

TANK SPRAY CLEANING HEAD TCN & TCR Series

APPLICATION

Tank Spray Cleaning Head uses cleaning media to provide coverage and impact. The device represents an effective alternative to traditional static spray balls because it uses low volumes of cleaning fluid at low pressure.

TCN is a fixed cleaning ball used for cleaning storage tanks in food and beverage industries, which are used for less demanding cleaning duties.

TCR is a rotating head with double ball bearing, it makes the device suitable for all industrial cleaning applications, including tanks, reactors, vessels and other containers ranging from 0.05 to 1 m³, depending on dimensions and cleaning task.



DESIGN AND FEATURES

- Different Spray Pattern
- Different Connection Way
- Different Connection Standard

MATERIAL

Body Material: SS304 or SS316L

Clip parts: SS304

CONNECTION

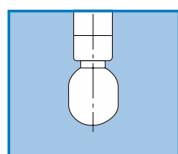
Clamp, Weld, Clip on, Female or on request.

TECHNICAL DATA

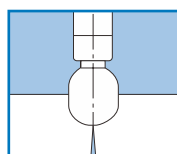
Wetting Radius:	Max. 2.5m
Impact cleaning radius:	Max. effective 0.6m
Working pressure:	1-3Bar
Recommended pressure:	2.5Bar

FINISH

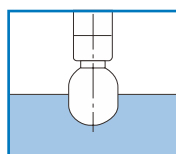
Exterior: Satin or Mirror



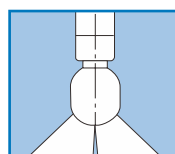
360°



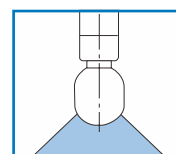
180° upwards



180° downwards



270° upwards



90° downwards

ORDERING INFORMATION

Product Series	TCN	Fixed Cleaning Ball
	TCR	Rotary Spray Ball
	TCD	Double Clamp Rotary Spray Ball
	TCC	Rotary Cleaner

Item No.	01	Model No.01
	02	Model No.02
	03	Model No.03

Connection	W	Weld
	C	Clamp
	B	Bolt
	M	Male Thread
	F	Female Thread

Body Material	4	SS304
	6	SS316L

Standard	1	3A
	2	DIN 11850
	1	BSPT thread
	2	NPT thread
	3	BSP Thread

Size	
Size	
Outside Surface Finishing	
DIN 11850	
015	DN15
020	DN20
...	...
100	DN100
3A	
050	1/2"
075	3/4"
...	
400	4"
Q40	Ball Dia 40mm
Q45	Ball Dia 45mm
Q63	Ball Dia 63mm
Q76	Ball Dia 76mm
Q91	Ball Dia 91mm
1	Outside Mirror Polishing
2	Outside Satin Polishing

Ordering Information:

Model:	TCN	01	W	4	1	050	Q40	1
	Product Series	Item No.	Connection	Material	Standard	Size	Ball Dia	Outside Surface Finishing

Example: Fixed Cleaning Ball, Weld connection, SS304, 3A 1/2" with ball dia 40mm, Outside Mirror Polishing



TCN Fixed Cleaning Ball

*Ball Dia: 40mm -91mm
 *Spray Patten:
 360°, 180° upwards,
 180° downwards
 *Working Pressure: 2.5 Bar



TCR Rotary Spray Ball

*Spray Patten:
 360°, 180° upwards,
 180° downwards
 *Working Pressure: 2 Bar



TCD Double Clamp Cleaning Ball

*Spray Patten:
 360°, 180° upwards,
 180° downwards
 *Working Pressure: 2 Bar

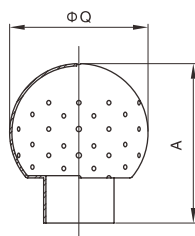


TCC Rotary Cleaner

*Working Pressure: 2.5 Bar
 *Spray Radius: 2-4M

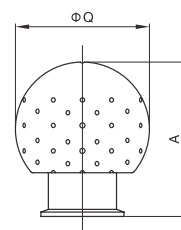
CLEANING HEAD

WELD FIXED CLEANING BALL TCN



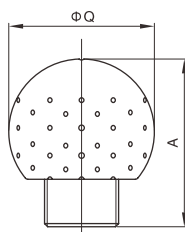
Model No	Size	A	Q	Hole Dia	Pressure	Spray Radius	Flow Rate
TCN01W41050Q401	1/2"	54	40	1.5mm	2.5Bar	0.8-1m	15M ³ /h
TCN01W41075Q451	3/4"	64	45	2mm	2.5Bar	1-1.25m	15M ³ /h
TCN01W41100Q531	1"	72	53	2mm	2.5Bar	1-1.25m	17M ³ /h
TCN01W41125Q631	1 1/4"	79	63	2mm	2.5Bar	1-1.25m	20M ³ /h
TCN01W41150Q761	1 1/2"	85	76	2.5mm	2.5Bar	2-3m	23M ³ /h
TCN01W41200Q911	2"	87	91	3mm	3.5Bar	3-3.5m	55M ³ /h

CLAMP FIXED CLEANING BALL TCN



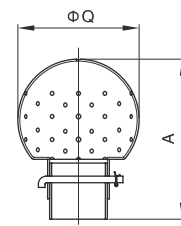
Model No	Size	A	Q	Hole Dia	Pressure	Spray Radius	Flow Rate
TCN01C41050Q401	1/2"	70	40	1.5mm	2.5Bar	0.8-1m	15M ³ /h
TCN01C41075Q451	3/4"	77	45	2mm	2.5Bar	1-1.25m	15M ³ /h
TCN01C41100Q531	1"	80	53	2mm	2.5Bar	1-1.25m	17M ³ /h
TCN01C41125Q631	1 1/4"	93	63	2mm	2.5Bar	1-1.25m	20M ³ /h
TCN01C41150Q761	1 1/2"	93	76	2.5mm	2.5Bar	2-3m	23M ³ /h
TCN01C41200Q911	2"	108	91	3mm	3.5Bar	3-3.5m	55M ³ /h

BSP FEMALE FIXED CLEANING BALL TCN



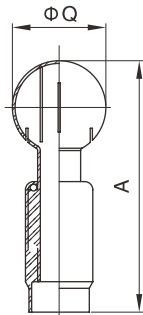
Model No	Size	A	Q	Hole Dia	Pressure	Spray Radius	Flow Rate
TCN01F43050Q401	1/2"	52	40	1.5mm	2.5Bar	0.8-1m	15M ³ /h
TCN01F43075Q451	3/4"	62	45	2mm	2.5Bar	1-1.25m	15M ³ /h
TCN01F43100Q531	1"	72	53	2mm	2.5Bar	1-1.25m	17M ³ /h
TCN01F43125Q631	1 1/4"	85	63	2mm	2.5Bar	1-1.25m	20M ³ /h
TCN01F43150Q761	1 1/2"	87	76	2.5mm	2.5Bar	2-3m	23M ³ /h
TCN01F43200Q911	2"	102	91	3mm	3.5Bar	3-3.5m	55M ³ /h

CLIP ON FIXED CLEANING BALL TCN



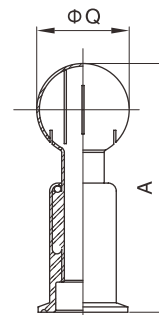
Model No	Size	A	Q	Hole Dia	Pressure	Spray Radius	Flow Rate
TCN01B41050Q401	1/2"	54	40	1.5mm	2.5Bar	0.8-1m	15M ³ /h
TCN01B41075Q451	3/4"	64	45	2mm	2.5Bar	1-1.25m	15M ³ /h
TCN01B41100Q531	1"	72	53	2mm	2.5Bar	1-1.25m	17M ³ /h
TCN01B41125Q631	1 1/4"	85	63	2mm	2.5Bar	1-1.25m	20M ³ /h
TCN01B41150Q761	1 1/2"	85	76	2.5mm	2.5Bar	2-3m	23M ³ /h
TCN01B41200Q911	2"	87	91	3mm	3.5Bar	3-3.5m	55M ³ /h

WELD ROTARY CLEANING BALL TCR

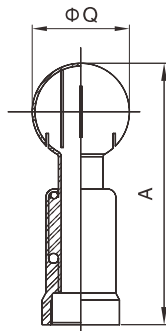


Model No	Size	A	Q	Pressure	Spray Radius	Flow Rate
TCR01W41050Q401	1/2"	110	40	2Bar	1.25	10
TCR01W41075Q451	3/4"	137	45	2Bar	1.25	10
TCR01W41100Q531	1"	143	53	2Bar	1.25	12
TCR01W41125Q531	1 1/4"	145	53	2Bar	1.25	12
TCR01W41150Q631	1 1/2"	145	63	2Bar	1.25	12
TCR01W41200Q761	2"	180	76	2Bar	1.5	38

CLAMP ROTARY CLEANING BALL TCR

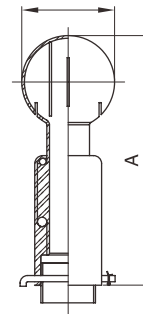


Model No	Size	A	Q	Pressure	Spray Radius	Flow Rate
TCR01C41050Q401	1/2"	120	40	2Bar	1.25	10
TCR01C41075Q451	3/4"	138	45	2Bar	1.25	10
TCR01C41100Q531	1"	138	53	2Bar	1.25	12
TCR01C41125Q531	1 1/4"	138	53	2Bar	1.25	12
TCR01C41150Q631	1 1/2"	138	63	2Bar	1.25	12
TCR01C41200Q761	2"	168	76	2Bar	1.5	38



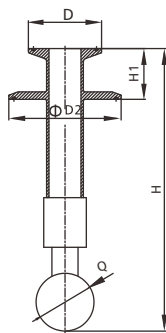
BSP FEMALE ROTARY CLEANING BALL TCR

Model No	Size	A	Q	Pressure	Spray Radius	Flow Rate
TCR01F43050Q401	1/2"	110	40	2Bar	1.25	10
TCR01F43075Q451	3/4"	138	45	2Bar	1.25	10
TCR01F43100Q531	1"	140	53	2Bar	1.25	12
TCR01F43125Q531	1 1/4"	160	53	2Bar	1.25	12
TCR01F43150Q631	1 1/2"	170	63	2Bar	1.25	12
TCR01F43200Q761	2"	192	76	2Bar	1.5	38



CLIP ON ROTARY CLEANING BALL TCR

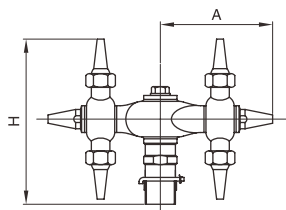
Model No	Size	A	Q	Pressure	Spray Radius	Flow Rate
TCR01B41050Q401	1/2"	110	40	2Bar	1.25	10
TCR01B41075Q451	3/4"	137	45	2Bar	1.25	10
TCR01B41100Q531	1"	135	53	2Bar	1.25	12
TCR01B41125Q531	1 1/4"	137	53	2Bar	1.25	12
TCR01B41150Q631	1 1/2"	150	63	2Bar	1.25	12
TCR01B41200Q761	2"	168	76	2Bar	1.5	38



DOUBLE CLAMP ROTARY SPRAY BALL

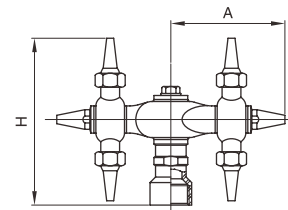
Model No	Size	D	D2	H1	H	Q
TCD01C1050Q401	1/2"	50.5	77.5	40	250	40
TCD01C1075Q451	3/4"	50.5	77.5	40	250	45
TCD01C1100Q531	1"	50.5	77.5	40	250	53
TCD01C1150Q631	1 1/2"	50.5	91	40	250	63
TCD01C1200Q761	2"	64	106	40	250	76

*D2, Q and H can be customized



CLIP ON ROTARY CLEANER

Model No	Size	A	H	Pressure	Spray Radius	Flow Rate
TCC01B411001	1"	118	175	1.5-2Bar	2-3m	23
TCC01B411251	1 1/4"	142	200	1.8-2.5Bar	2.5-3m	38
TCC01B411501	1 1/2"	142	200	1.8-2.5Bar	2.5-3m	38
TCC01B412001	2"	145	205	2.5-3Bar	3.5-4m	60



FEMALE ROTARY CLEANER

Model No	Size	A	H	Pressure	Spray Radius	Flow Rate
TCC01F411001	1"	118	165	1.5-2Bar	2-3m	23
TCC01F411251	1 1/4"	142	189	1.8-2.5Bar	2.5-3m	38
TCC01F411501	1 1/2"	142	189	1.8-2.5Bar	2.5-3m	38
TCC01F412001	2"	145	191	2.5-3Bar	3.5-4m	60

TANK SPRAY CLEANING HEAD TCA Series

APPLICATION

The Type TCA device can be used in hygienic and nonhygienic applications. The device is 100% self-rinsing. A variety of connection types are available and typically are installed permanently in a given tank or vessel. The Type TCA device can also be used on a portable basis when desired.

Typical Applications include but not limited to...

- Soup Kettles
- Yeast Propagation Tanks
- Batch Processing Vessels
- Fluid Bed Dryers
- Ink and Paint Mixing Vats
- Brew Kettles
- Storage Tanks
- Spray Dryers
- Commercial Ovens



DESIGN AND FEATURES

- Different Spray Pattern
- Different Connection way
- Different Connection Standard

MATERIAL

Body Material: SS316L

CONNECTION

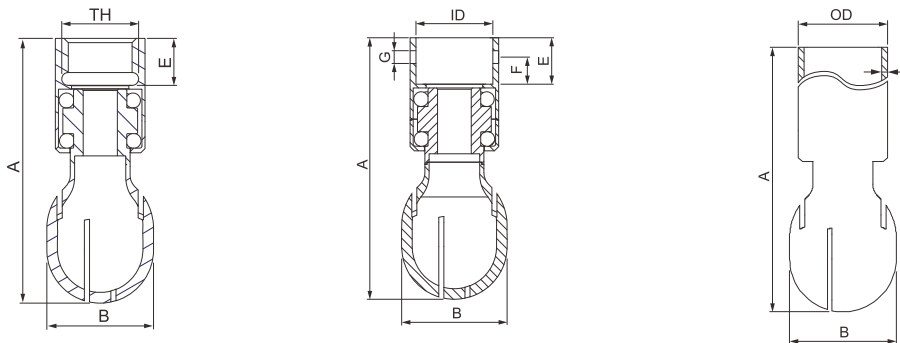
Clamp, Weld, Clip on, Female or on request.

TECHNICAL DATA

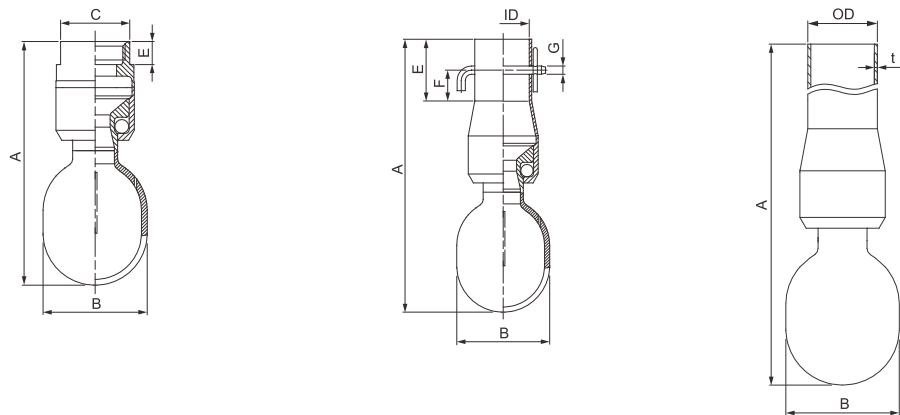
Wetting Radius:	Max. 2.5m
Impact cleaning radius:	Max. effective 0.6m
Working pressure:	1-3Bar
Recommended pressure:	2Bar

FINISH

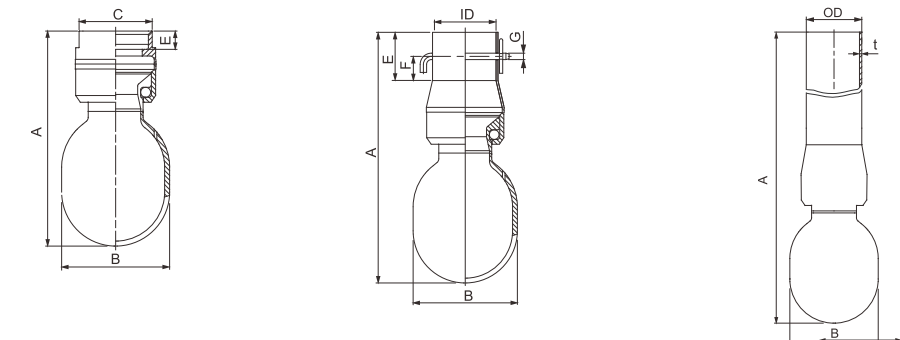
Exterior: Satin or Mirror



Connection	Model No	Size	A	B	ID	OD	E	F	G	Pressure	Wetting Radius	Cleaning Radius
Female (BSP)	TCA01F63038Q252	3/8"	62	25			11			1-3 Bar	Max. 2.5M	Max. 0.6 M
Female (NPT)	TCA01F62038Q252	3/8"	62	25			11			1-3 Bar	Max. 2.5M	Max. 0.6 M
Clip On (3A)	TCA01B61075Q252	3/4"	62	25	19.2		11	5.9	Φ3.6	1-3 Bar	Max. 2.5M	Max. 0.6 M
Clip On (DIN)	TCA01B62015Q252	DN15	62	25	18.2		11	5.9	Φ3.6	1-3 Bar	Max. 2.5M	Max. 0.6 M
Weld (3A)	TCA01W61075Q252	3/4"	77.5	25		19.05				1-3 Bar	Max. 2.5M	Max. 0.6 M
Weld (DIN)	TCA01W62015Q252	DN15	77.5	25		18				1-3 Bar	Max. 2.5M	Max. 0.6 M



Connection	Model No	Size	A	B	ID	OD	C	E	F	G	Pressure	Wetting Radius	Cleaning Radius
Female (BSP)	TCA01F63075Q452	3/4"	102	45			30	10			1-3 Bar	Max. 3M	Max.1.4 M
Female (NPT)	TCA01F62075Q452	3/4"	102	45			30	10			1-3 Bar	Max. 3M	Max.1.4 M
Clip On (3A)	TCA01B61100Q452	1"	133.5	45	28.3			30	15	Φ4	1-3 Bar	Max. 3M	Max.1.4 M
Clip On (DIN)	TCA01B62025Q452	DN25	133.5	45	29.3			30	15	Φ4	1-3 Bar	Max. 3M	Max.1.4 M
Weld (3A)	TCA01W61100Q452	1"	120.5	45		25.4					1-3 Bar	Max. 3M	Max.1.4 M
Weld (DIN)	TCA01W62025Q452	DN25	120.5	45		28					1-3 Bar	Max. 3M	Max.1.4 M



Connection	Model No	Size	A	B	ID	OD	C	E	F	G	Pressure	Wetting Radius	Cleaning Radius
Female (BSP)	TCA01F63125Q652	1 1/4"	130	65			44	10			1-3 Bar	Max. 3M	Max.2M
Female (BSP)	TCA01F63150Q652	1 1/2"	130	65			44	10			1-3 Bar	Max. 3M	Max.2M
Female (NPT)	TCA01F62125Q652	1 1/4"	130	65			44	10			1-3 Bar	Max. 3M	Max.2M
Female (NPT)	TCA01F62150Q652	1 1/2"	130	65			44	10			1-3 Bar	Max. 3M	Max.2M
Clip On (3A)	TCA01B61150Q652	1 1/2"	157	65	38.4			30	15	Φ4.2	1-3 Bar	Max. 3M	Max.2M
Clip On (DIN)	TCA01B62040Q652	DN40	157	65	40.4			30	15	Φ4.2	1-3 Bar	Max. 3M	Max.2M
Weld (3A)	TCA01W61150Q652	1 1/2"	157	65		38.1					1-3 Bar	Max. 3M	Max.2M
Weld (DIN)	TCA01W62040Q652	DN40	157	65		40					1-3 Bar	Max. 3M	Max.2M