

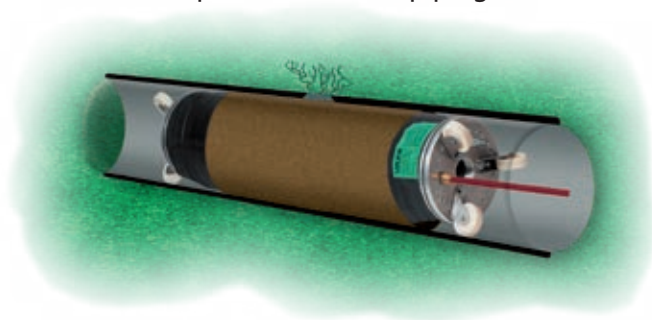
REHABILITATION PACKERS

Rehabilitation packers **P, FP, DP, HP** and **HPP** are used for repairing locally-damaged sewerages or other pipe-lines or for their successive maintenance. The packers can be applied to fissures, leaky joints, misalignments, root downgrowth and corroded sections. Sewerages made of all kinds of materials in the diameter ranging from 50 mm to 1200 mm can be maintained or repaired in this way.

These packers can be divided into several groups: short packers, flexible packers, lateral packers and long packers. They are made of a special rubber guaranteeing the necessary flexibility, strength and resistance. All their metal parts are made of corrosion-resistant materials.

The maintenance work consist of placing the packer and its insertion piece (a fabric of glass fibres impregnated with a special artificial resin) into the piping on the

damaged point. This procedure can be monitored by using a closed-loop television while the packer is not under pressure. Then the packer is inflated to the working pressure and the glass-fibre-fabric insertion piece is pressed against the wall of the pipe. As the overflowing resin penetrates the fissures and cavities, the damaged spot and the glass-fibre-fabric insertion piece become firmly connected. After the resin gets hardened, its static load capacity is supported with a short tube with gradual reductions. Then the packer is deflated and pulled out of the piping.



SMALL LATERAL PACKERS

Small lateral packers are used for repairing of the smallest diameter of house pipeline. For easy manipulation in pipe bends the rigid ends of packer are made as short as possible. The effective surface ranges from 300 mm to 1300 mm.

Small Lateral Packers HP

Type	Part - No	Pipe diameter	Rubber body diameter	Rubber body length	Total length	Application length in max. diameter	Weight	Operating pressure
		mm	mm	mm	mm	mm	kg	bar
HP 3/4 - 0,4	7330	30-40	25	400	450	270	0,30	3,0
HP 3/4 - 0,6	7341	30-40	25	600	650	470	0,40	3,0
HP 3/4 - 1	7342	30-40	25	1000	1050	870	0,60	3,0
HP 3/4 - 1,5	7343	30-40	25	1500	1550	1370	0,90	3,0
HP 3,5/5 - 0,4	7339	35-50	30	400	450	270	0,35	3,0
HP 3,5/5 - 0,6	7340	35-50	30	600	650	470	0,45	3,0
HP 3,5/5 - 1	7344	35-50	30	1000	1050	870	0,65	3,0
HP 3,5/5 - 1,5	7345	35-50	30	1500	1550	1370	0,95	3,0



TABLE OF RESISTANCE FOR PIPE STOPPERS AND REHABILITATION PACKERS

A – Pipe stoppers and Rehabilitation packers

B – Pipe stoppers resistant to oil

C – Cone pipe stoppers ULK and PULK

Chemicals	Concentration %	A	B	C
Acetone		+/-	--	++
Acetylene – Alcohol		++	++	++
Aniline		+/-	--	--
Petrol		--	++	++
Benzene		--	--	--
Boric Acid	10	++	++	++
Brake Fluid		++	--	++
Butanol		++	++	++
Butyric Acid		--	+/-	--
Calcium Hydroxide		++	+/-	++
Calcium Hypochlorite	15	++	--	++
Diesel Oil		--	++	++
Ethanol		++	++	++
Formaldehyde	40	++	++	++
Glycerine		++	++	++
Kerosene		--	++	+/-
Methanol	50	++	++	++
Mineral Oil		--	++	++
Methyl Chloride		--	--	--
Natural Gas		--	++	++
Nitric Acid Diluted	50	+/-	+/-	--
Ozone		--	--	++
Phenol		--	--	--
Phosphoric Acid	60	+/-	--	++
Propanol		++	+/-	++
Sodium Hydroxide	20	++	++	++
Sodium Hypochlorite	10	+/-	--	++
Sulphuric Acid	20	++	++	++
Sulphuric Acid	50	++	+/-	++
Sulphuric Acid	60	--	--	+/-
Toluene		--	--	--
Ammonium Hypochlorite		+/-	--	++
Vinegar Acid		++	+/-	+/-
Ferrous Hypochlorite		++	++	++
Sea Water		++	++	++

++ resistant
+/- partially resistant
-- non-resistant

