;
- Fitted all around the scraper is a special wear-resistant rubber strip for optimal cleaning of the slatted floor;
- Simple attachment of the Spinder PE rope to the scraper by means of the special rope socket provided;
- Also suitable for low-emission floors (ask your Spinder dealer for advice).

65.10.200	Scraper – 200 cm
65.10.250	Scraper 201 – 250 cm
65.10.300	Scraper 251 – 300 cm
65.10.350	Scraper 301 – 350 cm
65.10.400	Scraper 351 – 400 cm





Combi scraping system

In a building with solid concrete floors it is extremely important to keep the floors free of manure as much as possible. This can only be achieved by scraping a great number of times to keep the alleys clean to avoid slipping and sliding of the cows. In addition the fast removal of the manure prevents a large ammonia accumulation in the barn. The Spinder combi scraper is developed for solid concrete floors, with or without a rubber top layer. The scraper has a sturdy construction and is completely hot-dipped galvanized, it is build for intensive use. Each scraper is customized for type of floor and alley width.

Important advantages:

- The scraper has a sturdy construction and is completely hot-dipped galvanized;
- For each barn situation is a solution, even when the alleys are of a different length;
- Each scraper is customized for type of floor and alley width;
- The flaps under the scraper open automatically in the return action;
- The flaps take care of the cleaning alleys with an irregular width;
- Manure can be dumped in a pit or a grid channel;
- Drive unit can be located inside or outside a building;
- Trouble-free maintenance, grease nipples are easy accessible;

65.45.250
65.45.300
65.45.350
65.45.400

Combiscrapper for solid floor:

200 – 250 cm
251 – 300 cm
301 – 350 cm
351 – 400 cm





Combi-scraper for slotted floors

The floor elements are fitted with slots running parallel to the feeding passage. The slots in the floor elements separate urine from manure, resulting in lower emission compared to traditional slatted floors.

Cleaning the slots is by way of the so-called tines on the scraper blade, with polyurethane synthetic material. The standard widths of the scrapers are between 200 and 400 cm. Alternative dimensions and construction of the combi-scraper are available upon request.

Important features:

- Heavy, welded scraper blades ensure a clean scraper result;
- Wear-resistant slides under the scraper made of manganese steel;
- Hinged side blades clean the stall edges and/or sides;
- Valves below the scraper open in a return movement;
- Valves easily disassembled for possible maintenance;
- Scraper drive with Spinder PE rope;
- Alternative dimension / construction is available upon request.



65.50.200	Combi-scraper slotted floors 200 cm
65.50.220	Combi-scraper slotted floors 220 cm
65.50.250	Combi-scraper slotted floors 250 cm
65.50.275	Combi-scraper slotted floors 275 cm
65.50.300	Combi-scraper slotted floors 300 cm
65.50.325	Combi-scraper slotted floors 325 cm
65.50.350	Combi-scraper slotted floors 350 cm
65.50.375	Combi-scraper slotted floors 375 cm
65.50.400	Combi-scraper slotted floors 400 cm

