

THE COMPANY

Plastic materials have been used in the water industry for a long time. The company KONRAD STÜKERJÜRGEN, which has been active as manufacturer and supplier for the well drilling industry for more than 100 years, started already in the 1950s with the extrusion of PVC pipes and the subsequent manufacture of wellscreens and casings. Today the STÜWA plant is recognised as one of the leading manufacturers in Germany and Europe. Sales and distribution are made through the STÜWA Konrad Stükerjürgen GmbH as well as agents, be it in Europe or overseas. The company is ISO 9001 certified.



PRODUCTION

Extrusion lines
Threading
Slotting
Reducers and Adaptors
Accessories



CENTRAL STORAGE AND STOCKS

Well assorted stocks
All standard diameters
and slots available at short notice



DISPATCH AND DISTRIBUTION

STÜWA owns their own fleet of trucks and an Express Service is available. Some of our distributors carry stocks.

THE MATERIAL PVC

combines a number of properties and advantages, which are sought after particularly for the construction of water wells.

- PVC does not corrode and guarantees long life.
- PVC has a low specific gravity and can there be handled and installed very easily.
- PVC can be worked well and is therefore quite competitive.
- PVC has a smooth surface, which gives hydraulic advantages and prevents incrustations.
- PVC uses salt as a base product, can be recycled and is environmentally advantageous.
- PVC screens/casings are made from hard PVC and have a good stability.

STÜWA manufactures according to DIN 4925, which is divided in three parts:

- Part 1 - DN 35/1.1/4" to DN 100/4" with Witworth threads
- Part 2 - DN 100/4" to DN 200/8" with trapezoidal threads and profiled rubber seal
- Part 3 - DN 250/10" to DN 400/16" with trapezoidal threads and profiled rubber seal

Other dimensions, wall thicknesses and special sizes are produced to STÜWA HOUSE STANDARD.

All pipes correspond to the german KTW recommendations, hence are suitable for drinking water. STÜWA pipes are tested at regular intervals and obtain the DVGW test certificate.

PHYSICAL PROPERTIES

density:	abt. 1,4 g/cm ³	V-notch impact strength:	abt. 5 KJ/m ²
tensile strength:	45-55 N/mm ²	impact strength:	10% breakage
module of elasticity:	2500-3000 N/mm ²	Vicat softening temp.:	abt. 80°C

DIMENSIONS, WEIGHTS AND PULLING LOADS FOR CASING / SCREENS

DIN 4925, standard wall

Nom.Dia. DN	O.D. mm	wall mm	clear bore mm	weight kg/m ca.	slot widths mm	tensile strength in KN*			
						casing	socketed screen	C-thread	screen
35/1"	42	3,5	33	0,64	0,2-2,0	7,8	2,5	3,9	2,4
40/1 1/4"	48	3,5	39	0,75	0,2-2,0	8,9	2,8	4,5	2,7
50/2"	60	4,0	50	1,05	0,2-2,0	13,3	4,2	6,7	4,0
80/3"	88	4,0	77	1,58	0,2-2,0	19,0	6,0	9,5	5,7
100/4"	113	5,0	98	2,53	0,3-2,0	22,4	6,8	11,2	6,7
115/4 1/2"	125	5,0	110	2,90	0,3-2,0	24,8	7,8	12,4	7,4
125/5"	140	6,5	122	4,10	0,5-3,0	37,8	11,9	18,9	11,4
150/5"	165	7,5	144	5,50	0,5-3,0	53,2	16,8	26,6	16,0
175/7"	195	8,5	170	7,5	0,75-3,0	69,5	21,9	35,0	20,9
200/8"	225	10,0	195	10,0	0,75-3,0	94,3	20,7	47,2	28,3
250/10"	280	12,5	243	15,6	0,75-3,0	125,8	42,8	67,9	40,8
300/12"	330	14,5	290	21,3	0,75-3,0	151,2	47,6	75,6	45,3
350/14"	400	17,5	350	31,0	1,0-3,0	219,0	69,0	110,0	65,7
400/16"	450	19,5	395	39,0	1,0-3,0	274,5	86,5	137,3	82,4

DIN 4925, bit thickwalled

50/2"	60	6,0	46	1,5	0,5-2,0	()	()	()	()
100/4"	113	7,0	94	3,5	0,5-2,0	()	()	()	()
115/4 1/2"	125	7,5	105	4,1	0,5-2,0	44,1	13,9	22,7	13,2
125/5"	140	8,0	118	4,9	0,5-3,0	52,7	16,6	27,2	15,8
150/6"	165	9,5	139	6,9	0,5-3,0	73,7	23,2	38,0	22,0
175/7"	195	11,5	163	9,8	0,75-3,0	105,4	32,9	54,4	31,6
200/8"	225	13,0	188	12,8	0,75-3,0	135,8	43,3	70,9	41,3
250/10"	280	16,0	236	19,6	0,75-3,0	210,5	66,3	108,6	63,1
300/12"	330	19,0	281	27,4	0,75-3,0	294,7	92,8	127,7	88,4
350/14"	400	21,5	342	37,7	1,0-3,0	404,1	127,4	175,1	121,2
400/16"	450	23,5	387	46,4	1,0-3,0	497,0	156,5	215,4	149,1

special dimensions

150/6"	165	5,0	()	()	0,5-3,0	73,7	23,2	()	()
200/8"	225	7,0	()	()	0,75-3,0	135,8	43,3	70,9	41,3
225/9"	250	11,0	()	()	()	()	()	()	()
325/12 3/4"	360	15,0	()	()	()	()	()	()	()
600/24"	630	()	()	()	()	()	()	()	()

() technical details for enquiry

In addition to above, a number of casings/screens can also be produced with extra heavy walls.



PVC -WELLSCREENS

ACCESSORIES

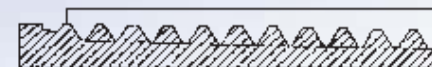
COLLAPSE PRESSURE RESISTANCE

When selecting PVC screens and casings the installation depth, bore size, weight of gravelpack, type of mud etc. must be taken into consideration. All factors do influence the collapse pressure to which the string may be subjected.

DN	standard wall		thickwalled	
	casing bar	screens bar	casing bar	screens bar
35	54,0	48,6-37,8	-	-
40	35,0	31,5-24,5	-	-
50	26,0	23,4-18,2	35	32-29
80	7,8	7,0-5,5	-	-
100	7,2	6,5-5,0	17,0	15-13
115	5,2	4,7-3,6	18,0	16,2-12,6
125	8,3	7,5-5,8	14,0	12,6-9,8
150	8,1	7,3-5,7	16,0	14,9-11,3
175	7,1	6,4-5,0	17,7	16,0-12,4
200	7,2	6,5-5,0	16,6	15,0-11,6
250	7,3	6,2-5,1	16,0	14,4-11,2
300	7,0	6,0-4,9	16,4	14,8-11,5
350	7,0	6,0-4,9	12,8	12,0-9,0
400	7,0	6,0-4,9	11,6	12,0-9,0

This chart is based of pressure tests and theoretical calculations.

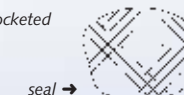
THREAD FORMS



Witworth thread (Gas thread)
 Pin/Box acc. to DIN 4925 part 1



Trapezoidal thread, socketed
 Pin/Box acc. to
 DIN 4925 parts 2+3



Flush joint trapezoidal thread, C-thread
 thread form similar to DIN 4925

GRAVEL PACKED SCREENS

These screens enable the installation without gravel pack, or, where required, with only one additional outer pack. The advantages of this type of screen are:
 Slim Diameter, uniform grain size, high porosity.

The basic dimensions are as above. It should be considered that the gravel pack does increase the O.D. of the screens by abt. 25 to 32 mm. (less for small, more for large diameters)



Contents:



ACCESSORIES

Accessories are important, particularly installation tools

We supply:
 Sealing rings, lifting caps, wooden clamps, centralizers, bottom caps, observation hole caps, well covers and wellheads

OPEN AREAS

Slot widths in mm	0,20	0,30	0,50	0,75	1,00	1,50	2,00	3,00
% open area.	3,70	5,20	5,60	8,00	8,30	8,50	10,5	13,0