



**Ranhill
SAJ**

**SPECIFICATION FOR
DUCTILE IRON B LARGE SLUICE VALVES**

**SPECIFICATION SAJ VL / SV / 001
(Rev.4.0 / 12.2018)**

QUALITY ASSURANCE DEPARTMENT
RANHILL SAJ SDN. BHD

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SAJ SPECIFICATIONS FOR DUCTILE IRON TYPE B LARGE SLUICE VALVE

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**SAJ SPECIFICATION FOR
DUCTILE IRON TYPE B LARGE SLUICE VALVES (DN 700 to DN 1800)
FOR WATERWORKS PURPOSES**

1.0 General

- a. Features required are as follows or otherwise the Spesifikasi JKR 20200-0077-00, JKR Standard Specification for Ductile Iron Type B Large Sluice Valves (DN 700 to DN 1800) shall be used.

2.0 Features Required

- a. The valve shall be of the double flange inside screw non – rising stem wedge gate type with body, bonnet and gate made of ductile iron.
- b. The nominal pressure shall be PN16.
- c. The valve shall be metal seated or resilient seated and supplied complete with built-in sluice valve by-pass and operated by suitable reducing gears with mechanical indicator. However, preference should be resilient seated.
- d. Ductile Iron caps on the main and bypass valves shall be supplied secured by a brass set screw with clockwise closing direction indicated on the cap.
- e. The bypass unit consists of ductile iron type B resilient seated gate valve and polymeric coated ductile iron pipe fittings with flanges bolted onto the tapped bosses or flanges integral to the main valve body by stainless steel bolts.
- f. All flanges and bolting shall comply with PN16 in BS 4504.

3.0 Materials

- a. All large sluice valves shall be made of the following materials complying with the relevant standards.

Valve Parts	Material	Standards
Body / Disc / Cover	Ductile Iron	BS 2789 Grade 420/12
Seat	Gunmetal	BS 1400 LG2
Stem	Stainless Steel	BS 970 Grade 304S15
Stem Nut	Gunmetal	BS 1400 LG2
Stem Seal	EPDM	BS EN 681

4.0 Finish

- a. All internal and external parts of the ductile iron casting components of the valve shall undergo the necessary surface preparation for fusion bonded epoxy coating of thickness from 250µm to 350µm.
- b. All bolts, nuts, washers and setscrews shall be of stainless steel 304S31.

5.0 Test, Inspection and Evaluation

- a. It is the responsibility of the tenderer to inform SAJ for inspection purposes during manufacturing and before delivery.
- b. SAJ reserve the right to inspect and witness the testing of product offered.
- c. At any time, when requested, the supplier is to provide SAJ a sample of the product offered for evaluation purposes. All costs shall be borne by the supplier.
- d. If at any time the supplier fails to deliver the required sample, the product is deemed fail to meet the specifications.

6.0 Certification

- a. Manufacturer of supplier are required to provide a copy of the certificate and testing report from SIRIM, IKRAM or other recognised certification body.
- b. Tests report required shall be those tests conducted within a year period.
- c. SAJ have the right to refuse offer or reject supply if the documents required are not enclosed.

7.0 Mandatory Marking

Valves shall have the following body markings in raised letters: -

- a) The nominal size (i.e. DN)
- b) The nominal pressure designation (i.e. PN.....)
- c) The body material identification – "D I"
- d) The seat material – "RES"
- e) The manufacture's name and trademark
- f) Year of manufacture
- g) Standard Reference – "BS 5163"
- h) Designation type – "TYPE B"
- i) Directional of closing markings – "CLOSE"

Serial number of the valve and date of manufacture shall be clearly printed on the valve body.

8.0 Packing

All valves are to be individually packed with proper methods and protected from damage during transit.



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SCHEDULE OF STORES

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Information to be supplied by the Tenderer

The tenderer should include the following information.

Nos.	Description of item	Feature / Material Type
a)	Type B	Yes / No
b)	Metal Seat Type / Resilient Seated Type	Type of Valve :
c)	Maximum differential pressure	
d)	Body Material	
e)	Bonnet Material	
f)	Stem Material	
g)	Stuffing Box Material	
h)	Gland / Seal Housing	
i)	Wedge	
j)	Cap	
k)	Hand Wheel	
l)	Spindle (Stem)	
m)	Stem Seal	
n)	Dust Seal	
o)	Bonnet Gasket (3 mm.min.)	
p)	Seal Cartridge	
q)	All Bolts & Stem Nut	
r)	Surface Coating (Internal & External)	
s)	The wedge should be guided by valve body design	Yes / No
t)	Bypass pipe type and gate valve size and type	
u)	Operating device supplied and type	
v)	Test certificate provided	

Signature of Tenderer : Signature of witness:

Name: Name:

In the capacity of: Address:

Tenderer's Seal or chop:

Date: Date:



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Schedule of Stores
For Supply and Delivery Of Double Flanged Ductile Iron Large Sluice Valves TYPE B
For the Period of Year(s)

No.	Description	Unit	Qty	Rate (RM)	Amount (RM)
1	Sluice Valve D/F ductile iron, PN 16 resilient seated complete with gearbox & indicator, bypass unit and cap top in accordance with SAJ VL / SV / 001				
	700 mm				
	800 mm				
	900 mm				
	1000 mm				
	1200 mm				
	1400 mm				
	1600 mm				
	1800 m				
	TOTAL VALUE OF TENDER FOR				

(Ringgit:)

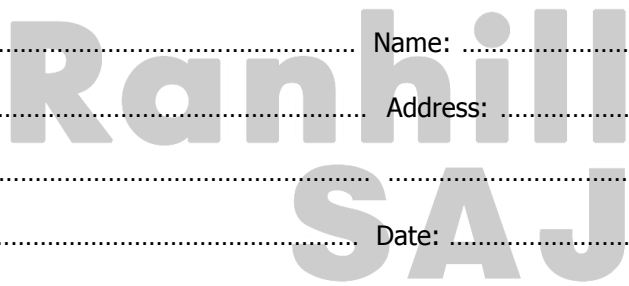
Signature of Tenderer: Signature of witness:

Name: Name:

In the capacity of: Address:

Tenderer's Seal or chop:

Date: Date:



Ranhill SAJ Sdn Bhd
Schedule of Stores
For Supply and Delivery Of Double Flanged Ductile Iron Large Sluice Valves TYPE B
For the Period of Year(s)

No.	Description	Unit	Qty	Rate (RM)	Amount (RM)
1	Sluice Valve D/F ductile iron, PN 16 metal seated complete with gearbox & indicator, bypass unit and cap top in accordance with SAJ VL / SV / 001				
	700 mm				
	800 mm				
	900 mm				
	1000 mm				
	1200 mm				
	1400 mm				
	1600 mm				
	1800 m				
	TOTAL VALUE OF TENDER FOR				

(Ringgit:)

Signature of Tenderer: Signature of witness:

Name: Name:

In the capacity of: Address:

Tenderer's Seal or chop:

Date: Date:

