

SACPRO

RELINING INNOVATORS



PRODUCT CATALOG

MATERIALS, EQUIPMENT & TRAINING
TRENCHLESS PIPE REHABILITATION

CONTENT

SACPRO PRODUCT CATALOG

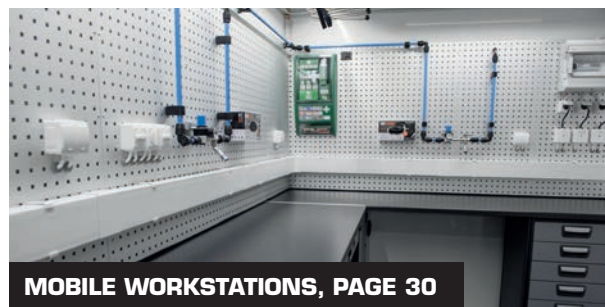
PARTNERS	3
HOUSELINER SYSTEM	4
LINER	6
EPOXY	8
MIXING RATIOS & CURING TIMES	10
RESIN CONSUMPTION & ROLLER DISTANCE	11
BRANCH PIPES	12
CUSTOMIZED BRANCH PIPES	15
RELINING CONNECTION	16
BRANCHING CONNECTION	17
RAPTOR CUTTER	18
ACCESSORIES DRAIN CLEANING	19
SCALING CHAINS	19
INVERSION DRUMS	20
ACCESSORIES INVERSION DRUMS	22
HEAT CURING	23
BRANCH PIPE TOOLS	24
ACCESSORIES BRANCH PIPE TOOLS	28
IMPREGNATION UNITS	29
MOBILE WORKSTATIONS	30
CONSUMABLES	32
END CAP SYSTEM	33
TRAINING	34
ABOUT SACPRO	35



RAPTOR CUTTER, PAGE 18



INVERSION DRUMS, PAGE 20



MOBILE WORKSTATIONS, PAGE 30

SACPRO PARTNERS

AROUND THE WORLD

VISIT OUR WEBSHOP



<https://webshop.sacpro.se/shop>



GREEN MOLES
GREECE/CYPRUS
www.greenmoles.com

C J KELLY INTERNATIONAL LTD
UNITED KINGDOM
www.cjkelly.shop

AUSTRALIAN PIPELINING SUPPLIES
AUSTRALIA
www.pipelining Supplies.com.au

AMERICAN PIPELINING SUPPLIES
USA
www.apspipelining Supplies.com

Today Sacpro have partners in six different countries, and we are hoping to find more. We are building a group of partners around the world that wants to join us in our journey.

We believe it is a big benefit by collaborating close with our partners and we are working hard to support them.

With their knowledge of the market and our expertise in technology we form a great team.



CYPRUS SHOW 2022 WITH GREEN MOLES



WWETT SHOW 2022 WITH APS

- Our partners are extremely valuable to us and we support them by all means necessary.

Fredrik Sterner - CEO



MATERIALS, EQUIPMENT & TRAINING
TRENCHLESS PIPE REHABILITATION



HOUSELINER[®] SYSTEM



Houseliner System is a complete system for rehabilitation of sewer pipes in buildings. It is installed with inversion technology, both in horizontal and vertical pipes and through all bends and connections.

The material is cured inside the old pipes and creates a new self-supporting pipe systems with a durability that matches new PP pipe. Houseliner System consists of high quality resin, liners and Sacparts components.

HORIZONTAL AND VERTICAL SEWER PIPES

A pipe made by flexible liner always provide a predetermined wallthickness the entire lenght of the pipe. The liner in Houseliner System can be found in dimensions 30 - 400 mm and 2,5 - 5 mm thickness.

BENDS

The liner in Houseliner System is very flexible and can be installed in pipes with multiple bends up to 90° without disturbing wrinkles.

DIMENSIONAL CHANGES

Changes in diameter is a major challenge for many relining methods, but not for Houseliner System. The liner is so flexible that it makes it possible to install even though having several dimensional changes in the pipe.

BRANCH PIPES

The weakest point in a sewage system is usually the branches. When installing Houseliner System, prefabricated branch pipes are used, regardless of the size and design of branches.

BRANCHING CONNECTIONS

Branching connections can quickly and safely be installed using the Sacparts Branching Connection. Perfect to facilitate for example a new kitchen drain.

STANDARDIZED TRANSITIONS

Sacpart Relining Connection secures the transition from a conventional pipe to a renovated pipe.



CUSTOMER CASE

914 apartments in Norway

TOTAL AMOUNT INSTALLED:

- 3513 METER 4" LINER
- 214 VERTICAL PIPES
- 1354 SINGLE BRANCH PIPES
- 258 DOUBLE BRANCH PIPES
- 5270 KG EPOXI

One of many major projects that have chosen to work with the houseliner system is this housing association consisting of 914 apartments in Norway. The project lasted for about 2 years. There were 2 work teams that were there during the project. The teams worked side by side with one lining team and one spray coating team. The job ran at 3-week intervals. Because of stellar planning before the project started, all the installations were made with amblycured epoxy.

WEEK 1

- Monday, one stairwell with two vertical stacks were lined.
- Tuesday, lateral connections were milled up and four branch pipes were mounted. The vertical stacks of the next stairwell were cleaned and four branch pipes were changed to the next round.
- Wednesday, four branch pipes were installed. The next stairwells vertical stacks were closed off and lined. After that, the last four branch pipes were mounted in the first stairwell. Depending on when the branch pipes were installed, the residents got the water back within the next 12 hours.
- Thursday, the lateral connections were milled up and branch pipes were installed.
- Friday, eight branch pipes were installed and the residents got their water back within the next 12 hours.
- Saturday, the vertical stacks were put into operation. The upcoming vertical stacks were cleared for next week's work.

WEEK 2

- Monday, one stairwell was closed, liners were mounted with a 3,5-hour epoxy and milled out the same day.
- Tuesday, the next stairwell was closed off and lined with a 3,5-hour epoxy and milled the same day. Eight to twelve branch pipes were mounted in the first stairwell.
- Wednesday, twelve branch pipes were installed in the second stairwell and eight branch pipes were installed in the first stairwell, which is now ready to use.
- Thursday the first stairwell, by the latest, was done and one round of branch pipes was installed in the second stairwell, which was then completed on Thursday afternoon.
- Friday, everything was filmed and the self-checks were filled in. During the work, a simplified self-check system was used with only the time, date, version of and epoxy amount for liners and branch pipes. Then we went home to have a week of "down time" before everything started over again.

- I was part of this exciting project in Norway and spent two years there. Of all those branch pipes there were only six we had to re do.

Jockum Brodén

- Head of Research & Development



LINER SYSTEM

HOUSELINER

Our flexible liners are the basis for a self-supporting piping system, that can handle both dimensional changes and 90° bends with an absolute minimum of wrinkles. Combined with our Houseliner Resin the new sewer pipes will get a predetermined wall thickness of your choice. The new pipes are high E-modulus and chemically resistant after curing. The characteristics are much like a new, conventionally made PP sewer pipe.

Houseliner FL and FLT combined with Houseliner Resin are both tested for life expectancy at Eurofins. The test showed that you can expect more than 50% of the initial strength after 50 years of service.

Approved according to RISEs standard **CR072** in Sweden.

ASTM approved, tested by Eurofins.



LINER

FLT

Houseliner FLT gives you a near perfect result. Made for DN50 to DN150, all with the same thickness after curing, approximately 2 mm. Made from 100% PES fiber with a PU coating. Suitable for ambient, hot water, UV, or steam curing up to 70°C. Changes in diameter or 90° bends is no match for this liner. This liner is perfect for domestic pipes, or pipes where there is limited demand for ring stiffness.

The ease to wet out, combined with low resin usage, gives you more time to install your liner instead of spending time at your wet-out table.

LINER FLT

Liner FLT	
HL-FLT-050	Houseliner FLT 50-70 (50m)
HL-FLT-055	Houseliner FLT 70-100 (100m)
HL-FLT-060	Houseliner FLT 100-150 (100m)

LINER

FL



LINER FL

Houseliner FL is your go-to liner. It comes in a variety of sizes and thicknesses to suite your needs. From DN30 all the way to DN400. Wall thickness from 2,5 to 5mm depending on your choice of liner. Made from 100% PES fiber with a TPU coating. Suitable for ambient, UV or hot water curing up to 80°C.

Houseliner FL can handle up to 90° bends and changes in diameter. Whatever your needs may be, Houseliner FL can almost for certain fulfill your demands. The wet-out process is extremely fast, giving you more time to invert then spending time at the wet-out table.

Liner FL Standard assortment

HL-FL-3525	Houseliner FL 2,5mm DN30-50 (25m)
HL-FL-3625	Houseliner FL 2,5mm DN45-70 (50m)
HL-FL-3725	Houseliner FL 2,5mm DN50-70 (50m)
HL-FL-4730	Houseliner FL 3mm DN63-100 (100m)
HL-FL-4930	Houseliner FL 3mm DN100-150 (100m)
HL-FL-5740	Houseliner FL 4mm DN100-150 (100m)
HL-FL-5840	Houseliner FL 4mm DN150-225 (100m)
HL-FL-6700	Houseliner FL 5mm DN225-300 (100m)
HL-FL-7620	Houseliner FIX 3mm DN75 (100m)
HL-FL-7650	Houseliner FIX 3mm DN100 (100m)
HL-FL-7670	Houseliner FIX 3mm DN150 (100m)

Liner FL Produced when ordered assortment

HL-FL-3750	Houseliner FL 2,5mm DN63-75 (50m)
HL-FL-3760	Houseliner FL 2,5mm DN70-100 (100m)
HL-FL-4525	Houseliner FL 3mm DN30-50 (50m)
HL-FL-4530	Houseliner FL 3mm DN45-70 (50m)

HL-FL-4600	Houseliner FL 3mm DN60-75 (50m)
HL-FL-4615	Houseliner FL 3mm DN63-75 (50m)
HL-FL-4630	Houseliner FL 3mm DN50-70 (50m)
HL-FL-4830	Houseliner FL 3mm DN70-100 (100m)
HL-FL-4900	Houseliner FL 3mm DN100-120 (100m)
HL-FL-5540	Houseliner FL 4mm DN63-100 (100m)
HL-FL-5640	Houseliner FL 4mm DN70-100 (100m)
HL-FL-5650	Houseliner FL 4mm DN80-110 (100m)
HL-FL-5800	Houseliner FL 4mm DN120-150 (100m)
HL-FL-5940	Houseliner FL 4mm DN200-250 (100m)
HL-FL-6550	Houseliner FL 5mm DN150-225 (100m)
HL-FL-6650	Houseliner FL 5mm DN200-250 (100m)
HL-FL-6750	Houseliner FL 5mm DN250-300 (100m)
HL-FL-6850	Houseliner FL 5mm DN300-400 (100m)
HL-FL-7525	Houseliner FIX 2,5mm DN75 (100m)
HL-FL-7550	Houseliner FIX 2,5mm DN100 (100m)

- Extremely fast wet-out process, long working time in relation to curing time, gives you the possibility to make more installations per day

Markus Matsson - Sales & Order



EPOXY

Resin Base, Ultra, Fast, Medium, Slow and Hot Cure



Our range of epoxy resin is tailored to suit most liners. Both woven and felt liner are able to use Houseliner resin.

There are five different curing agents to suit your needs.

Ultra – cures in 2 hours at 20°Celsius, but still gives you approx. 16 minutes of working time.

Fast – cures in 3 hours at 20°Celsius, but still gives you approx. 18 minutes of working time.

Medium – cures in 6 hours at 20°Celsius, and gives you approx. 42 minutes of working time.

Slow – cures in 12 hours at 20°Celsius, and gives you approx. 3 hours of working time.

Hot Cure – made for steam or hot water curing with a high temperature resistance. Working time approx. 70 minutes.

All our curing agents are paired with Houseliner Resin Base. Ultra, Fast, Medium, and Slow are mixable with each other if preferred, or needed, as they all have the same mixing ratio.

Houseliner Resin releases no environmentally hazardous substances when fully cured.

The color is bright orange, making it easy to see when the liner is saturated. Other benefits are that you easily can spot small drops, and identify the liner as a Houseliner product after curing.

Houseliner resin is tracked by Batch No. and the shelf life is expected to be at least 18 months from production date.

Epoxy 1,54 kg

HL-RM-1515	Medium Hardener 0,44 kg and Resin Base 1,1 kg
HL-RF-1510	Fast Hardener 0,44 kg and Resin Base 1,1 kg
HL-RU-1440	Ultra Hardener 0,44 kg and Resin Base 1,1 kg



Epoxy 7,7 kg (6,93 kg)

HL-RS-1500	Slow Hardener 2,2 kg
HL-RM-1500	Medium Hardener 2,2 kg
HL-RF-1490	Fast Hardener 2,2 kg
HL-RU-1430	Ultra Hardener 2,2 kg
HL-RH-1270	Hot Cure Hardener 1,43 kg
HL-BA-002	Resin Base 5,5 kg

ULTRA HARDENER
 Cures in 2 hours at 20°C
 Approx. 16 min working time



Epoxy 14 kg (12,6 kg)	
HL-RS-1420	Slow Hardener 4,0 kg
HL-RM-1415	Medium Hardener 4,0 kg
HL-RF-1410	Fast Hardener 4,0 kg
HL-RU-1420	Ultra Hardener 4,0 kg
HL-RH-1260	Hot Cure Hardener 2,6 kg
HL-BA-001	Resin Base 10 kg

NEW

HOUSELINER® SHAKE 2H

To minimize the shrinkage and to get all the properties from an epoxy for your packer installations, the Houseliner Shake 2h is finally here.

Shake 2h comes in two bottles with two different colors for the base and the curing agency. When mixed and Shaked by hand a new color will occur, that's when you know it's ready to be used. Shake 2h has a fast curing time, and can be used for installations of packers, short repairs and junctions.

During the development we have had companies from different countries giving us feedback, and we are really satisfied with the end result.



SHAKE 2H	
HL-RU-1460	Houseliner Shake 2h 0,91 kg

Mixing ratios for Houseliner Epoxy

Weight in KG	ULTRA, FAST, MEDIUM and SLOW		HOT CURE	
	Base in GRAMS	Hardener in GRAMS	Base in GRAMS	Hardener in GRAMS
1	714	286	794	206
2	1429	571	1587	413
3	2143	857	2381	619
4	2857	1143	3175	825
5	3571	1429	3968	1032
6	4286	1714	4762	1238
7	5000	2000	5556	1444
8	5714	2286	6349	1651
9	6429	2571	7143	1857
10	7143	2857	7937	2063
11	7857	3143	8730	2270
12	8571	3429	9524	2476
13	9286	3714	10317	2683
14	10000	4000	11111	2889
15	10714	4286	11905	3095
16	11429	4571	12698	3302
17	12143	4857	13492	3508
18	12857	5143	14286	3714
19	13571	5429	15079	3921
20	14286	5714	15873	4127
21	15000	6000	16667	4333
22	15714	6286	17460	4540
23	16429	6571	18254	4746
24	17143	6857	19048	4952
25	17857	7143	19841	5159
26	18571	7429	20635	5365
27	19286	7714	21429	5571
28	20000	8000	22222	5778

Resin curing and working times

Curing times					
Temperature	ULTRA	FAST	MEDIUM	SLOW	HOT CURE
+ 10°C	4h	6h	12h	24h	36h
+ 20°C	2h	3h	6h	12h	18h
+ 30°C	1h	90min	3h	6h	9h
+ 40°C	30min	50min	90min	3,5h	5h
+ 50°C	15min	30min	50min	2h	3h
+ 60°C	15min	30min	30min	75min	2h
+ 70°C	15min	30min	30min	50min	90min

Approximately working times at + 20°C				
ULTRA	FAST	MEDIUM	SLOW	HOT CURE
16min	18min	42min	3h	1h 10min

Note:

The Ultra and Fast resin may heat up to very high temperatures if left in large quantities. Be careful with the leftover resin. Minimal required curing temperature is + 10°C

Resin consumption and roller distance metric

Article	HOUSELINER FL 2,5 mm	DN 30-50	DN 40-60	DN 45-70	DN 50-70	DN 63-75	DN 70-100	DN 100-150	DN 110-160	
Resin consumption Houseliner Ultra, Fast, Medium & Slow per linear meter:		0,27 kg	0,35 kg	0,40 kg	0,40 kg	0,55 kg	0,62 kg	0,85 kg	0,93 kg	
Resin consumption Houseliner Hot Cure & UV Epoxy per linear meter:		0,26 kg	0,35 kg	0,39 kg	0,39 kg	0,55 kg	0,61 kg	0,84 kg	0,92 kg	
Resin consumption all resins in Litre per linear meter:		0,25 l	0,33 l	0,38 l	0,38 l	0,52 l	0,58 l	0,80 l	0,88 l	
Roller distance of the impregnation plant:		5,5 mm								
Article	HOUSELINER FL 3 mm	DN 30-50	DN 45-70	DN 50-70	DN 60-75	DN 63-75	DN 63-100	DN 70-100	DN 100-120	DN 100-150
Resin consumption Houseliner Ultra, Fast, Medium & Slow per linear meter:		0,30 kg	0,49 kg	0,49 kg	0,55 kg	0,57 kg	0,62 kg	0,71 kg	1,02 kg	1,02 kg
Resin consumption Houseliner Hot Cure & UV Epoxy per linear meter:		0,30 kg	0,48 kg	0,49 kg	0,54 kg	0,57 kg	0,61 kg	0,70 kg	1,01 kg	1,01 kg
Resin consumption all resins in Litre per linear meter:		0,28 l	0,46 l	0,46 l	0,52 l	0,54 l	0,58 l	0,67 l	0,96 l	0,96 l
Roller distance of the impregnation plant:		6,5 mm								
Article	HOUSELINER FL 4 mm				DN 63-100	DN 70-100	DN 80-110	DN 100-150	DN 120-150	DN 150-225
Resin consumption Houseliner Ultra, Fast, Medium & Slow per linear meter:					0,84 kg	0,93 kg	1,10 kg	1,33 kg	1,55 kg	2,03 kg
Resin consumption Houseliner Hot Cure & UV Epoxy per linear meter:					0,83 kg	0,92 kg	1,09 kg	1,31 kg	1,53 kg	2,01 kg
Resin consumption all resins in Litre per linear meter:					0,79 l	0,88 l	1,04 l	1,25 l	1,46 l	1,92 l
Roller distance of the impregnation plant:		8,5 mm								
Article	HOUSELINER FL 5 mm				DN 150-225	DN 200-250	DN 225-300			
Resin consumption Houseliner Ultra, Fast, Medium & Slow per linear meter:					2,59 kg	3,46 kg	3,89 kg			
Resin consumption Houseliner Hot Cure & UV Epoxy per linear meter:					2,56 kg	3,42 kg	3,84 kg			
Resin consumption all resins in Litre per linear meter:					2,44 l	3,26 l	3,66 l			
Roller distance of the impregnation plant:		10,5 mm								
Article	HOUSELINER FIX 3 mm				DN 75	DN 100	DN 150			
Resin consumption Houseliner Ultra, Fast, Medium & Slow per linear meter:					0,66 kg	0,84 kg	1,33 kg			
Resin consumption Houseliner Hot Cure & UV Epoxy per linear meter:					0,66 kg	0,83kg	1,31 kg			
Resin consumption all resins in Litre per linear meter:					0,63 l	0,79 l	1,25 l			
Roller distance of the impregnation plant:		6,5 mm								
Article	HOUSELINER FLT				DN 50-70	DN 70-100	DN 100-150			
Resin consumption Houseliner Ultra, Fast, Medium & Slow per linear meter:					0,43 kg	0,62 kg	0,82 kg			
Resin consumption Houseliner Hot Cure & UV Epoxy per linear meter:					0,42 kg	0,61kg	0,81 kg			
Resin consumption all resins in Litre per linear meter:					0,4 l	0,58 l	0,77 l			
Roller distance of the impregnation plant:		7 mm								

Resin consumption and roller distance imperial

Article	HOUSELINER FL 2,5 mm	DN 30-50	DN 40-60	DN 45-70	DN 50-70	DN 63-75	DN 70-100	DN 100-150	DN 110-160	
Resin consumption Houseliner Ultra, Fast, Medium & Slow per linear feet (pound):		0,182	0,235	0,269	0,269	0,37	0,417	0,572	0,625	
Resin consumption Houseliner Hot Cure & UV Epoxy per linear feet (pound):		0,175	0,235	0,262	0,262	0,37	0,41	0,565	0,619	
Resin consumption all resins in Gallon per linear feet:		0,021	0,027	0,03	0,03	0,042	0,047	0,065	0,071	
Roller distance of the impregnation plant:		5,5 mm / 0,2165 inch								
Article	HOUSELINER FL 3 mm	DN 30-50	DN 45-70	DN 50-70	DN 60-75	DN 63-75	DN 63-100	DN 70-100	DN 100-120	DN 100-150
Resin consumption Houseliner Ultra, Fast, Medium & Slow per linear feet (pound):		0,202	0,33	0,33	0,37	0,383	0,417	0,477	0,686	0,686
Resin consumption Houseliner Hot Cure & UV Epoxy per linear feet (pound):		0,202	0,323	0,323	0,363	0,383	0,41	0,47	0,679	0,679
Resin consumption all resins in Gallon per linear feet:		0,023	0,037	0,037	0,042	0,044	0,047	0,054	0,077	0,077
Roller distance of the impregnation plant:		6,5 mm / 0,2559 inch								
Article	HOUSELINER FL 4 mm				DN 63-100	DN 70-100	DN 80-110	DN 100-150	DN 120-150	DN 150-225
Resin consumption Houseliner Ultra, Fast, Medium & Slow per linear feet (pound):					0,565	0,625	0,74	0,894	1,05	1,37
Resin consumption Houseliner Hot Cure & UV Epoxy per linear feet (pound):					0,558	0,619	0,733	0,881	1,03	1,35
Resin consumption all resins in Gallon per linear feet:					0,064	0,071	0,084	0,1	0,118	0,155
Roller distance of the impregnation plant:		8,5 mm / 0,3346 inch								
Article	HOUSELINER FL 5 mm				DN 150-225	DN 200-250	DN 225-300			
Resin consumption Houseliner Ultra, Fast, Medium & Slow per linear feet (pound):					1,74	2,264	2,55			
Resin consumption Houseliner Hot Cure & UV Epoxy per linear feet (pound):					1,72	2,238	2,52			
Resin consumption all resins in Gallon per linear feet:					0,197	0,256	0,287			
Roller distance of the impregnation plant:		10,5 mm / 0,4134 inch								
Article	HOUSELINER FIX 3 mm				DN 75	DN 100	DN 150			
Resin consumption Houseliner Ultra, Fast, Medium & Slow per linear feet (pound):					0,444	0,565	0,894			
Resin consumption Houseliner Hot Cure & UV Epoxy per linear feet (pound):					0,442	0,558	0,88			
Resin consumption all resins in Gallon per linear feet:					0,051	0,064	0,101			
Roller distance of the impregnation plant:		6,5 mm / 0,2559 inch								
Article	HOUSELINER FLT				DN 50-70	DN 70-100	DN 100-150			
Resin consumption Houseliner Ultra, Fast, Medium & Slow per linear feet (pound):					0,282	0,406	0,537			
Resin consumption Houseliner Hot Cure & UV Epoxy per linear feet (pound):					0,275	0,4	0,53			
Resin consumption all resins in Gallon per linear feet:					0,032	0,046	0,061			
Roller distance of the impregnation plant:		7mm / 0,2756 inch								



BRANCH PIPE 45°

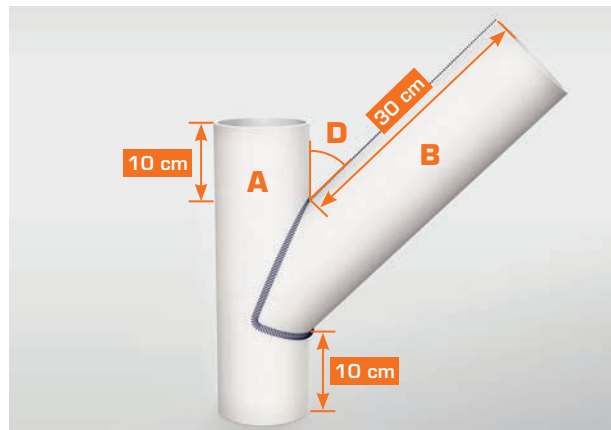
BRANCH PIPES

Installing branch pipes will give you a superior advantage and guarantee the quality for many years. Sacparts provide a form-fitting solution for lateral and horizontal pipe connections. When using our branch pipe tools and a form fitted branch pipe a quick, easy, and reliable renovation will be achieved, even on sewer pipes in poor condition.

- Form-fitted branch pipes for renovation of existing branch pipes.
- Standard DN sizes are from 70 mm up to 225 mm in the main pipe.
- DN from 50 mm up to 225 mm in the branch line connection.
- Standard length of the connection is 30 cm regardless of branch pipe dimensions.
- Flexible and secure connection
- For a leak-free and easy installation.

CUSTOMIZED BRANCH PIPES

In addition to our standard products we also manufacture and develop branch pipes and branch pipe tools to meet our customer's needs.



HOW TO BUY THE RIGHT BRANCH PIPE

We have a lot of branch pipe standards in stock. Our standard branch pipes have 30 cm lateral pipe and 10 cm main pipe above and below the connection to the lateral pipe.

How we name our standard branch pipes:

SP Branch Pipe **A/B-D**

A: Diameter main pipe, e.g. Ø 100 mm

B: Diameter lateral pipe, e.g. Ø 100 mm

D: Angle between main and lateral pipe, e.g. 45°

Branch pipe on the illustration above is named:
SP Branch Pipe 100/100-45

Double and corner branch pipes:

SP Branch Pipe **A/B₁+B₂-D TYPE**

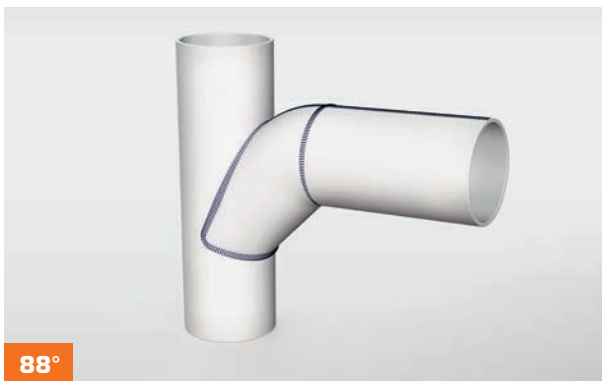
B₁ and B₂: Diameter lateral pipes

TYPE: Type of branch pipe, **double** or **corner**

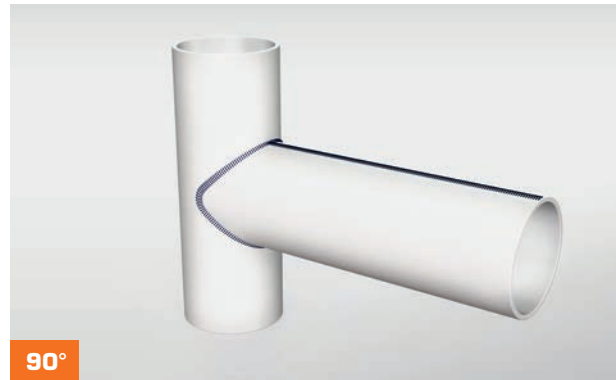
An example of a standard branch pipe double:
SP Branch Pipe 100/100+100-45 Double


45°
Branch Pipes 45°

S1-231-045	SP Branch Pipe 75/75-45
S1-230-50-45	SP Branch Pipe 90/50-45
S1-232-005	SP Branch Pipe 100/50-45
S1-232-045PP	SP Branch Pipe 100/50-45PP
S1-232-007	SP Branch Pipe 100/60-45
S1-232-010	SP Branch Pipe 100/63-45
S1-232-045	SP Branch Pipe 100/75-45
S1-232,5-045	SP Branch Pipe 100/90-45
S1-233-045	SP Branch Pipe 100/100-45
S1-236-045	SP Branch Pipe 125/60-45
S1-236-7545	SP Branch Pipe 125/75-45
S1-237-045	SP Branch Pipe 125/100-45
S1-238-045	SP Branch Pipe 125/125-45
S1-241-045	SP Branch Pipe 150/75-45
S1-242-045	SP Branch Pipe 150/100-45
S1-2421-45	SP Branch Pipe 150/125-45
S1-243-045	SP Branch Pipe 150/150-45
S1-248-045	SP Branch Pipe 200/75-45
S1-249-045	SP Branch Pipe 200/100-45
S1-2491-045	SP Branch Pipe 200/125-45
S1-250-045	SP Branch Pipe 200/150-45
S1-251-045	SP Branch Pipe 200/200-45
S1-244-045	SP Branch Pipe 225/75-45
S1-245-045	SP Branch Pipe 225/100-45
S1-2451-045	SP Branch Pipe 225/125-45
S1-246-045	SP Branch Pipe 225/150-45
S1-247-045	SP Branch Pipe 225/225-45


88°
Branch Pipes 88°

S1-231-088	SP Branch Pipe 75/75-88
S1-232-006	SP Branch Pipe 100/50-88
S1-232-020	SP Branch Pipe 100/63-88
S1-232-088	SP Branch Pipe 100/75-88
S1-233-088	SP Branch Pipe 100/100-88
S1-233-188	SP Branch Pipe 100/100-88PP
S1-241-088	SP Branch Pipe 150/75-88
S1-242-088	SP Branch Pipe 150/100-88
S1-243-088	SP Branch Pipe 150/150-88
S1-248-088	SP Branch Pipe 200/75-88
S1-249-088	SP Branch Pipe 200/100-88
S1-250-088	SP Branch Pipe 200/150-88
S1-244-088	SP Branch Pipe 225/75-88
S1-245-088	SP Branch Pipe 225/100-88
S1-246-088	SP Branch Pipe 225/150-88
S1-247-088	SP Branch Pipe 225/225-88


90°
Branch Pipes 90°

S1-231-090	SP Branch Pipe 75/75-90
S1-230-90	SP Branch Pipe 90/90-90
S1-230-100-90	SP Branch Pipe 90/100-90
S1-232-004	SP Branch Pipe 100/50-90
S1-232-090PP	SP Branch Pipe 100/50-90PP
S1-232-008	SP Branch Pipe 100/60-90
S1-232-021	SP Branch Pipe 100/63-90
S1-232-090	SP Branch Pipe 100/75-90
S1-232,5-090	SP Branch Pipe 100/90-90
S1-233-090	SP Branch Pipe 100/100-90
S1-236-090	SP Branch Pipe 125/60-90
S1-236-7590	SP Branch Pipe 125/75-90
S1-237-090	SP Branch Pipe 125/100-90
S1-238-090	SP Branch Pipe 125/125-90
S1-241-090	SP Branch Pipe 150/75-90
S1-242-090	SP Branch Pipe 150/100-90
S1-2421-90	SP Branch Pipe 150/125-90
S1-243-090	SP Branch Pipe 150/150-90
S1-249-090	SP Branch Pipe 200/100-90

Branch Pipes 90°

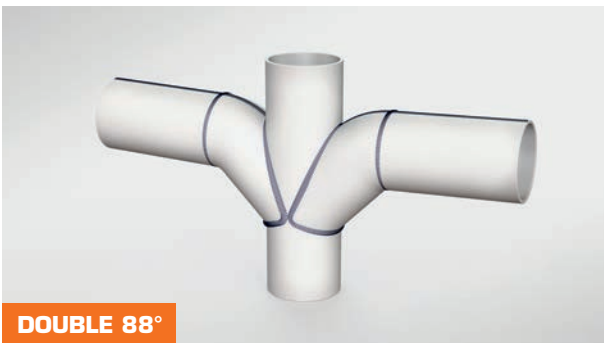
S1-2491-090	SP Branch Pipe 200/125-90
S1-250-090	SP Branch Pipe 200/150-90
S1-251-090	SP Branch Pipe 200/200-90
S1-245-090	SP Branch Pipe 225/100-90
S1-2451-090	SP Branch Pipe 225/125-90
S1-246-090	SP Branch Pipe 225/150-90
S1-247-090	SP Branch Pipe 225/225-90



DOUBLE 45°

Branch Pipes Double 45°

S1-232-045D	SP Branch Pipes 100/75+75-45 Double
S1-234-145D	SP Branch Pipes 100/100+75-45 Double
S1-234-045D	SP Branch Pipes 100/100+100-45 Double
S1-237-045D	SP Branch Pipes 125/75+75-45 Double
S1-242-045D	SP Branch Pipes 150/100+100-45 Double



DOUBLE 88°

Branch Pipes Double 88°

S1-232-088D	SP Branch Pipe 100/75+75-88 Double
S1-234-188D	SP Branch Pipe 100/100+75-88 Double
S1-234-088D	SP Branch Pipe 100/100+100-88 Double
S1-242-088D	SP Branch Pipe 150/100+100-88 Double



DOUBLE 90°

Branch Pipes Double 90°

S1-236-090D	SP Branch Pipe 100/50+50-90 Double
S1-239-090D	SP Branch Pipe 100/100+75-90 Dubbel
S1-234-090D	SP Branch Pipe 100/100+100-90 Double
S1-237-090D	SP Branch Pipe 125/75+75-90 Double
S1-242-090D	SP Branch Pipe 150/100+100-90 Double



CORNER 45°

Branch Pipes Corner 45°

S1-235-045H	SP Branch Pipe 100/100+100-45 Corner
S1-242-045H	SP Branch Pipe 150/100+100-45 Corner



CORNER 88°

Branch Pipes Corner 88°

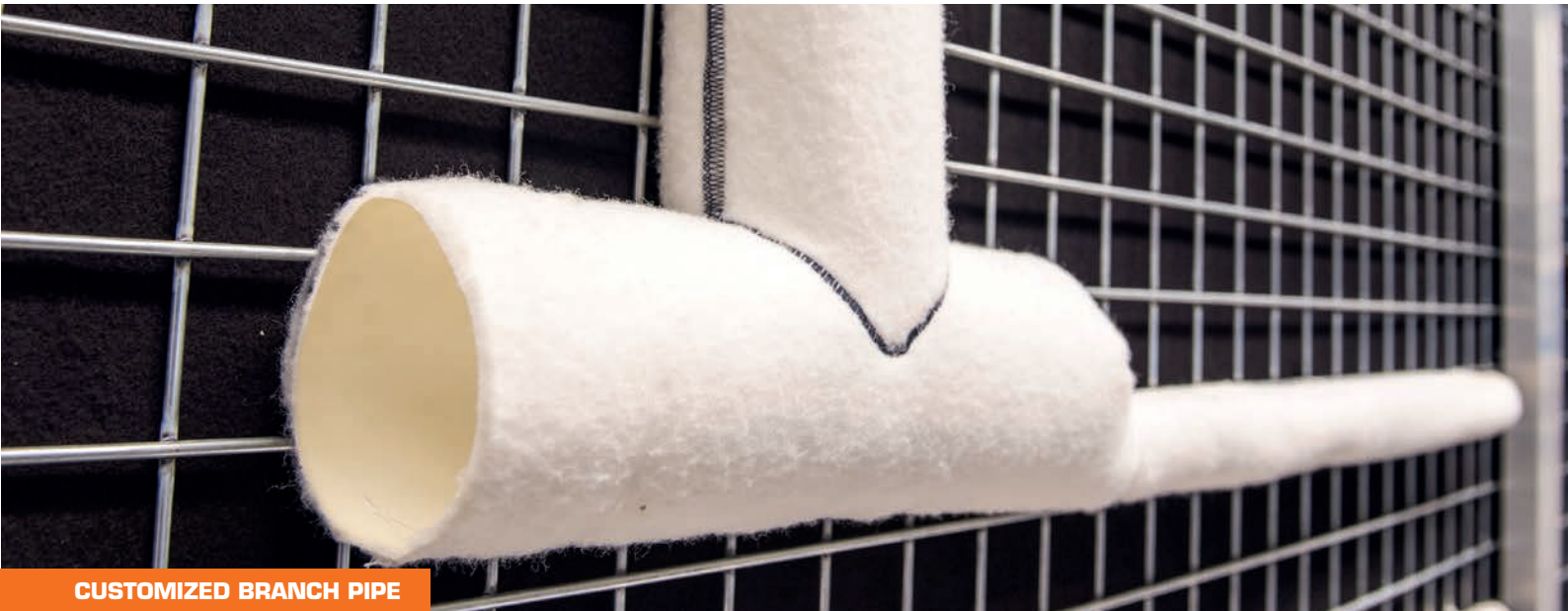
S1-232-088H	SP Branch Pipe 100/75+75-88 Corner
S1-234-388H	SP Branch Pipe 100/75+100-88 Corner
S1-234-288H	SP Branch Pipe 100/100+75-88 Corner
S1-235-088H	SP Branch Pipe 100/100+100-88 Corner
S1-242-088H	SP Branch Pipe 150/100+100-88 Corner



CORNER 90°

Branch Pipes Corner 90°

S1-235-090H	SP Branch Pipe 100/100+100-90 Corner
S1-242-090H	SP Branch Pipe 150/100+100-90 Corner



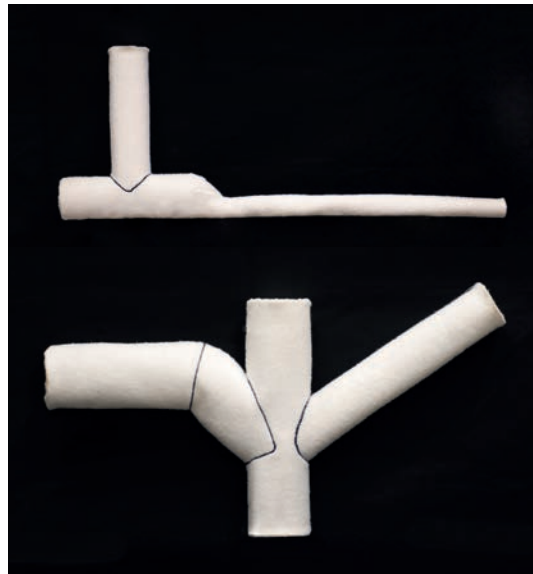
CUSTOMIZED BRANCH PIPE

CUSTOMIZED BRANCH PIPES

With our experience of over 30 years in the industry, we know that pipes and branch pipes can have dimensions and shapes that are anything but standard. Therefore, we offer customized solutions for both branch pipes and tools. Thanks to our efficient production, we can, despite the most extreme installation projects, offer fast deliveries.

UNIQUE BRANCH PIPES

Do you need longer main and lateral pipe sections? Dimension changes on the main pipe? Four lateral pipes on the same branch pipe? We can create almost anything you want. With your input together with the expertise of our technical team we manufacture the branch pipes and tools you need for your unique situation.



Branch Pipes Special

S1-232-078D	SP Branch Pipe 100/75+75-78 Double
S1-900-901	SP Branch Pipe satellit 100/100+100+75+75-90

- For me, the total width of our range is super important. That we can offer tailored connections with short lead times is one of those things that I am very proud of.

Ville Laine - Head of Operation SACPRO OY





RELINING CONNECTION Ø 75 AND Ø 110

RELINING CONNECTION

HOUSELINER SYSTEM

Our Relining Connection is included in the Houseliner System. It is designed to secure the connection between standard waste water pipes and the relined pipe system. The connection is 100% leak-free throughout, to ensure that no moisture can penetrate between the new relining and the old pipe.

The Jet clamp is included in the Relining Connection package. The recommended sealant Sikaflex-521 FC is sold separately.

The installation guide has easy-to-follow instructions on how to install the Relining Connection in a quick, safe and reliable way. The result will be a safe and leak-free connection.

The Relining Connection is a major part of Houseliner System and will of course work perfectly well together with other types of relining, where a secure connection is required.

Relining Connection	
S1-200-110PKT	Relining Connection Ø 110 PP STR incl. Jet Clamp
S1-200-075PKT	Relining Connection Ø 75 PP STR incl. Jet Clamp
S5-151-002	Sikaflex-521 FC



- Back when we were installing contractors, we sometimes had problems with the joint between the new lining and the old pipes leaking. We developed the relining connection and it solved all our problems. It is super easy to install and always gives a good end result.

Tomas Sjögren - Sales Manager





Installing a Branching Connection



BRANCHING CONNECTION

HOUSELINER SYSTEM



BRANCHING CONNECTION

Use Branching Connection to open up for new connections on the lateral pipes. Branching Connection can be connected to pipes with dimensions DN 75/80 and DN 110. The black ring fits DN 75/80 and the blue fits DN 110.

Branching Connection

S1-200-050	Branching Connection Ø 50 stainless
------------	-------------------------------------



HOLE SAW PACKAGE

Hole Saw Package for Branching Connection
Complete package for opening holes when mounting Sacparts Branching Connections. Holder, center drill and two HSS Bi-Metal hole saws.

Holesaw Branching Connection

S5-631-080	Hole Saws Package (Branching Connection) Pro fit
S5-631-082	Holesaw Ø64 Pro fit
S5-631-081	Holesaw Ø44 Pro fit
S5-631-083	Center Drill Pro fit
S5-631-002	Holder Holesaw 2L 63-76
S5-631-076	Holesaw Ø76 for Branching Connection

RAPTOR CUTTER



HOUSELINER RAPTOR CUTTER



RAPTOR CUTTER

HOUSELINER DRAIN CLEANING

Houseliner Raptor Cutter is the newest innovation in high-speed drain cleaning.

With its advanced wireless control and patented quickfit reel system this machine is extremely versatile and easy to work with. The reels are available in two versions, 8-10mm and 10-12mm.

Maximum shaft lengths:
 Ø 8mm - Max length 30 m
 Ø 10mm - Max length 26 m
 Ø 12mm - Max length 23 m

- Advanced wireless control
- Lightweight and portable
- Patented quickfit reel
- Easily fits through doorways
- Operates laying down or standing up
- Adjustable handle for easier storage
- Built in safety features

NEW

Raptor Cutter / Shaft

HL-RP-100	Houseliner Raptor Cutter
HL-RP-110	Houseliner Microreptile
S5-452-008	Shaft with cover Ø 8mm
S5-452-010	Shaft with cover Ø 10mm
S5-452-012	Shaft with cover Ø 12mm



SHAFT SIZES

ACCESSORIES

DRAIN CLEANING



Houseliner Reinstatement Tool / Liner Remover

HL-RP-077	Houseliner Reinstatement Tool DN75
HL-RP-078	Houseliner Reinstatement Tool DN100
HL-RP-079	Houseliner Reinstatement Tool DN150
HL-RP-080	Houseliner Liner Remover DN75
HL-RP-081	Houseliner Liner Remover DN100
HL-RP-082	Houseliner Liner Remover DN150



ASSEMBLED GRINDING HUB

Houseliner Grinding Hub

HL-RP-083	Houseliner Grinding Hub DN75
HL-RP-084	Houseliner Grinding Hub DN100
HL-RP-085	Houseliner Grinding Hub DN150



Houseliner Grinding Panel

HL-RP-086	Houseliner Grinding Panel DN75
HL-RP-087	Houseliner Grinding Panel DN100
HL-RP-088	Houseliner Grinding Panel DN150



Houseliner Support Panel

HL-RP-089	Houseliner Support Panel DN75
HL-RP-090	Houseliner Support Panel DN100
HL-RP-091	Houseliner Support Panel DN150



SCALING CHAINS

HOUSELINER CHAINS



Houseliner Viper Chain

HL-RP-001	Houseliner Viper Chain DN50 8mm
HL-RP-002	Houseliner Viper Chain DN75 8mm
HL-RP-003	Houseliner Viper Chain DN100 8mm
HL-RP-023	Houseliner Viper Chain DN75 10mm
HL-RP-024	Houseliner Viper Chain DN100 10mm
HL-RP-026	Houseliner Viper Chain DN150 10mm
HL-RP-050	Houseliner Viper Chain DN75 12mm
HL-RP-052	Houseliner Viper Chain DN100 12mm
HL-RP-054	Houseliner Viper Chain DN150 12mm



Houseliner Trident Chain

HL-RP-038	Houseliner Trident Chain DN100 10mm
HL-RP-040	Houseliner Trident Chain DN150 10mm
HL-RP-072	Houseliner Trident Chain DN100 12mm
HL-RP-074	Houseliner Trident Chain DN150 12mm
HL-RP-076	Houseliner Trident Chain DN225 12mm



Houseliner Cyclone Chain

HL-RP-130	Houseliner Cyclone DN75 8mm
HL-RP-131	Houseliner Cyclone DN100 8mm
HL-RP-132	Houseliner Cyclone DN75 10mm
HL-RP-133	Houseliner Cyclone DN100 10mm
HL-RP-134	Houseliner Cyclone DN150 10mm
HL-RP-135	Houseliner Cyclone DN100 12mm
HL-RP-136	Houseliner Cyclone DN150 12mm



Houseliner Pike Chain

HL-RP-137	Houseliner Pike DN50 (2 links) 8mm
HL-RP-138	Houseliner Pike DN75 8mm
HL-RP-139	Houseliner Pike DN100 8mm
HL-RP-140	Houseliner Pike DN75 10mm
HL-RP-141	Houseliner Pike DN100 10mm
HL-RP-142	Houseliner Pike DN150 10mm
HL-RP-143	Houseliner Pike DN75 12mm
HL-RP-144	Houseliner Pike DN100 12mm
HL-RP-145	Houseliner Pike DN150 12mm



Houseliner PVC Chain

HL-RP-008	Houseliner PVC Chain DN50 8mm
HL-RP-009	Houseliner PVC Chain DN75 8mm
HL-RP-010	Houseliner PVC Chain DN100 8mm
HL-RP-030	Houseliner PVC Chain DN75 10mm
HL-RP-031	Houseliner PVC Chain DN100 10mm
HL-RP-033	Houseliner PVC Chain DN150 10mm
HL-RP-034	Houseliner PVC Chain DN200 10mm
HL-RP-062	Houseliner PVC Chain DN100 12mm
HL-RP-064	Houseliner PVC Chain DN150 12mm
HL-RP-065	Houseliner PVC Chain DN200 12mm



EXTRUDER EXO 700



EXO700 INVERSION DRUM

HOUSELINER EXTRUDER

The Houseliner EXO700 Extruder is the first size in a new range of Extruders.

Lightweight drum and frame where the latter are detachable in two ways, the complete frame, or just the wheels, all by just pulling a tab. With the frame off, the Extruder has its own

"feet" to stand on. The frame has integrated holders for cordless drill, storz key, and hose clamps. Probably the industry's largest sight glass, that opens with only one lever. Internal lighting as an option. Suitable for ambient, steam, hot water, or UV curing.

Model	Weight	Off wheel-stand	Stacked Liner Length*	Max Liner Length*	Width	Length	Height	Off wheel-stand
Extruder EXO 700	55 kg/ 121 lb	40 kg/ 88 lb	45 m/ 147 ft	70 m/ 229 ft	63 cm/ 24,8 in	95 cm/ 37,4 in	107 cm/ 42,1 in	82 cm/ 32,3 in

*1) Recommended maximum length with Houseliner DN100-150 FL 3mm wet-out liner.

NEW

EXO Inversion Drums

S4-601-850 Extruder EXO 700 Alu

Produced according to SS EN ISO 13445-8

-We design our products with a focus on function, user-friendliness and appealing design. Our extruders are a brilliant example of that.

Fredrik Åhslund - Product Designer



INVERSION DRUMS

HOUSELINER EXTRUDERS

Houseliner Extruders are inversion drums developed for liner installation with air pressure. They are designed to go through regular doorways. You can bring them all the way into apartment bathrooms.

Houseliner Extruders are available in five different sizes to meet all your needs. The Inversion drum is made of aluminum for maximum strength combined with low weight. The larger drums have large sight glass that provide a good overview into the pressure vessel during work.

Houseliner Extruders are the perfect tool for liner installation inside building with a fully controlled and safe inversion process. Suitable for ambient, steam, hot water, or UV curing.



EXTRUDER 700 SLIM



EXTRUDER 900



EXTRUDER 700



EXTRUDER 500



EXTRUDER 350

Model	Weight	Off wheel-stand	Stacked Liner Length*	Max Liner Length*	Width	Length	Height	Off wheel-stand
Extruder 900	80 kg/ 176 lb	-	70 m/ 229 ft	100 m/ 328 ft	82 cm/ 32,3 in	120 cm/ 47,3 in	128 cm/ 50,4 in	-
Extruder 700 Slim	63 kg/ 139 lb	53kg/ 117 lb	45 m/ 147 ft	70 m/ 229 ft	59 cm/ 23,2 in	98 cm/ 38,6 in	114 cm/ 44,9 in	96 cm/ 37,8 in
Extruder 700	52 kg/ 114 lb	-	45 m/ 147 ft	70 m/ 229 ft	72 cm/ 28,4 in	91 cm/ 35,8 in	118 cm/ 46,5 in	-
Extruder 500	39 kg/ 86 lb	-	22 m/ 72 ft	35 m/ 114 ft	63 cm/ 24,8 in	86 cm/ 33,6 in	112 cm/ 44,1 in	-
Extruder 350	16 kg/ 35 lb	-	-	11 m/ 36 ft	44 cm/ 17,3 in	55 cm/ 21,7 in	48 cm/ 18,9 in	-

*1 Recommended maximum length with Houseliner DN100-150 FL 3mm wet-out liner.

Inversion Drums

S4-601-200	Extruder ST 200 Alu
S4-601-350	Extruder ST 350 Alu
S4-601-500	Extruder ST 500 Alu
S4-601-700	Extruder ST 700 Alu
S4-601-750	Extruder ST 700 Slim Alu
S4-601-900	Extruder ST 900 Alu

Produced according to SS EN ISO 13445-8



ALL HOUSELINER EXTRUDERS ARE AVAILABLE WITH STORZ OR CAMLOCK COUPLING

ACCESSORIES

INVERSION DRUMS



STRAIGHT



45°



90°



STEAM



HOSE



CAMLOCK STRAIGHT

Storz accessories

S4-603-004	Rubber gasket Storz 6"
S4-603-013	Storz 6" Cover Alu.
S4-603-003	Storz A Cover 4"
S4-603-010	Storz Transition 6"-8" 150-205
S4-603-008	Storz Transition Reduc 4" x 6" 133 - 160, Svivel
S4-603-021	Storz lever 100-150 alu (6)
S4-603-030	Inversion (Straight) Storz 4" to liner Ø 75, Hose
S4-603-031	Inversion (Straight) Storz 4" to liner Ø 150, Hose
S4-603-040	Inversion (Straight) Storz 4" to liner Ø 100, Hose
S4-603-018	Inversion (Straight) Storz 6" to liner Ø 50
S4-603-047	Inversion (Straight) Storz 6" to liner Ø 75
S4-603-048	Inversion (Straight) Storz 6" to liner Ø 100
S4-603-048,5	Inversion (Angle 45°) Storz 4" to liner Ø 75
S4-603-049	Inversion (Angle 45°) Storz 4" to liner Ø 100
S4-603-049,5	Inversion (Angle 90°) Storz 4" to liner Ø 75

S4-603-050	Inversion (Angle 90°) Storz 4" to liner Ø 100
S4-603-051	Inversion (Straight) Storz 6" to liner Ø 150
S4-603-052	Inversion (Angle 45°) Storz 6" to liner Ø 150
S4-603-053	Inversion (Angle 90°) Storz 6" to liner Ø 150

Camlock accessories

S4-603-160	Inversion (Straight) 6" Ø50/2"
S4-603-161	Inversion (Straight) 6" Ø75/3"
S4-603-162	Inversion (Straight) 6" Ø100/4"
S4-603-163	Inversion (Straight) 6" Ø150/4"
S4-603-164	Inversion (Straight) 8" Ø200/8
S4-603-166	Camlock Transition 6"- 8"
S4-603-167	Camlock female 6"
S4-603-168	Camlock female 8"
S4-603-169	Camlock male 6" lid



END PLUG

End plugs

S4-603-072	End plug Ø 40 with grommet incl. hose and valve
S4-603-070	End plug Ø 60 with grommet incl. hose and valve

Liner lubricating spray system

S4-601-101	Liner lubricating system
------------	--------------------------



HOLDERS FOR LINER

Holders for liner

S4-604-000	Holders for liner, kit 3/4/6"
------------	-------------------------------

Clamping pliers

S4-603-028	Clamping pliers 280
------------	---------------------

HEAT CURING

STEAM GENERATORS



STEAM UNIT MEDIUM

By adding heat during the curing process, the installation will be faster and performed in a controlled manor. With determined temperature, the risk of ending up with an installation that isn't completely cured is eliminated.

STEAM UNIT MEDIUM

Steam Unit Medium ha a heating power of 6 kW and requires a 3-phase, 400v, 16A power supply. Quick start-up, free from diesel spills and fumes. Continuous water connection to the steam unit allows continuous operation.

Low centre of gravity, large wheels and ergonomic design makes the transportation of the steam generator convenient all the way to the work sight. Easy to understand and secure operation with all controls gadered on a control panel.



STEAM BOX SMALL 1400

STEAM BOX SMALL 1400

Electrical Steam Box Small 1400 for steam curing when installing branch pipes. Heating power of 1,4 kW and requires 1 phase 240V power supply.

Steam Genarators

BW-601-010	Steam Box Small 1400
S4-801-001	Steam Unit Medium

TEMPERATURE SENSOR

Equipment to monitor the temperature during the curing process of the branch pipe or liner installation. The wire for the temperature sensor is sold separately.

Temperature Sensor

EL-100-000	Temperature Sensor Package
EL-100-006	Wire for the Temperature Sensor, 25m, Spool

Hose kit steam for packer holder tools

S5-201-101	Hose kit. steam fixture Ø 60
S5-201-102	Hose kit. steam fixture Ø 80



PRESSURE GUARD

PRESSURE GUARD

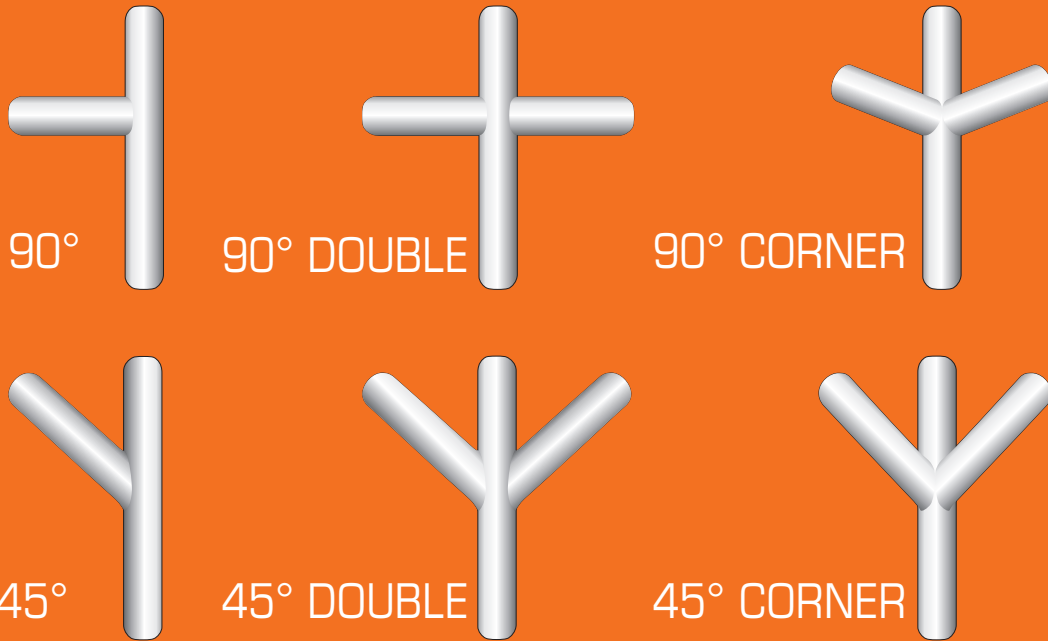
Avoid liner collapse during the curing process.

The Pressure Guard is a monitoring device that will send you an alert through a text message, if the pressure in the installation becomes too low, or if there is a power loss. The Pressure Guard eases the installers workload as he is not required to be on site during the entire curing process and can proceed with other work duties.

Several cell phone numbers can be programmed with the included software. This is an easy to use, very cost efficient and reassuring device that will eliminate unpleasant surprises when returning to a cured installation.

Pressure Guard

S4-730-020	Pressure Guard
------------	----------------



BRANCH PIPE TOOLS

Sacpro provides branch pipe tools in many different standard designs. We also manufacture customized versions.

Every branch pipe tool includes a packer cover and packer holder for the specific branch pipe you are about to install. Sacpro has many different versions in stock, to fit most standard pipes on the market.

BLADDER MATERIAL

Sacpro have three different bladder materials:



STANDARD

A reliable material that must be lubricated with grease. Thin, flexible and stretchable. Durable for multiple installations. This material is also repairable out in the field.



DUAL LAYER SILICONE SURFACE

A reliable material with a silicone surface that does not require lubrication with grease. Thin, flexible and stretchable. Durable for multiple installations.



SILICONE

A reliable silicone material that does not require lubrication with grease. Flexible and stretchable material. Durable for multiple installations.

- RIGID OR FLEXIBLE TOOLS
- CORD FOR CONTROLLED INSTALLATIONS
- DOUBLE RODS INSIDE FOR EASIER POSITION ADJUSTMENTS
- WITH OR WITHOUT STEAM
- REPLACEABLE BLADDERS

RIGID OR FLEXIBLE TOOLS

Our standard tools are rigid tools that are easy to use but do not go through a 90° bend.

Flextool is a tool that goes through 90° bends. It can easily move back and forth through the bends. This makes it possible to install branch pipes even behind several sharp bends. The Flextool is an extremely flexible, yet rotatable tool that guides the branch pipes into the right position. The tool is guided into place with flexible rods (Flexrod) and is compliant with Ridgid® push-rods. The bladder is replaceable.

FLEXTOOL BL

Our flexible packer holder tool that have the same features as the regular Flextool but is suited for installations from the branch line.

CUSTOMIZED TOOLS

In addition to standard dimensions for standard branch pipes, Sacpro manufactures custom branch pipe tools, to meet our customer's needs.



SILICONE BLADDER DOME

Bladders 45°			
Dimension	Standard	Silicone Dome	Silicone String
75/75-45	S3-342-045	S8-442-045	S8-342-045
100/50-45	S3-348-045	MTO*	MTO*
100/50-45PP	S3-348-045PP	MTO*	MTO*
100/63-45	S3-349-045	MTO*	MTO*
100/75-45	S3-350-045	S8-450-045	S8-350-045
100/100-45	S3-351-045	S8-451-045	S8-351-045
125/60-45	S3-3511-6045	MTO*	MTO*
125/75-45	S3-3511-045	MTO*	S8-3511-045
125/100-45	S3-3512-045	MTO*	S8-3512-045
125/125-45	S3-3513-045	MTO*	S8-3513-045
150/75-45	S3-352-045	S8-452-045	S8-352-045
150/100-45	S3-353-045	S8-453-045	S8-353-045
150/125-45	S3-3531-45	MTO*	S8-3531-045
150/150-45	S3-354-045	S8-454-045	S8-354-045
200/75-45	S3-359-045	MTO*	S8-355-045
200/100-45	S3-360-045	MTO*	S8-356-045
200/125-45	S3-361-045	MTO*	MTO*
200/150-45	S3-362-045	MTO*	S8-362-045
200/200-45	S3-363-045	MTO*	S8-358-045
225/75-45	S3-355-045	MTO*	S8-355-045
225/100-45	S3-356-045	MTO*	S8-356-045
225/125-45	S3-3561-045	MTO*	MTO*
225/150-45	S3-357-045	MTO*	S8-362-045
225/225-45	S3-358-045	MTO*	S8-358-045

Bladders 90°			
Dimension	Standrad	Silicone Dome	Silicone String
63/63-90	S3-343-090	MTO*	MTO*
75/63-90	S3-342-190	MTO*	MTO*
75/75-90	S3-342-090	S8-442-090	S8-342-090
100/50-90PP	S3-349-6050PP	MTO*	MTO*
100/63-90	S3-349-6090	MTO*	MTO*
100/75-90	S3-350-090	S8-450-090	S8-350-090
100/100-90	S3-351-090	S8-451-090	S8-351-090
125/60-90	S3-3511-6090	MTO*	MTO*
125/75-90	S3-3511-090	MTO*	S8-3511-090
125/100-90	S3-3512-090	MTO*	S8-3512-090
125/125-90	S3-3513-090	MTO*	S8-3513-090
150/63-90	S3-251-090	MTO*	MTO*
150/75-90	S3-352-090	S8-452-090	S8-352-090
150/100-90	S3-353-090	S8-453-090	S8-353-090
150/125-90	S3-3531-90	MTO*	S8-3531-090
150/150-90	S3-354-090	S8-454-090	S8-354-090
200/75-90	S3-359-090	MTO*	MTO*
200/100-90	S3-360-090	MTO*	S8-356-090
200/125-90	S3-361-090	MTO*	MTO*
200/150-90	S3-362-090	MTO*	S8-362-090
200/200-90	S3-363-090	MTO*	S8-358-090
225/75-90	S3-355-090	MTO*	MTO*
225/100-90	S3-356-090	MTO*	S8-356-090
225/125-90	S3-3561-090	MTO*	MTO*
225/150-90	S3-357-090	MTO*	S8-362-090
225/225-90	S3-358-090	MTO*	S8-358-090

* Made To Order





COMPLETE BRANCH PIPE FLEXTOOL BL FOR 45°

Bladders 45° Double

Dimension	Standard	Silicone Dome	Silicone String
100/75+75-45D	S3-350-145D	MTO*	S8-350-145D
100/100+63-45D	S3-351-063D	MTO*	MTO*
100/100+75-45D	S3-350-045D	MTO*	MTO*
100/100+100-45D	S3-351-045D	MTO*	S8-351-045D
125/75+75-45D	S3-3511-045D	MTO*	MTO*
150/75+75-45D	S3-3531-045D	MTO*	MTO*
150/100+100-45D	S3-353-045D	MTO*	S8-353-045D

Bladders 78° Double

Dimension	Standard	Silicone Dome	Silicone String
100/75+75-78D	S3-350-078D	MTO*	MTO*

Bladders 90° Double

Dimension	Standard	Silicone Dome	Silicone String
100/50+50-90D	S3-351-190D	MTO*	MTO*
100/100+75-90D	S3-354-090D	MTO*	S8-350-190D
100/100+63-90D	S3-354-063D	MTO*	MTO*
100/100+75-90D	S3-354-090D	MTO*	MTO*
100/100+100-90D	S3-351-090D	MTO*	S8-351-090D
125/75+75-90D	S3-3511-090D	MTO*	MTO*
150/100+100-90D	S3-353-090D	MTO*	S8-353-090D

Bladders 45° Corner

Dimension	Standard	Silicone Dome	Silicone String
100/75+75-45C	S3-350-145H	MTO*	S8-350-145H
100/100+75-45C	S3-351-145H	MTO*	MTO*
100/100+100-45C	S3-351-045H	MTO*	S8-351-045H
150/100+100-45C	S3-353-045H	MTO*	MTO*

Bladders 68° Corner

Dimension	Standard	Silicone Dome	Silicone String
100/100+100-68C	S3-351-068H	MTO*	MTO*

* Made To Order

Bladders 90° Corner

Dimension	Standard	Silicone Dome	Silicone String
100/75+75-90C	MTO*	MTO*	S8-350-190H
100/100+75-90C	S3-351-190H	MTO*	S8-351-190H
100/100+100-90C	S3-351-090H	MTO*	S8-351-090H
150/100+100-90C	S3-353-090H	MTO*	MTO*

BL Bladders

Dimension	Standard
100/100-45	DL-100-001
100/100-90	DL-100-002
150/150-45	S8-363-045
150/150-90	S8-363-090

Bladders Dual Layer Silicon Surface

Dimension	Standard
75/75-45	DL-342-045
100/50-45	DL-348-045
100/50-45PP	DL-348-045PP
100/75-45	DL-350-045
100/100-45	DL-351-045
125/75-45	DL-3511-045
125/100-45	DL-3512-045
125/125-45	DL-3513-045
75/75-90	DL-342-090
100/50-90PP	DL-349-6050PP
100/75-90	DL-350-090
100/100-90	DL-351-067
125/75-90	DL-3511-090
125/100-90	DL-3512-090
125/125-90	DL-3513-090
100/75+75-45D	DL-350-145D
100/100+75-45D	DL-360-045D
100/100+100-45D	DL-351-045D
100/100+75-90D	DL-354-090D
100/100+100-90D	DL-351-090D



FLEXTOOL

Flextools

S4-700-040	Bladder holder tool Flextool 40 Ø100-125
S4-700-041	Bladder holder tool Flextool 40 Ø100-125 Steam
S4-700-070	Bladder holder tool Flextool 70 Ø150
S4-700-071	Bladder holder tool Flextool 70 Ø150 Steam
S4-700-072	Bladder holder tool Flextool BL 70 Ø150
S4-700-042	Bladder holder tool Flextool BL 40 Ø100-125

BLADDER HOLDER FLEXTOOLS

Bladder holders Ø200-225

S4-700-130	Bladder holder 130 Ø200-225
S4-700-131	Bladder holder 130 Ø200-225 Steam



BLADDER HOLDER STEAM

Bladder holders Ø150

S4-700-080	Bladder holder 80 Ø150
S4-700-081	Bladder holder 80 Ø150 Steam

Bladder holders Ø100-125

S4-700-060	Bladder holder 60 Ø100-125
S4-700-061	Bladder holder 60 Ø100-125 Steam

Bladder holders Ø70

S4-700-034	Bladder holder 40 Ø70
S4-700-035	Bladder holder 40 Ø70 Steam



FLEXROD

PUSH- AND FLEXRODS

Flexrod are flexible rods that goes through 90° bends and are designed to work in combination with Flextool. The flexible rods are compatible with Ridgid® push-rods.

Flexrods

S4-800-001	Flexrod 1 m
S4-800-002	Flexrod 2 m
S4-800-003	Flexrod 3 m

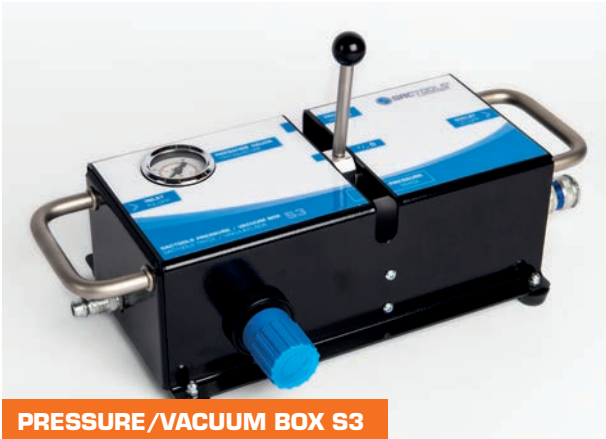


Ridgid push-rods are to be connected to the bracket located on the fixture for installation.

Ridgid push-rods

BW-604-090	Ridgid push-rod 900 mm
BW-604-150	Ridgid push-rod 1500mm

ACCESSORIES BRANCH PIPE TOOLS



PRESSURE/VACUUM BOX S3

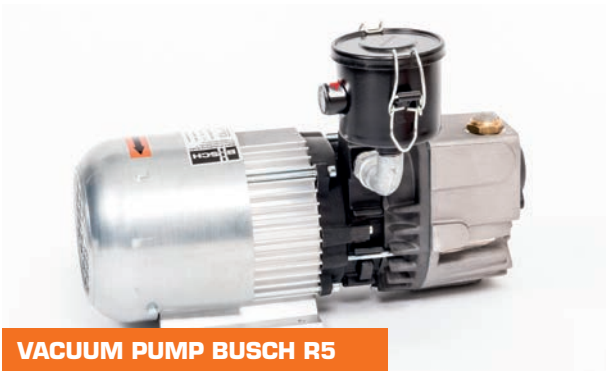
PRESSURE/VACUUM BOX S3

The Pressure/Vacuum Box is an important tool to make branch pipe installations easier.

- Pressure and vacuum
- Single lever operation
- Built-in precision regulator
- Makes installations easier
- Weight 3,2 kg

Sactools Pressure/Vacuum Box S3

S4-630-020	Pressure/Vacuum Box S3
------------	------------------------



VACUUM PUMP BUSCH R5

Vacuum pump

BU-100-002	Vacuum pump Busch R5 2008l/min
BU-200-001	Vacuum pump Busch (portable)

Accessories pressure/vacuum

S4-660-001	Precision pressure regulator
S4-631-001	Suction cup Pi-vac B75P.5E G40M
S4-630-001	Vacuum ejector mini kit



BAND-IT HOSE CLAMP

BAND-IT HOSE CLAMP

A stylish, durable and above all an incredibly smooth hose clamp. Perfect when fixing the bladder on the bladder holder. The BAND-IT hose clamp is to be tightened with a BAND-IT Tool. The hose clamp is available in multiple sizes.

Band IT Hose Clamp

S5-222-063	Band IT Jr. 12,7 x 63
S5-222-088	Band IT Jr. 12,7 x 88
S5-222-101	Band IT Jr. 19,1 x 101
S5-222-133	Band IT Jr. 19,1 x 133
S5-222-152	Band IT Jr. 19,1 x 152

Band IT Tool

S5-650-001	Band IT Tool incl. Heavy Duty Adaptor
------------	---------------------------------------

LUBRICATION

The Hydro Gliss Gel is used to lubricate the bladder in order to prevent the resin from sticking to the bladder cover.



LUBRICATION GEL

S6-200-100	Hydro Gliss Gel (500ml)
------------	-------------------------

SILICONE SPRAY

Silicone spray is used to lubricate the inside of the bladder cover.

Silicon spray

S5-156-030	Revolta S.I.L Spray 400ml
------------	---------------------------

IMPREGNATION UNITS

Devices to evenly distribute the resin when impregnating a liner. The impregnation units are perfect tools for achieving the best results regarding thickness and distribution of resin within the liner, which improves the final result considerably.

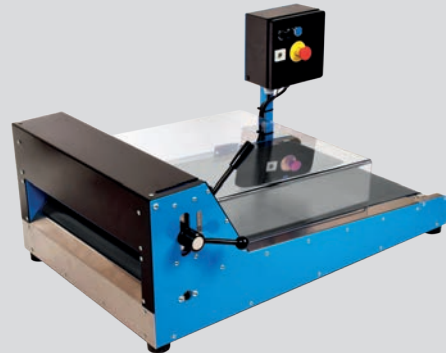
COMPACT ELECTRIC ROLLER

- Weight 16,5 kg/ 36 lb
- Length 190 mm, width 590 mm, height 350 mm
- Roller width 430 mm/ 16,9 in
- Adjustable height with thickness indicator in millimeter
- Adjustable speed
- Forward and reverse operation
- Pinch protection
- Operates at 100 - 240 V



MANUAL ROLLER

- Weight 26 kg/ 57 lb
- Length 250 mm, width 610 mm, height 450 mm
- Roller width 300/400 mm/ 11,8/15,7 in
- Measuring scale on the side
- Locking lever to adjust the distance between the rollers



AUTOMATIC ELECTRIC ROLLER

- Weight 55 kg/ 121 lb
- Length 950 mm, width 550 mm, height 450 mm
- Roller width 480 mm/ 18,9 in
- Measuring scale on the side
- Locking lever to adjust the distance between the rollers
- Operates at 220 - 240 V



PORTABLE ROLLER

- Weight 7,5 kg/ 16 lb
- Length 400 mm, width 350 mm, height 150 mm
- Roller width is 235mm/ 9,25 in
- Measuring scale on the side
- Powered by cordless drill (not included)

Impregnation Units

S4-610-155	Stand for Impregnation Unit Manual
S4-610-150	Impregnation Unit, Manual 400 mm
S4-610-300	Impregnation Unit, Manual 300 mm
S4-610-160E	Impregnation Unit, Automatic 480 mm
S4-610-430	Impregnation Unit Electric quick lock 430 mm
PI-001-001	Smart Portable Roller 235 mm



MOBILE WORKSTATION

MOBILE WORKSTATIONS

CUSTOM BUILT

Our mobile workstations is a complete workshop for relining. A safe, pleasant and effective work environment that can be placed next to your installation site. The standard workstation comes well equipped with heating, benches, easy sliding drawers, ventilation cabinets, manual impregnation unit, service compressor, vacuum etc.

They are custom built and many accessories can be added as per your requirement. For example electric impregnation unit, air conditioning, diesel or petrol air compressor, stereo etc.



-The quality of our mobil workstations are on another level. Perfectly tailored to suit our customers needs.

Roger Henningson - Master vehicle builder



VEHICLE & TRAILER TYPES

All our vehicles and trailers are custom built to suit the customers needs. We offer tailored workbenches, ventilated mixing cabinets, compressors, vacuum, impregnation units, air conditioning, heating, custom lighting, stereo and much more. The vehicles and trailers below are examples of the types we offer.



VAN WORKSTATION

Size of workspace:
L 4256 x W 1784 x H 2025
This example is built on a Ford chassi.
We build on any van base chassi
customer requests.



TRUCK WORKSTATION

Size of workspace:
L 4150 x W 2160 x H 2100
This example is built on a Renault chassi.
We build on any van base chassi
customer requests.



TRAILER WORKSTATION

Size of workspace:
L 6500 x W 2350 x H 2100
Can be built from 4 to 12 meters length.



CONTAINER WORKSTATION

Size of workspace:
Standard 20 foot, L 6000 x W 2400 x H 2300



CONSUMABLES



LDPE HOSE

Low Density Polyethylene. The LDPE hose is used for an extension between the Extruder and the pipe to be relined. It can also be used at the pipe end, if the relining extends past the pipe.

LDPE Hose

S3-303-120	LPDE Hose 120-010 Ø 75, 100 m
S3-303-175	LPDE Hose 175-020 Ø 110, 100 m
S3-303-205	LPDE Hose 205-0,20 Ø 135, 100 m
S3-303-250	LPDE Hose 250-020 Ø 160, 100 m
S3-303-354	LPDE Hose 354-0,20 Ø 225, 100 m



PULL STRAP

The pull strap is used to control the speed of the installation and will give the installer the possibility to rewind the liner. One end of the pull strap is attached at the centre axle of the Extruder (Inversion drum), the other end is attached to the furthest end of the liner to be installed. The pull strap must be longer than the liner.

Pull Strap

S5-135-027	Pull Strap 15 mm roll 50 meter
S5-135-025	Pull Strap 25 mm roll 50 meter

CLEANING PADS

The pads are extremely effective for grease removal on all equipment and for the user.

Cleaning Pads

S5-156-020	Cleaning Pads CL 510 (150 pcs.)
------------	---------------------------------



CALIBRATION HOSE

The calibration hose is primarily used when installing an open-end liner. When curing with high temperatures use a high-temperature calibration hose.

As an extra precaution, we recommend that you bring a calibration hose of every dimension for each installation, in case of a leak or puncture in the liner

Calibration Hose

BW-110-075	CH DN 70, std. temp up to 40°C, (100m)
BW-110-100	CH DN 100, std. temp up to 40°C, (100m)
BW-110-125	CH DN 125, std. temp up to 40°C, (100m)
BW-110-150	CH DN 150, std. temp up to 40°C, (100m)
BW-110-200	CH DN 200, std. temp up to 40°C, (100m)
BW-110-225	CH DN 225, std. temp up to 40°C, (100m)
CJ-111-075	CH Light duty stitch 80° Ø075 (100m)
CJ-111-100	CH Light duty stitch 80° Ø100 (100m)
CJ-111-125	CH Light duty stitch 80° Ø125 (100m)
CJ-111-150	CH Light duty stitch 80° Ø150 (100m)
CJ-111-200	CH Light duty stitch 80° Ø200 (100m)
CJ-111-225	CH Light duty stitch 80° Ø225 (100m)
CJ-111-250	CH Light duty stitch 80° Ø250 (100m)
CJ-111-300	CH Light duty stitch 80° Ø300 (100m)
S6-100-099	CH Light duty stitch Clear DN75 (100m)
S6-100-101	CH Light duty stitch Clear DN100 (100m)
S6-100-103	CH Light duty stitch Clear DN125 (100m)
S6-100-104	CH Light duty stitch Clear DN150 (100m)
S6-100-106	CH Light duty stitch Clear DN225 (100m)



AVAILABLE IN ALL SIZES

JUBILEE HOSE CLAMPS

The Hose clamps are threaded throughout the entire steel strap to handle multiple dimensions. Used for attaching the liner to the Inversions, or the pull strap to the liner.

END CAP SYSTEM



MOUNTING FIXTURE

When preparing for open-ended installation, a mounting fixture is used when gluing the Omaplata to the liner.



GLUED END

The glued end is used on installations where you don't want, or have the possibility to cut away the far end of the liner. For example from the house out to the main. The Omaplata hose is used as an extension of the liners coating that protrudes the liners far end, and is retracted after curing. This leaves the liner open and there is no need for further work.

Omaplata

S3-304-050	Omaplata Ø 50
S3-304-075	Omaplata Ø 75/67-105
S3-304-100	Omaplata Ø 100/90-141
S3-304-150	Omaplata Ø 150/130-205

Mounting fixture

S3-381-075	Mounting fixture Ø 75
S3-381-100	Mounting fixture Ø 100
S3-381-125	Mounting fixture Ø 125
S3-381-150	Mounting fixture Ø 150



STEAM GLUE

Steam Glue is a thermal adhesive that is cured at about 60°Celsius. It is used for gluing the Omaplata to the liner coating, when making a glued end. A heat gun is used to cure the glue. Steam glue can also be used in applications where heat curing is used.

Steam glue

S5-151-011	Steam Glue 50ml
S5-151-010	Steam Glue 300 ml

BOOK YOUR
TRAINING



<https://sacpro.se/en/training/>

TRAINING

PIPE REHABILITATION FOR HOUSES

More than 300 installers have completed our popular training on how to install liners and branch pipes.

We have recently freed up more “fun time” by having the participants do the majority of the theoretical part online, before arriving in Falun or Kaarina. What that means is that we have almost three full days of practical exercises together. We cover everything from A-Z when it comes to rehabilitate a pipe using liners.

Our education focuses on the finished result. We want you to skip those thirty-some years that we have used for developing the technique and materials. You should take it from here, and into the future.

Our training includes:

- Descaling of pipes
- Installation methods – the does and don'ts
- Liners and resins
- All curing methods covered – UV- fastest there is, Steam, Hot water and Ambient
- Robot cutting / reinstatements
- Recovery – damage control
- Branch pipes – from main as well as from the branch arm
- Safe epoxy handling
- Installation protocols
- Introduction to DANCUTTER equipment .
- Introduction to SEWERTRONICS equipment.
- Introduction to HOUSELINER material.

We use these brands and more when we carry out our training courses



Basically, we want you to feel safe and secure when installing liners. You should feel that it works perfectly, every single time you do an installation.

If preferred we can adjust the length of the education as well as the content of it.

LOCATION

The educations are hosted in Falun, Sweden by Freddy or Jockum or, in Kaarina, Finland by Ville.

REGISTRATION

Registration by e-mail to info@sacpro.se or by filling out the form on our website:

www.sacpro.se/en/training



ONGOING TRAINING



THREE-STOREY
TRAINING APARTMENT





SACPRO HQ FALUN SWEDEN DURING TECH DAYS

SACPRO IS A LEADING SUPPLIER FOR THE PIPE REHABILITATION INDUSTRY

Sacpro AB is Scandinavia's leading supplier of tools and materials for piperehabilitation of sewage and sewage systems in and out of buildings. We have developed four brands - Saccpipe®, Saccparts®, Sactools®, and Houseliner®. With our brands and close cooperation with the leading European brand Brawoliner®, Sacpro represents a complete pipe rehabilitation system - Houseliner System.

MANY YEARS OF EXPERIENCE

The company have over 30 years of experience of pipe rehabilitation inside buildings. First as an entrepreneur around Sweden and since 2005, only as a manufacturer and supplier. Sacpro was one of the first in the world that took pipe rehabilitation inside buildings with both liner and branch pipes installation. We are now continuing our journey with innovative and reliable products, fast deliveries and excellent support.

For more information go to our webpage:
www.sacpro.se



1991



1996



SACRAB TEAM 1998

Disclaimer

All contents of this document are obtained without warranties of any kind, either expressed or implied. Sacpro AB can not be liable for any direct, indirect, or incidental damages arising from access to or use of this document.

Copyright © 2023 Sacpro AB

The contents of this document may not be reproduced, copied, modified or distributed without written permission from Sacpro AB. Material may under no circumstances be used for commercial purposes. This includes everything in this document, both texts and images.

Trademarks

Houseliner®, Sactools®, Saccparts® and Saccpipe® are registered trademarks by Sacpro AB. All brands and all content in this document are protected by copyright laws unless otherwise is stated and may not be used without prior written consent of Sacpro.

MATERIALS, EQUIPMENT & TRAINING

TRENCHLESS PIPE REHABILITATION

SACPRO

www.sacpro.se | www.sacpro.fi
www.houseliner.se

