

CERTIFICATE OF COMPLIANCE
Material and Production Test Certification
Mueller 14-24" R2361 OS&Y Valves

WE HEREBY CERTIFY that MUELLER CO. 14 - 24" R2361 OS&Y valves are manufactured and tested at the Mueller ISO 9001 registered facility in Chattanooga, TN, USA. Mueller certifies these valves are UL 262 Listed, FM 1120/1130 Approved and are certified to ANSI/NSF 61 & 372 and meet or exceed the requirements of AWWA C515. Production testing is performed in accordance with these standards and meets the following specifications.

APPROVALS / PRODUCTION TESTING						
Size	Model No.	AWWA C515 (psi)	UL 262 (psi)	FM 1120/1130 (psi)	Hydro Seat Test (psi)	Hydro Shell Test (psi)
14 - 16"	R2361	250	250	250	375/375	500
18 - 24"	R2361	250	175	250	275/275	

Mueller certifies that valve body, bonnet, yoke and wedge are manufactured per Mueller QA procedures; each heat is tested and certified to be within the specification shown in the chart under a controlled program and in accordance with ASTM A536 Ductile Iron.

Ductile Iron: ASTM A536										
CHEMICAL COMPOSITION										
Element	C	Si	Mn	S	Cu	P	Cr	Ti	Pb	Mo
Minimum	3.900	2.500	0.370	-----	0.140	-----	-----	-----	-----	-----
Maximum	3.950	2.800	0.420	0.022	0.180	0.050	0.080	0.015	0.005	-----

Mueller certifies that R2361 valves feature manganese bronze stems manufactured under a controlled program and are in accordance with the following alloys.

14-16" Valves: ASTM B138; Alloy C67600									
Chemical Composition							Mechanical Properties		
Element	Cu	Fe	Pb	Mn	Sn	Zn	Tensile	Yield	Elongation
Minimum	57.00	0.40	0.50	0.05	0.50	Remainder	70,000	35,000	15.00%
Maximum	60.00	1.30	1.00	0.50	1.50	Remainder	-----	-----	-----

18-24" Valves: ASTM B584; Alloy C86400											
Chemical Composition								Mechanical Properties			
Element	Cu	Al	Fe	Pb	Mn	Sn	Zn	Specification	Tensile	Yield	Elongation
Minimum	56.00	0.50	0.40	0.50	0.10	0.50	34.00	Minimum	60,000	20,000	15.00%
Maximum	62.00	1.50	2.00	1.50	1.50	1.50	42.00	Maximum	-----	-----	-----

Mueller certifies that R2361 14-16" valves feature SBR encapsulated wedges and 18-24" valves feature EPDM encapsulated wedges. Wedges are manufactured under a controlled program and are in accordance with the following elastomer specifications.

SBR (Mueller Rubber Specification R-88); ASTM D2000				
Specification	Durometer	Tensile	Elongation	Compression Set
Minimum	73	2,000	200%	0.00
Maximum	83	-----	-----	18.00

EPDM (Mueller Rubber Specification R-97); ASTM D2000				
Specification	Durometer	Tensile	Elongation	Compression Set
Minimum	69	2,000	200%	0.00
Maximum	79	----	----	18.00

Mueller certifies the coating supplied with these valves is Mueller® Pro-Gard™ Epoxy Coating, an exceptional fusion bonded epoxy electrostatically applied to valve internal and external surfaces to protect against corrosion. This coating is Sienna red in color, non-toxic and suitable for use with drinking water components. Mueller valves with Pro-Gard are certified to NSF 61 and meet or exceed AWWA C550 requirements. Valves have a standard coating of ten mils nominal thickness.

Mueller certifies that components for R2361 OS&Y valves are manufactured in accordance with Mueller Co. QA procedures which include but are not limited to relevant dimensional, visual, and functional inspection and verification.

Respectfully,

A handwritten signature in black ink, appearing to read 'Anton Nasledov', with a long horizontal flourish extending to the right.

Anton Nasledov
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