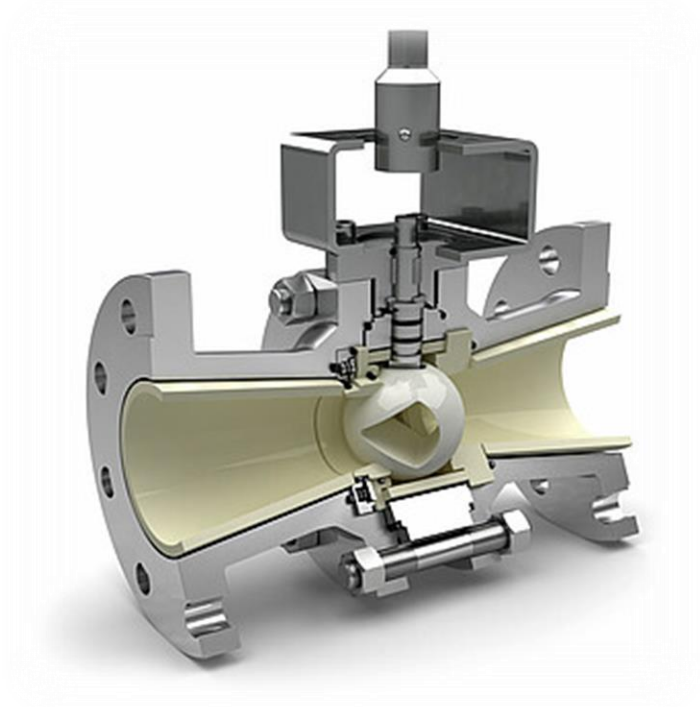
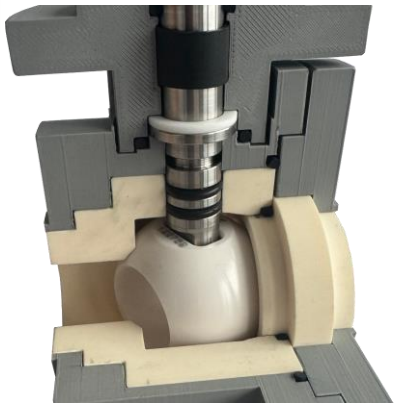
SAMSON CERA SYSTEM

SAMSON - CERA



Applications for SAMSON CERAVALVE in the SUGAR INDUSTRY

Application: sugar beet and sugar cane

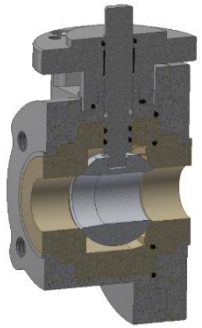


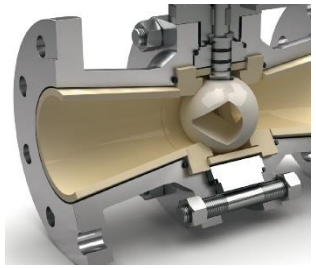
CERAVALVE
control valves are used in the cleaning / neutralizing „raw syrup“ lines.
The pH neutralization media is lime milk / lime slurry / Calcium Hydroxide $CaOH_2$

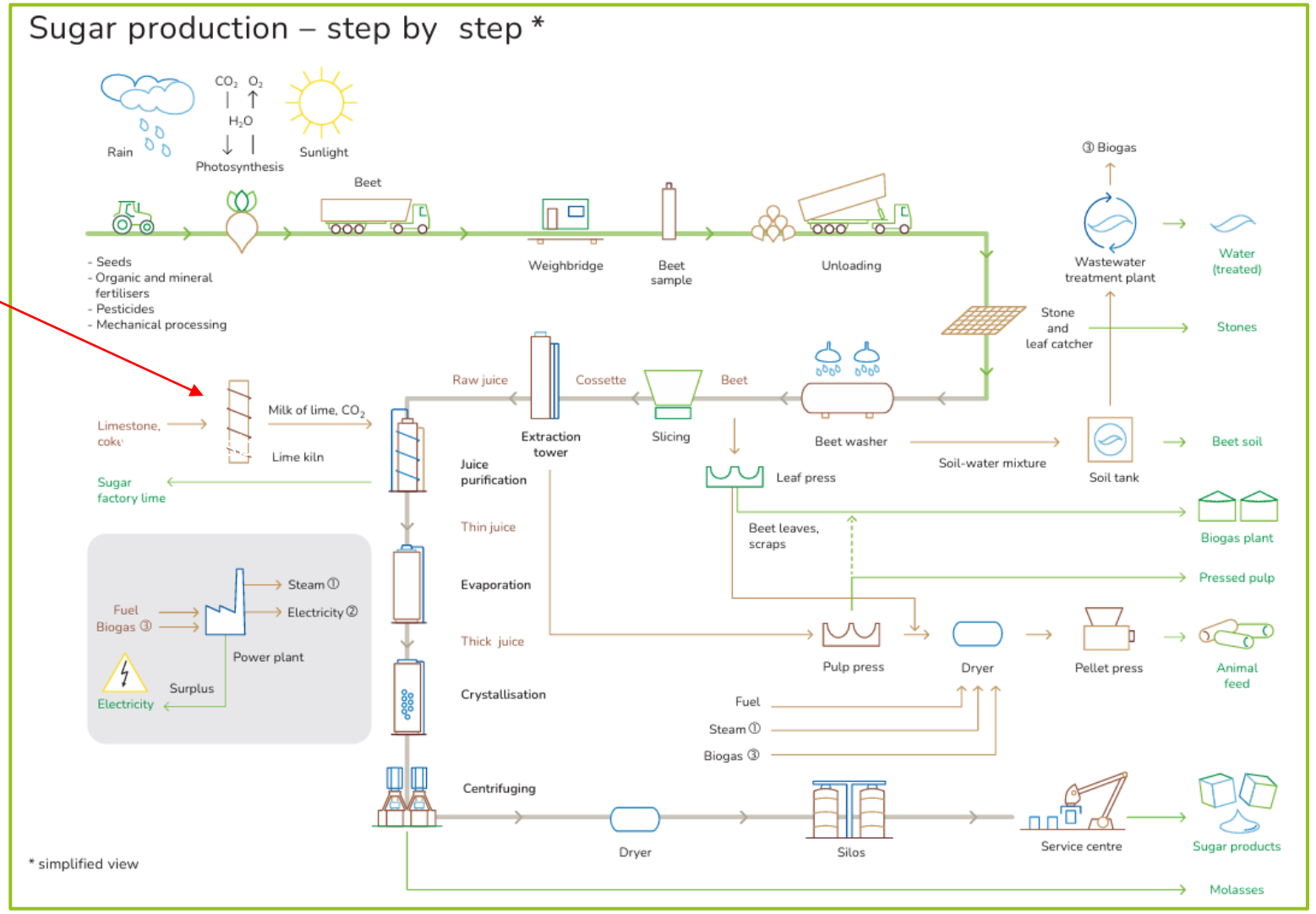
APPLICATION: SUGAR OUT OF SUGAR BEET

Area of application for Cera:

Juice purification and evaporation. The non-sugar substances in the raw juice are separated during juice purification with the help of calcium carbonate and carbon dioxide. After being filtered twice, a clear, pale-yellow clarified juice remains. In the evaporation station, water is extracted from the clarified juice in several stages until the sugar content reaches about 67% in the form of a thick juice.



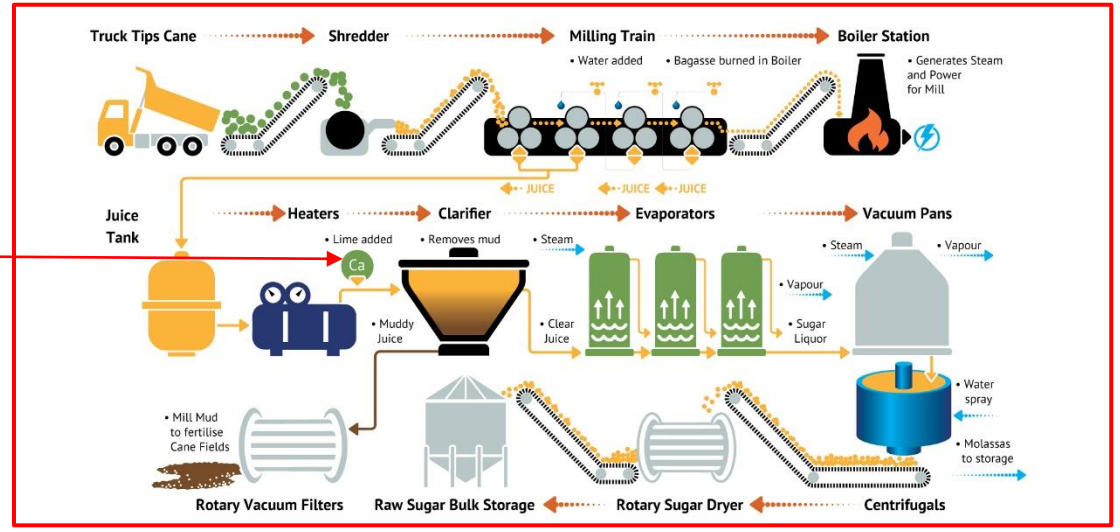


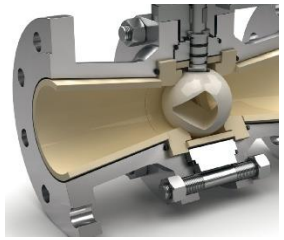


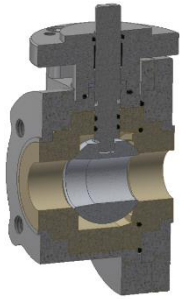
APPLICATION: SUGAR OUT OF SUGARCANE

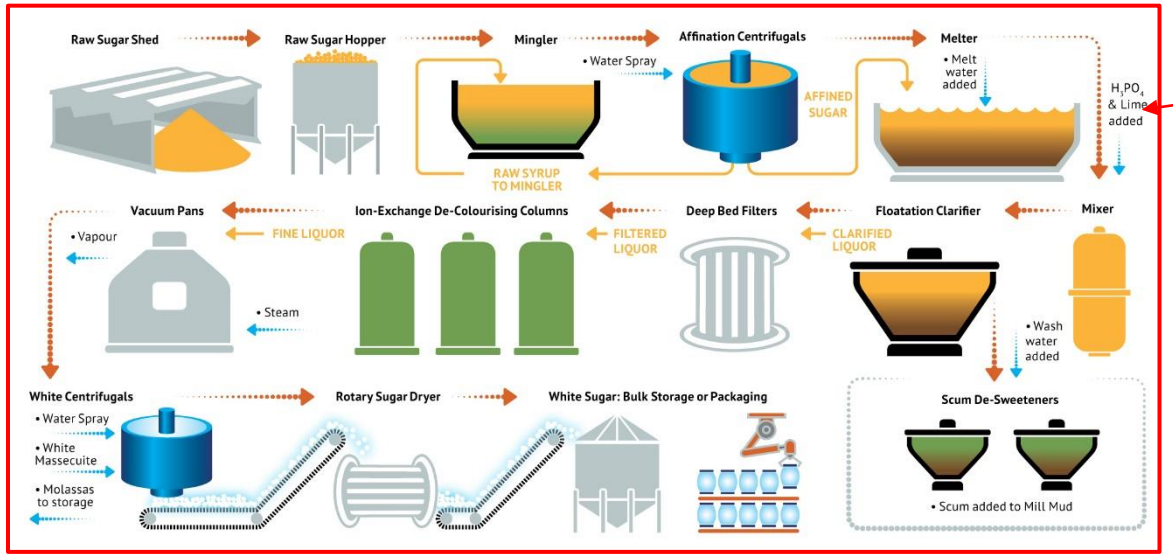
Area of application for Cera:

Raw Sugar production
Juice purification and evaporation. The non-sugar substances in the raw juice are separated during juice purification with the help of calcium carbonate and carbon dioxide.





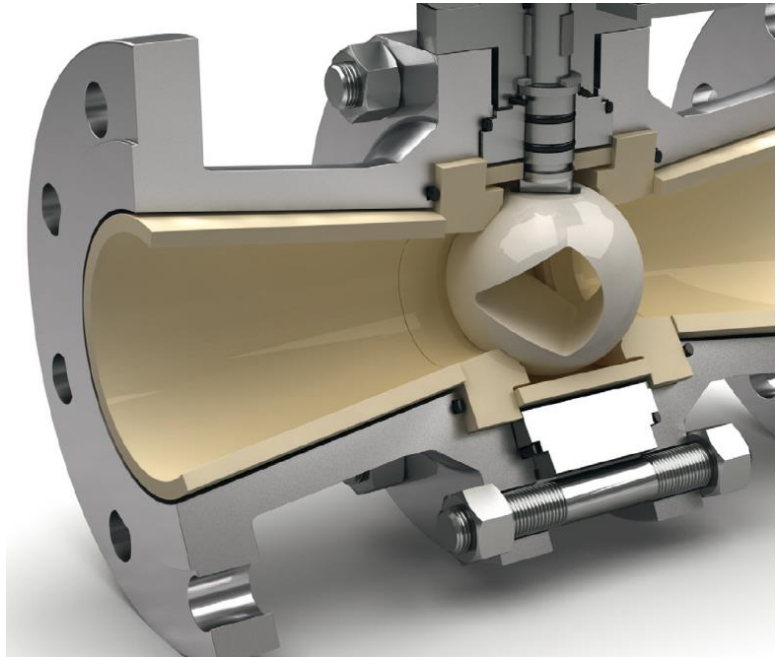




Area of application for Cera:

Refining Sugar production
Additional purification of non-sugar substances in the raw sugar with the help of calcium carbonate and carbon dioxide.

CERAVALVE SERIES KST



CERAVALVE KST

The CERAVALVE Series KST valve is a ceramic-lined ball valve for on/off and control applications in highly abrasive and corrosive media, preferably for suspensions.

Pos.	Component	Material
1	Body	1.4301
2	Seat ring	Al_2O_3
3	Ball	ZrO_2
4	Shaft	1.4462
5	Flange	1.4301
6	Bonnet	1.4301
7	Wear protection sleeve	Al_2O_3
8	Center sleeve	Al_2O_3
9	O-rings	FKM (Viton)
10	Gaskets	PTFE
11	Bushing	PTFE
12	Bolting	A2-70/A4-70

CERAVALVE SERIES KST

Size range:

Flange connections DN15 (½“) up to DN300 (12“)

Pressure range:

PN10 to PN40, ANSI class 150 and class 300 (additional pressure ratings upon request)

Temperature range:

-50°C/-58°F to 327°C/620°F (lower and higher temperatures available upon request)

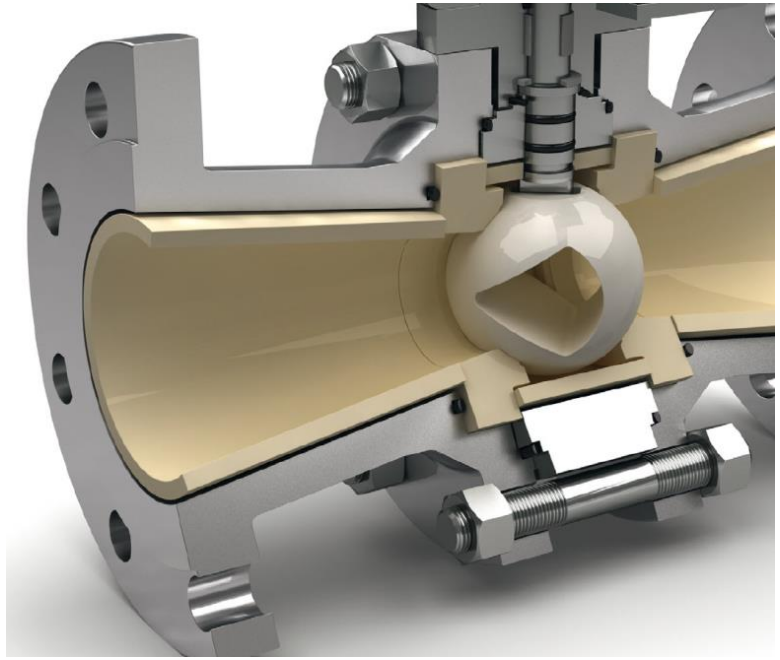
Face-to-Face lengths:

DIN (EN558-1) / ANSI B16.10 / special

Actuation Options:

pneumatic, electric, hydraulic, manual with gear or lever

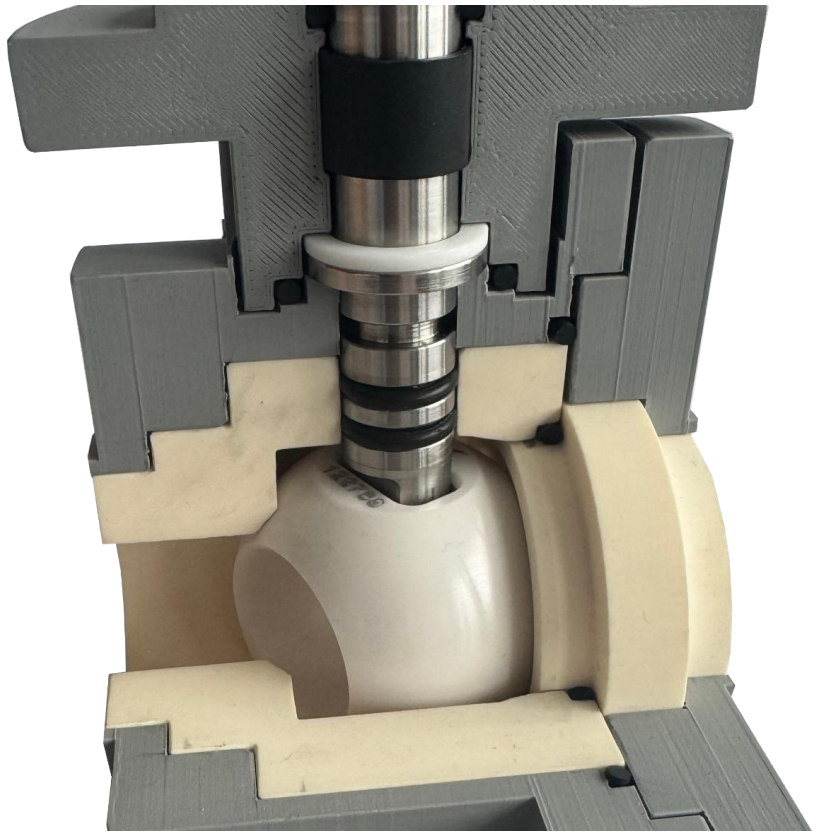
CERAVALVE SERIES KST



CV/KVS Values

CERAVALVE		K_{VS} and C_V flow coefficients for control valves with standard lengths															
Flange size			Center Body														
			DN15		DN25		DN40		DN65		DN80		DN100		DN125		DN150	
DIN	ANSI	Ball	NPS ½		NPS 1		NPS 1 ½		NPS 2 ½		NPS 3		NPS 4		NPS 5		NPS 6	
DN	NPS	bore	K_{VS}	C_V	K_{VS}	C_V	K_{VS}	C_V	K_{VS}	C_V	K_{VS}	C_V	K_{VS}	C_V	K_{VS}	C_V	K_{VS}	C_V
15	½	triangular	12,2	14,2														
		full bore	14,6	17,0														
20	¾	triangular	14,1	16,5														
		full bore	19,1	22,3														
25	1	triangular	13,1	15,3	37,3	43,5												
		full bore	19,2	22,4	45,9	53,6												
32	1 ¼	triangular	11,5	13,4	41,7	48,7												
		full bore	17,3	20,2	62,1	72,5												
40	1 ½	triangular	9,4	11,0	36,5	42,6	89,1	104										
		full bore	15,5	18,1	62,4	72,8	127	148										
50	2	triangular	9,4	11,0	28,8	33,6	89,4	104										
		full bore	14,1	16,5	54,0	63,0	166	193										
65	2 ½	triangular			27,2	31,7	75,5	88,1	202	236								
		full bore			46,5	54,3	169	197	342	398								
80	3	triangular			26,4	30,8	64,5	75,3	178	207	311	363						
		full bore			39,8	46,4	140	163	433	505	529	617						
100	4	triangular					61,6	71,9	148	173	248	290	414	483				
		full bore					108	125	385	450	670	782	825	962				
125	5	triangular					60,0	70,0	138	160	232	271	335	391				
		full bore					101	118	285	333	573	668	922	1076	1392	1623		
150	6	triangular							132	154	215	250	297	346				
		full bore							258	301	482	563	778	907	1711	1996	2031	2369
200	8	triangular											273	319				
		full bore											529	617	1458	1700	2649	3091

CERAVALVE K-PERFORMANCE LINE



The CERAVALVE K-Performance Line valve is a ceramic-lined ball valve in compact design for on/off and control applications in highly abrasive and corrosive media, preferably for suspensions.

Pos.	Component	Material
1	Body	1.4408/CF8M
2	Seat ring	Al_2O_3
3	Seat ring 2	Al_2O_3
4	Ball	ZrO_2
5	Shaft	1.4462
6	Body flange	1.4408/CF8M
7	Top flange	1.4301
8	O-rings	FKM (Viton)
9	Gaskets	PTFE
10	Bushing	PTFE
11	Bolting	A2-70/A4-70

CERAVALVE K-PERFORMANCE LINE

Size range:

Flange connections DN15 (½“) up to DN100 (4“)

Pressure range:

PN10 to PN40, ANSI class 150 and class 300 (additional pressure ratings upon request)

Temperature range:

-50°C/-58°F to 327°C/620°F (lower and higher temperatures available upon request)

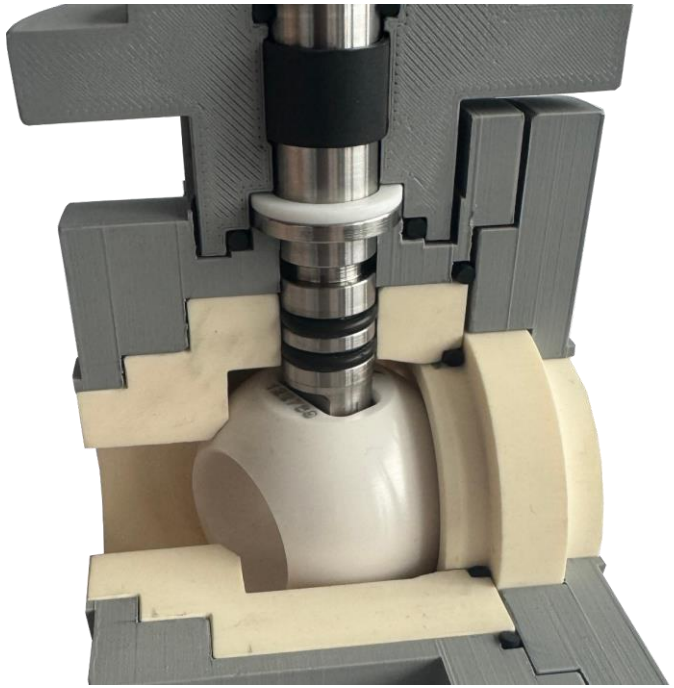
Face-to-Face lengths:

DN15 (½“)	DN20 (¾“)	DN25 (1“)	DN40 (1½“)	DN50 (2“)	DN65 (2½“)	DN80 (3“)	DN100 (4“)
71 mm	79.5 mm	85 mm	111 mm	120 mm	140 mm	164.5 mm	193.5 mm

Actuation Options:

pneumatic, electric, hydraulic, manual with gear or lever

CERAVALVE K-PERFORMANCE LINE



CV/KVS Value

CERAVALVE		KVS and Cv-values												
Size of flanges		Ball characteristics	Size of ball											
			DN15		DN25		DN40		DN65		DN80		DN100	
			½"		1"		1½"		2½"		3"		4"	
			KVS	Cv	KVS	Cv	KVS	Cv	KVS	Cv	KVS	Cv	KVS	Cv
DN15	½"	Triangular	12,2	14,2										
		Round	14,6	17										
DN20	¾"	Triangular	14,1	16,5										
		Round	19,1	22,3										
DN25	1"	Triangular			37,3	43.5								
		Round			45,9	53.6								
DN40	1½"	Triangular					89,1	104						
		Round					127	148						
DN50	2"	Triangular					89,4	104						
		Round					166	193						
DN65	2½"	Triangular							202	236				
		Round							342	398				
DN80	3"	Triangular									311	363		
		Round									529	617		
DN100	4"	Triangular											414	483
		Round											825	962

MAJOR ADVANTAGES OF THE CERAVALVE VERSUS CONVENTIONAL VALVES

SAMSON CERA SYSTEM

- All parts in contact with corrosive / abrasive media protected by ceramics therefore reaching long service times
- Easy maintenance with individual spare parts replacement possibility
- Good control characteristics with up to 8 Kvs/Cvs per line size (KST type) allowing optimal opening angles
- CERAVALVE K-PERFORMANCE: compact design, fluid not in contact with stainless steel body ideal against high corrosion
- Replaceability of existing control valve made easy

APPLICATION: SUGAR REFINERIES

pH neutralization of the raw syrup pipelines
with abrasive lime milk / lime-slurry





SAMSON AT A GLANCE

STAFF

- Worldwide 4,500
- Europe 3,600
- Asia 700
- Americas 200
- Frankfurt am Main, Germany 1,900

WORLDWIDE MARKETS AND APPLICATIONS

- Chemicals and petrochemicals
- Food and beverages
- Pharmaceuticals and biotechnology
- Oil and gas
- Power and energy distribution
- Industrial gases, Cryogenic application
- Metallurgy and mining
- Pulp and paper
- Water and wastewater
- Industrial applications

PRODUCTS

- Valves
- Self-operated regulators
- Actuators
- Valve accessories
- Signal converters
- Controllers and automation systems
- Sensors and thermostats
- Digital solutions

SALES SITES

- More than 50 subsidiaries in over 40 countries
- More than 200 representatives

PRODUCTION SITES

- SAMSON Germany, Frankfurt, established 1916 · Total area: 150,000 m²
- SAMSON France, Lyon, established 1962 · Total area: 23,400 m²
- SAMSON Turkey, Istanbul established 1984 · Total area: 11,100 m²
- SAMSON India, Pune district, established 1999 · Total area: 28,000 m²
- SAMSON USA, Baytown, TX, established 1992 · Total area: 20,000 m²
- SAMSON China, Beijing, established 1998 · Total area: 47,000 m²
- SAMSON AIR TORQUE, Bergamo, Italy · Total area: 27,000 m²
- SAMSON CERA SYSTEM, Hermsdorf, Germany · Total area: 14,700 m²
- SAMSON KT-ELEKTRONIK, Berlin, Germany · Total area: 1,100 m²
- SAMSON LEUSCH, Neuss, Germany · Total area: 18,400 m²
- SAMSON PFEIFFER, Kempen, Germany · Total area: 20,300 m²
- SAMSON RINGO, Zaragoza, Spain · Total area: 19.000 m²
- SAMSON SED, Bad Rappenau, Germany · Total area: 10,400 m²
- SAMSON STARLINE, Bergamo, Italy · Total area: 27,000 m²
- SAMSON VDH PRODUCTS, the Netherlands · Total area: 12,000 m²
- SAMSON VETEC, Speyer, Germany · Total area: 27,100 m²

SAMSON AKTIENGESELLSCHAFT

WORLDWIDE SERVICES

