

## No-dig equipment

The no-dig machines are used, when traditional construction activity is unacceptable. For example, open cut excavation method causes damage to ground or building foundations.

Many kilometers of water pipes are installed or replaced in historical and industrial regions of Saint-Petersburg, Moscow and other Russian cities with no-dig hydraulic machines manufactured by AVA Hydrosystems.

Tunnelling distance is up to 100 m.

The machines ACP can be assembled and work inside of wells or in other narrow places.



Fig. 1. ACP-20 is a compact solution for pit or well use.



Fig. 2. Destroyer with changeable knives.

Tool set includes reamers and pipe destroyers, spare knives, thread adapters, symmetric and steering heads with angled tips.

### System parts

(see fig. 3 and 4)

- I. No-dig machine
- II. Power unit
- III. Connecting hoses
- IV. Pilot bars
- V. Tool

### No-dig machine main parts

(see fig. 3 and 4)

1. Base frame
2. Main cylinder
3. Hydraulic height adjusting and leveling system (optional)
4. Hydraulic holder for bars
5. Hydraulic bar screwing and rotating device (optional)

### Technical data\*

Type	ACP-20	AC-60	ACP-60	AC-120	ACP-240	ACT-250	AC-300
No-dig machine							
Force, kN	Push	100	200	250	400	900	1000
	Pull	200	600	600	1200	2000	3000
Stroke, mm	400	500	400	500	400	1600	500
Pipe O.D., mm	60-150	up to 315	up to 315	up to 500	up to 630	up to 1620	up to 630
Weight, kg	300	1200	800	1500	2100	10200	3000
Dimensions, mm	1400x450 x450	2200x600 x500	1300x400 x700	2200x700 x500	1500x600 x1000	6800x1700 x1900	2200x800 x1200
Power Unit							
Work pressure, MPa	40	32	40	32	40	40	32
Flow, lpm	10	50	10	50	20(10)	16	100
Power supply, kW	10	30	10	30	10	22	60
Tank volume, l	100	250	100	250	100	320	400

\* The catalogue data does not refer to any particular equipment and can be changed by AVA Hydrosystems without notifications. Please, see technical passport for equipment in use.

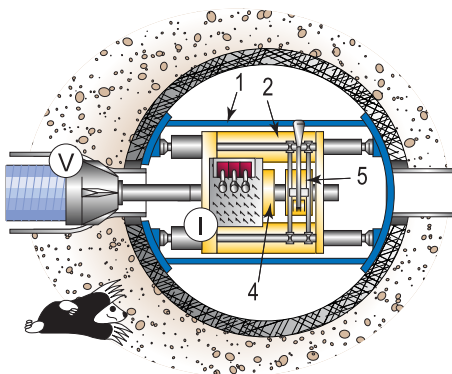


Fig. 3. Type ACP - well machines.

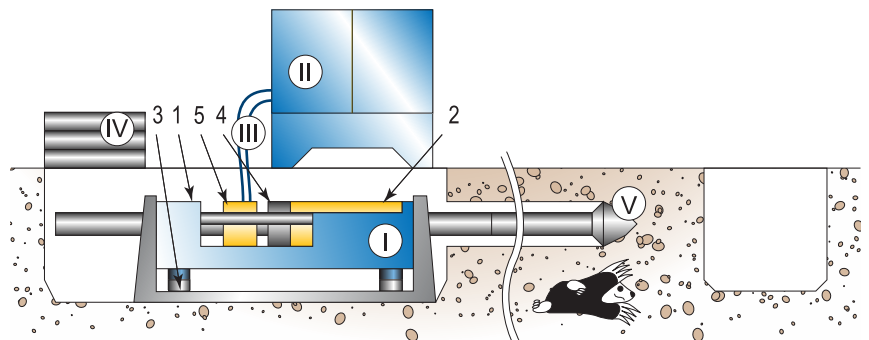


Fig. 4. Type AC - pit machines.

# Trenchless technologies

no-dig hydraulic machines and equipment  
 design and production



## No-dig machine ACP-60

### Application

Pipe installation and replacement with pilot bar method (for pipes up to 315 mm).

### Technical data

Pull force - 600 kN

Push force - 350 kN



## Multifunction machine ACT-250

### Application

I. Pipe jacking (for pipes from 820 to 1620 mm).

II. Pipe installation and replacement with pilot bar method (for pipes up to 630 mm).

### Technical data

Push force - 2500 kN

Pull force - 2000 kN



## Force booster LGI - 200 for HDD machine

The machine was designed as a step drive (1 step is 1000 mm).

### Technical data

Pull force - 2000kN

Drilling pipe diameter - 114mm

Drilling pipe max. length - 5000mm