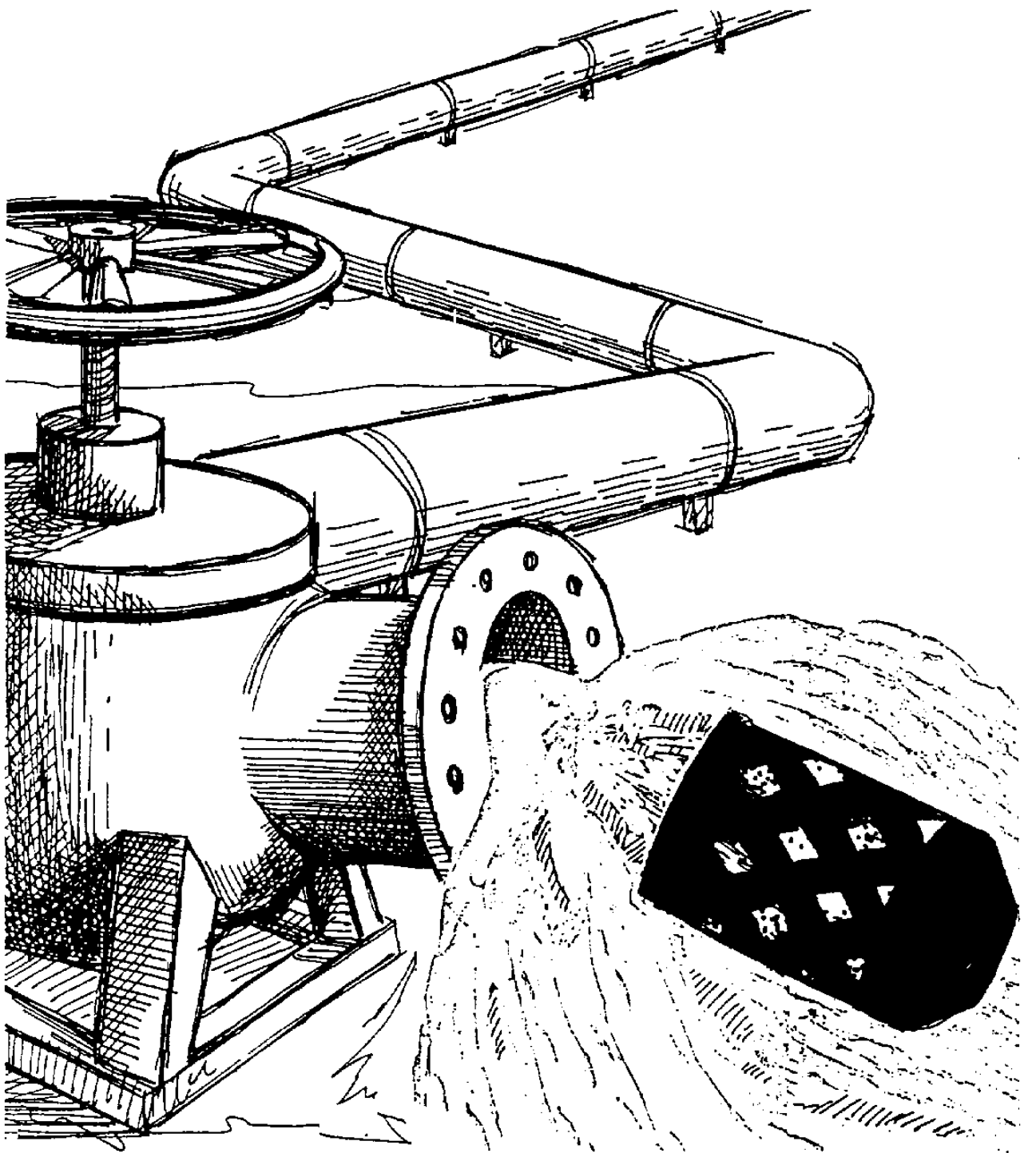
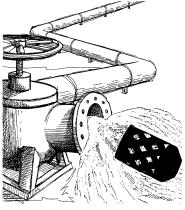


COBALCH PIPE CLEANING

Cleaning of new steel pipes





Cleaning of new steel pipe with air as propeller

With cleaning of new pipes and pipelines (gas, oil, water, district heating ect.) are the propelling normal air, to avoid sue of water and the problems and costs with enviromental correct destruction of this after use. We have after several years experience seen that most of the people look mostly on the pressure, because the pig have to be pushed through the pipe.

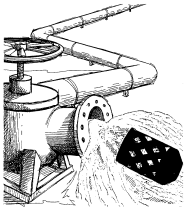
BUT IT IS NOT THE PRESSURE WHICH IS THE MOST IMPORTANT, IT IT THE VOLUMEN OF AIR!!

BECAUSE: The pig must have a continuiosluy speed of 1-2 meter per second and app. a third of the air is passing between the pig and pipe.

Therefore can you see in the scheme behind, information about the size of compressors and necessary dimension of the aor hoses. In the same time is given information about the force, which puch on the pig by 2 bars pressure, which is enough to run the pig through the pipe from Ø200 mm and upwards. Dimension on air supply is the hole way from compressor to pipe. It means compressor manifold, air hose and valves. There must always be installed pressure reduction to max 2 bar and manometer with the connection to the pipe.

TO INCREASE THE PRESSURE HELPS ONLY VERY LITTLE, BUT IT MAKES THE PIG TO A PROJECTILE OR A BOMB.

- 1 Pig launcher have to be mounted - see typical arrangement.
2. Pig reciever have to be mounted - see typical arrangement.
3. Necessary equipment.
Compressor with a capacity of min. 6,4 m³/min.
Outlet from manifold on the compressor must be min. DN 2 1/2".
Air hose with a diameter of min. DN 2 1/2" and max. length of 10 meter.
Connection and valve to the pipe with diameter of min. DN 2 1/2".
Pressure reduction valve to secure that the pressure in the pipe of max. 2 bar.
4. The pig to be used is a GIRARD Polly Pig type ACC-WB with wirebrush, which have to be send through the pipe twice or more, until all rust, dirt and deposit is removed.
Then a GIRARD Polly Pig type AB aqua bare have to run one or twcie to remove the dust.
5. Procedure.
 - a. Open the launcher and put the pig into it, adjust the pusher, so that the pig is pressing up in the reducer.
 - b. Close the launcher again.
 - c. Secure the closure is locked and thight.
 - d. Start the compressor and open for the air.
 - e. When the first manometer shows 2 bar, the pig will be launched into the pipe, which can be seen on the second manometer.
 - f. After necessary running time - which depend of the length of the pipe to be cleaned - will the manometer on the reciever show, that the pig has arrived together with the dirt.
 - g. Open the reciever and take the pig and dirt out.
 - h. Close the closure again.
 - i. This procedure continious until the wished result have been reached.
 - j. As the last point a GIRARD Polly Pig type ASK have to be runned after the same procedure, to remove the lighter deposit and dust, there may still be left in the pipe.
6. After fininshing the job, the launcher and reciever can be dismantled and moved to the next pipe.



Pressure and volumen
with use of air as propeller

Pipediameter	4"	6"	8"	10"	12"	16"	20"	24"
Inside diameter mm	107	160	210	260	311	392	490	590
App. area in cm [°]	89	200	346	530	759	1283	1885	2733
Force in kg V/2 bar	178	400	692	1060	1518	2566	3770	5466
Necessary volumen of air in m ³ /min. to 2 m/sek.	2,2	2,4	4,4	6,4	9,1	15,4	22,6	32,8
Dimension of outlet on compressor manifold	1 1/2"	1 1/2"	2"	2 1/2"	3"	3 1/2"	4 1/2"	6"
Dimension on airhose with max. 10 meter	1 1/2"	1 1/2"	2"	2 1/2"	3"	3 1/2"	4 1/2"	6"
Dimension on airhose with max. 20 meter	2"	2"	4"	4"	6"	6"	8"	8"
Dimension on valve and inlet into the pipe	1 1/2"	1 1/2"	2"	2 1/2"	3"	3 1/2"	4 1/2"	6"

