What’s in Your Pipeline?
Here’s What’s in Ours:

One  Centrifugal casting makes HOBAS unique, delivers major benefits.

Two  Inherent corrosion resistance produces the longest service, a 100-year design life.

Three  25 years of experience with installations in most major US municipalities.

Four  Engineering support and field service staff to assure your success.

Five  Quality, the finest materials and sophisticated manufacturing for consistent, reliable pipes every job, every time.
Why Pick HOBAS?
It’s the Best Pipe Investment You Can Make
Centrifugal Casting Is the Difference

Exactly What Are HOBAS Pipes?
HOBAS pipes are unique - centrifugally cast, fiberglass reinforced, polymer mortar (CCFRPM). They are strong, light and inherently corrosion resistant with consistent dimensions, smooth surfaces and high stiffness. Sophisticated HOBAS manufacturing means you get real value, the lowest life cycle cost in the industry for both new installations and rehabilitation.

Long-Life
HOBAS pipe is inherently corrosion resistant because of the materials that go into it. Design service life is up to 100 years and more. HOBAS meets or exceeds ASTM standards as measured in sewer pipe accelerated aging tests. Results project that HOBAS pipe will last many thousands of years, unequaled by any other pipe.

Consistent Quality for Performance You Can Count On
Most U.S. municipalities have HOBAS pipe in their systems and the use of HOBAS pipe in the USA is expanding faster than ever after more than 25 years of reliable performance. More than 8,000 miles of HOBAS pipe is in service around the world. The HOBAS computer controlled production process assures consistent, high quality pipes, tested to comply with applicable standards.

Smoother Surfaces, High Flow Capacity
Precision centrifugal casting produces pipes that no other method can deliver - a dense composite with moldsmooth exterior surfaces and a glass-smooth liner that is nonporous, resilient and abrasion resistant. Combined with HOBAS thin-wall construction and resulting oversized I.D., you get the highest flow capacity available.

The HOBAS name on the pipe says you’ve chosen the leader in pipe technology: first choice for virtually every application and method of installation.
Leak-Free Joints
Another HOBAS advantage is push-together joints for a 100 percent leak-free pipeline that preserves the streets above and reduces treatment costs. HOBAS pipe has a consistent, mold-smooth O.D. The pipes seal perfectly to molded or precise tolerance machined couplings.

Easy Installation
Installation is quick and easy for several reasons. HOBAS high stiffness design provides predictable, reliable pipe performance by every method.

Push-together joints are simple and fast to assemble. Lightweight pipes are safe and easy to handle, often with the smaller equipment typically on the site.

Sliplining: The smooth interior surface and oversized I.D. typically maintain or increase flow capacity. Low profile and flush bell-spigot joint options give you a choice of joint configurations.

Tunneling: Two-pass tunneling requires a smaller primary tunnel because of HOBAS high strength, thin-wall pipe. This reduces excavation and spoil removal. Longer insertion pushes speed installation and require fewer shafts. HOBAS pipe can navigate curves, too.
**Easy To Specify, Lower Project Cost**
ASTM and AWWA standards cover most applications and product tests. And we offer guide specifications to tailor for your individual project and give you the best pipe for your application.

**Microtunneling or Jacking:** HOBAS pipe’s high strength and smooth, constant O.D. permit drives of 500 to 1,000 feet with lower force and fewer jacking stations.

**Direct Bury:** HOBAS is the preferred pipe for deep installations and withstands covers in excess of 80 feet.

**Above Ground:** HOBAS pipe is ideal for above ground installations. UV resistance is excellent.

**Engineering and Customer Support**
Count on HOBAS for responsive customer service and on-site field reps backed by extensive engineering support. That means continuous cooperation from spec writing stage to installation and final acceptance.
HOBAS Pipe Delivers Major Advantages in Every Demanding Application, Every Type of Installation.

Applications and Installation Methods
This unique, high performance pipe is used for both new installations and rehabilitation. HOBAS pipe is manufactured in diameters from 18 to 110 inches and various section lengths. Other choices include multiple stiffness and pressure classes and a variety of joints and couplings. This flexibility makes HOBAS suitable for virtually every application and type of installation.

The Product
Multiple Applications
• Sewer Interceptors
• Potable Water
• Force Mains
• Outfalls
• Industrial Effluents
• Salt Water Lines
• Odor Control Piping
• Cooling Water

Section Lengths
Standard 5, 10 and 20 feet

Pressure Classes
Standard 25, 50, 100, 150, 200 and 250 psi

Stiffness Classes
Standard 18, 36, 46 and 72 psi plus jacking pipes

Diameters from 18 to 110 inches

<table>
<thead>
<tr>
<th>Diameter</th>
<th>18”</th>
<th>20”</th>
<th>24”</th>
<th>27”</th>
<th>28”</th>
<th>30”</th>
</tr>
</thead>
<tbody>
<tr>
<td>33”</td>
<td>33”</td>
<td>36”</td>
<td>41”</td>
<td>42”</td>
<td>44”</td>
<td>45”</td>
</tr>
<tr>
<td>48”</td>
<td>51”</td>
<td>54”</td>
<td>57”</td>
<td>60”</td>
<td>63”</td>
<td></td>
</tr>
<tr>
<td>66”</td>
<td>69”</td>
<td>72”</td>
<td>78”</td>
<td>84”</td>
<td>85”</td>
<td></td>
</tr>
<tr>
<td>90”</td>
<td>96”</td>
<td>104”</td>
<td>110”</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Wall Construction:
I-Beam Principle

- OUTER LAYER (Sand and Resin)
- HEAVILY REINFORCED (Chopped Glass and Resin)
- TRANSITION (Glass, Resin, Mortar)
- CORE (Polymer Mortar)
- TRANSITION (Glass, Resin, Mortar)
- HEAVILY REINFORCED (Chopped Glass and Resin)
- LINER (High Elongation Resin)
## Joints

### FWC Coupling
- **Application**: Direct Bury and Aboveground (up to 250 psi)

### Low Profile Bell-Spigot
- **Application**: Gravity flow sliplining

### Flush Bell-Spigot
- **Application**: Gravity flow direct jacking and sliplining

<table>
<thead>
<tr>
<th>Joint Type</th>
<th>Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>FWC Coupling</td>
<td>Direct Bury and Aboveground (up to 250 psi)</td>
</tr>
<tr>
<td>Low Profile Bell-Spigot</td>
<td>Gravity flow sliplining</td>
</tr>
<tr>
<td>Pressure Relining</td>
<td>Pressure sliplining</td>
</tr>
<tr>
<td>Flush Bell-Spigot</td>
<td>Gravity flow direct jacking and sliplining</td>
</tr>
<tr>
<td>Flush FWC Coupling</td>
<td>Pressure Jacking</td>
</tr>
</tbody>
</table>

### Universal Features
- **FWC Coupling**
  - Inherent Corrosion Resistance
- **Low Profile Bell-Spigot**
  - Oversized Smooth I.D.
- **Flush Bell-Spigot**
  - Lightweight

### Universal Benefits
- **FWC Coupling**
  - Long service life
  - No add-on linings or coatings
  - Hydraulics don’t change
  - Lowest Life Cycle cost
- **Low Profile Bell-Spigot**
  - Superior hydraulic characteristics
  - High flow capacity
  - Significant energy savings in pumped systems
- **Flush Bell-Spigot**
  - Less expensive equipment for handling

### Fittings
- Elbows
- Flanges
- Tees
- Nozzles
- Reducers
- Wyes
- Laterals
- Manholes

### Standard Specifications
- ASTM D3262 Non-pressure Sanitary Sewers
- ASTM D3754 Sewer Force Mains and Industrial Effluents
- AWWA C950 Pressure Water Systems
- AWWA M45 Fiberglass Pipe Design Manual