



Stainless Steel **Flexible Hose** Fitting for Automatic Sprinkler Systems

COMPANY PROFILE

- Quality Products since **1961**
- Distribute to more than **130** countries and regions
- One stop supply for **Fire Protection**, HVAC, Gas, Water system, etc



PRODUCT & SERVICE

APPLICATION



Fire



Gas



HVAC



Water



Power



Mining



Irrigation



Mechanical

PRODUCT CATEGORY



Valves



Grooved Fittings



Threaded Fittings

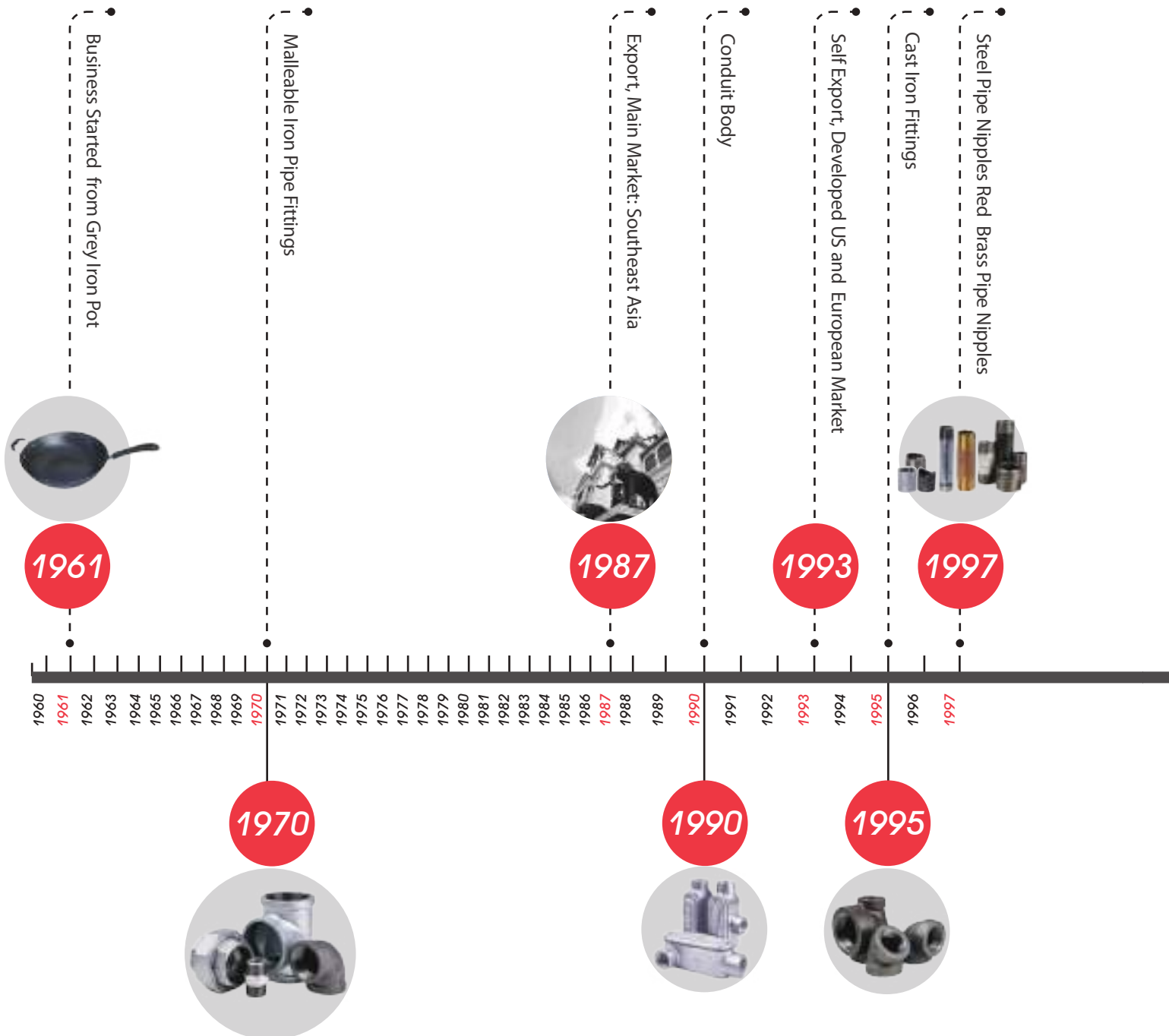


Steel Pipe Nipples



Electric Power Fittings

COMPANY HISTORY





Hydrants, Supervisory Switches
and HVAC Balance Valves

"MECH" Malleable Iron Pipe Fittings

Extra-heavy Brass Pipe Nipples

Valves

Electric Power Fittings

Bronze Fittings

Ductile Iron Pipe Fittings

Ductile Iron Grooved Fittings
and Couplings / Ball Valves

Pipe Hangers and Brackets

Malleable Iron Pipe Clamps



1998

1998



2000

2000



2003

2003



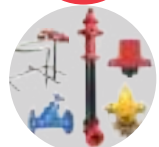
2011

2011



2014

2014



2017

2017



1999

1999



2001

2001



2007

2007



2012

2012

CERTIFICATES



FEATURE



• Safe & Reliable

All the parts of MECH brand flexible hoses are manufactured in corrosion resistant and high-powered stainless steel with 100% leak tested prior to leaving the factory and the environmental temperature resistance being as high as 107°C/225°F.

• Easy and Quick installation

No special tools are required and It only needs the simple use of wrench, screw driver and pipe sealing tape, etc, in the installation with the minimal amount of time. The flexibility of MECH brand hose can be adjusted based on the installation space and can also be combined with 90° elbow, which allows hose to be fixed in limited installation space.

• Economizing on cost

With the unique connection mode of flexible hose, the MECH brand is much more time and cost saving and with no need of any machine against traditional hard pipe system installation.

• Environmental Friendly

The MECH brand flexible hose can be re-shaped and relocated to suit the final sprinkler location on the ceiling without draining the system, avoiding the pipe wasted by the inaccurate measurement. No sprinkler displacement even after high pressure test and eliminating the need for an oversized ring around the sprinkler.

• Seismically

The MECH brand stainless steel hose can absorb seismic shock, and protect the sprinkler system to maintain normal operation in the case of an earthquake.

10X
Faster

10 times time saving
against traditional installation

100
circles

The assurance of 100
bends without damage

100%
Tested

100% leak tested
prior to leaving the factory

Earth
quake

Reducing the damage
in the earthquake

7.0Mpa
Burst Test

The burst test pressure
being as high as 70 bar

TECHNICAL SPECIFICATIONS

Style: MDFU

Unbraided Hose with Straight Nipple

listing: cULus (limited flexibility)
LISTED

Connection: DN25xDN15orDN20(1"x1/2"or3/4")

Hose Diameter: O.D.26.8mm/1 1/16"Flow:22.5mm/7/8"

Maximum service pressure: 14bar/200PSI

Maximum ambient temperature: 107°C/225°F



Flexible hose		cULus listing data			
Hose Length	Sprinkler Thread Size	Max. Allow. Sprinkler K-factor	Max. No. of 90° Bends	Min. Bending Radius	EQL of 33.7mm/1" SCH40 Pipe
mm in.	DN in.	Metric Imprl.	n x 90°	mm in.	meters feet
700 28	15 ½	115 8.0	1	100 3.9	5.5 18
	20 ¾	202 14.0			7.3 24
1000 40	15 ½	115 8.0	2	100 3.9	10.1 33
	20 ¾	202 14.0			12.5 41
1200 48	15 ½	115 8.0	2	100 3.9	13.1 43
	20 ¾	202 14.0			14.0 46
1500 60	15 ½	115 8.0	3	100 3.9	19.2 63
	20 ¾	202 14.0			19.5 64
1800 72	15 ½	115 8.0	4	100 3.9	23.8 78
	20 ¾	202 14.0			24.4 80

TECHNICAL SPECIFICATIONS

Style: MDFB

Braided Hose with Straight Nipple

listing:  

Connection: DN25xDN15orDN20(1"x1/2"or3/4")

Hose Diameter: O.D.26.8mm/1 1/16"Flow:21.0/13/16"

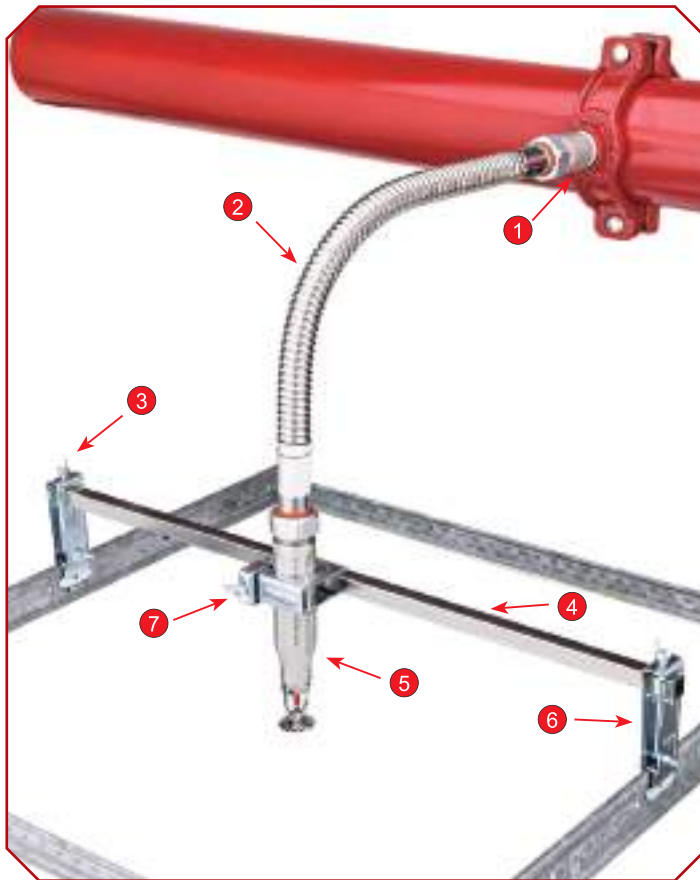
Maximum service pressure: 14bar/200PSI

Maximum ambient temperature: 107°C/225°F



Flexible hose		FM approval data				cULus listing data			
Hose Length	Sprinkler Thread Size	Max. Allow. Sprinkler K-factor	Max. No. of 90° Bends	Min. Bending Radius	EQL of 33.7mm/1" SCH40 Pipe	Max. Allow. Sprinkler K-factor	Max. No. of 90° Bends	Min. bending Radius	EQL of 33.7mm/1" SCH40 Pipe
mm in.	DN in.	Metric Imprl.	n x 90°	mm in.	meters feet	Metric Imprl.	n x 90°	mm in.	meters feet
700 28	15 1/2	115 8.0	1	250 9.8	8.1 26.7	81 5.6	2	100 3.9	7.6 25.0
	20 3/4	202 14.0			6.5 21.5	115 8.0			6.4 21.0
1000 40	15 1/2	115 8.0	3	250 9.8	12.9 42.6	81 5.6	3	100 3.9	10.1 33.0
	20 3/4	202 14.0			12.0 39.6	115 8.0			11.0 36.0
1200 48	15 1/2	115 8.0	3	250 9.8	16.2 53.2	81 5.6	3	100 3.9	11.9 39.0
	20 3/4	202 14.0			15.7 51.6	115 8.0			13.1 43.0
1500 60	15 1/2	115 8.0	4	250 9.8	20.6 67.8	81 5.6	3	100 3.9	15.2 50.0
	20 3/4	202 14.0			19.3 63.5	115 8.0			15.8 52.0
1800 72	15 1/2	115 8.0	4	250 9.8	25.1 82.4	81 5.6	3	100 3.9	17.7 58.0
	20 3/4	202 14.0			22.9 75.4	115 8.0			19.2 63.0

STRUCTURE & MATERIAL SPECIFICATION



Description		Material
Corrugated tube Braid&collar-rings		AISI 304 stainless steel
Discharge Nipple NPT & BSPT	Straight	Galv Steel ASTM 1020
	90° Bend	Galv Steel ASTM 1020
Inlet Nipple NPT & BSPT		Galv Steel ASTM 1020
Hexagon Slip nut		Galv Steel ASTM 1020
Gasket		EPDM
Isolation Ring		Nylon 66
Center Bracket	Fast Center Bracket	Galv. Steel ASTM A283 Gr.D
	Regular Center Bracket	Galv. Steel ASTM A283 Gr.D
Side Bracket	Long Side Bracket	Galv. Steel ASTM A283 Gr.D
	Short Side Bracket	Galv. Steel ASTM A283 Gr.D
Square Bar 635mm & 1270mm		Galv. Steel ASTM A283 Gr.B
Bolts & Screws	Hexagon Screw Set	Galv. Steel ASTM A283 Gr.D
	Wing Screw Set	Galv. Steel ASTM A283 Gr.D

Parts of The Complete Assembly Available for Purchase Individually.



1 Inlet Nipple



2 ※ Braided hose
※ Unbraided hose



3 ※ Wing screw set



※ Hexagon screw set



4 Square Bar



5 ※ 90° bend ※ Straight



6 ※ Long side bracket ※ Short side bracket

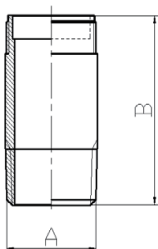
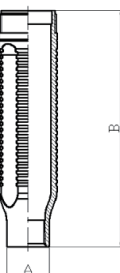
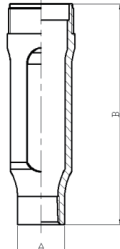
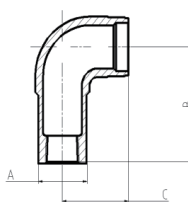
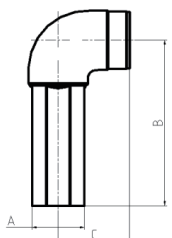


7 ※ Center bracket regular ※ Fast center bracket

TECHNICAL SPECIFICATIONS



Dimensions

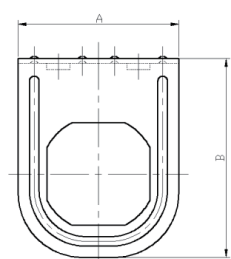
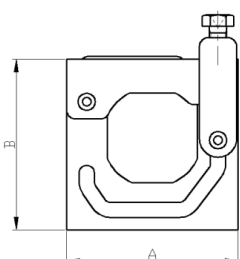
	Inlet Options	Outlet Options			
					
A	R1 (1" BSPT)* 1" NPT	Rc 1/2 (1/2" BSPT) 1/2" NPT* Rc 3/4 (3/4" BSPT) 3/4" NPT	Rc 1/2 (1/2" BSPT) 1/2" NPT* Rc 3/4 (3/4" BSPT) 3/4" NPT	Rc 1/2 (1/2" BSPT) 1/2" NPT* Rc 3/4 (3/4" BSPT) 3/4" NPT	Rc 1/2 (1/2" BSPT) 1/2" NPT* Rc 3/4 (3/4" BSPT) 3/4" NPT
B mm	64	140	110	67.5	97.5
C mm				43.5	43.5

Material Specifications :

All inlets and outlets are made from carbon steel, zinc plated






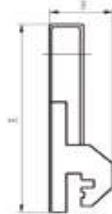
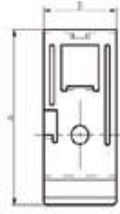
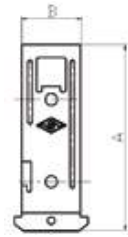
Dimensions

	PTKJ	KZJ
		
A mm	50	60
B mm	62	60

TECHNICAL SPECIFICATIONS



Dimensions

	EZKJ	EJWJ	EEJZ	EEJZ	EDZJ	ECZJ
						
A mm	45.3	40	62.24	102	70	92
B mm	30	30	30	30	32	32
	J-frame	C-frame	E-TYPE stents	E-type long bracket	Short support	Long support

Material Specifications

All brackets are made from mild steel, zinc plated.

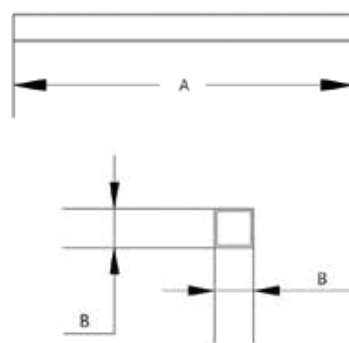
Square Bar

Length (mm): 635mm/1000mm or customized according to customers

Material Specifications



All brackets are made from mild steel, zinc plated.

	EFG15
	
A mm	635
B mm	15
	Square Bar

HOW TO INSTALL



1- INLET NIPPLE INSTALLATION

Using pipe wrench to connect Inlet Nipple and mechanical tee of the water supply pipeline, sealing with Teflon tape or pipe glue, etc. Tightening torque would be around 50 N•m(35ft-lbs). Checking the Hexagon nut to keep the mechanical tee and pipe line in good sealing performance.



4- DISCHARGE NIPPLE and SPRINKLER INSTALLATION

Tightening the nut of Discharge Nipple with torque 15 N•m(12ft-lbs). Connecting the sprinkler head to Discharge Nipple according to the sprinkler installation instructions. Taking the leakage test in according with NFPA guidelines.



2- BRACKET SYSTEM INSTALLATION

Connecting the square bar through three brackets. One bracket is in the middle of square bar is for Discharge Nipple. The other two brackets should be put two sides of the bar. After putting the side brackets into right location, fixing the side brackets to the main-rail and tightening all the bolts on brackets with torque 4 N•m (3ft-lbs)

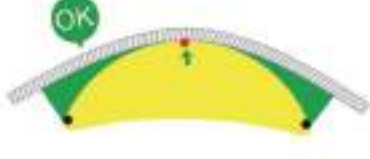
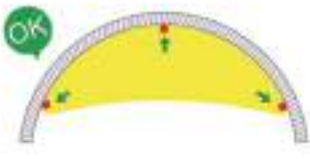






3- HOSE BENDING ADJUSTMENT


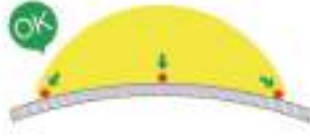
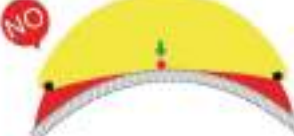



Before connecting Discharge Nipple to the center bracket, all the hose bending must be adjusted to the right position according to the requirement of below hose bending degrees. Then tightening the center bracket with torque 4 N•m(3ft-lbs)

USE MECH RADIUS CHECK HOSE HEND

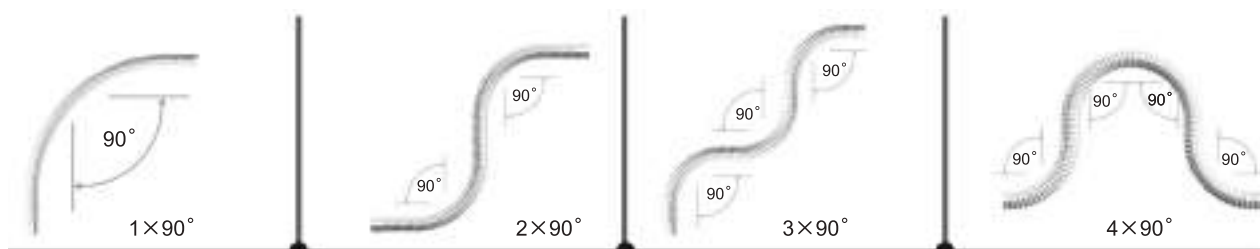
Use outer edge check MDFU unbraided hoses

		
GREATER than 	EQUAL to 	SMALLER than 

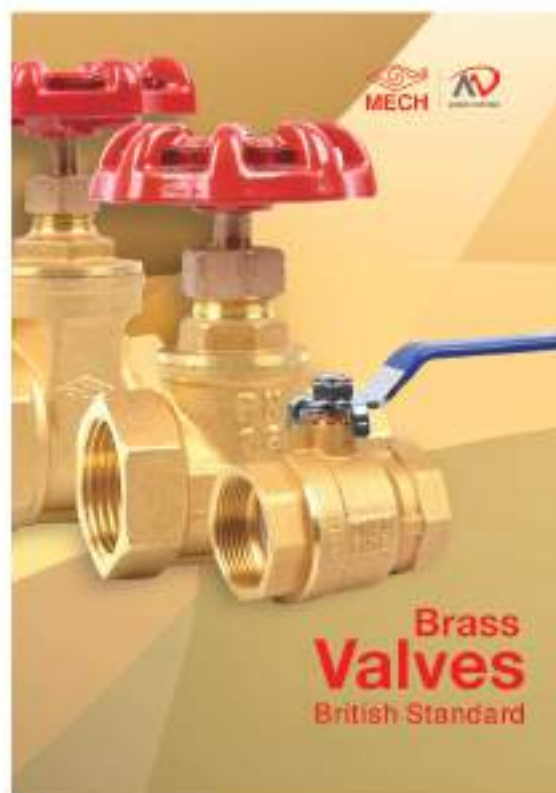
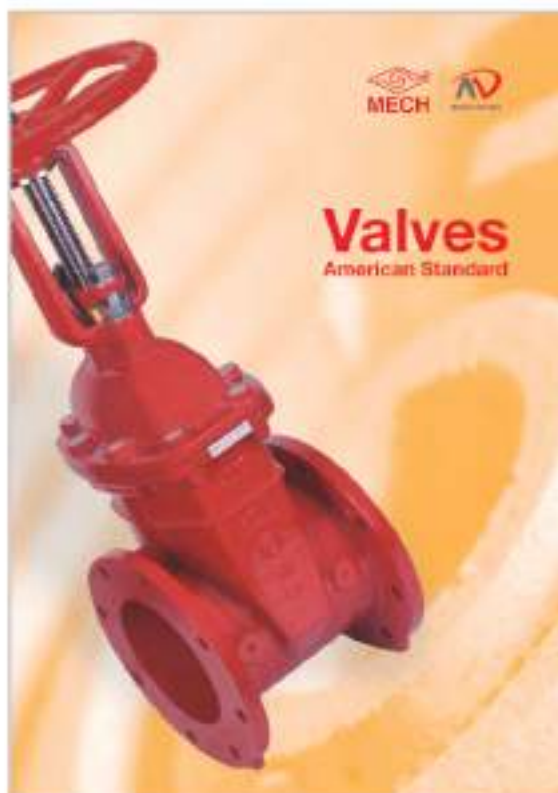
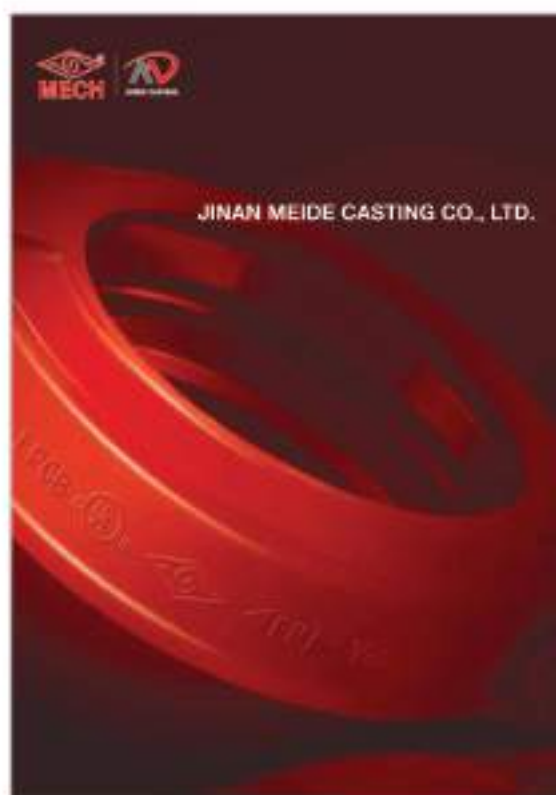
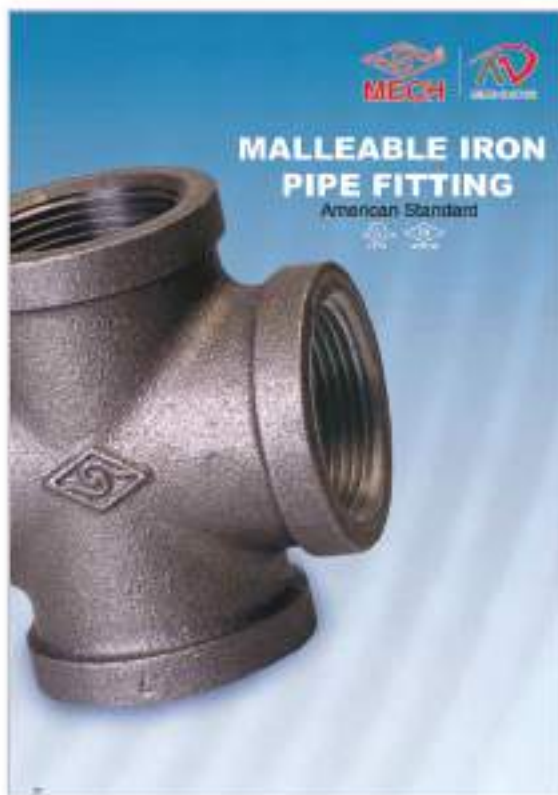
Use inner edge check MDFB Braided hoses

		
GREATER than 	EQUAL to 	SMALLER than 

HOSE BENDING, CORRECT OR WRONG



MECH FLOW SUPPLIES





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