

Fiberglass Reinforced Pipe

China Energy Technology and Service Limited

Content

I.	Product Feature.....	3
II.	Manufacture Process.....	5
III.	Production Type.....	10
IV.	Connection Type.....	11
V.	Product Specifics	12
VI.	Quality control system	13
VII.	Manufacture Standard	15
VIII.	Application Field	16

Product Feature

Fiberglass pipe

- **Excellent corrosion resistance**
- **Long service life: 30-50 years**
- **Excellent anti-freezing property:
No pipe cracking at -40 °C**
- **Smooth inner surface, low friction,
few chance to have paraffin
deposit.**
- **Low maintenance cost**
- **No maintenance except damaged
by the external cause.**
- **Lightweight: ¼ of steel pipe**
- **Low thermal conductivity**
- **Good insulation property**

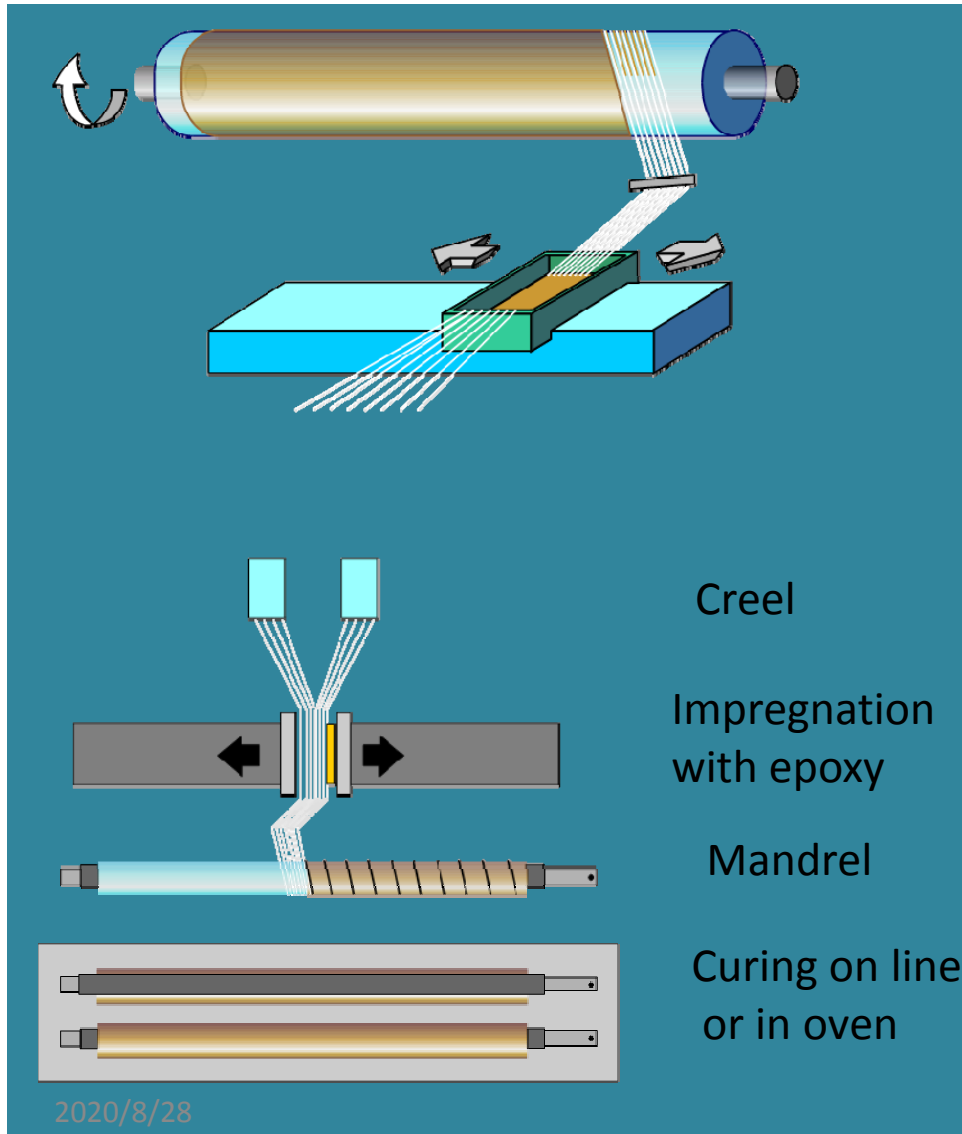
Steel pipe

- **Easy to be corroded**
- **Short service life: 5-10 years**
- **Easy to crack in case of freeze**
- **Rough inner surface, high friction,
easy to have paraffin deposit.**
- **High maintenance cost**
- **Anti-corrosion coating , cathode
protection.**
- **Heavy weight**
- **High thermal conductivity**
- **Poor insulating property**

Product Feature

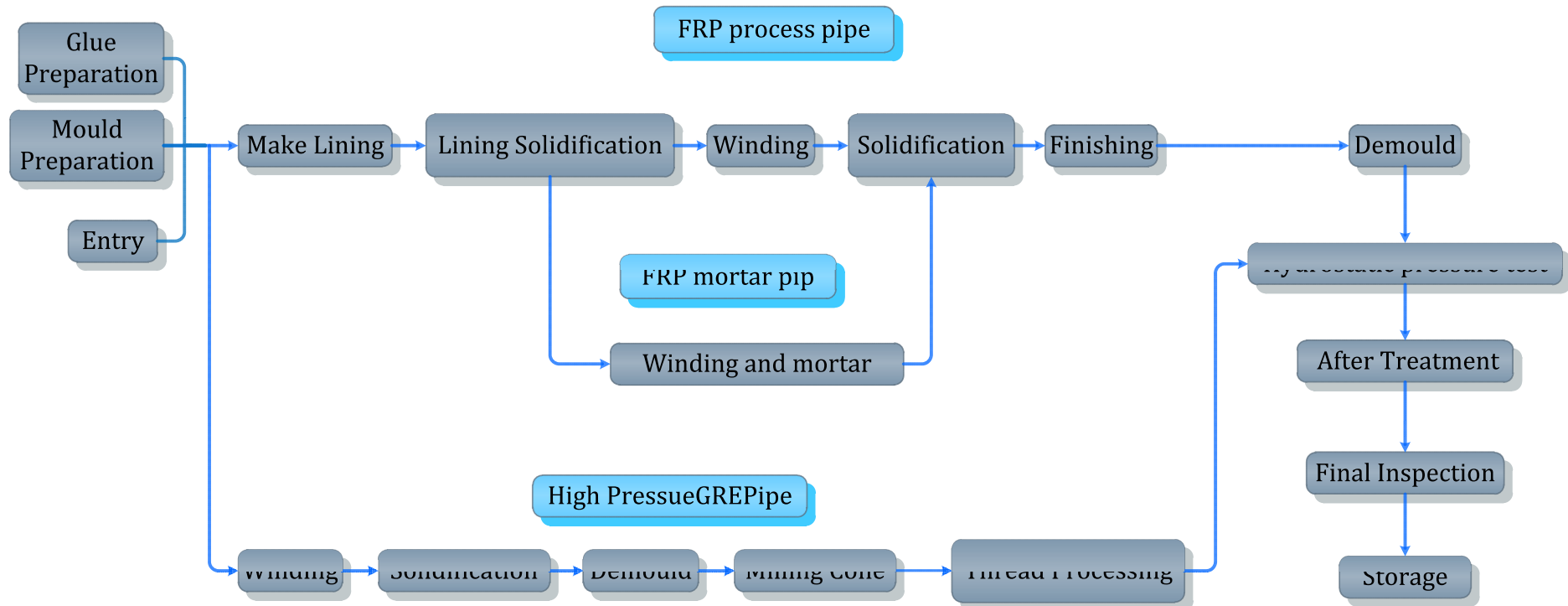
	Fiberglass pipe	Steel pipe
Anticorrosion:	Strong	Weak
Service Life:	30-50 years	5-10 years
Cracking Property:	No cracking at -40 °C	Easy to crack when cold
Inner Surface:	<ul style="list-style-type: none"> • Smooth • Low friction • Hard to paraffin deposit 	<ul style="list-style-type: none"> • Rough • High friction • Easy to paraffin deposit
Maintenance Cost:	Low(except mechanical damage)	High (coating , cathode protection etc.)
Weight:	Light: ¼ of steel pipe	Heavy
Thermal Conductivity:	Low	High
Insulation Property:	Good	Poor

Manufacture Process



Manufacture Process

Manufacturing Flow Chart:



Manufacture Process

Part of Production Line:



Preparation



Making Lining



Lining Solidification



Winding



Winding and Mortar



Finishing



Solidification



Demoulding



2020/6/28
Thread Processing



Hydrostatic Pressure



Fitting Production

Production Type



High Pressure Pipes



Low Pressure Pipes



Downhole Pipes



Pressure Tank



Water Tank



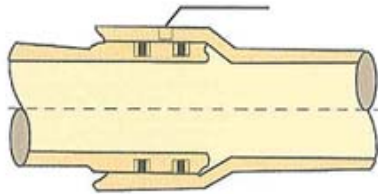
structural section

Product Type

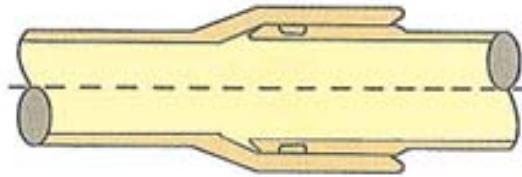
Pipe Fittings:



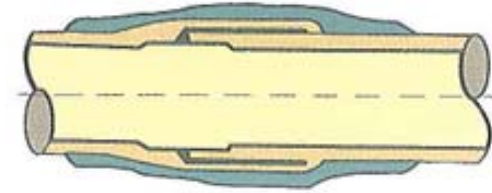
Connection Type



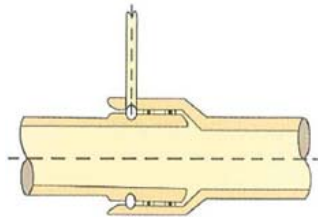
Double ring socket connection



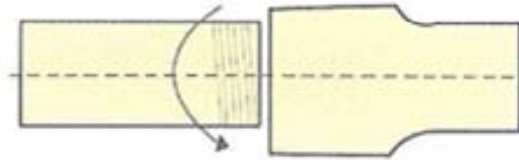
Single ring socket connection



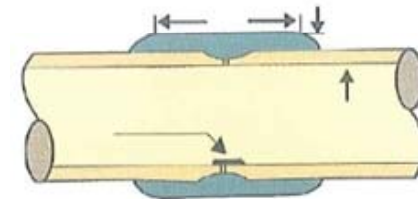
Socket bonding connection



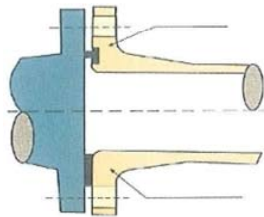
Double ring socket axial locking connection



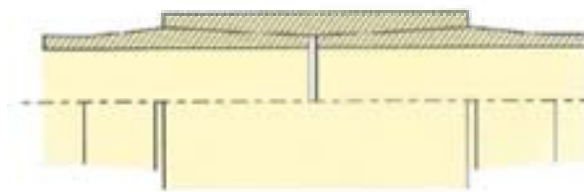
Threaded connection



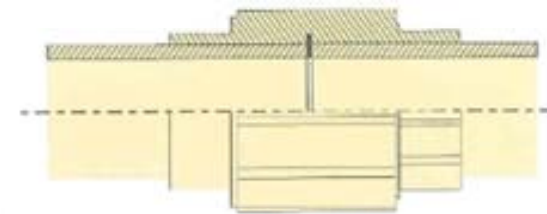
Butt bonding connection



Flange connection



Coupling threaded connection



Union connection



Product Specifics

Pipe Type	Pressure Class/Mpa	Nominal Diameter/mm
Low Pressure GRE Pipe	0.1-6.9	DN25-DN2000
High Pressure GRE Pipe	3.45-34.5	DN40-DN600
FRP Mortar Pipe	0.1-2.5	DN100-DN4000
GRE tubing	10-25	DN50-DN80
GRE Casing	10-25	DN100-DN200

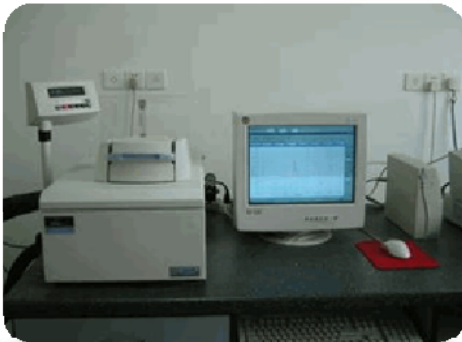
Quality control system



Cyclic pressure testing machine



Hydrostatic pressure testing machine



DSC machine



Thread detector



Level-3 Fire Endurance Test



Quality control system

Certificate

API SPEC 15HR

ISO9001:2000

ISO14001



Manufacture Standard

API SPEC 15HR	Specification for High Pressure Fiberglass Line Pipe
API SPEC 15LR	Specification for Low Pressure Fiberglass Line Pipe and Fittings
SY T6267-2006	Specification for High Pressure Fiberglass Line Pipe
SY-T 6266-2004	Specification for Low Pressure Fiberglass Line Pipe and Fittings
GB/T2 1238-2007	Glass fiber reinforced plastic mortar pipe Other related specifications and Standards

Application Field

- Water injection, oil collection, crude oil long distance transportation and down-hole tubing.
- Nature gas transportation pipe line and gas station pipe line.
- Marine and Offshore pipe line
- Petrol and chemical industry pipe line.

