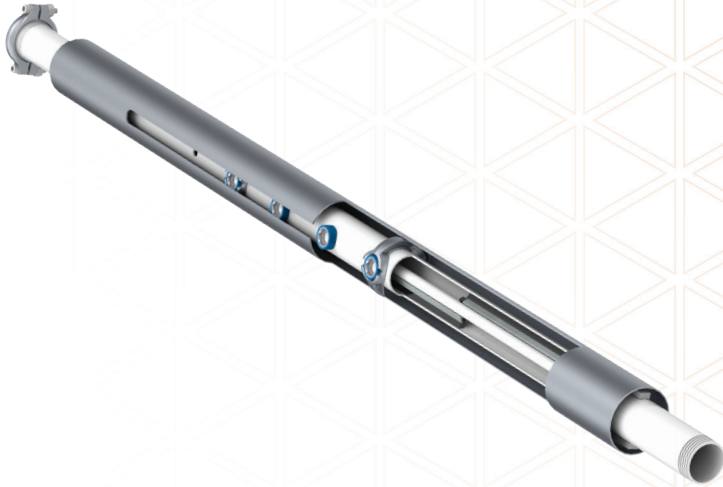


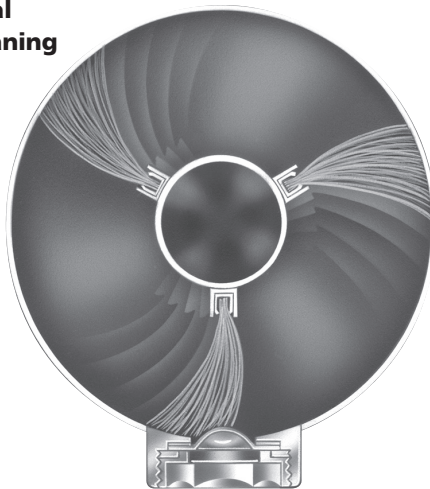
# Genesis™ Double Tube Brush Showers



## Efficient System Design

Genesis double tube brush showers are designed and built for applications using filtered fresh or recycled process water. Full length, internal stainless steel brushes clean the full internal pipe circumference and the nozzle orifices which protrude inside the pipe. This comprehensive sweep prevents solids build-up, eliminates contamination problems, and directs loosened debris to the integral flush valve. The Kadant family of brush showers in single or double tube design are essential components for optimizing paper machine hygiene programs.

## Complete Internal Shower Pipe Cleaning



## Safe Operation and Maintenance

Genesis double tube brush showers are available for either stationary or oscillating applications. They incorporate design features to ensure operator safety. The drive component for the oscillating shower is completely enclosed with all moving parts protected and guarded, eliminating hazardous pinch points.

## Overview



### Features

- 316 stainless steel construction
- Aggressive nozzle cleaning and full pipe ID
- Design prevents nozzles from falling into machine
- Oscillating or stationary shower designs
- Manual or automatic brush rotation available



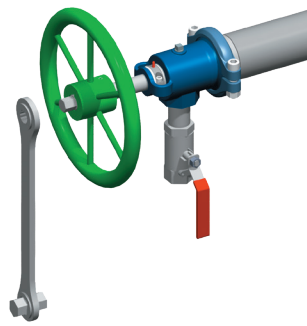
### Benefits

- Inner pipe can be safely removed during machine operation
- Permits re-use of white water
- Reduces energy requirements to heat fresh water
- Improves machine hygiene
- Blow-down valve is rotatable 360°

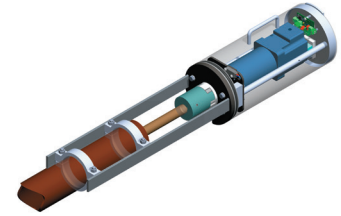
## Effective Manual or Automatic Cleaning

Removing contaminants from the nozzles and the shower pipe is a simple process. The showers are supplied with standard manual cleaning or optional automated cleaning using the Genesis auto-brush rotator.

Manual cleaning, with the standard ratchet wrench or optional handwheel, involves opening the flush valve and rotating the brushes 360°. The loosened contaminant flows through the flush valve and is disposed off process without contaminating the paper machine or product. The brushes are returned to "park" position, the flush valve is closed and the shower is ready to continue operating.



Manual handwheel or ratchet wrench rotation.



The optional auto brush rotator performs the entire nozzle and flow pipe cleaning process through a user selected and programmed time cycle.

NOZZLE PRESSURE		PSI	20	40	60	80	100	125	150	200	250	300	400	600	800	1000
		BAR	1.5	3.0	4.0	6.0	7.0	9.0	10	14	17	21	28	41	55	69
NOZZLE	ORIFICE in./mm	FAN ANGLE	NOZZLE FLOW: Gallons Per Minute/Litres Per Minute													
2227 GP	7	0.028	0.064	0.090	0.110	0.128	0.143	0.160	0.175	0.202	0.226	0.247	0.285	0.349	0.403	0.451
		0.71	0.242	0.341	0.416	0.484	0.541	0.604	0.662	0.765	0.855	0.935	1.08	1.32	1.53	1.71
	6	0.033	0.089	0.125	0.153	0.177	0.198	0.222	0.243	0.280	0.313	0.343	0.396	0.485	0.560	0.626
		0.84	0.337	0.473	0.579	0.669	0.749	0.840	0.920	1.06	1.19	1.30	1.50	1.84	2.12	2.37
	5	0.040	0.130	0.184	0.225	0.260	0.291	0.326	0.356	0.412	0.460	0.504	0.582	0.713	0.823	0.920
		1.02	0.492	0.696	0.851	0.984	1.10	1.23	1.35	1.56	1.74	1.91	2.20	2.70	3.12	3.48
	4	0.055	0.246	0.348	0.426	0.492	0.550	0.615	0.674	0.778	0.870	0.953	1.10	1.35	1.56	1.74
		1.40	0.931	1.32	1.61	1.86	2.08	2.33	2.55	2.94	3.29	3.61	4.16	5.11	5.91	6.59
3	0.070	0.399	0.564	0.690	0.797	0.891	0.999	1.09	1.26	1.41	1.54	1.78	2.18	2.52	2.82	
	1.78	1.51	2.13	2.61	3.02	3.37	3.78	4.13	4.77	5.34	5.83	6.74	8.25	9.54	10.67	
2	0.094	0.714	1.01	1.24	1.43	1.60	1.79	1.96	2.26	2.53	2.77	3.19	3.91	4.52	5.05	
	2.39	2.70	3.83	4.69	5.41	6.06	6.76	7.42	8.55	9.58	10.48	12.07	14.80	17.11	19.11	
1	0.125	1.27	1.80	2.20	2.54	2.84	3.18	3.48	4.02	4.49	4.92	5.69	6.96	8.04	8.99	
	3.18	4.81	6.81	8.33	9.61	10.75	12.02	13.17	15.22	16.99	18.62	21.54	26.34	30.43	34.03	

NOZZLE PRESSURE		PSI	20	40	60	80	100	125	150	200	250	300
		BAR	1.5	3.0	4.0	6.0	7.0	9.0	10	14	17	21
NOZZLE	ORIFICE in./mm	FAN ANGLE	NOZZLE FLOW: Gallons Per Minute/Litres Per Minute									
C14506	GP7	0.055	0.27	0.38	0.46	0.54	0.60	0.67	0.73	0.85	0.95	1.04
		1.4	1.02	1.44	1.74	2.04	2.27	2.54	2.76	3.22	3.60	3.94
	GP8	0.094	0.85	1.20	1.47	1.70	1.90	2.12	2.33	2.69	3.00	3.29
		2.39	3.22	4.54	5.56	6.43	7.19	8.02	8.82	10.18	11.36	12.45
	GP9	0.125	1.43	2.02	2.48	2.86	3.20	3.58	3.92	4.53	5.06	5.54
GP1	0.156	2.31	3.27	4.00	4.62	5.17	5.78	6.33	7.31	8.17	8.95	
	3.96	8.74	12.38	15.14	17.49	19.57	21.88	23.96	27.67	30.92	33.88	
GP11	0.188	3.35	4.74	5.81	6.71	7.50	8.39	9.19	10.61	11.86	12.99	
	4.78	12.68	17.94	21.99	25.40	28.39	31.76	34.78	40.16	44.89	49.17	
C14506	GP2	0.055	0.38	0.54	0.66	0.76	0.85	0.95	1.04	1.20	1.34	1.47
		1.4	1.44	2.04	2.50	2.88	3.22	3.60	3.94	4.54	5.07	5.56
	GP3	0.070	0.52	0.74	0.91	1.05	1.17	1.31	1.44	1.66	1.86	2.03
		1.78	1.97	2.80	3.44	3.97	4.43	4.96	5.45	6.28	7.04	7.68
GP13	0.094	0.85	1.20	1.47	1.70	1.90	2.12	2.33	2.69	3.00	3.29	
	2.39	3.22	4.54	5.56	6.43	7.19	8.02	8.82	10.18	11.36	12.45	
GP4	0.125	1.62	2.29	2.80	3.24	3.62	4.05	4.43	5.12	5.72	6.27	
	3.18	6.13	8.67	10.60	12.26	13.70	15.33	16.77	19.38	21.65	23.73	
C14506	GP14	0.055	0.40	0.57	0.70	0.80	0.90	1.01	1.10	1.27	1.42	1.56
		1.4	1.51	2.16	2.65	3.03	3.41	3.82	4.16	4.81	5.37	5.90
	GP15	0.094	0.89	1.26	1.55	1.79	2.00	2.24	2.45	2.83	3.16	3.46
		2.39	3.37	4.77	5.87	6.78	7.57	8.48	9.27	10.71	11.96	13.10
	GP17	0.125	1.52	2.15	2.63	3.04	3.40	3.80	4.16	4.81	5.38	5.89
		3.18	5.75	8.14	9.95	11.51	12.87	14.38	15.75	18.21	20.36	22.29
	GP18	0.156	2.24	3.16	3.87	4.47	5.00	5.59	6.12	7.07	7.91	8.66
		3.96	8.48	11.96	14.65	16.92	18.93	21.16	23.16	26.76	29.94	32.78