

**DRP-M<sup>®</sup>**



*Experience & Technology  
Support Our Products*



कर्मण्येवाधिकारस्ते मा फलेषु कदाचन।  
मा कर्मफलहेतुर्भूर्मा ते संगोऽस्त्वकर्माणि॥

*(You have right to duty but not in its award. You should not be the reason of awards of your deeds and also you should not have attachment in not doing deeds.)*

Believing in this dictum of Shrimad Bhagvat Geeta, Sh. Pran Nath Bhalal made a very humble beginning with a small capital but with lots of blessings of his elders, Prabhu and Guru, for the manufacturing of Gun Metal Valves in a covered area of about 600 sq. ft. in the name & style of DRP Metals Works (Regd.) in 1976, his independent business after a short stint of learning process.

"As you sow, so shall you reap" the seeds of honesty, hard work & quality sown about 31 years ago have grown into a monolith, with four independent group companies, having more than 1 lac sq. feet covered area, latest CNC machines, diverse product portfolio and committed & qualified family work force.

In the development process, which is still continuing, brothers of Sh. Pran Nath namely Sh. Gopal Sharan, Sh. Desh Bandhu & Sh. Priya Mohan joined the business and the next generation of technically qualified youngsters is slowly but surely taking over.

A brief of growth and development is as follows :

Sr. No.	Company	Year Established	Products
1.	DRP Metal Works	1976	 Bronze & S.S. Valves & Cocks
2.	Veeson Valves Pvt. Ltd.	1992	 C.I. Industrial Valves & Cocks
3.	DRP Malleables Pvt. Ltd.	1996	 M.I.G.I. & C.S. Heavy Pipe Fittings
4.	Dhaniram Industries	2003	 Brass Valves & Cocks

These companies, though working independently, are still under guidance and advise of parent set up, a united force of family values, which till date, is unique in itself, while normally the companies start dividing themselves on family lines after a short period of bonhomie.

The hands on training of family values, quality products and good business relations, inculcate in the youngsters joining the business, the importance of human relations with our valueable customers, who are backbone of our growth.

*Family support has helped us think big and do well.*

Experience & Technology Support Our Products

International  
Standard's Infrastructure,  
Research & Development Lab.  
(R&D)



Casting

Facilities at  
DRP-M

- Moulding
- Heat Treatment
- Galvanizing
- Machining
- Testing
- Packaging
- Despatch



Chemical Test



Hydraulic Test

Widest Range of Products  
all India dealer network  
and prompt delivery.



CNC Unit





## A. Technical Information on DRP-M Malleable Iron Pipe Fittings :

Pipe Fitting are used in places where they are usually apt to escape attention or be hidden from sight. It follows that if leakage occurs from the Pipe Fitting, it can develop into an accident before the maintenance personnel notice it. Hence the users should be most careful in the quality of fittings chosen.

The DRP-M Pipe Fittings are manufactured under the motto

**"NO BREKAGE", NO LEAKAGE AND NO DEFORMATION DURING SERVICE"**

or simply to say  
**"FIT & FORGET"**

### 1. Applications :

The DRP-M Pipe Fittings are extensively used on pipe lines handling Steam, Air, Water, Gas Oil or many other kinds of liquids in building construction, oil refineries, fertilizer plants, steel plants, ship yards, agriculture, power plants, textiles, sugar mills, cement plants & many other fields.

### 2. Material Specifications :

1. Black Heart malleable cast iron as per IS: 14329-1995 graded BM-300
2. Specified zinc with 100% purity.

## Technical Comparison Data

Specification	DRP-M	ISS	ISO	BSS	JIS
Minimum Tensile strength (Kgf/mm <sup>2</sup> )	32	30	30	28	28
Minimum Elongation (%)	7.5	6	6	6	5
Minimum Zinc Coating (gms/m <sup>2</sup> )	680	610	450	450	-----
Minimum Working Pressure (Kgf/cm <sup>2</sup> ) Hydraulic	20	14	20	14	20
Angle Tolerance Degree (+/-)	0.50	1.00	0.50	0.45	0.40
Working Temperature (°C)	310	-----	-----	-----	-----

From above comparison data, it is quite clear that DRP-M products out perform all standards, which means value for money for our valueable customers.

### 3. Zinc Coating :

The DRP-M Pipe Fittings are classified as galvanized or black types. The galvanized type fittings are especially safe from corrosion. They are dipped in melted zinc before threading i.e. hot dipping process.

In DRP-M Pipe Fittings, the thickness of zinc coating exceeds the maximum specified in the Indian Standard, so as to provide added resistance the corrosion in abnormal wheter conditions.

This will result into that the DRP-M Galvanised Pipe Fittings will remain free from corrosion for forty years under favorable service conditions and for ten years even under unfavourable service conditions.

### 4. Finish :

Galvanised finish tested in accordance with provision contained in IS-4759-1996.

### 5. Threads :

Threaded as per IS-554-1999; Parallel Female & Taper Male Threads.

# Manufacturing Process

## B. Manufacturing Process of for DRP-M Pipe Fittings :

The DRP-M Pipe Fittings are manufactured by a fully mechanized mass production system under strict quality control applied throughout every stage of the manufacturing process, under the watchful eyes of experienced and highly qualified technical staff.

### I. Modernization :

New trends & technology is followed with keen interest and any innovations are introduced from time to time at the earliest. We have modern manufacturing facilities comprising :

- (a) Mechanized Foundry Shop
- (b) Continuous Annealing Furnace
- (c) Specially Modernized Tapping Shop

### 2. Quality Control

Our quality control system is very strict & encompasses all the stages of manufacturing, starting right from the raw material upto end product. We have well equipped computerised modern laboratory manned by qualified experience engineers and chemists ensures :

- Composition of Material
- Malleability Testing
- Sizes of Moulds
- Coating of Zinc
- Machining & Threading
- Hydraulic Testing
- Angle Inspection
- Surface Shine

All above steps of our quality control system ensures the best and product.



Fitting Inspection by use of standard thread gauge.



Angle Inspection of thread Axle wire.

### 3. Performance Guarantee

DRP-M Fittings are covered by an unprecedented performance guarantee of life time against manufacturing defect, if any, and such fitting will be replaced free of cost.

### 4. Advantage

1. Full flow (More space for material to run through it)
2. Quick installation, no need of additional coating, rust free & leak proof.
3. Best for underground installation, save time & labour.
4. Perfect Angle & Specified thread alignment, Non-crackable, Non-breakable and no maintenance required.
5. Wides Range of Products, all India dealer network and prompt delivery.



**D**

Durability

**R**

Reliability

**P**

Performance

**M**

Malleability

Experience & Technology Support Our Products





1. Computerized Designing



2. Quality Raw Material



3. Chemical Analysis of Raw Material



7. Grinding



8. Press Work



9. Shot Blasting



13. Thread Inspection



14. Angle Alignment



15. Hydraulic Pressure Test

# PROCESS FLOW CHART



4. Melting by Rotary Furnace



5. Moulds by Core Shooter Machine



6. Annealing Procedure



10. Hot Dip Galvanising



11. Chamfering



12. Machining & Threading with CNC



16. Final Inspection



17. Packing



18. Despatch



# Certificate of Registration



This is to certify that the  
Quality Management System of

**DRP Malleables (P) Ltd.**

Alawalpur, Jalandhar 144 301  
Punjab, INDIA

has been assessed and found compliant with the requirements of  
**ISO 9001:2000**

Approval is hereby granted for registration providing the  
certification rules and conditions are observed at all times.

**Certification Scope :**  
Manufacture and Supply of Pipe Fittings

Certificate No. IPK-0400.06  
Issue Date: 15 September 2006  
Expiry Date: 17 July 2008

A handwritten signature in black ink, appearing to read 'B. Singh'.

Authorised Signature

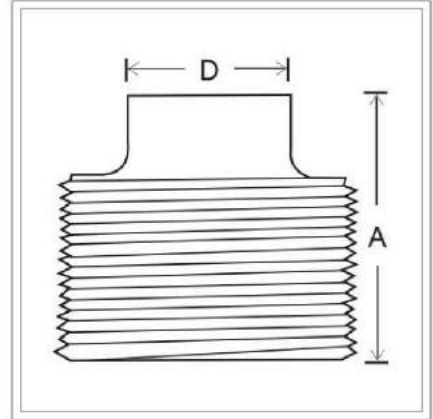
**Moody International Certification Ltd.**  
[www.moodyint.com](http://www.moodyint.com)

The use of the Accreditation Mark indicates accreditation in respect of those activities covered by the Accreditation Certificate 014.  
The certificate remains the property of Moody International Certification Limited to whom it must be returned on request.



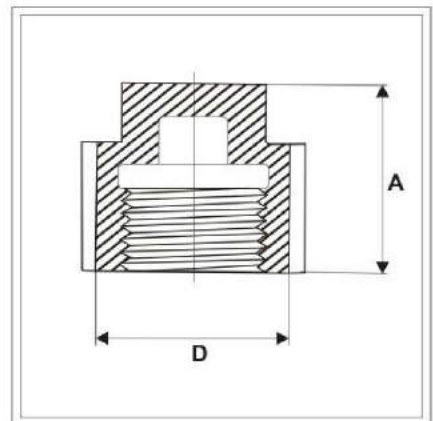
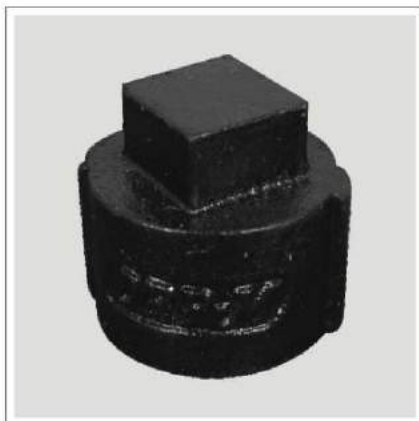


## Plug



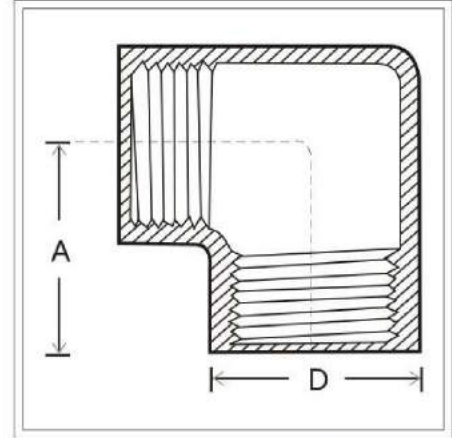
Size in inches	Size in mm	A in mm	D in mm	Weight in Kg.
1/2"	15	28	14	0.050
3/4"	20	31	16	0.070
1"	25	35	21	0.135
1 1/4"	32	38	25	0.200
1 1/2"	40	42	29	0.280
2"	50	47	35	0.430
2 1/2"	65	50	41	0.620
3"	80	58	46	0.900
4"	100	64	54	1.500
5"	125			
6"	150			

## Cap Plug



Size in inches	Size in mm	A in mm	D in mm	Weight in Kg.
1/2"	15	38	31	0.100
3/4"	20	41	37	0.150
1"	25	43	43	0.200
1 1/4"	32	50	53	0.350
1 1/2"	40	55	59	0.400
2"	50	59	72	0.550
2 1/2"	65	62	88	0.800
3"	80	65	102	1.150
4"	100	72	129	1.850

## Elbow Equal

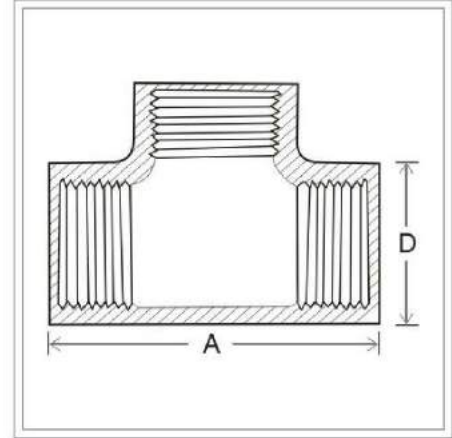


Size in inches	Size in mm	A in mm	D in mm	Weight in Kg.
1/4"	8	25	22	0.100
3/8"	10	28	26	0.160
1/2"	15	35	33	0.250
3/4"	20	39	39	0.350
1"	25	45	45	0.450
1 1/4"	32	52	55	0.750
1 1/2"	40	58	61	0.950
2"	50	68	75	1.450
2 1/2"	65	80	92	2.300
3"	80	90	107	3.150
4"	100	107	133	6.150

## Reducing Elbow E.O.D.

Size in inches	Size in mm	A in mm	D in mm	Weight in Kg.
3/4" x 1/2"	20x15	39	39	0.450
1" x 1/2"	25x15	45	45	0.500
1" x 3/4"	25x20	45	45	0.500
1 1/4" x 1.2"	32x15	52	55	0.845
1 1/4" x 3/4"	32x20	52	55	0.830
1 1/4" x 1"	32x25	52	55	0.800
1 1/2" x 1/2"	40x15	58	61	1.300
1 1/2" x 3/4"	40x20	58	61	1.200
1 1/2" x 1"	40x25	58	61	1.100
1 1/2" x 1 1/4"	40x32	58	61	1.100
2" x 1/2"	50x15	68	75	1.830
2" x 3/4"	50x20	68	75	1.900
2" x 1"	50x25	68	75	1.850
2" x 1 1/4"	50x32	68	75	1.700

## Tee Equal



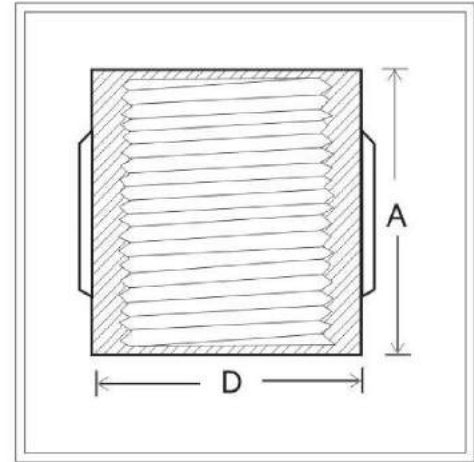
Size in inches	Size in mm	A in mm	D in mm	Weight in Kg.
1/4"	8	50	22	0.100
3/8"	10	56	26	0.150
1/2"	15	70	32	0.300
3/4"	20	79	39	0.450
1"	25	90	45	0.550
1 1/4"	32	105	55	0.850
1 1/2"	40	116	61	1.100
2"	50	136	75	1.650
2 1/2"	65	160	92	2.900
3"	80	180	107	3.900
4"	100	214	133	6.800

## Reducing Tee E.O.D.

Size in inches	Size in mm	A in mm	D in mm	Weight in Kg.
3/4" x 1/2"	20x15	79	39	0.500
1" x 1/2"	25x15	90	45	0.650
1" x 3/4"	25x20	90	45	0.650
1 1/4" x 1.2"	32x15	105	55	1.050
1 1/4" x 3/4"	32x20	105	55	1.010
1 1/4" x 1"	32x25	105	55	0.950
1 1/2" x 1/2"	40x15	116	61	1.300
1 1/2" x 3/4"	40x20	116	61	1.250
1 1/2" x 1"	40x25	116	61	1.300
1 1/2" x 1 1/4"	40x32	116	61	1.250
2" x 1/2"	50x15	136	75	2.310
2" x 3/4"	50x20	136	75	2.230
2" x 1"	50x25	136	75	2.150
2" x 1 1/4"	50x32	136	75	2.100



## Socket Equal

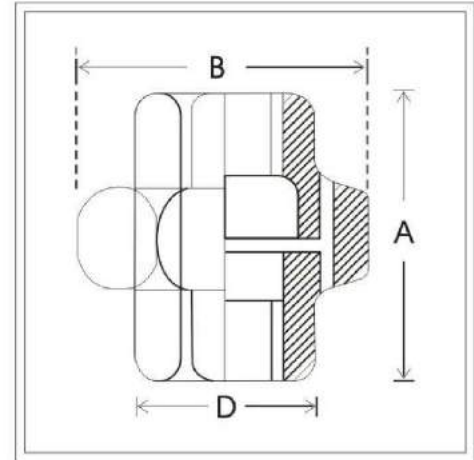


Size in inches	Size in mm	A in mm	D in mm	Weight in Kg.
1/4"	8	30	22	0.050
3/8"	10	33	26	0.050
1/2"	15	39	31	0.100
3/4"	20	43	36	0.150
1"	25	47	43	0.200
1 1/4"	32	54	53	0.350
1 1/2"	40	59	61	0.350
2"	50	68	74	0.550
2 1/2"	65	79	91	0.900
3"	80	86	107	1.300
4"	100	101	132	1.750
5"	125	120	162	3.190
6"	150	133	192	4.520

## Reducing Socket E.O.D.

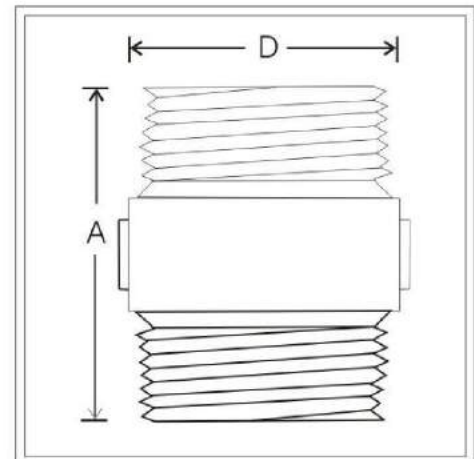
Size in inches	Size in mm	A in mm	D in mm	Weight in Kg.
3/4" x 1/2"	20x15	43	36	0.200
1" x 1/2"	25x15	47	43	0.250
1" x 3/4"	25x20	47	43	0.250
1 1/4" x 1.2"	32x15	54	53	0.480
1 1/4" x 3/4"	32x20	54	53	0.450
1 1/4" x 1"	32x25	54	53	0.400
1 1/2" x 1/2"	40x15	59	61	0.600
1 1/2" x 3/4"	40x20	59	61	0.550
1 1/2" x 1"	40x25	59	61	0.500
1 1/2" x 1 1/4"	40x32	59	61	0.450
2" x 1/2"	50x15	68	74	0.920
2" x 3/4"	50x20	68	74	0.910
2" x 1"	50x25	68	74	0.900
2" x 1 1/4"	50x32	68	74	0.850
2" x 1 1/2"	50x40	68	74	0.800

## Union Brass to Iron Seat



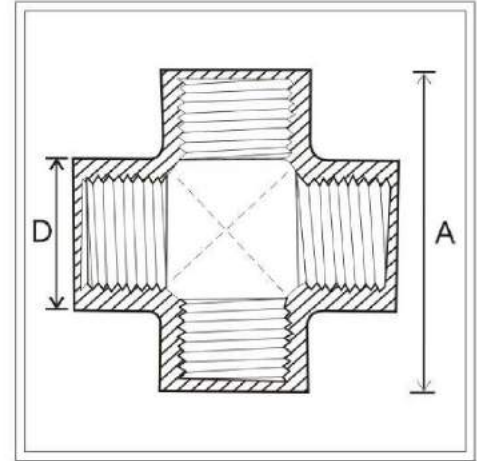
Size in inches	Size in mm	A in mm	B in mm	D in mm	Weight in Kg.
1/4"	8	48	39	22	0.200
3/8"	10	51	43	24	0.250
1/2"	15	57	47	29	0.300
3/4"	20	65	56	35	0.500
1"	25	70	65	41	0.700
1 1/4"	32	75	77	53	0.950
1 1/2"	40	85	83	58	1.150
2"	50	105	99	72	1.850
2 1/2"	65	98	116	84	2.350
3"	80	108	133	110	3.450
4"	100	124	169	127	5.400

## Nipple Equal



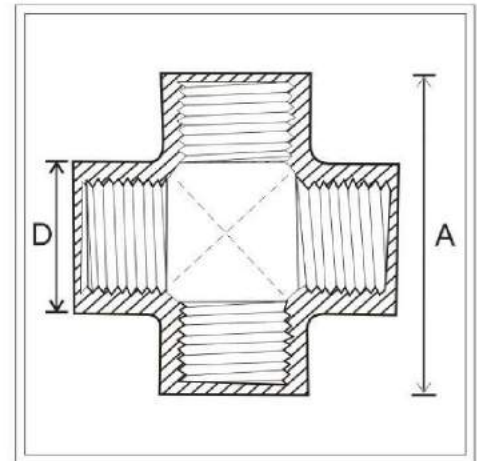
Size in inches	Size in mm	A in mm	D in mm	Weight in Kg.
1/2"	15	50	28	.100
3/4"	20	56	32	.150
1"	25	62	40	.230
1 1/4"	32	68	51	.380
1 1/2"	40	73	56	.480
2"	50	82	67	.610
2 1/2"	65	90	84	.870
3"	80	96	98	1.370
4"	100	112	124	2.300

## Cross Equal



Size in inches	Size in mm	A in mm	D in mm	Weight in Kg.
1"	25	90	46	0.650
1¼"	32	106	56	1.00
1½"	40	114	62	1.250
2"	50	136	76	2.200
2½"	65	--	--	--
3"	80	--	--	--
4"	100	--	--	--

## Reducing Cross E.O.D.



Size in inches	Size in mm	A in mm	D in mm	Weight in Kg.
1¼" x 1"	32x25	106	56	1.250
1½" x 1"	40x25	114	62	1.650
1½" x 1¼"	40x32	114	62	1.600
2" x 1"	50x25	136	76	2.550