Stockham iron body valves are proven performers in mechanical systems of commercial buildings throughout America. Chemical plants, steel mills, shipyards, refineries, pulp and paper mills, and utilities have also found that Stockham iron body valves do the job better and longer for their many general services.

QUALITY MANAGEMENT

Stockham is committed to a philosophy of total quality management. It begins with design, to comply with pertinent MSS and ASME Standards. Continuous improvement are applied in a process to improve materials and services to meet or exceed customer needs.

MATERIALS

The iron used as the basic valve material conforms to the chemical and physical requirements of the American Society of Testing and Materials A-126 Class B for Cast Iron Valves. Cast iron valves with 3% nickel content can also be provided. All valve materials are listed and described in the Technical Data Booklet.

RATED WORKING PRESSURES

The pressure-temperature ratings of Stockham iron body valves in this catalog section are as follows:

TEMPERATURE °F	PRESSURE (PSIG)				
	CLASS 125 CAST IRON			CLASS 250 CAST IRON	
	SIZES 2-12	SIZES 14-24	SIZES 30-36	SIZES 2-12	SIZES 14-24
-20 to 100	200	150	150	500	300
150	200	150	150	500	300
200	190	135	115	460	280
225	180	130	100	440	270
250	175	125	85	415	260
275	170	120	65	395	250
300	165	110	50	375	240
325	155	105		355	230
350	150	100		335	220
375	145			315	210
400	140			290	200
425	130			270	
450	125			250	
500					
600					
650					

The temperature shown for a corresponding pressure rating is the temperature of the pressure containing shell of the component. In general, this temperature is the same as that of the contained fluid. Composition disc valves are excluded from these ratings.

DESIGN:
GATE VALVES-CLASSES 125 and 250

Stem—All stems are designed for ample strength and are machined to function easily. Backseats are provided on OS&Y valves.

Packing Gland Assembly—Glands and gland flanges have a ball and socket joint which assures alignment. It provides for proper packing compression without binding against the stem.

Packing—Non-Asbestos.

Disc—Strong, solid wedge discs have disc guides for precision seating with minimum friction against body seats.

Yoke and Bonnet—One-piece yoke bonnets are utilized on 12" and smaller size OS&Y valves. Larger sizes have separate yokes and bonnets.

Stuffing Box—NRS valves have stuffing boxes assembled to bonnets to accommodate the packing gland assembly.

Seat Ring—Buttress-type seat rings are bottom-seated with accurately machined faces to match disc faces.

Handwheel or Operating Nut—Handwheels have large diameters for good leverage. Operating nuts, 2" square may be furnished on any NRS valve if specified.

Yoke Bushing—Yoke bushings on OS&Y valves have Acme threads for stem engagement, and handwheels fit snugly over bushings. Handwheels are securely locked to yoke bushings with locknuts. Bolted yoke cap secures the yoke bushing to yoke.

Body—Body sections are evenly distributed for maximum strength. Dimensions and drilling of end flanges of cast iron valves conform to the ASME Standard B16.1 for Classes 125 and 250 Cast Iron Flanges. Face-to-face dimensions comply with ASME Standard B16.10.

DESIGN:
GLOBE AND ANGLE VALVES-OUTSIDE SCREW AND YOKE-CLASSES 125 and 250

Stem—Stems are machined with Acme threads which fully engage the yoke bushing threads at all times.

Packing Gland Assembly—Glands and gland flanges have a ball and socket joint which assures alignment and proper packing compression.

Packing—Non-Asbestos.

Backseat Bushing—Bushings are threaded into bonnets, providing beveled seats for backseating on stem shoulders.

Disc—Bronze discs are furnished in Class 125 and 250 globe and angle valves, which are regrindable. Disc nuts thread into disc. The Class 250 nonreturn stop-check valve conforms to ASME boiler codes and utilizes a dashpot and piston design to cushion the disc action.

Yoke Bonnet—One-piece yoke bonnets are fastened to bodies with capscrews.

Seat Rings—Seat rings are bottom seated and are readily renewable.

Handwheel—Handwheels have large diameters for ample leverage.

Yoke Bushing—Accurate Acme threads engage stem threads. Set screws fasten yoke bushings to yoke.

Body—Bodies are designed with uniform sections evenly distributed for maximum strength. Dimensions and drilling of end flanges on flanged valves conform to the ASME Standard B16.1 for Classes 125 and 250 Cast Iron Flanges. Face-to-face dimensions comply with the ASME Standard B16.10.

DESIGN:
SWING CHECK VALVES-CLASSES 125 and 250

Cap—Caps are bolted to bodies.

Hinge—Hinges are precisely drilled for assembly with discs.

Hinge Pin—Pins are located by side plugs screwed into bodies.

Disc—Disc faces are accurately machined for tight seal with seat rings.

Seat Ring—Buttress design of renewable seat rings provides bottom seating and good strength.

Body—Dimensions and drilling of end flanges on flanged valves conform to ASME Standard B16.1 for Classes 125 and 250 Cast Iron Flanges. Face-to-face dimensions comply with ASME B16.10.

ACCESSORIES—Stockham iron body valves may be furnished with motor operators, gearings, bypasses, floorstands, extension stems, lever and weight attachment or other accessories.

MARKING—Numerals indicate the size and pressure class. Cast arrows indicate direction of flow on check, globe and angle valves.

TESTING AND INSPECTION—Before shipment, each valve is individually tested under pressure for soundness of castings and tight closure to MSS Standards.

FINISH—External cast iron parts are coated with a durable black finish.

WEIGHTS AND DIMENSIONS—Dimensions and weights shown in this catalog section are furnished for estimating purposes only and are subject to change without notice. It is our intent to maintain basic dimensional requirements of accepted standards.

C_V COEFFICIENTS*
(For estimating purposes only)

Size	Gate	Globe	Swing Check
2	327	50	131
2½	480	74	192
3	742	114	297
4	1314	202	526
5	2129	327	852
6	3175	487	1270
8	5691	873	2276
10	8970	1376	3588
12	13351	—	5340
14	16277	—	6511
16	21562	—	8625
18	28715	—	11486
20	35760	—	14304
24	52165	—	20866
30	82563	—	—
36	119910	—	—

*Fully open. C_V=GPM @ 1 PSI ΔP, 60°F Water

The above values for Swing Check Valves are correct only when the valve is fully open. This corresponds to a velocity of 6 ft./sec. for water flow.