Management of Change Guide
New Sourcing for K-Ball™ Ball Valves

K-BALL™

EMERSON™

Table of **Contents**

Management of **Change**

Management of Change (MOC) is a procedure used to proactively manage changes that have the potential to result in safety or process impact within a process plant. Evaluating new techniques for improving MOC approval procedures can have an impact on plant efficiency. Historically, upgrading obsolete products or replacing existing process control equipment has been delayed or abandoned due to the extensive paperwork involved in completing a complex MOC approval document.

Contained in the following sections are design comparisons between former K-Ball ball valves and K-Ball ball valves from the new source of supply. These comparisons are intended to help end users complete MOC approval documents to understand the similarities and differences between these valves to effectively transition to the newly sourced valves.

Background

Emerson is changing the sourcing direction of its K-Ball branded range of ball valves. These valves will now be sourced directly from a qualified vendor with manufacturing operations based in Taiwan.

Question and Answer
Checklist

Below are typical questions received from customers regarding their management of change impact.

Q1. Does the proposed modification cause any changes to P&IDs?
A1. No.

Q2. Does the proposed modification change process chemistry, technology, or operating control philosophies?
A2. No.

Q3. Does the proposed modification change how the existing plant is operated?
A3. No.

Q4. Does the proposed modification change process flows?
A4. No.

Q5. Will the proposed changes affect products quoted and delivery times?
A5. Yes, new alternative products will be offered in line with the delivery matrix.
Product models F130M, F133M and R138 are now obsolete. No replacement product shall be offered.

Q6 Do the proposed changes, change the process of how I receive my quotation?
A6. No.

Q7. Have the codes and standards to which the new equipment has been designed changed?
A7. No.

Q8. Does the proposed modification change the materials of construction such as a change in material form (cast, forged, or alloy)?
A8. No.

Q9. Does the proposed modification introduce equipment items that require new periodic predictive maintenance?
A9. No. The new equipment items will require the same periodic maintenance as required by the old equipment items.

Q10. Does the proposed modification change existing operator training requirements?
A10. No.

Q11. Does the proposed modification introduce new equipment items that require training, manuals, maintenance procedures, or training to teach maintenance department craftsmen how to maintain them?
A11. No.

Q12. Does the proposed modification introduce new equipment items that require spares or obsolete spares for existing equipment?
A12. Yes. The K-Ball Series 172 and 182 will require new spares that are not compatible with the previous model. For all other Series, Emerson continues to recommend repair by replace methodology.

Q13. Does the proposed modification permanently remove the spares for existing pieces of equipment?
A13. Once the equipment items are replaced, yes, the spare parts of the existing equipment items should be removed from the plant.

Q14. Does the proposed modification change the inspection scope or inspection interval?
A14. No.

Current and New K-Ball Sourced Range **Comparison**

The tables and sections that follow describe the similarities and differences between these product lines.

1. Seat Availability

Each valve should be reviewed to help ensure the appropriate K-Ball Series is selected for the application. The following tables provide the necessary design information to compare current and newly sourced K-Ball valves.

Seat Material Availability by Series												
Series Number	110	110	120	120	155	155	171	172	171T	172T	180	182
	Former	New	Former	New	Former	New	Former	New	Former	New	Former	New
Standard Seats												
PTFE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
TFM 1600											✓	✓
Optional Seats												
PTFE											•	•
15% Glass (PTFE)											•	
UHMWPE											•	•
25% Carbon (RPTFE)											•	•
PEEK											•	•
MG1421											•	•

✓	Offered as standard seat
•	Offered as optional seat
[blank]	Not in K-Ball range

2. Body and Trim Material Availability

Please see the table below for body materials comparison.

Body Material Availability by Series												
Series Number	110	110	120	120	155	155	171	172	171T	172T	180	182
	Former	New	Former	New	Former	New	Former	New	Former	New	Former	New
Carbon Steel*					✓	✓	✓	✓			✓	✓
Stainless Steel*	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

✓	Available body material
[blank]	Not in K-Ball range
*	Offered with Stainless Steel 316 ball and stem

3. Torque Comparison at Rated Pressure for Series 171

Please see the table below for valve Break to Open (BTO) Torque values comparison.

Former K-Ball Series 171 Differential Pressure Torque Values in Nm (ft·lb)								
Size		Pressure in bar (psi)						MAST
DN	NPS	0 (0)	6.9 (100)	20.7 (300)	48.3 (700)	69 (1000)	103.4 (1500)	A276-316 SS
8	¼	-	-	-	-	-	-	-
10	⅜	-	-	-	-	-	-	-
15	½	6.2 (4.6)	6.4 (4.7)	6.8 (5.0)	7.2 (5.3)	8.6 (6.3)	-	25.2 (18.6)
20	¾	8.8 (6.5)	9.0 (6.6)	9.6 (7.1)	10.5 (7.7)	11.5 (8.5)	-	25.2 (18.6)
25	1	12.0 (8.9)	12.5 (9.2)	12.5 (9.2)	13.0 (9.6)	13.0 (9.6)	-	40.2 (29.6)
32	1¼	13.5 (10.0)	14.0 (10.3)	14.5 (10.7)	17.0 (12.5)	20.5 (15.1)	-	40.2 (29.6)
40	1½	18.0 (13.3)	18.5 (13.6)	19.5 (14.4)	23.5 (17.3)	33.0 (24.3)	-	18.4 (13.6)
50	2	21.0 (15.5)	21.5 (15.9)	23.0 (17.0)	38.5 (28.4)	68.0 (50.2)	-	18.4 (13.6)
65	2½	42.5 (31.3)	45.0 (33.2)	61.0 (45.0)	125.0 (92.2)	-	-	318.0 (234.5)
80	3	61.0 (45.0)	64.0 (47.2)	83.0 (61.2)	180.0 (132.8)	-	-	318.0 (234.5)
100	4	80.0 (59.0)	83.0 (61.2)	105.0 (77.4)	213.0 (157.1)	-	-	392.0 (289.1)
125	5	149.5 (110.3)	155.0 (114.3)	175.0 (129.1)	-	-	-	392.0 (289.1)
150	6	235.0 (173.3)	402.5 (296.9)	520.0 (383.5)	-	-	-	637.0 (469.8)
200	8	322.0 (237.5)	440.0 (324.5)	560.0 (413.0)	-	-	-	637.0 (469.8)
250	10	460.0 (339.3)	747.5 (551.3)	1260.0 (929.3)	-	-	-	1313.0 (968.4)
300	12	590.0 (435.2)	890.0 (656.4)	1520.0 (1121.1)	-	-	-	1313.0 (968.4)

New K-Ball Series 172 Differential Pressure Torque Values in Nm (ft·lb)								
Size		Pressure in bar (psi)						MAST
DN	NPS	0 (0)	6.9 (100)	20.7 (300)	48.3 (700)	69 (1000)	103.4 (1500)	A276-316 SS
8	¼	4.0 (3.0)	4.0 (3.0)	4.0 (3.0)	5.0 (3.7)	5.0 (3.7)	-	35.0 (25.8)
10	⅜	4.0 (3.0)	4.0 (3.0)	4.0 (3.0)	5.0 (3.7)	5.0 (3.7)	-	35.0 (25.8)
15	½	6.2 (4.6)	6.4 (4.7)	6.8 (5.0)	7.2 (5.3)	8.6 (6.3)	-	35.0 (25.8)
20	¾	8.8 (6.5)	9.0 (6.6)	9.6 (7.1)	10.5 (7.7)	11.5 (8.5)	-	64.0 (47.2)
25	1	12.0 (8.9)	12.5 (9.2)	12.5 (9.2)	13.0 (9.6)	13.0 (9.6)	-	64.0 (47.2)
32	1¼	13.5 (10.0)	14.0 (10.3)	14.5 (10.7)	17.0 (12.5)	20.5 (15.1)	-	167.0 (123.2)
40	1½	18.0 (13.3)	18.5 (13.6)	19.5 (14.4)	23.5 (17.3)	33.0 (24.3)	-	167.0 (123.2)
50	2	21.0 (15.5)	21.5 (15.9)	23.0 (17.0)	38.5 (28.4)	68.0 (50.2)	-	167.0 (123.2)
65	2½	42.5 (31.3)	45.0 (33.2)	61.0 (45.0)	125.0 (92.2)	-	-	307.0 (226.4)
80	3	61.0 (45.0)	64.0 (47.2)	83.0 (61.2)	180.0 (132.8)	-	-	307.0 (226.4)
100	4	80.0 (59.0)	83.0 (61.2)	105.0 (77.4)	213.0 (157.1)	-	-	307.0 (226.4)
125	5	-	-	-	-	-	-	-
150	6	-	-	-	-	-	-	-
200	8	-	-	-	-	-	-	-
250	10	-	-	-	-	-	-	-
300	12	-	-	-	-	-	-	-

Change from Series 170 Discontinued from new K-Ball range Seat = PTFE / RPTFE Stem = A276-316 SS

4. Torque Comparison at Rated Pressure for Series 180

Please see the table below for valve Break to Open (BTO) Torque values comparison.

Former K-Ball Series 180 (F180/F180F, R180/R180F) Differential Pressure Torque Values in Nm (ft·lb)								
Size		Pressure in bar (psi)						MAST
DN	NPS	0 (0)	6.9 (100)	20.7 (300)	48.3 (700)	69 (1000)	103.4 (1500)	A276-316 SS
8	¼	-	-	-	-	-	-	-
10	⅜	-	-	-	-	-	-	-
15	½	5.1 (3.8)	5.2 (3.8)	5.2 (3.8)	5.2 (3.8)	5.4 (4.0)	5.4 (4.0)	25.2 (18.6)
20	¾	7.7 (5.7)	7.7 (5.7)	7.8 (5.8)	7.8 (5.8)	8.0 (5.9)	8.0 (5.9)	25.2 (18.6)
25	1	9.6 (7.1)	9.8 (7.2)	10.0 (7.4)	10.0 (7.4)	10.2 (7.5)	10.2 (7.5)	40.2 (29.6)
32	1¼	12.5 (9.2)	12.5 (9.2)	13.0 (9.6)	16.5 (12.2)	21.0 (15.5)	28.5 (21.0)	40.2 (29.6)
40	1½	19.5 (14.4)	20.0 (14.8)	21.0 (15.5)	25.5 (18.8)	36.0 (26.6)	54.0 (39.8)	78.4 (57.8)
50	2	25.5 (18.8)	27.5 (20.3)	31.0 (22.9)	41.0 (30.2)	57.0 (42.0)	70.0 (51.6)	78.4 (57.8)
65	2½	48.0 (35.4)	53.0 (39.1)	65.0 (47.9)	125.0 (92.2)	-	-	318.0 (234.5)
80	3	59.0 (43.5)	63.0 (46.5)	85.0 (62.7)	180.0 (132.8)	-	-	318.0 (234.5)
100	4	-	-	-	-	-	-	-

New K-Ball Series 182 (182 SF/182 FF, 182 SR/182 FR) Differential Pressure Torque Values in Nm (ft·lb)								
Size		Pressure in bar (psi)						MAST
DN	NPS	0 (0)	6.9 (100)	20.7 (300)	48.3 (700)	69 (1000)	103.4 (1500)	A276-316 SS
8	¼	5.1 (3.8)	5.2 (3.8)	5.2 (3.8)	5.2 (3.8)	5.4 (4.0)	5.4 (4.0)	35.0 (25.8)
10	⅜	5.1 (3.8)	5.2 (3.8)	5.2 (3.8)	5.2 (3.8)	5.4 (4.0)	5.4 (4.0)	35.0 (25.8)
15	½	5.1 (3.8)	5.2 (3.8)	5.2 (3.8)	5.2 (3.8)	5.4 (4.0)	5.4 (4.0)	35.0 (25.8)
20	¾	8.4 (6.2)	8.4 (6.2)	8.4 (6.2)	8.4 (6.2)	9.1 (6.7)	9.1 (6.7)	64.0 (47.2)
25	1	9.6 (7.1)	9.8 (7.2)	10.0 (7.4)	10.0 (7.4)	10.2 (7.5)	10.2 (7.5)	64.0 (47.2)
32	1¼	12.5 (9.2)	12.5 (9.2)	13.0 (9.6)	16.5 (12.2)	21.0 (15.5)	28.5 (21.0)	64.0 (47.2)
40	1½	19.5 (14.4)	20.0 (14.8)	21.0 (15.5)	25.5 (18.8)	36.0 (26.6)	54.0 (39.8)	167.0 (123.2)
50	2	25.5 (18.8)	27.5 (20.3)	31.0 (22.9)	41.0 (30.2)	57.0 (42.0)	70.0 (51.6)	167.0 (123.2)
65	2½	48.0 (35.4)	53.0 (39.1)	65.0 (47.9)	125.0 (92.2)	-	-	307.0 (226.4)
80	3	59.0 (43.5)	63.0 (46.5)	85.0 (62.7)	180.0 (132.8)	-	-	307.0 (226.4)
100	4	100.0 (73.8)	113.0 (83.3)	147.0 (108.4)	293.0 (216.1)	-	-	486.0 (358.5)

Change from Series 180 Discontinued from new K-Ball range Seat = PTFE / RPTFE Stem = A276-316 SS

5. Face-to-Face Dimensions

The tables below compare the face-to-face dimensions of the former and new K-Ball Series valves with both metric and imperial measurements.

Face-to-Face Dimensions by Series and Size (mm)															
Series Number	110	110	120	120	155	155	171	172 SD & SW	172 BW	171T	172T	F180 (F)	F182 (F)	R180 (F)	R182 (F)
DN	Former	New	Former	New	Former	New	Former	New	New	Former	New	Former	New	Former	New
8	39.0	40.0	50.0	60.0	54.0	54.0	65.0	59.0	52.4	-	-	66.6	60.0	-	60.0
10	44.0	44.0	60.0	60.0	54.0	54.0	65.0	59.0	52.4	-	79.0	66.6	60.0	-	60.0
15	56.5	57.0	75.0	75.0	63.5	61.5	72.1	62.0	56.0	93.0	89.0	71.6	65.0	66.6	60.0
20	59.0	59.5	80.0	80.0	72.5	71.0	85.0	77.0	75.0	105.2	101.0	76.6	75.0	71.6	65.0
25	71.0	71.0	90.0	90.0	81.0	83.5	92.0	83.0	83.0	113.9	114.0	109.0	85.0	96.6	75.0
32	78.0	78.0	110.0	110.0	94.5	97.0	110.0	94.0	95.0	-	127.0	117.0	100.0	109.0	85.0
40	83.0	82.0	120.0	120.0	108.0	110.5	123.0	107.0	107.0	125.0	140.0	129.0	110.0	117.0	100.0
50	100.0	99.0	140.0	140.0	121.5	129.0	142.0	124.0	120.0	146.0	156.0	142.0	130.0	129.0	110.0
65	-	-	-	-	157.5	171.5	174.0	156.0	156.0	174.0	197.0	174.0	170.0	142.0	130.0
80	-	-	-	-	190.0	200.0	193.0	182.0	182.0	193.0	229.0	193.0	190.0	174.0	170.0
100	-	-	-	-	225.0	252.0	221.4	213.6	213.6	219.4	241.0	-	220.0	193.0	190.0

Face-to-Face Dimensions by Series and Size (inch)															
Series Number	110	110	120	120	155	155	171	172 SD & SW	172 BW	171T	172T	F180 (F)	F182 (F)	R180 (F)	R182 (F)
NPS	Former	New	Former	New	Former	New	Former	New	New	Former	New	Former	New	Former	New
¼	1.54	1.57	1.97	2.36	2.13	2.13	2.56	2.32	2.06	-	-	2.62	2.36	-	2.36
⅜	1.73	1.73	2.36	2.36	2.13	2.13	2.56	2.32	2.06	-	3.11	2.62	2.36	-	2.36
½	2.22	2.24	2.95	2.95	2.50	2.42	2.84	2.44	2.20	3.66	3.50	2.82	2.56	2.62	2.36
¾	2.32	2.34	3.15	3.15	2.85	2.80	3.35	3.03	2.95	4.14	3.98	3.80	2.95	2.82	2.56
1	2.80	2.80	3.54	3.54	3.19	3.29	3.62	3.27	3.27	4.48	4.49	4.29	3.35	3.80	2.95
1¼	3.07	3.07	4.33	4.33	3.72	3.82	4.33	3.70	3.74	-	5.00	4.61	3.94	4.29	3.35
1½	3.27	3.23	4.72	4.72	4.25	4.35	4.84	4.21	4.21	4.92	5.51	5.08	4.33	4.61	3.94
2	3.94	3.90	5.51	5.51	4.78	5.08	5.59	4.88	4.72	5.75	6.14	5.59	5.12	5.08	4.33
2½	-	-	-	-	6.20	6.75	6.85	6.14	6.14	6.85	7.76	6.85	6.69	5.59	5.12
3	-	-	-	-	7.48	7.87	7.60	7.17	7.17	7.60	9.02	7.60	7.48	6.85	6.69
4	-	-	-	-	8.86	9.92	8.72	8.41	8.41	8.64	9.49	-	8.66	7.60	7.48

NOTE

For detailed dimension comparison, please refer to the latest General Arrangement drawings.

6. Height Dimensions

The tables below compare the height dimensions of the former and new K-Ball Series valves with both metric and imperial measurements.

Height Dimensions by Series and Size (mm)														
Series Number	110	110	120	120	155	155	171	172	171T	172T	F180 (F)	F182 (F)	R180 (F)	R182 (F)
DN	Former	New	Former	New	Former	New	Former	New	Former	New	Former	New	Former	New
8	35.0	26.0	52.0	50.0	49.0	53.6	65.5	62.0	-	-	66.0	68.0	-	68.0
10	36.5	27.0	52.0	50.0	49.0	53.6	66.0	62.0	-	53.0	66.0	68.0	-	68.0
15	40.0	35.0	58.0	58.0	58.0	56.1	83.0	64.0	82.0	57.0	84.0	72.0	66.0	68.0
20	44.3	38.0	63.0	62.5	61.0	61.8	86.0	70.0	86.0	64.0	88.0	79.0	84.0	72.0
25	47.5	44.0	75.0	69.3	68.0	75.8	96.0	74.0	98.0	75.0	98.0	85.0	85.0	79.0
32	53.0	48.0	80.0	76.0	73.5	81.4	102.0	86.0	-	81.0	101.0	88.0	98.0	85.0
40	62.0	55.0	94.0	86.9	84.5	97.2	115.0	93.0	116.0	100.0	117.0	105.0	101.0	88.0
50	68.5	61.0	103.0	95.0	93.2	105.5	124.0	101.0	125.0	109.0	125.0	114.0	117.0	105.0
65	-	-	-	-	131.8	140.5	160.0	143.0	160.0	135.0	165.0	153.0	125.0	114.0
80	-	-	-	-	140.0	150.7	170.0	154.0	171.0	145.0	174.0	165.0	165.0	153.0
100	-	-	-	-	173.6	174.3	182.0	168.0	204.0	160.0	-	205.0	174.0	165.0

Height Dimensions by Series and Size (inch)														
Series Number	110	110	120	120	155	155	171	172	171T	172T	F180 (F)	F182 (F)	R180 (F)	R182 (F)
NPS	Former	New	Former	New	Former	New	Former	New	Former	New	Former	New	Former	New
¼	1.38	1.02	2.05	1.97	1.93	2.11	2.58	2.44	-	-	2.60	2.68	-	2.68
⅜	1.44	1.06	2.05	1.97	1.93	2.11	2.60	2.44	-	2.09	2.60	2.68	-	2.68
½	1.57	1.38	2.28	2.28	2.28	2.21	3.27	2.52	3.23	2.24	3.31	2.83	2.60	2.68
¾	1.74	1.50	2.48	2.46	2.40	2.43	3.39	2.76	3.39	2.52	3.46	3.11	3.31	2.83
1	1.87	1.73	2.95	2.73	2.68	2.98	3.78	2.91	3.86	2.95	3.86	3.35	3.35	3.11
1¼	2.09	1.89	3.15	2.99	2.89	3.20	4.02	3.39	-	3.19	3.98	3.46	3.86	3.35
1½	2.44	2.17	3.70	3.42	3.33	3.83	4.53	3.66	4.92	3.94	4.61	4.13	3.98	3.46
2	2.70	2.40	4.06	3.74	3.67	4.15	4.88	3.98	6.30	4.29	4.92	4.49	4.61	4.13
2½	-	-	-	-	5.19	5.53	6.30	5.63	6.73	5.31	6.50	6.02	4.92	4.49
3	-	-	-	-	5.51	5.93	6.69	6.06	8.03	5.71	6.85	6.50	6.50	6.02
4	-	-	-	-	6.83	6.86	7.17	6.61	8.90	6.30	-	8.07	6.85	6.50

NOTE

For detailed dimension comparison, please refer to the latest General Arrangement drawings.

7. Design Features Comparison

The former and new K-Ball Series ball valves share many standard features. Notable differences can be seen for the Series 171 and 180 where face to face dimensions differ, the patented Sealmaster® secondary seal is replaced with an O-ring design and the Posilock® locking lever is replaced with a standard locking lever arrangement.

Series Number	110	110	120	120	155	155
	Former	New	Former	New	Former	New
Supplier Model No.	-	V1	-	V2	-	V-3E
Body Construction	1 pc	1 pc	2 pc	2 pc	3 pc	3 pc
Port	Reduced	Reduced	Full	Full	Full	Full
Size Range	NPS ¼ - 2 DN 8 - 50	NPS ¼ - 2 DN 8 - 50	NPS ¼ - 2 DN 8 - 50	NPS ¼ - 2 DN 8 - 50	NPS ¼ - 4 DN 8 - 100	NPS ¼ - 4 DN 8 - 100
Pressure Range	1000 psig	1000 psig	1000 psig	1000 psig	1000 psig (to 2") 600 psig (2½"- 4")	1000 psig (to 2") 800 psig (2½ - 4")
Face to Face	Manufacturer Std.	Manufacturer Std.	DIN 3203 M3	DIN 3203 M3	Manufacturer Std.	Manufacturer Std.
End Connection	BSPP / BSPT / NPT	BSPP / BSPT / NPT	BSPP / BSPT / NPT	BSPP / BSPT / NPT	BSPP / BSPT / NPT / BW / SW	BSPP / BSPT / NPT / BW / SW
Body Material	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel / Carbon steel	Stainless Steel / Carbon steel
Seat options	PTFE (std.)	PTFE (std.)	PTFE (std.)	PTFE (std.)	PTFE (std.)	PTFE (std.)
Design Standard	Manufacturer Std.	Manufacturer Std.	Manufacturer Std.	Manufacturer Std.	Manufacturer Std.	Manufacturer Std.
ISO 5211 Topworks	No	No	No	No	No	No
Testing Standard	API 598	API 598	API 598	API 598	API 598	API 598
Packing (as per)	Manufacturer Std.	Manufacturer Std.	Manufacturer Std.	Manufacturer Std.	Manufacturer Std.	Manufacturer Std.
Certification						
PED	✓	✓	✓	✓	✓	✓
TA-LUFT	-	-	-	-	-	-
CU TR (EAC)	✓	✓	✓	✓	✓	✓
3.1	-	-	-	-	-	-
Firesafe Certificate	-	-	-	-	-	-

Series Number	171	172	171T	172T	180	182 S (Standard)	180F	182 F (Firesafe)
	Former	New	Former	New	Former	New	Former	New
Supplier Model	-	V-3MH	-	V-3SAN	-	V-3WMH / V-3WMHR	-	V-3WMHFS / V-3WMHRFS
Body Construction	3 pc	3 pc	3 pc	3 pc	3 pc	3 pc	3 pc	3 pc
Port	Full	Full	Full	Full	Full / Reduced	Full / Reduced	Full / Reduced	Full / Reduced
Size Range	NPS ¼ - 4 DN 8 - 100	NPS ¼ - 4 DN 8 - 100	NPS ¼ - 12 DN 8 - 300	NPS ¼ - 4 DN 8 - 100	NPS ¼ - 4 DN 8 - 100	NPS ¼ - 4 DN 8 - 100	NPS ¼ - 4 DN 8 - 100	NPS ¼ - 4 DN 8 - 100
Pressure Range	1000 psig (to 1 ½") 800 psig (2 - 4")	1000 psig (to 1 ½") 800 psig (2 - 4")	1000 psig (to 1 ½") 800 psig (2 - 12")	1000 psig (to 1 ½") 800 psig (2 - 4")	1440 psig (to 2") 740 psig (2½ - 4")	1500 psig (to 2") 800 psig (2½ - 4")	1440 psig (to 2") 740 psig (2½ - 4")	1500 psig (to 2") 800 psig (2½ - 4")
Face to Face	Manufacturer Std.	Manufacturer Std.	Manufacturer Std.	Manufacturer Std.	Manufacturer Std.	Manufacturer Std.	Manufacturer Std.	Manufacturer Std.
End Connection	BSPP / BSPT / NPT / BW / SW	BSPP / BSPT / NPT / BW / SW	Tri-Clamp / BW / Orbital Tubing	Tri-Clamp / BW	BSPP / BSPT / NPT / BW / SW	BSPP / BSPT / NPT / BW / SW	BSPP / BSPT / NPT / BW / SW	BSPP / BSPT / NPT / BW / SW
Body Material	Stainless Steel / Carbon steel	Stainless Steel / Carbon steel	Stainless Steel	Stainless Steel	Stainless Steel / Carbon steel	Stainless Steel / Carbon steel	Stainless Steel / Carbon steel	Stainless Steel / Carbon steel
Seat options	PTFE (std.)	PTFE (std.)	PTFE (std.)	PTFE (std.)	TFM 1600 (std.)	TFM 1600 (std.)	TFM 1600 (std.)	TFM 1600 (std.)
Design Standard	Manufacturer Std.	Manufacturer Std.	Manufacturer Std.	Manufacturer Std.	Manufacturer Std.	Manufacturer Std.	Manufacturer Std.	Manufacturer Std.
ISO 5211 Topworks	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Testing Standard	API 598	API 598	API 598	API 598	API 598	API 598	API 598	API 598
Packing (as per)	Manufacturer Std.	Manufacturer Std.	Manufacturer Std.	Manufacturer Std.	Manufacturer Std.	Manufacturer Std.	Manufacturer Std.	Manufacturer Std.
Certification								
PED	✓	✓	✓	✓	✓	✓	✓	✓
TA-LUFT	✓	✓	-	-	-	-	-	-
CU TR (EAC)	✓	✓	✓	✓	✓	✓	✓	✓
3.1	-	-	-	-	-	-	✓	✓
Firesafe Certificate	-	-	-	-	-	-	✓	✓

Conclusion

The change in sourcing for K-Ball ball valves allows Emerson to continue to offer and support an extensive range of K-Ball ball valves while focusing on new product innovation for the core product portfolio. The newly sourced K-Ball ball valves provide broad coverage of the former range as detailed in the table below.

Notably, the new source of K-Ball ball valves does not provide coverage for the Series 130 (F130M, F133M and R138). These products are discontinued effective from the date of the official announcement. Please also review the official announcement for specifics on how current orders, current and expired quotations, and spare parts support are to be managed for these products.

Additionally, the new source of supply will result in design changes for Series 171 and Series 180:

- An O-ring design replaces the patented Sealmaster® secondary seal arrangement.
- A standard pad lockable lever replaces the patented Posilock® lever arrangement.
- The Series 171 and Series 180 are renamed Series 172 and Series 182 respectively to distinguish between the product lines as there are some significant differences in face to face dimensions.
- The Series 172T is no longer offered with orbital tubing ends.

Former K-Ball Range		New K-Ball Range Replacement Summary by Size (DN)															
Series	**Material**	**8**	**10**	**15**	**20**	**25**	**32**	**40**	**50**	**65**	**80**	**100**	**125**	**150**	**200**	**250**	**300**
110	SS	Series 110*															
120	SS	Series 120*															
130M	SS																
133M	SS																
138	SS																
155	SS	Series 155*															
	CS	Series 155*															
171	SS	Series 172															
	CS	Series 172															
171T	SS			Series 172T				Series 172T									
F180/R180	SS	Series 182 SF (standard, full bore) or Series 182 SR (standard, reduced bore)															
	CS	Series 182 SF (standard, full bore) or Series 182 SR (standard, reduced bore)															
F180F/R180F	SS	Series 182 FF (firesafe, full bore) or Series 182 FR (firesafe, reduced bore)															
	CS	Series 182 FF (firesafe, full bore) or Series 182 FR (firesafe, reduced bore)															

NOTES

Existing size availability coverage in new K-Ball range

Expanded size availability in new K-Ball range

Product discontinued with no direct replacement - consult Emerson representative

Not available in Emerson range

* Former and new designs are almost identical, hence there is no change in the Series number

Thank you for utilizing this Management of Change Document to aid you in this transition

Please contact your local Emerson representative for additional details, questions, and support regarding Emerson's K-Ball ball valve portfolio.