

球阀被广泛的应用在石油炼制、化工、造纸、制药、食品、水力、市政、钢铁等行业。其中抗硫系列球阀特别适用于含硫化氢介质、杂质多、腐蚀严重的天然气长输管线。

Ball valves are widely used in petroleum refining, chemical, paper making, pharmacy, food, water power, municipal, steel and other industries. Among them, sulfur-resistant series ball valves are particularly suitable for long-distance pipeline for transmission of high-corrosion natural gas with sulphuric hydrogen medium and many impurities.

### 球阀的全通径及缩径结构 FULL & REDUCE BORE

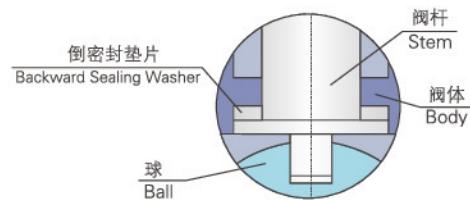
为满足客户的不同需求，球阀设有全通及缩径两大系列。全通径球阀的通道内径与管线内径一致，不但流体阻力最小，也便于管道清理。而缩径球阀的流体阻力比相同口径截止阀的流体阻力要低很多，重量比相同口径的球阀要轻30%左右，有效的降低了生产成本及价格，因而遂得到了较为广泛的使用。

In order to meet different needs of customers, we provide two series of ball valves, full bore and reduced bore ball valves. The channel inner diameter of full bore ball valves is consistent with the inner diameter of pipeline, which can not only minimize the fluid resistance but also facilitate pipeline cleaning. The fluid resistance of necked bore ball valves is much less than that of the globe valve with the same caliber while its weight is 30% lighter than ball valves with the same caliber. As a result, it can effectively reduce both the production cost and price, and is relatively widely used.

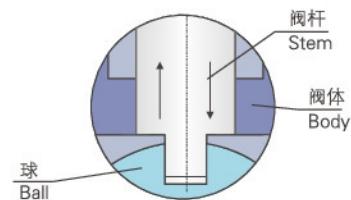
### 阀杆防冲出及有效密封结构 BLOW – OUT PROOF STEM

阀杆采用下装式、设置带有密封垫片的倒密封结构，倒密封的密封力随阀腔介质压力的增高而增大，从而确保阀杆的密封效果。当阀腔异常升压时，阀杆不会被冲出。填料采用设计合理的V型结构、能将阀腔内部的介质压力及外部压盖的锁紧力有效的转化成阀杆的密封力(如图一)。

The stem is downloading with its inverted sealing structure with sealing gasket. The force of inverted sealing structure will increase while the medium pressure in the valve cavity increases, to ensure the sealing effect of the stem. In case of abnormal pressure increasing of the valve cavity, the stem won't be impacted out. The filler is designed with proper V-shaped structure, which can effectively convert the medium pressure inside the valve cavity and the locking force of outer gland into the sealing force of stem (Figure 1).



有倒密封的下装式结构  
Lower-Loading Construction with Backward Sealing



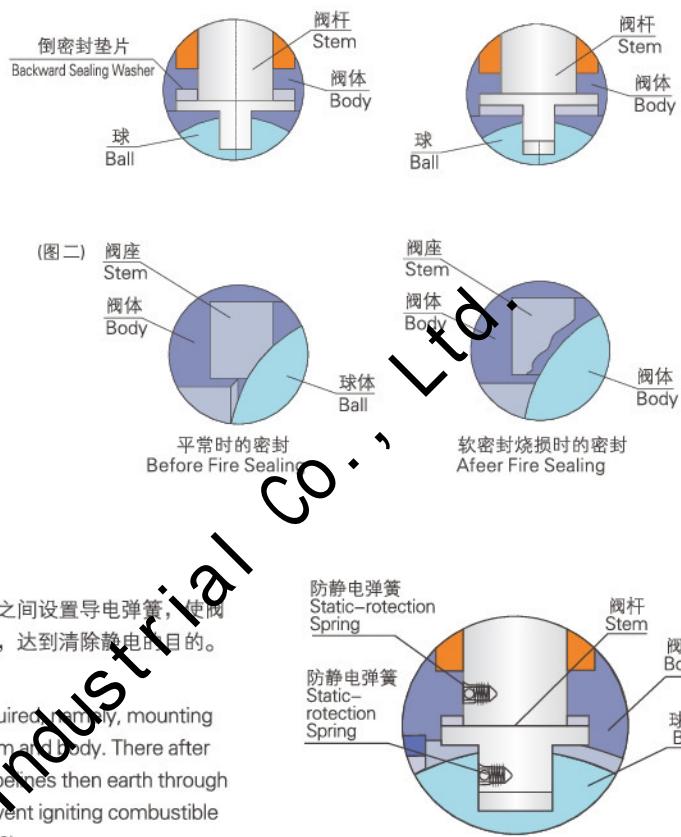
无倒密封的下装式结构  
Lower-Loading Construction without Backward Sealing

(图一)

## 耐火结构 FIRE SAFE SEAT SEALING

根据用户的需要，球阀可设计成耐火结构，当万一发生火灾而使密封圈烧损时，球阀的各个密封部位均能形成金属对金属的硬密封结构，有效阻止介质的扩散，防止火灾扩大(如图二)。

According to the user's requirement, the ball valve can be designed with fire-resistant structure. In case of a fire and the sealing ring is damaged, every sealing part of the ball valve can form the structure of metal-to-metal hard seal, which can prevent the spreading of both the media and fire (Figure 2).



## 防静电结构 STATIC-PROTECTING CONSTRUCTION

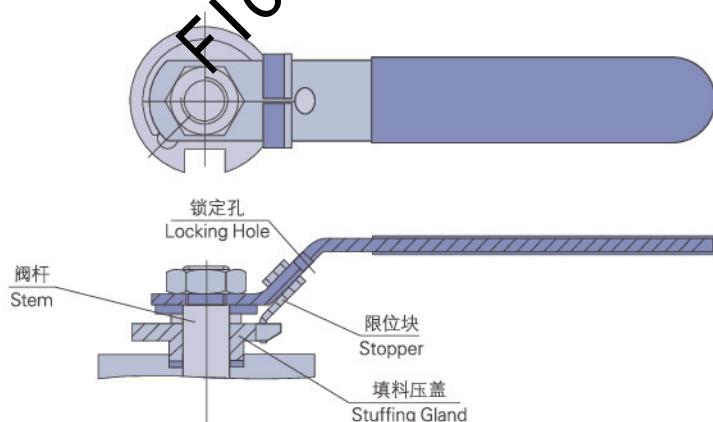
根据用户需要，球阀可设计防静电结构，即在球体与阀杆、阀杆与阀体之间设置导电弹簧，使阀门在开启过程中产生的静电能通过所设置的静电通道传入管路导入地下，达到清除静电的目的。避免静电打火点燃易燃介质，确保系统安全。(如图九)

The ball valve could be designed as static-protecting construction as required, namely, mounting conductive spring between the globe body and stem, or between the stem and body. There after the static engendered during opening the valve could be conducted to pipelines then earth through the pre-set static passage to clear static away. The design works to prevent igniting combustible medium by static fire-striking for the system safety.(As shown in figure 9)

## 带锁结构 INTERLOCKING DEVICE

对安装在野外的或防止非工作人员误操作的，以及在有些震动较大的场合手柄受到撞击易产生误操作的阀门，在阀门的全开或全关的位置设有锁定孔，需要时可加锁，起到安全保险作用(十二、十三)。

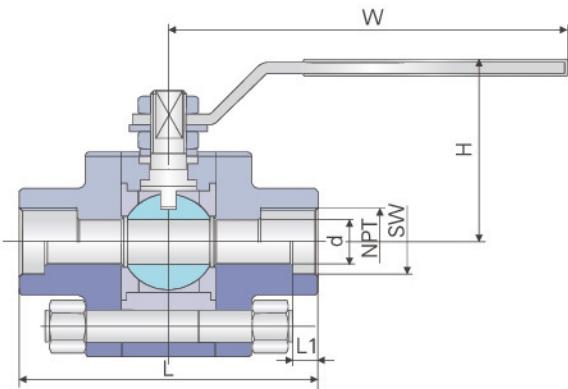
For valves installed outdoors, those preventing improper operation of non-workers and valves, of which collision of its stem in relatively violent vibration occasions easily causes improper operation, a locking bore can be set in the fully open position or fully closed position and a lock can be used if needed, for the purpose of security insurance (Figure 4).



图十三/ Figure 12

## 三片式锻钢球阀

### 3 PCS FORGED STEEL BALL VALVES 800LB/1500LB



#### 主要零件及材料 MAIN PARTS AND MATERIALS

NO	名称 Part name	碳钢 CARBON STEEL	不锈钢 STAINLESS STEEL
1	阀体Body	A105	F304 F316 F316L
2	球Ball	SS304	SS316 SS316L
3	阀杆Stem	SS304	SS316 SS316L
4	密封圈Seat	PTFE,RTFE	
5	垫片Gasket	O-RING,PTFE,GRAPHITE	
6	填料Stuffing	PTFE,GRAPHITE	
7	止推垫片Fixcasket	PTFE	
8	定位片Locating piece	A283D, STAINLESS STEEL	
9	手柄Lever	A283D, Stainless steel	
10	薄螺形母Stem nut	Stainless steel A276-T304	
11	定位销Stop pin	Stainless steel A276-T304	
12	螺母NUT	A194-2H	A194-8
13	螺栓STUD BOLT	A193-B7	A193-B8

#### 主要连接尺寸表 DIMENSION TABLE

缩径 RB	通径 FB	L	d	NPT		SW		L1		H	W	WEIGHT (kg)
				RB	FB	RB	FB	RB	FB			
3/8x1/4"	1/4"	92	9.5	3/8"	1/4"	17.6	14.2	9.6	9.6	53	130	1.5
1/2x3/8"	3/8"	92	9.5	1/2"	3/8"	21.8	17.6	9.6	9.6	53	130	1.5
3/4x1/2"	1/2"	92	13	3/4"	1/2"	27.1	21.8	12.7	9.6	56	130	1.5
1x3/4"	3/4"	111	18	1"	3/4"	33.8	27.1	12.7	12.7	70	160	2.4
11/4x1"	1"	127	24	11/4"	1"	42.6	33.8	12.7	12.7	80	220	3.9
11/2x11/4"	11/4"	140	30	11/2"	11/4"	48.7	42.6	12.7	12.7	90	250	6.1
2x11/2"	11/2"	152	38	2"	11/2"	61.2	48.7	15.9	12.7	100	250	8.5
21/2x2"	2"	178	48	21/2"	2"	74.1	61.2	15.9	15.9	110	290	10

#### 应用规范 APPLICATION SPECIFICATIONS

- 设计制造标准:BS5351 MSS SP-118  
Design and manufacture conform to Bs5351 MSS SP-118
- 连接端尺寸Connection ends conform to:  
 1)承插口尺寸按:ANSIB16.11; JB/T1715  
Socket welded ends conform to  
ANSIB16.11; JB/T1715  
 2)螺纹端尺寸按:ANSIB1.12.1; JB/T7306  
Screw ends conform to  
ANSI B1.12.1; JB/T7306  
 3)对焊端尺寸按:ANSI B16.25; JB/T12224  
Butt-welded ends conform to  
ANSI B16.25; JB/T12224
- 检验和试压按:API598;GB/T13927;JB/T9092  
Test and inspection conform to  
API598; GB/T13927; JB/T9092
- 材料标准根据:ANSI/ASTM  
Materials conform to ANSI/ASTM

阀体温压等级  
VALVE BODY PRESSURE RATING  
Class 800,Max 1920 psig@100 °F  
Class 1500,Max 3600 psig@100 °F

## 三片式锻钢球阀

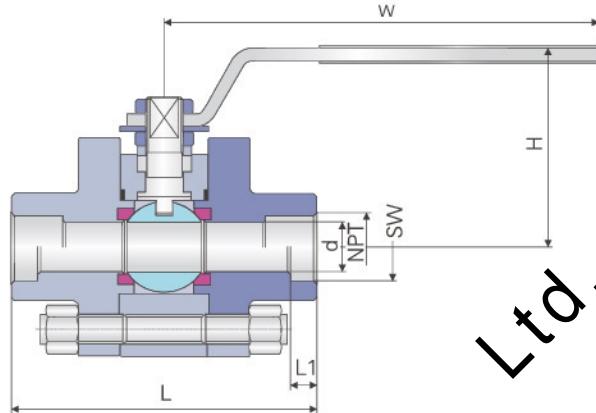
### 3 PCS FORGED STEEL BALL VALVES 2500LB

#### 应用规范 APPLICATION SPECIFICATIONS

- 1.设计制造标准:BS5351 MSS SP-118  
Design and manufacture conform to Bs5351 MSS SP-118
- 2.连接端尺寸Connection ends conform to:
  - 1)承插口尺寸按:ANSIB16.11 JB/T1715  
Scocket welded ends conform to ANSIB16.11 JB/T1715
  - 2)螺纹端尺寸按:ANSI B1.12.1 JB/T7306  
Screw ends conform to ANSI B1.12.1 JB/T7306
  - 3)对焊端尺寸按:ANSI B16.25 JB/T12224  
Butt-welded ends conform to ANSI B16.25 JB/T12224
- 3.检验和试压按:API598 GB/T13927 JB/T9092  
Test and inspection conform to Ap598 GB/T13927 JB/T9092
- 4.材料标准根据:ANSI/ASTM  
Materials conform to ANSI/ASTM

阀体温压等级  
VALVE BODY PRESSURE RATING  
Class 2500,Max 6000 psig@ 100 °F

#### 主要连接尺寸表 DIMENSION TABLE



#### 主要零件及材料 MAIN PARTS AND MATERIALS

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3	阀杆 Stem	SS304	SS304 SS316 SS316L
4	密封圈 Seat		PEEK
5	垫片 Gasket		O-RING, PTFE, GRAPHITE
6	填料 Stuffing		PTFE, GRAPHITE
7	止推垫片 Fixcasket		PTFE
8	定位片 Locating piece		A283D, STAINLESS STEEL
9	手柄 Lever		A283D, Stainless steel
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1 1/4x1"	1"	140	24	1 1/4"	1"	42.6	33.8	12.7	12.7	80	250	6
1 1/2x1 1/4"	1 1/4"	152	30	1 1/2"	1 1/4"	48.7	42.6	12.7	12.7	90	250	10.7
2x1 1/2"	1 1/2"	178	38	2"	1 1/2"	61.2	48.7	15.9	12.7	100	290	12.1
2 1/2x2"	2"	203	48	2 1/2"	2"	74.1	61.2	15.9	15.9	110	380	18.3