

FRANK
FÖCKERSPERGER

*Your Partner
for Professional
Pipe and Cable
Plow Installations*

- since 1971



TRADITION. INNOVATION. FÖCKERSPERGER.

The **FRANK FÖCKERSPERGER Plow Method.**

has been used with great success since 1971 for the trenchless installation of power cables and telephone lines. Since the development of flexible pipe materials (HDPE) in the 1980s, approximately 800 civil engineering and pipe installation companies as well as numerous providers or private building owners place their trust in our competence in installing supply and disposal pipelines. In the course of time, we have carried out more than 20,000 construction measures and installed more than 80,000 km of pipe and cable using the plowing method. The price includes the costs for the crew and rig – our service is charged on the basis of installed meters only.



At a steep slope.



On skids in tideland.

Plowing-in of
control, telephone, fiber optic and
power cables, cable protection
pipes, drinking water, sewer
and gas lines.

Our application range is versatile.

The plow method is especially suitable for installing pipes in rural areas where great installation lengths are required. Shorter sections and pipelines through rough-to-run terrains can also be plowed in easily. Installing pipes through steep slopes or undercrossing small inshore waters (with a top water level of 1.20 m) present no technical problems for the plow due to its construction with universally adjustable plow arms. The gentle application of the Frank Föckersperger Plow Method is very economical, even for installations beneath groundwater level.

Our method works perfectly in displaceable soils. Even coarse grained soils with large stone and rock fractions can easily be plowed with the Frank Föckersperger Pipe and Cable Plows.





Along an embankment.

All advantages at one glance.

1 economical

- savings up to 50%
- 90% less fuel consumption
- short set-up and installation times
- low labour costs
- high daily performance, up to 7,000 m are possible
- plowing and cable / pipe installation in one go
- no sand bedding required

2 eco-friendly

- any traces of work disappear quickly after installation
- no mixing of the soil
- no groundwater lowering required
- minimal traffic disturbance
- minimal working area
- no topsoil stripping
- low soil compaction

3 powerful

- optimal adaptation to every kind of terrain and constant laying depth
- high installation quality
- practice-oriented advanced development
- almost 50 years of experience in production, development and application of the method
- enormous flexibility for varying application conditions
- experienced operators



Digital depth display.





Plowing in of 18 x cable protection pipe HDPE OD 50.

Simultaneous installation of two medium voltage systems in parallel.

FRANK FÖCKERSPERGER Installation Plow Method.

With the Frank Föckersperger Pipe and Cable Plow, flexible cables and pipes (HDPE) up to an outer diameter (OD) of 250 mm can be installed, for example telephone cables, fiber optic cables, control cables, cable protection pipes, drinking water, sewer and gas lines. Also a combination of several cables and pressure pipes as well as the parallel installation of warning tapes and lightning protection wires is possible.



Plowing in of a sewer pressure pipe HDPE OD 90.



Plowing in of a gas pipeline HDPE OD 180 and 2 x cable protection pipe OD 50.

Surface, immediately after plowing.

Plowing in of a sewer pressure pipe HDPE OD 160.





left: Crossing a brook.
right: Along a crash barrier.

The Frank Föckersperger Pipe and Cable Plow is characterized by its enormous flexibility. The main areas of application are large cross-country distances and routes in difficult terrains, for example on steep slopes, crossing brooks, in tideland (on skids) or along embankments.

FRANK FÖCKERSPERGER Rocket Plow Method.

When using the Rocket Plow Method, the soil is mainly displaced in the embedment area. A very narrow trench is generated. On the surface, this trench closes immediately after plowing and remains for a short while as a freestanding void at the pipe bottom area. In the course of time, this void is filled up with the fine material washed in.

Application range: HDPE pipelines up to OD 355; cast iron pipes up to DN 200; steel pipes up to DN 250.

Advantages: When pipes are installed using the Rocket Plow, the emerging soil bulge is no larger than the bulge forming when a small cable is installed. As the major displacement is limited to the embedment area, only minimal pulling forces are required. This results in minimal surface damages.

Traction force monitoring: The traction forces affecting the pipe are permanently monitored and controlled using a measuring device.

Plowing in of a steel gas pipeline DN 150 with the Rocket Plow.

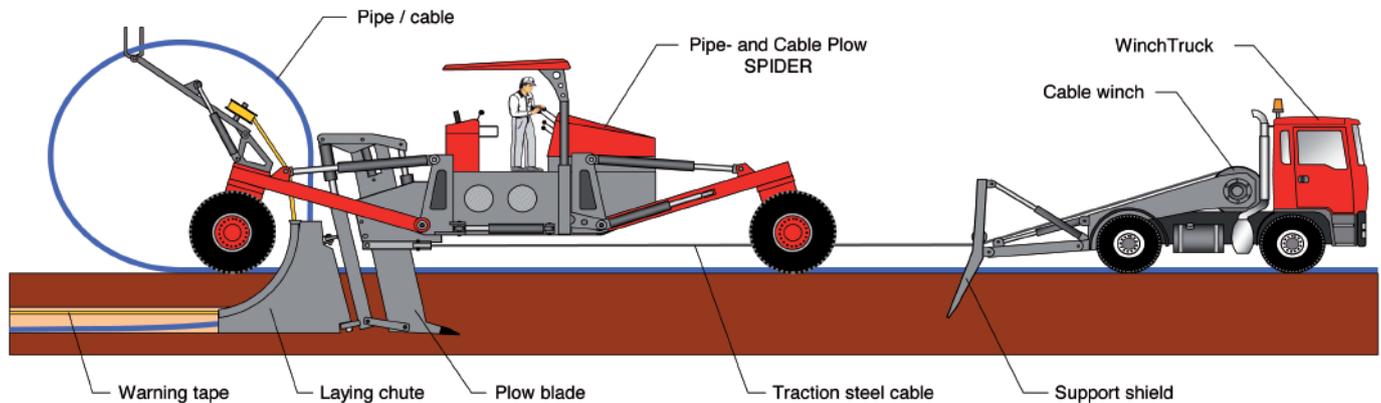


Surface after installing a drinking water pipeline 250 x 14.8 with the Rocket Plow.



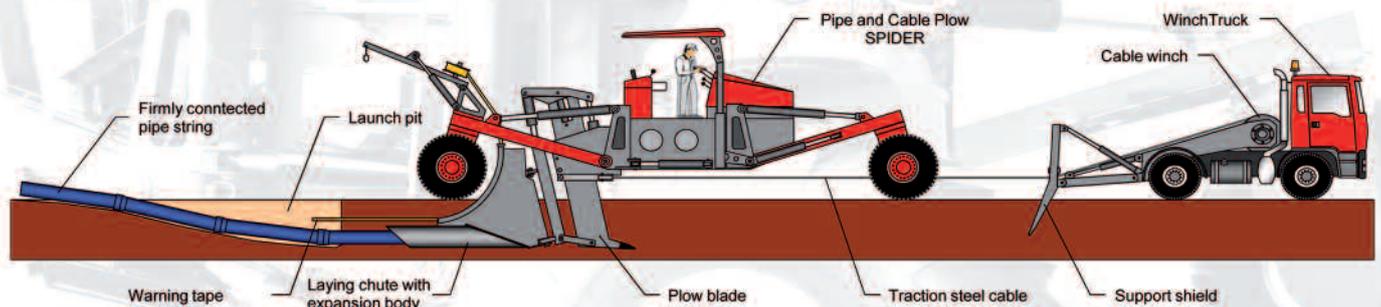
Description of the **FRANK FÖCKERSPERGER** Method.

Installation Plow Method for cables and pipes up to Ø 250 mm.



With the aid of a cable winch, the plow is pulled by an all-terrain WinchTruck which is equipped with a support shield. Four plow arms, individually adjustable in all directions, and rubber tyres regulated by hydraulics, help the Pipe and Cable Plow to get through rough terrains. The plow blade is inserted at installation level of the cable or pipe in a launch pit at the starting point of the plow route. Driven by the cable winch's tractive force, the plow blade displaces the soil and clears any stones within the embedment area, at the same time smoothing the trench bottom with the horizontally and vertically mobile installation chute attached. This working step generates a void, ready for stress-free laying out of the cable or pipe in the required depth. The Pipe and Cable Plow can install several pipes, cables and warning tapes in one go.

Rocket Plow Method for PE pipes, steel pipes and ductile iron pipes up to Ø 355 mm.



Unlike the Installation Plow Method, the Rocket Plow (designed and patented by Frank Föckersperger) has the pipe mounted directly to the expansion body (rocket) so it can be pulled into the void this rocket is generating. The expansion body establishes voids reaching a maximum size of Ø 500 mm. Therefore, PE pipes up to OD 355, steel pipes and ductile iron pipes up to DN 200 can be pulled in. With the help of the chute mounted to the expansion body, additional cables and warning tapes can be installed. Using the Rocket Plow Method, the 200 - 300 m long pipe is laid out behind the launch pit and pulled in by the Rocket Plow. The traction forces affecting the pipe are monitored using an measuring device.



Our machinery.

Our modern machinery covers the entire range of Pipe and Cable Plowing Systems. Therefore we can offer the suitable machine system for each construction project. Together with our highest qualified and experienced personnel, this is the basis for quality, reliability and on-time execution.

Our machinery comprises the following machines:

- 4 Pipe and Cable Plows System Föckersperger
- 4 Vibratory Plows on wheel or track basis
- 6 WinchTrucks
- 3 Cable Transporters
- 2 HDD-rigs

Technical data.

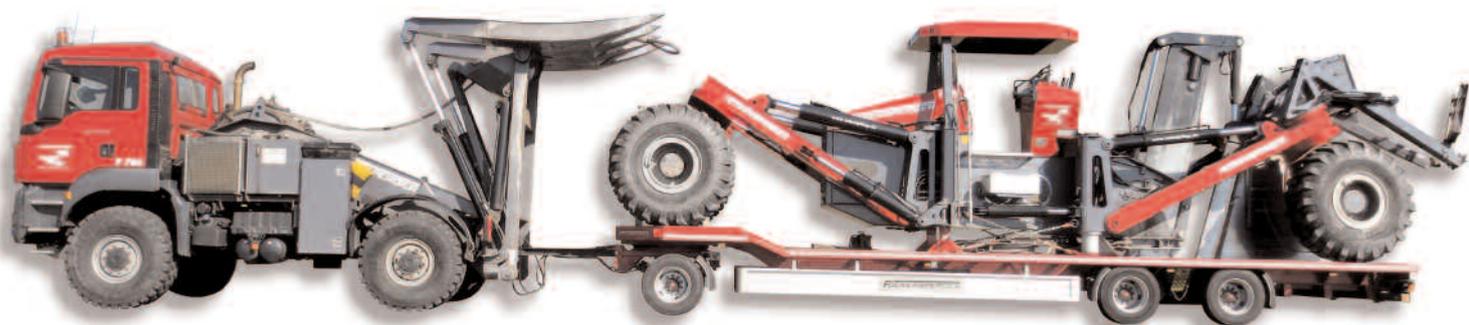
Pipe and Cable Plow

| | |
|--|-------------------|
| Weight (depending on model) | 16 - 22 t |
| Width min. | 1.95 m |
| Width max. | 7.50 m |
| Installation depth (adjustable continuously) | 0 - 2.00 m |
| Max. cable / pipe diameter | 355 mm |
| Max. ground clearance (crash barrier etc.) | 1.60 m |
| Traction drive | hydrostatic (AWD) |
| Depth display | digital |



WinchTruck

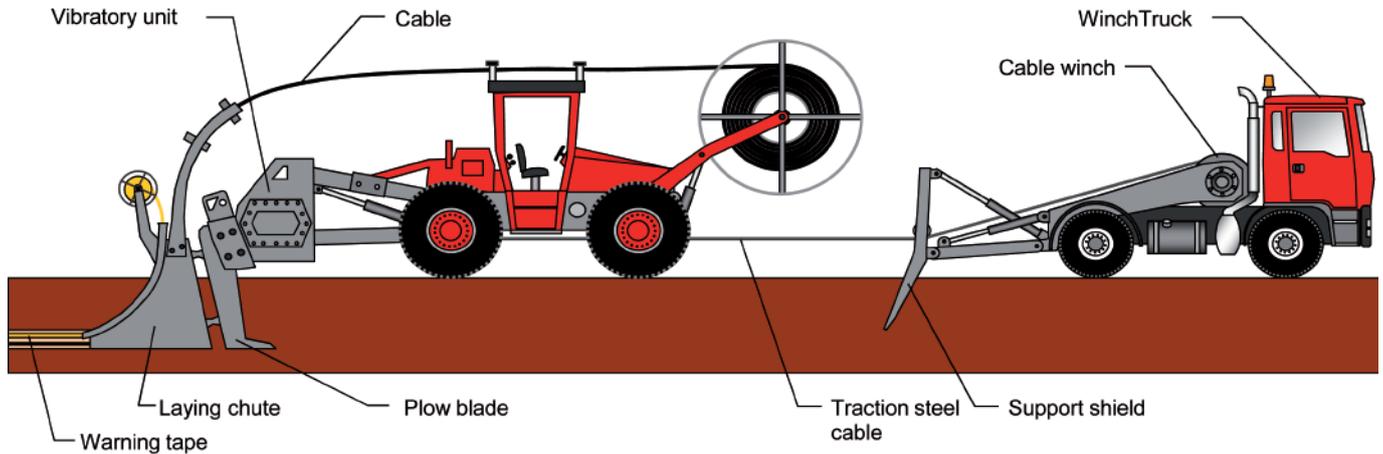
| | |
|----------------------------|-----------------|
| Engine power | 368 kW / 500 HP |
| Weight | 18 t |
| Width | 2.55 m |
| Tractive force cable winch | 80 t / 160 t |
| Cable reception | 120 m |
| Cable diameter | 44 mm |
| Speed cable winch | 0 - 50 m/min |
| Traction drive cable winch | hydrostatic |



Transport position.

Surface-protecting Vibratory Plows.

System description.



Our vibratory plows are ideal for the installation of cables, DSL cables and cable protection pipes. Plowing besides roads and lanes is easily possible. Only few traces of work are visible, field damages are extremely rare. We offer the suitable plow for all requirements: Tracked plows with protective rubber pads for the protection of paved roads and vibratory plows on wheel basis. Each of our vibratory plows can carry one cable drum.

Our vibratory plows
 On our building sites, our vibratory plows are always supported by our WinchTruck in order to provide additional tractive support.



Surface, immediately after plowing.





Pictures made in practice.

FÖCKERSPERGER vibratory plows on track basis.



Protective rubber pads for the protection of surfaces.

Plowing in of a gas pipeline HDPE OD 110 and cable protection pipe OD 50.

FÖCKERSPERGER vibratory plows on wheel basis.



Plowing in of a cable protection pipe HDPE OD 50.

Plowing in of 3 x cable protection pipe HDPE OD 50.



Cable transport with seven drums.



Cable transport with four drums.

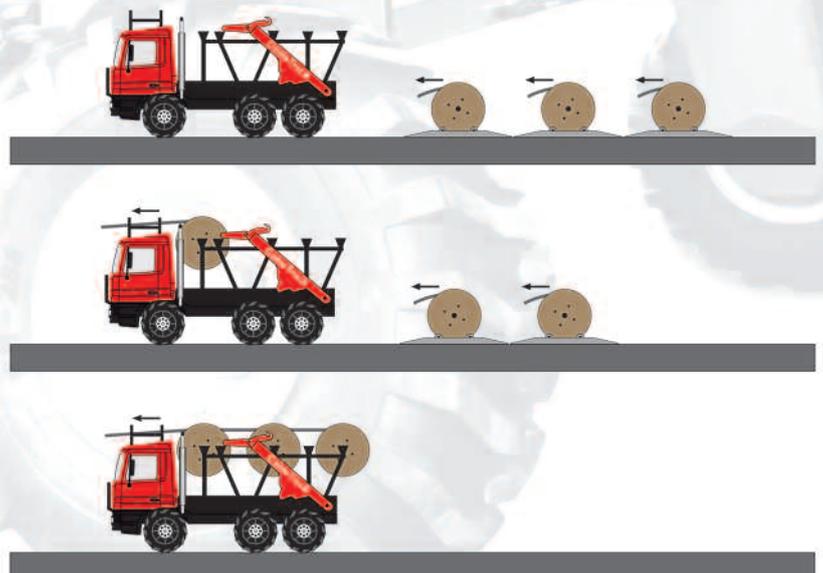
FRANK FÖCKERSPERGER cable trailers and cable transporters.

With our cable trailers and cable transporters, up to seven drums with 5 t weight each can be collected and installed with the cable plow moving ahead. Alternatively, the cables can be laid out besides the installation route before the plowing process.

Cable transporter with self-collecting cable drum function.

The cable transporter with self-collecting cable drum function can collect up to four drums.

Functionality of the self-collecting cable drum transporter.





Our horizontal drilling technique.

We have expanded our service of trenchless pipe and cable installation by two HDD drills.

Thanks to our trained operators we are able to install PE pipes accurately up to diameters of 180 mm and lengths of 150 m. All types of supply and disposal lines can be inserted. The fields of application are mainly road and waterway crossings.



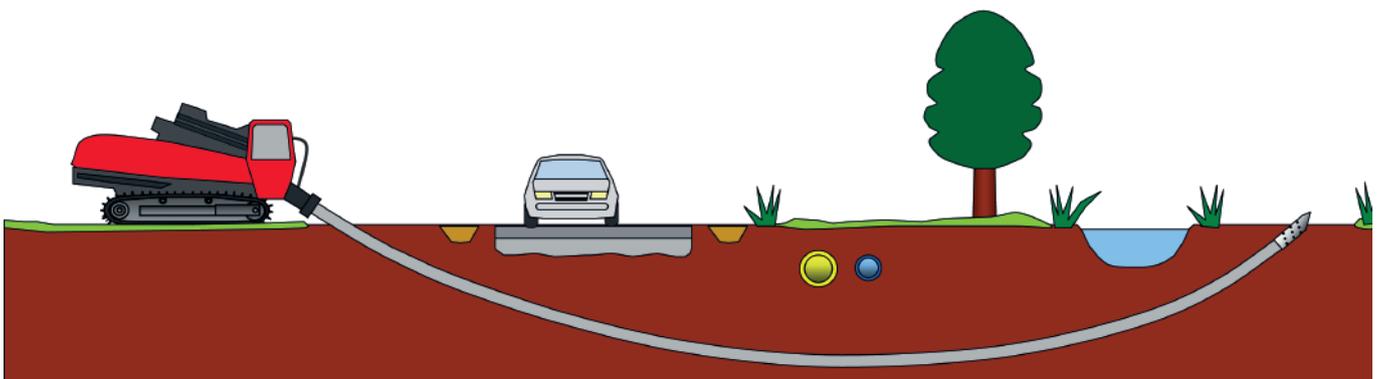
Ditch Witch JT2020 Mach 1.



Vermeer D9x13 S2.

Our drilling technique is an ideal trenchless complement to our pipe- and cable plowing technology.

System description.



With the support of a tracking system, the drilling rig carries out a pilot hole quickly and accurately, using a drill suspension. After the pilot drilling, the expansion takes place. The pipe or cable gets pulled through the previously created drill hole by retracting the drill pipe.

Always the latest technology.

Many patented construction solutions were packed into our state-of-the-art machine technology. That is why we can offer you a perfect Pipe and Cable Installation System. Constant advanced development down to the tiniest little detail and the use of high-quality materials guarantee functionality and safety at work.



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Decades of Experience and Innovation.

- 1865** Johann Heinrich Müller founded a mill repair company in his home town Münchaurach.
- 1970** Georg Föckersperger started with the design, construction and production of Pipe and Cable Plows, Rocket Plows and WinchTrucks.
- 1988** Introduction of the CNC technology. Start of a new, future-oriented branch: the production of precision parts for our own machinery, industry and motor sports.
- 2005** Due to the company's succession, the Georg Föckersperger GmbH is turned into the Günter Föckersperger GmbH for the CNC production branch and the Frank Föckersperger GmbH for the area Cable Plow.
- 2008** Foundation of the subsidiary Föckersperger Maschinen GmbH.
- 2011** Presentation of the new WinchTruck F780 and the new Pipe and Cable Plow Spider F220.
- 2014** Development of the strongest high-performance Pipe and Cable Plow Spider F250.
- 2015** 150th company anniversary.
- 2016** Presentation of the new Vibratory Plow Viper V225 with chain drive and the new WinchTruck F480.
- 2018** Construction of an extra high voltage plow.
- 2019** Presentation of the new Vibratory Plow Viper V225 on wheel basis.



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