FÖCKERSPERGER

Pipe and Cable Plow Systems

SINCE 1971

MADE IN GERMANY
MADE BY FÖCKERSPERGER

CABLE Plow

TRADITION. INNOVATION. FÖCKERSPERGER.

VIPER® V225

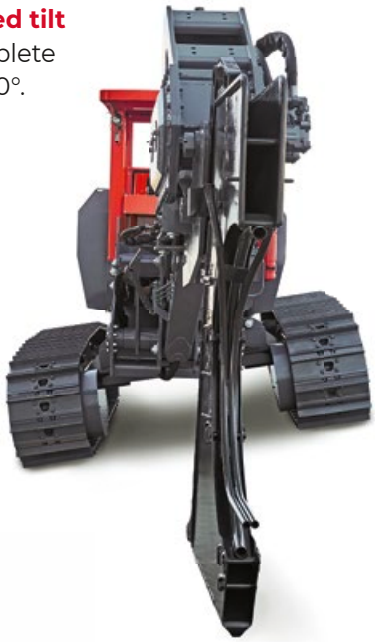
Surface protecting vibratory plows

FUNCTIONS – FLEXIBLE AND POWERFUL

With the new vibratory cable plow VIPER V225 Frank Föckersperger offers a compact machine especially for plowing in fiber optic cables, power cables and cable protection pipes.

The new V225 is characterized by its robust design and easy operation.

A special feature is the **integrated tilt function,** which allows the complete frame to tilt hydraulically up to 10°.



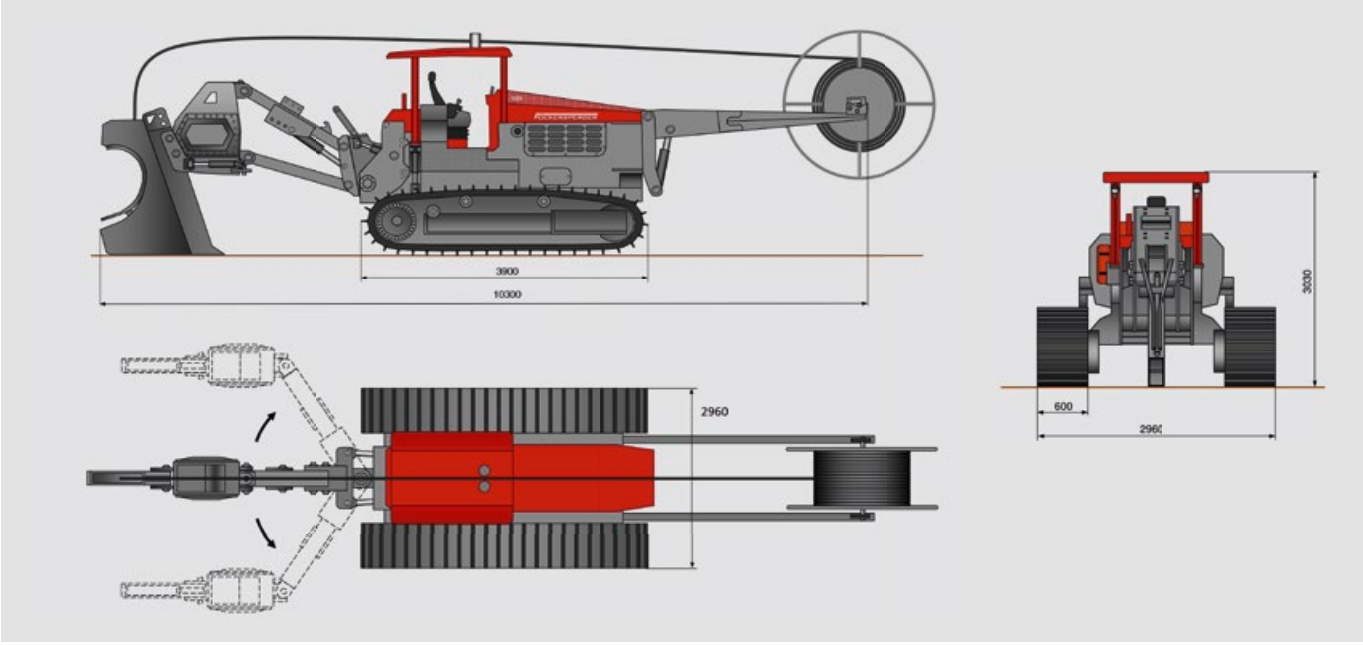
The vibratory unit can be **swivelled hydraulically** and therefore allows plowing with lateral displacement.

The clear control unit and the **ergonomic driver's seat** allow comfort and convenience as well as maximum efficiency in daily work.

With its sophisticated features, the V225 makes it easy to plow in the most diverse ground conditions, helping to **increase productivity**.

Technical data

Carrier vehicle and Cableplow	Föckersperger
Type	**VIPER® V225**
Engine power	168 kW / 225 PS
Engine type	Caterpillar C7.1 Diesel
Total weight	Track version – 18.5 t Wheel version – 16.5 t incl. laying blade and laying chute
Length	3.75 m
Width	2.96 m
Height	3.03 m
Drive	Hydrostatic drive
Chassis	With tilting function, 10° inclination adjustment
Drive (wheel/tracks)	Track drive: D5H steel tracks, width 0.60 m Wheel drive: All wheel, 2 steerable axles
Vibration amplitude	Continuously adjustable
Cable reel carrier	Hydraulic reception, lifting capacity 3.5 t
Cable plow	Laterally movable up to 1500 mm to the left and right
Laying depth	up to 1.50 m (depending on diameter and ground conditions)
Diameter of cable/pipe	up to Ø 125 mm (cable protection pipes, power cables, pipes)
Working speed	up to 10.000 m daily performance (depending on the route and ground conditions)



WINCH TRUCK F890

Cable winch works up to 160 tonnes tractive force

For towing Pipe and Cable Plows, e.g. on steep slopes, crossing brooks, in swampy areas, along railtracks, along tarred roads, on embankments, cross-country, in almost every terrain.

The WinchTruck F890 carrier vehicle is available on MAN and on Mercedes basis.

Both variants are equipped with the patented Frank Föckersperger winch construction.

All advantages at one glance

- Towing vehicle with road approval
- Short set-up and installation times
- Perfect hold (even on embankments)
- Swivelling winch construction
- Tipping and tilting support shield
- Minimum cable wear – optimal cable guidance

The swivelling of the frame, the tipping and tilting support shield and the single-drum winding guarantee maximum tractive force in every position.

Technical data

WinchTrucks

	WinchTruck F890	WinchTruck F480
Carrier vehicle Mercedes	MB Arocs 2048 AK 4x4	MB Arocs 2048 AK 4x4
Carrier vehicle MAN	MAN TGS 18.500 4x4	MAN TGS 18.500 4x4
Engine	368 kW / 500 HP EURO 6	368 kW / 500 HP EURO 6
Length	MB: 8650 mm / MAN: 8200 mm	MB: 8450 mm / MAN: 8000 mm
Width	2550 mm	2550 mm
Weight	18,000 kg	15,000 kg
Max. speed	86 km/h	86 km/h
Tyres	16.00 R 20 XZL	14.00 R 20 XZL
Ground clearance	440 mm	440 mm
Tractive force – direct	80 t	40 t
Tractive force – deflection roller	160 t	80 t
Cable diameter	44 mm	36 mm
Max. cable length	120 m	100 m
Drive	hydrostatic	hydrostatic
Cable speed	stepless from 0 – 50 m/min	stepless from 0 – 25 m/min
Winch construction	hydraulically swivelling	-
Support shield	hydraulically tipping / tilting	hydraulically tipping / tilting
Cable guidance	single-drum winding	-
Weight distribution	50:50 without overhang	50:50 without overhang

Hydraulically swivelling winch construction

Minimum cable wear Single-drum winding Optimal cable guidance

No additional front and rear overhang

Hydraulically tipping and tilting support shield

Optimal 50:50 weight distribution

Easy and safe joystick handling

SPIDER® F220

Pipe and cable plowing works in almost every terrain

The latest generation of the Frank Föckersperger Pipe and Cable Plow is based on over 50 years of experience.

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.

Wheel suspension on top for optimal ground clearance

Two-part laying blade for optimal depth and terrain adjustment

Clearly arranged User-friendly Service-friendly

Powerful 4 x 4 propulsion technology with differential lock

Traction force point directly in front of the laying blade

Weight optimized and perfect weight distribution

Technical data

Pipe and Cable Plows

Model	SPIDER® F220	SPIDER® F250
WEIGHT AND ENGINE POWER		
Weight	16,800 kg	20,500 kg
Engine power	82 kW / 110 HP – Diesel Cat C4.4	82 kW / 110 HP – Diesel Cat C4.4
TYRE EQUIPMENT		
Tyres	23.5 – 25 20 PR	23.5 – 25 20 PR
MEASUREMENTS		
Length min.	8200 mm	10300 mm
Length max.	10500 mm	12500 mm
Min. width front (plow arms)	1950 mm	1950 mm
Max. width front (plow arms)	6900 mm	8550 mm
Min. width back (plow arms)	1950 mm	2000 mm
Max. width back (plow arms)	6900 mm	6900 mm
Wheel base min.	6600 mm	8800 mm
Wheel base max.	8600 mm	10800 mm
Machine height	3550 mm (incl. frame and roof)	3980 mm (incl. cabin)
Transportation height	4000 mm (incl. frame and roof)	4400 mm (incl. cabin)
Curve radius	3500 mm	3500 mm
Cround clearance (wading depth)	1600 mm	1600 mm
Laying blade (from frame lower edge)	2200 mm	2500 mm
Height adjustment (embankment)	+/- 2000 mm (Total 4000 mm)	+/- 2100 mm (total 4200 mm)
Slope angle (inclination)	45° (100%)	45° (100%)
Articulation angle (main frame)	+/- 30°	+/- 30°
Swivel angle (plow arms)	38°	38°
GENERAL EQUIPMENT		
Wheel drive	4 x 4 with differential lock	4 x 4 with differential lock
Steering	all wheels and mainframe	all wheels and mainframe
Multi-purpose arms back	with telescope function	with telescope function
Hydraulic safety frame	inclusive	inclusive
Overhead guard	inclusive	inclusive
PRACTICE SPECIFICATIONS		
Max. tractive force	140 t	200 t
Max. running speed	8 km/h	8 km/h
LAYING CHUTES		
Pipe and cable laying chutes	all common sizes	all common sizes
Rocket plow chutes	all common sizes	all common sizes
ADDITIONAL EQUIPMENT		
Comfort cabin with heating and aircondition	optional	optional
Digital depth display	optional	optional
Wireless safety shutdown of cable winch	optional	optional

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 of up to 7,000 m possible
- plowing and cable / pipe installation in one go
- no sand bedding required

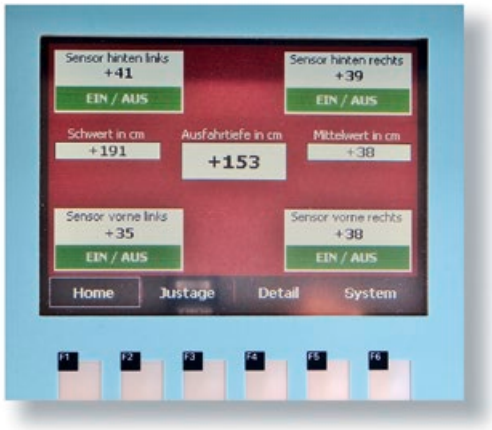
PLOWING-IN OF

- FIBER OPTIC CABLES
- TELEPHONE- AND CONTROL CABLES
- POWER CABLES
- CABLE PROTECTION PIPES
- DRINKING WATER
- SEWER AND GAS LINES

2 eco-friendly

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

Digital depth display



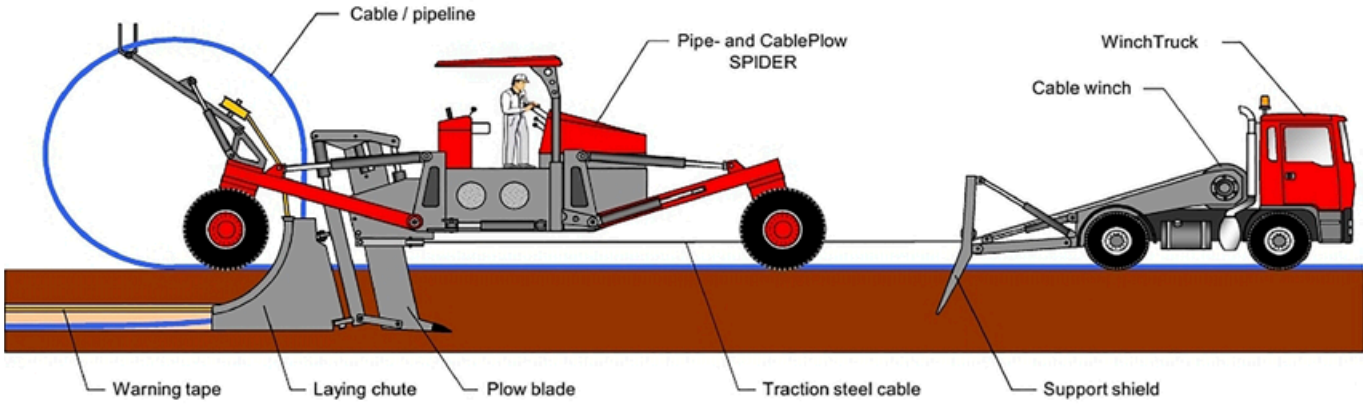
3 powerful

- 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



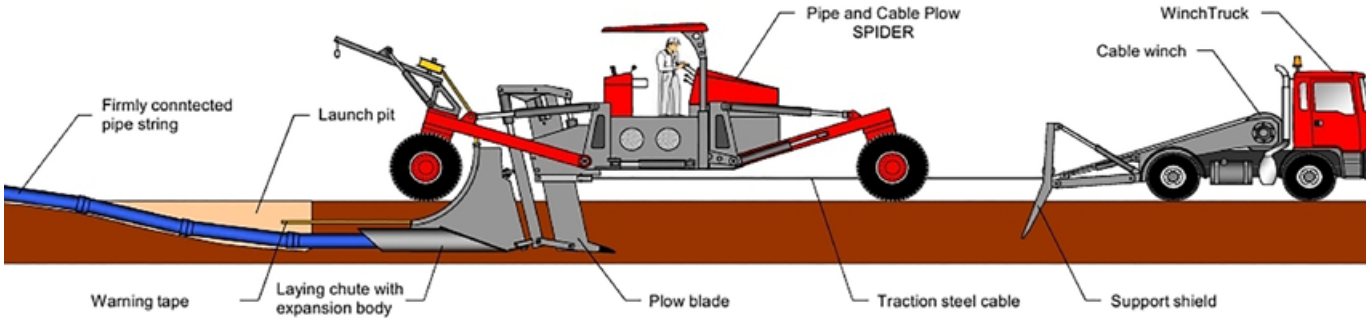

Description of the FRANK FÖCKERSPERGER Method

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 a measuring device.

PICTURES MADE IN PRACTICE

FÖCKERSPERGER Pipe and Cable Plow

Along a crash barrier

Plowing in of a gas pipeline PE-RC OD 180
and 2 x cable protection pipe OD 50

Crossing a brook

On skids in tideland

FÖCKERSPERGER WinchTruck

WinchTruck with dual tyres

Swivelling winch construction

FÖCKERSPERGER Vibratory Plow

Plowing in of cable protection pipes

Plowing in of a gas pipeline HD-PE OD 110
and cable protection pipe OD 50

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.

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, Georg Föckersperger GmbH is turned into Günter Föckersperger GmbH for the CNC production branch and 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	Presentation of the extra high voltage plow MFP3 for 380 kV AC power lines.
2019	Presentation of the new Vibratory Plow Viper V225 on wheel basis.
2022	Presentation of the extra high voltage plow MFP2 for 525 kV DC power lines.

PLEASE CONTACT US – WE WILL BE PLEASED TO HELP YOU!

CABLE Plow

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