



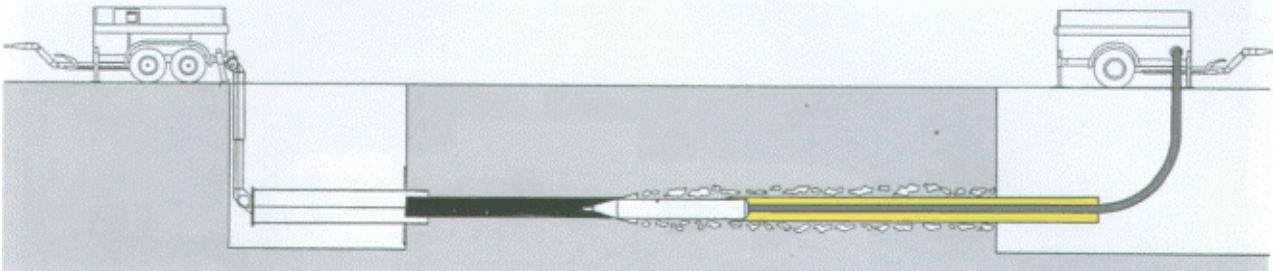
PULLING FORCE PRESELECTION WITH AUTOMATIC HOLD-ON (STATIC PULL) SYSTEM



Specification are subject without notice. Output details are depending on use conditions.

Pipe Cracking

When cracking underground cast-iron pipes the winch will have to pull the cracking mole (PIM) through various obstructions, such as bell-and-spigot joints, sleeves, leak clamps etc. To avoid overstressing of the cracking mole each Bagela Pipe Renewal Winch is equipped with a line pull pre-selecting device, i.e. the pre-selected line speed is much higher than the pipe cracking speed. This system works as follows: as soon as the pre-selected line pull is reached, the hydraulic pump will be automatically controlled down to the line speed required to keep the pre-selected rope tension, or simply speaking, to keep the rope tight. So, whenever the cracking mole comes against an obstruction, such as a bell-and-spigot joint, the line speed will be controlled down to zero and the winching rope be kept tight until the resistance is overcome by the mole. Then the line speed is immediately increased to pre-selected line pull. In that way the rope will never become slack with the risk of being damaged by the mole.



Pipe Cleaning

Much power is required to remove any internal incrustations from pipes. This will be achieved by pre-selecting high line pull at low line speed.

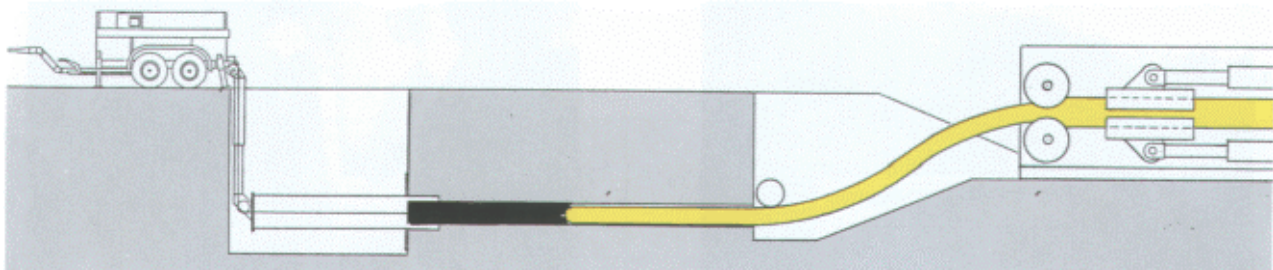
Pipe Relining

by the rolldown or swageline method

Pipe relining by rolldown machine and Bagela Winch:

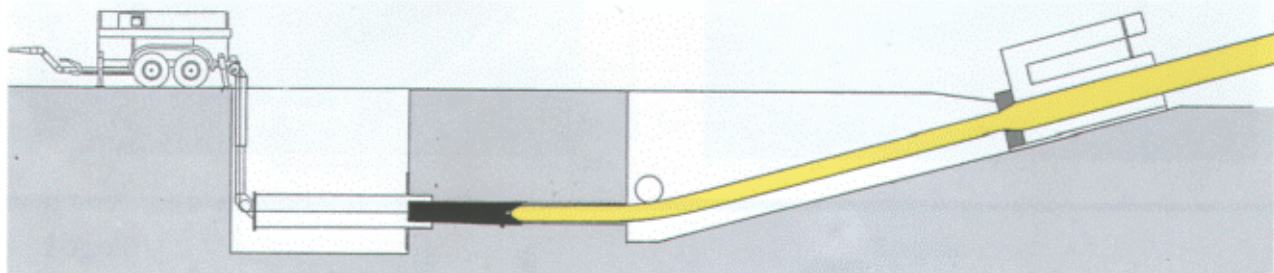
The task of the winch is to pull the new polyethylene liner into the old pipe after it has been reduced in diameter by the rolldown machine. Generally there is only little friction when the liner is inserted into the carrier pipe.

However, as the liners pushed intermittently through the rolldown machine, the pulling operation of the winch will be jerky too. But thanks to the automatic tensioning system incorporated in the Bagela winch there will always be a steady and even line pull without any risk of overstressing the polyethylene liner.



Pipe relining by swageline machine and Bagela Winch:

In the swageline method the diameter of the polyethylene liner is reduced by heating the liner and drawing it through a die. To draw the PE liner into the carrier pipe, a steady and even line pull by the winch is required. If the line pull slackens down the PE liner may regain its original diameter and get stuck in the carrier pipe. This will never happen with the automatic tensioning system of the Bagela Winch.



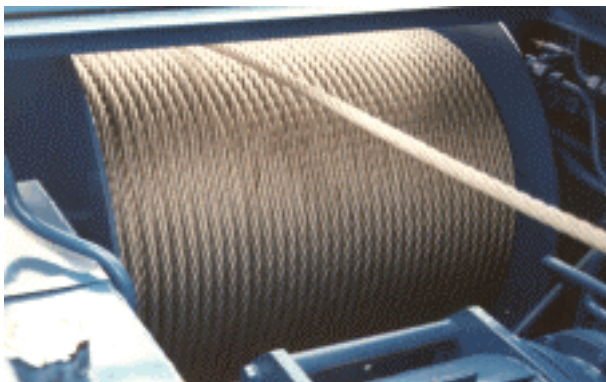
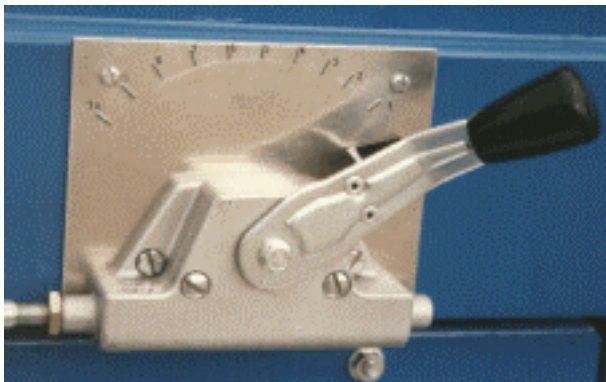
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All Bagela winches are mounted on single- or tandem- axle trailers with eye or ball trailing coupling. The winch itself consist of a twin capstan drive and rope storage drum with automatic rope stacking device, driven by a diesel or petrol engine via hydraulic transmission. All winches are fully enclosed by a steel frame with steel-sheet sides and top.

Telescopic deflection boom:

By means of appropriate pins, a telescopic deflection boom may be attached to the tail pulley of the winch. The boom can be tilted up and down as well as sideways.



The required line pull can be pre-selected by control of the hydraulic oil pump (pressure/flow control) which will keep the winching rope in permanent tension even at varying pull resistance. This system ensures full self-control of the winch and is more effective than manual control of the line speed. The line pull may be increased until the hydraulic overflow valves are activated.



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Standard design:

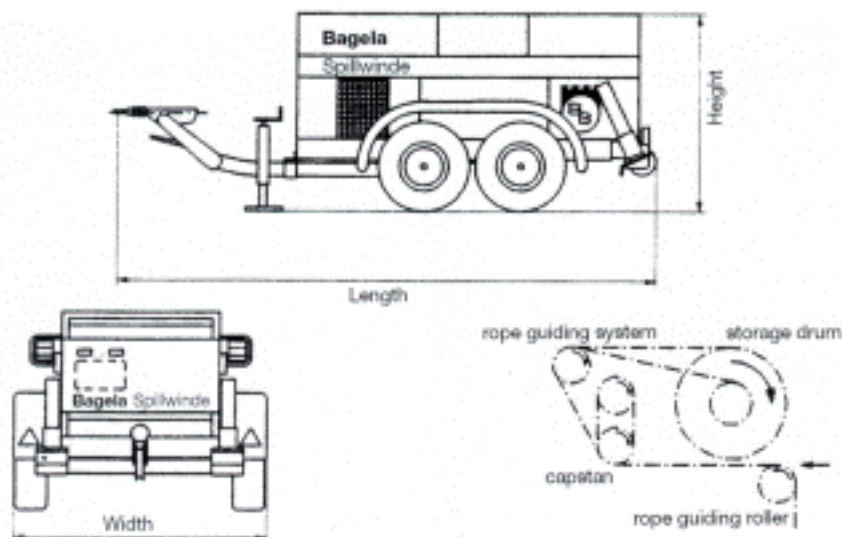
- Chassis with overrunning and automatic reversing brake system respectively air brake system, height adjustable tow-bar with ring-eye, ball type coupling (up to 3500 kg total weight), 12 V lighting system, TÜV-approval (up to 3500 kg total weight),
- Lockable, sound proofed sheet metal hood
- Hydraulic measuring indicator
- Operating hour counter
- Diesel engine with hydrostatic gear system
- Pulling force preselection with automatic pull hold-on system
- Twin capstan system with rope storage drum
- Painting: traffic red RAL 3020

Extras: (on request)

- other types of engines, painting or rope lengths
- from 3500 kg up total weight: wheelslip brake control system with TÜV-approval
- other types of measuring and registration system on demand (refer to separate leaflet)
- Telescopic deflection booms (refer to separate leaflet)

Dimensions and weights may differ if extras are fitted.

Technical data:



-o single-straight

-o single-height-adj.

-oo tandem-straight

-oo tandem-height-adj.

Type	Max. pulling		Drive engine			Rope-		Chassis		Length	Width	Height	Weight	Order No.
	force	speed	kW	fuel	cyl.	diam.	length	type	brake					
RW 3000	30 kN	40 m/min	10	diesel	1 A	10 mm	200 m	-o 1,3	overrun	3500 mm	1650 mm	1300 mm	1200 kg	001.002.10
RW 4000	40 kN	40 m/min	20	diesel	4 W	11 mm	300 m	-o 1,6	overrun	4200 mm	1650 mm	1300 mm	1450 kg	001.003.13
RW 5000	50 kN	30 m/min	20	diesel	4 W	12 mm	300 m	-o 1,6	overrun	4200 mm	1650 mm	1300 mm	1450 kg	001.004.28
RW 10	100 kN	14 m/min	20	diesel	4 W	16 mm	300 m	-oo 2,5	overrun	4600 mm	1820 mm	1460 mm	2300 kg	002.003.01
RW 10	100 kN	30 m/min	48	diesel	4 A	16 mm	500 m	-oo 3,0	overrun	4800 mm	1820 mm	1460 mm	2950 kg	002.003.04
RW 20	200 kN	17 m/min	36	diesel	3 A	22 mm	300 m	-oo 5,0	air press	4900 mm	2000 mm	1750 mm	5000 kg	002.301.01
RW 40	400 kN	25 m/min	74	diesel	6 W	32 mm	800 m	-oo 16,0	air press	6750 mm	2500 mm	2650 mm	16000 kg	002.603.02

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