



**Sustainably superior –  
ductile iron pipe systems**

- economically superior**
- environmentally superior**
- technically superior**

**Resources can be saved for present and future generations!**



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## Economically superior

- push-in joints make for highly productive installation
- no welding needed
- installation in all weathers
- sand bedding often not required
- concrete thrust blocks not needed when joints are restrained
- joints can be deflected angularly
- wide range of fittings and valves available so no need for specials
- extremely low damage rates
- operating life of up to 100 years or more
- ▶ reduces labour costs
- ▶ reduces labour costs
- ▶ reduces labour costs
- ▶ reduces materials and logistics costs
- ▶ reduces materials and labour costs
- ▶ saves on fittings
- ▶ reduces materials and labour costs
- ▶ reduces repair and maintenance costs
- ▶ keeps renovation budgets to a minimum

**Investing in ductile iron pipe system pays for itself in low installation and operating costs with, at the same time, a long operating life!**



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## Environmentally superior

- impermeability to diffusion
  - linings
  - scrap as the raw material
  - ductile iron
  - low expenditure on maintenance and repairs, and long operating life
- ▶ safeguards drinking water in all soil and installation conditions and the groundwater when sewage is being transported
  - ▶ ensure that drinking water is transported hygienically and environmentally safely
  - ▶ minimises the consumption of primary and fossil raw materials
  - ▶ is recycled so saves resources for present and future generations
  - ▶ minimises CO<sub>2</sub> emissions and the consumption of resources

**Ductile iron pipe systems can be shown to produce true sustainability!**



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## Technically superior

- the material is strong
- external protection
- static load-bearing capacity
- joints
- ductile iron
- installation
- restrained joints
- the material has superior properties
- ▶ allows operating pressures up to 100 bars
- ▶ shields against mechanical and chemical attack
- ▶ allows very high stresses in the transverse and longitudinal directions
- ▶ are resistant to the penetration of roots
- ▶ is non-combustible
- ▶ is possible with no special equipment
- ▶ withstand very high tractive forces and are therefore ideal for trenchless installation
- ▶ which allow special applications in mountainous regions and for fire-fighting pipelines, snow-making systems and hydroelectric power stations

**The technical performance of ductile iron pipe systems ensures the highest safety and reliability in all areas of the water industry!**



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- With its outstanding technical performance, *safety and reliability*, and *sustainably* quantifiable advantages, ductile iron makes a convincing case for itself in the water industry.
- With its *environmental properties* and its *extraordinary durability*, ductile iron is the only material in the water industry that provides *demonstrably real sustainability*.

Resources can be saved for present and future generations!