

ADVANTAGES OF KPMI HDPE PIPES:

- ✓ OUR HDPE PIPES ARE 10X LIGHTER THAN RCP
- ✓ 15% REDUCED PROJECT COST VERSUS RCP
- ✓ 50% REDUCED PROJECT COST VERSUS STEEL
- ✓ 100 YEARS SERVICEABILITY
- ✓ 100% QUALITY ASSURED
- ✓ ZERO LEAK ISSUES
- ✓ ECONOMICAL
- ✓ TAILOR-MADE TO YOUR PROJECT REQUIREMENTS

Need a QUOTE?

CONTACT US NOW!

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✉ marketing@krah-pipes.com.ph

CONNECT WITH US



AT KPMI, WE GET YOUR PROJECT GOING...

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KRAH PIPES MANILA INC

GLOBAL LEADER FOR LARGE-DIAMETER HDPE PIPING SYSTEM

DN/ID: 300 MM - 3500 MM



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KRAH Germany, founded in 1968, is the global pioneer and recognized market leader in helical extrusion (spiral-wound) pipe production technology.

With more than five decades of continuous innovation, KRAH has set the international benchmark for the manufacture of large-diameter thermoplastic piping systems, supplying advanced machinery and engineering solutions to pipe manufacturers worldwide.

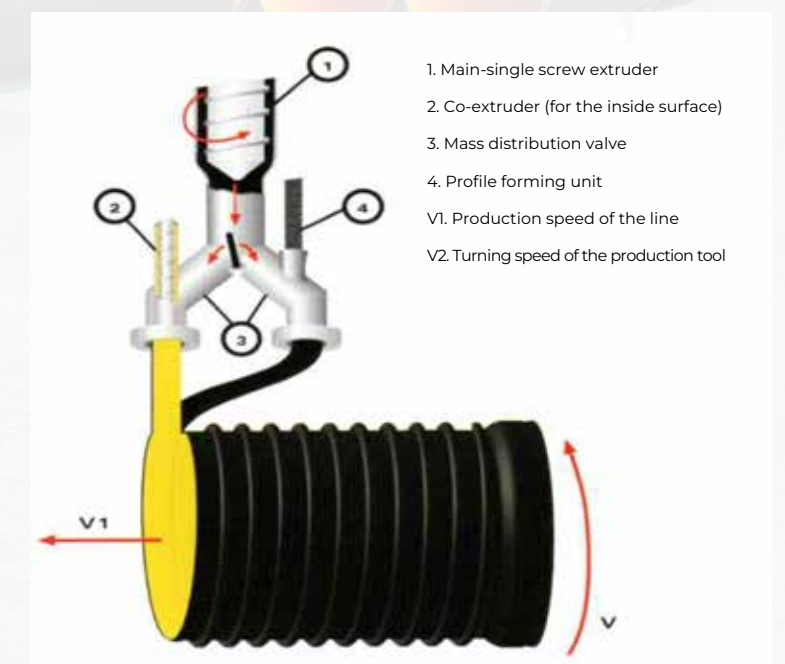
KPMI's high-performance production systems are engineered to manufacture large-diameter HDPE pipes ranging from DN/ID 300 mm to DN/ID 3500 mm, with extrusion capacities of up to 1,000 kilograms per hour. A single KRAH machine provides exceptional versatility, enabling the production of pipes with a wide range of stiffness classes, pressure ratings, structured or solid wall profiles, and application-specific configurations.

This flexibility allows manufacturers to tailor each pipe to precise project requirements while maintaining consistent quality, structural integrity, and long-term performance across diverse infrastructure applications.



The KPMI spiral-wound manufacturing process involves the extrusion of a heated thermoplastic profile that is helically wound onto a rotating, collapsible mandrel.

As the profile is laid, it fuses seamlessly without the need for conventional welding, forming a completely homogeneous pipe wall. The mandrel determines the pipe's diameter, ensuring that all pipes are measured accurately by their inside diameter (ID). This process results in pipes with a smooth inner surface, excellent hydraulic performance, and superior structural integrity.



Krah Pipes Manila Inc.® (KPMI) is the Philippines' leading manufacturer of large-diameter, structured-wall High-Density Polyethylene (HDPE) pipes, produced using world-class KRAH spiral-wound technology from Germany. Backed by more than 50 years of proven German engineering excellence, this advanced manufacturing process enables the production of pipes with superior strength, flexibility, and hydraulic performance, making them ideal for demanding infrastructure applications across the country.

By combining cutting-edge technology with local manufacturing expertise, KPMI delivers high-performance, durable, and sustainable piping solutions tailored to critical infrastructure projects such as sewerage, drainage, irrigation, flood control, and industrial systems. Our structured-wall HDPE pipes are engineered for long service life, corrosion resistance, and cost efficiency, providing a reliable and environmentally responsible alternative to traditional piping materials while meeting international quality standards.

KPMI TECHNOLOGY

GERMAN TECHNOLOGY, FILIPINO INGENUITY



ABOUT KPMI

Krah Pipes Manila, Inc. is the Philippines' leading manufacturer of large-diameter HDPE pipes, recognized for its unwavering commitment to quality, technical excellence, and total customer satisfaction. Since its establishment in 2015, the company has rapidly earned industry recognition for delivering innovative, reliable, and sustainable piping solutions that set new benchmarks in performance and durability.

Driven by a culture of excellence, Krah Pipes Manila, Inc. continues to strengthen its presence in both local and international markets. Leveraging advanced German KRAH technology and extensive industry expertise, the company manufactures high performance pipes engineered to meet the most demanding infrastructure requirements. Our highly skilled team provides end-to-end technical support, ensuring seamless project execution from design and customization to installation and after-sales service.

Krah Pipes Manila Inc. (KPMI) operates from an ISO 9001:2015-certified, 8,289 square meter manufacturing facility, delivering precision-engineered HDPE piping solutions for projects of any scale. KPMI is the first manufacturer in Southeast Asia to produce HDPE pipes with an inside diameter of 3,500 mm, setting a benchmark in large-diameter pipe technology.

Powered by advanced KRAH spiral-wound technology and a team of highly skilled professionals, KPMI manufactures structured-wall HDPE pipes and fully integrated system components that meet international standards. Designed for efficient installation, long service life, and reliable performance, KPMI solutions support critical infrastructure with confidence. With in-house logistics, nationwide delivery, and end-to-end project support, KPMI ensures seamless execution from design to completion.

KRAH PIPES MANILA, INC.
ISO 9001:2015 CERTIFIED



First to produced an ID 3,500 mm pipe in South East Asia



Knowledge over Conformity

Encouraging everyone to challenge conventional wisdom, explore new ideas, and innovate rather than simply following established practices without question.



Pursuit of Excellence

Striving for the highest standards of quality and achievement in everything we do.



Mastery in One's craft

Each committing to his or her own expertise in one's field, continuously honing skills to achieve mastery.



Innovation and Integrity

Embracing creativity and new ideas while upholding honesty, transparency, and ethical standards.

The goal of Krah Pipes Manila Inc. is to establish a reputation for high-quality goods and services, honesty, dependability, and expertise. We aim to create a management culture that adapts to the changing needs of its clients and customers. As a manufacturer, our ability to ensure product and service integrity in all that we do depends on upholding our dynamic contracting culture among all members of our workforce.

Our Mission

To revolutionize the landscape of the piping industry.

Our Vision

To create a world where clean water and power are no longer a privilege of the few but a way of life for all.

KPMI PIPE FEATURED

APPLICATIONS AND PROJECTS

HYDRO POWER PLANT



THE FLS HYDRO ELECTRIC POWER PLANT PROJECT REPLACEMENT OF CONVEYANCE SYSTEM, BAKUN, BENGUET

REVITALIZING CLEAN ENERGY IN THE HIGHLANDS: KPMI SUPPLIES LARGE-DIAMETER HDPE PIPES FOR THE BAKUN HYDROPOWER PROJECT

Krah Pipes Manila Inc. (KPMI) supported the restoration of the FLS Hydroelectric Power Plant in Bakun, Benguet by supplying 1,600 mm large-diameter HDPE pipes engineered for high-altitude and demanding terrain conditions. Covering 396 meters and designed for pressures up to 2.1 bar, the pipes deliver excellent structural performance with SN2 and SN13 stiffness ratings.

Private developers are increasingly converting from conventional materials to HDPE piping systems due to their corrosion resistance, leak-free jointing, lightweight installation, and long service life. These advantages result in faster installation, lower life-cycle costs, and improved hydraulic efficiency, making HDPE the preferred solution for modern energy infrastructure. Through advanced technology and proven expertise, KPMI continues to support sustainable and reliable power generation projects nationwide.

HYDRO POWER PLANT



**14.5MW SIGUIL
HYDROELECTRIC POWER PLANT**
Pipe Installed: Solid & Structured Wall Pipe
Ring Stiffness: SN2
Pressure Rating: Atmospheric
Size: ID 2,000 mm | Length: 18 KM
Location: Maasim, Siguil, General Santos, Mindanao



**LOWER LABAY
HYDROELECTRIC POWER PLANT**
Pipe Installed: Solid Wall Pipe
Pressure Rating: 2.1 Bar
Size: ID 1,400 mm
Location: Bakun, Benguet



**7.4 MW MALITBOG - SILO - O
HYDROELECTRIC POWER PLANT**
Pipe Installed: Profiled Wall Pipe
Ring Stiffness: SN2
Pressure Rating: 1 Bar | 2 Bar | 3 Bar
Size: ID 1,500 mm
Location: Malitbog, Bukidnon



**12 MW MANGIMA HYDROELECTRIC
POWER PLANT**
Pipe Installed: Covered Wall Pipe
Ring Stiffness: SN4
Pressure Rating: 2 Bar | 3 Bar | 4 Bar
Size: ID 2,000 mm | Length: 6 KM
Location: Mangima, Bukidnon

KPMI PIPE FEATURED

APPLICATIONS AND PROJECTS

LAND DEVELOPMENT



ENHANCING EXPRESSWAY RESILIENCE: HDPE DRAINAGE SOLUTION FOR SLEX, SAN PEDRO, LAGUNA (SOUTHBOUND)

To strengthen flood control along a vital section of the South Luzon Expressway (SLEX), San Miguel Corporation (SMC) implemented a major drainage upgrade in San Pedro, Laguna, selecting KPMI's Large-Diameter HDPE Pipes for long-term performance and reliability.

The project features 1,600 mm Covered Wall HDPE pipes, installed over 1,302 linear meters and designed for gravity-flow drainage. Private developers increasingly favor HDPE over conventional concrete or steel pipes due to its corrosion resistance, lighter weight, faster installation, and superior service life, particularly in high-traffic expressway environments. By converting to HDPE technology, the SLEX project demonstrates how modern drainage systems support resilient road networks, improved flood mitigation, and sustainable expressway development. Through projects like this, KPMI continues to be the preferred HDPE pipe partner of private developers nationwide.



SUPPORTING PORT INFRASTRUCTURE: KPMI INSTALLS LARGE-DIAMETER HDPE PIPES FOR EAST ACCESS ROAD MICT DRAINAGE PROJECT

Krah Pipes Manila Inc. (KPMI) supplied 1,500 mm Covered Wall HDPE pipes for the East Access Road MICT drainage system in Tondo, Manila, covering 140 linear meters for gravity flow applications. With a ring stiffness of SN8, the system ensures durability and structural reliability in a demanding port environment.

By integrating advanced HDPE piping solutions into a major seaport development, this project demonstrates the importance of reliable underground infrastructure in supporting above-ground operations. The project further highlights why modern developments are shifting from conventional materials to HDPE solutions, valued for ease of installation, low maintenance, and extended service life.

LAND DEVELOPMENT



BAYVIEW HEIGHTS DETENTION POND CORPORATE

Pipe Installed: Profiled Wall Pipe
& Covered Wall Pipe
Ring Stiffness: SN8
Size: ID 800 mm & 1,000 mm
Location: Tablon, Cagayan de Oro



WEST DIVERSITY AVENUE

Pipe Installed: Covered Wall Pipe
Pressure Rating: Non-Pressurized
(Gravity Flow)
Size: ID 1,800 mm
Location: Nuvali, Laguna



NUVALI SERENEO PROJECT

Pipe Installed: Covered Wall Pipe
Pressure Rating: Non-Pressurized
(Gravity Flow)
Size: ID 1,000 mm
Location: Nuvali, Canlubang, Laguna



CONSTRUCTION OF REVETMENT & OTHER IMPROVEMENTS ALONG BALUCTOT RIVER EAST SIDE BRGY. SALAWAG DASMARIÑAS, CAVITE

Pipe Installed: Covered Wall Pipe
Size: ID 1,000 mm
Location: Salawag, Dasmariñas Cavite

KPMI PIPE FEATURED

APPLICATIONS AND PROJECTS

IRRIGATION



VILLA DOMINGO PUMPING STATION

Pipe Installed: Solid Wall Pipe
Ring Stiffness: SN8
Pressure Rating: 4 Bar
Size: ID 1,000 mm | Length: 108 Linear Meter
Location: Cauayan, Isabela



UPPER CHICO RIVER IRRIGATION SYSTEM

Pipe Installed: Solid Wall Pipe
Ring Stiffness: SN8
Size: ID 1,000 mm
Location: Barucboc, Quezon, Isabela



ANARATAN INTEGRATED IRRIGATION SYSTEM

Pipe Installed: Profiled Wall Pipe
Ring Stiffness: SN8
Pressure Rating: Gravity
Size: ID 800 mm | Length: 162 Linear Meter
Location: Anaratan, Isabela



CABAGAN SIPHONIC IRRIGATION PIPELINE

Pipe Installed: Profiled Wall Pipe
Ring Stiffness: SN8
Pressure Rating: 4 Bar
Size: ID 800 mm | Length: 198 Linear Meter
Location: Cabagan Isabela



DIPALO IRRIGATION SYSTEM PROP. MODIFICATION OF EXISTING SIPHON

Pipe Installed: Covered & Solid Wall Pipe
Ring Stiffness: SN8
Size: ID 2,000 mm
Location: San Quintin, Pangasinan



COLOCOL INTEGRATED IRRIGATION SYSTEM

Pipe Installed: Covered Wall Pipe
Ring Stiffness: SN8
Pressure Rating: 2 Bar, Load Bearing
Size: ID 2,100 mm | Length: 252 Linear Meter
Location: Bayombong, Nueva Viscaya



MALLIG RIVER IRRIGATION SYSTEM

Pipe Installed: Profiled Wall Pipe
Ring Stiffness: SN8
Pressure Rating: Gravity
Size: ID 800 mm
Location: Mallig Isabela



DINAPIGUE INTEGRATED IRRIGATION SYSTEM

Pipe Installed: Covered Wall Pipe
Ring Stiffness: SN8
Pressure Rating: Gravity
Size: ID 1,000 mm | Length: 96 Linear Meter
Location: Dinapigui, Isabela

KPMI PIPE FEATURED

APPLICATIONS AND PROJECTS

STORM DRAINAGE



BATANGAS COMBINE CYCLE POWER PLANT

Pipe Installed: Structured Wall Pipe
Load Bearing
Ring Stiffness: SN6
Size: ID 2,000 mm | Length: 6 Linear Meter
Location: Ilijan Batangas City

WATER SYSTEM



REHABILITATION OF LAMESA WATER TREATMENT PLANT 1

Pipe Installed: Gravity Load Bearing Pipes
Ring Stiffness: SN8
Size: ID 1,800 mm | Length: 326 Linear Meter
Location: Quezon City

SEA OUTFALL



COASTLAND CONSTRUCTION & DEVELOPMENT CORP. - SAMAL SHORES PROJECT, SAMAL SHORES HOTEL AND RESTAURANT ISLAND GARDEN CITY OF SAMAL

Pipe Installed: Gravity Load Bearing Pipes
Size: ID 800 mm
Location: Samal Island Davao del Norte



MANILA BAY OUTFALL, MANILA BAY, ROXAS BOULEVARD

Pipe Installed: Special Load Bearing Pipes
Ring Stiffness: SN13
Size: ID 1,000 mm
Length: 402 Linear Meter
Location: Manila Bay, Roxas Boulevard

SEWERAGE



VALENZUELA SEWER INTERCEPTOR

Pipe Installed: Special Load Bearing Pipes
Ring Stiffness: SN16
Size: ID 600 mm & 1,000 mm
Length: 468 & 384 Linear Meter
Location: Valenzuela City

WATER STORAGE SYSTEM



NSCR PROJECT HDPE WATER TANK

Size: ID 2,000 mm
Location: Guiguinto, Bulacan

DRAINAGE



CROSSROADS PROJECTS DRAINAGE SYSTEM

Pipe Installed: Covered Wall Pipes
Ring Stiffness: SN8
Size: ID 1,000 mm - 1,800 mm
Location: Plaridel, Bulacan



MDC LTI BATANGAS TECHNOPARK

Pipe Installed: Profiled Wall Pipes &
Covered Wall Pipes
Ring Stiffness: SN8 | Size: ID 400 mm - 1,600 mm
Length: 1,518 Linear Meter
Location: Padre Garcia Batangas

AT KPMI, WE GET YOUR

PROJECT GOING ...

KPMI PIPE FEATURED

APPLICATIONS AND PROJECTS

PUBLIC WORKS & HIGHWAYS



**DPWH - CONSTRUCTION OF
SPILLWAY IN LITTLE BAGUIO,
MALAYBALAY BUKIDNON**
Pipe Installed: Covered Wall Pipes
Size: ID 3,000 mm
Location: Valencia Bukidnon

**DPWH Standard Specification for Item 706.14.2
Structured Wall Pipe - High Density
Polyethylene Pipe (HDPE)**



**DPWH - CONSTRUCTION/UPGRADING/
REHABILITATION OF DRAINAGE
ALONG BUTUAN-CDO NATIONAL
ROAD - CARAGA REGION PROJECT**
Pipe Installed: Covered Wall Pipes
Size: ID 1,000 mm & 2,000 mm
Location: Butuan City, Agusan del Norte

PUBLIC WORKS & HIGHWAYS



**DPWH - CONSTRUCTION OF
DRAINAGE SYSTEM ALONG
SUMULONG HIGHWAY
INCLUDING LATERALS (PHASE III)**
Pipe Installed: Covered Wall Pipes
Pressure Rating: Gravity
Size: ID 3,500 mm
Location: Sumulong Highway, Marikina

**DPWH Standard Specification for Item 706.14.2
Structured Wall Pipe - High Density
Polyethylene Pipe (HDPE)**



**DPWH - CONSTRUCTION/
UPGRADING/REHABILITATION OF
DRAINAGE ALONG NATIONAL ROADS
- PRIMARY ROADS - MANUEL S.
AGYAO BOULEVARD**
Pipe Installed: Profiled Wall Pipe
Size: ID 1,800 mm
Location: Tabuk City, Kalinga



**DPWH - CONSTRUCTION OF
MONCADA - PANIQUI
DIVERSION ROAD**
Pipe Installed: Profiled Wall Pipes
Size: ID 3,000 mm
Location: Moncada, Tarlac



**DPWH - CONSTRUCTION OF ROAD
ALONG IZNART ST. AND J.M. BASA ST.
WITH DRAINAGE SYSTEM**
Pipe Installed: Profiled Wall Pipes
Size: ID 1,000 mm
Location: Iloilo City



**LGU - CABADBARAN PROJECT
AGUSAN DEL NORTE**
Pipe Installed: Profiled Wall Pipe
Size: ID 400, 500, 600, 800, 1,000 mm
Location: Cabadbaran, Agusan del Norte



**DPWH - PANIQUI
DRAINAGE PHASE 2**
Pipe Installed: Covered Wall Pipes
Size: ID 1,000 mm & 2,000 mm
Location: Paniqui, Tarlac

KPMI PIPE FEATURED

APPLICATIONS AND PROJECTS

PUBLIC WORKS & HIGHWAYS



DPWH - PROJECT (PILOT) LAS PIÑAS DRAINAGE CANAL - ZAPOTE ROAD

Pipe Installed: Profiled Wall Pipes
Size: ID 1,000 mm
Location: Las Piñas

DPWH Standard Specification for Item 706.14.2
Structured Wall Pipe - High Density
Polyethylene Pipe (HDPE)



DPWH - BALINTI TARLAC ROAD PROJECT

Pipe Installed: Profiled Wall Pipes
Size: ID 1,000 mm
Location: Balinti, Tarlac City

PUBLIC WORKS & HIGHWAYS



DPWH - CONSTRUCTION OF BANK PROTECTION STRUCTURE ALONG TARLAC RIVER CONTROL RIGHT DIKE, SAN NICHOLAS - STA. CRUZ SECTION

Pipe Installed: Profiled Wall Pipes
Size: ID 1,000 mm
Location: Tarlac City

DPWH Standard Specification for Item 706.14.2
Structured Wall Pipe - High Density
Polyethylene Pipe (HDPE)



DPWH - REHABILITATION OF C5 EXTENSION, MULTINATIONAL SECTION

Pipe Installed: Covered Wall Pipes
Size: ID 1,000 mm
Location: Parañaque City



DPWH - MACABULOS TARLAC ROAD PROJECT

Pipe Installed: Profiled Wall Pipe
Size: ID 1,200 mm
Location: Macabulos, Tarlac City



DPWH - CONSTRUCTION OF MONCADA SAN MANUEL BY-PASS ROAD DRAINAGE

Pipe Installed: Profiled Wall Pipes
Size: ID 1,000 mm & 1,200 mm
Location: San Manuel, Tarlac City



LGU - REHABILITATION OF LADLADEGAN-PALEZA ROAD

Pipe Installed: Profiled Wall Pipes
Size: ID 1,000 mm
Location: Ladladegan, Besao,
Mountain Province



DPWH - CEBU 6TH MACTAN AIRPORT ROAD PROJECT

Pipe Installed: Profiled Wall Pipes
Size: ID 1,000 mm
Location: Lapu-Lapu City

AT KPMI, WE GET YOUR PROJECT GOING ...

KPMI PIPE FEATURED

APPLICATIONS AND PROJECTS

PUBLIC WORKS & HIGHWAYS



**DPWH - CONSTRUCTION OF
RIVERWALL ALONG TANZA DIKE,
BRGY. TANZA, NAVOTAS CITY**
Pipe Installed: Profiled Wall Pipes
Size: ID 800 mm | 96 Linear Meter
Location: Tanza, Navotas City

**DPWH Standard Specification for Item 706.14.2
Structured Wall Pipe - High Density
Polyethylene Pipe (HDPE)**



**DPWH - NEW CLARK CITY ACCESS
ROAD DRAINAGE PROJECT**
Pipe Installed: Profiled Wall Pipes
Size: ID 1,000 mm
Location: San Jose, Tarlac

PUBLIC WORKS & HIGHWAYS



**DPWH - CONSTRUCTION /
MAINTENANCE OF FLOOD
MITIGATION STRUCTURES AND
DRAINAGE SYSTEMS**
Pipe Installed: Profiled Wall Pipes
Size: ID 1,000 mm
Location: Balud, Masbate

**DPWH Standard Specification for Item 706.14.2
Structured Wall Pipe - High Density
Polyethylene Pipe (HDPE)**



**DPWH - NARRA PALAWAN
DRAINAGE PROJECT**
Pipe Installed: Profiled Wall Pipes
Size: ID 800 mm
Length: 120 Linear Meter
Location: Narra Palawan



**DPWH - BACOLOD CITY
DRAINAGE PROJECT**
Pipe Installed: Profiled Wall Pipe
Size: ID 1,000 mm & 1,200 mm
Location: Aganan, Oton, Iloilo City



**DPWH - G. ARANETA
DRAINAGE SYSTEM**
Pipe Installed: Covered Wall Pipes
Size: ID 1,500 mm
Location: G. Araneta, Quezon City



**DPWH - ASSET PRESERVATION PROGRAM -
CONSTRUCTION/UPGRADING/REHABILITATION
OF DRAINAGE ALONG NATIONAL ROADS
PRIMARY - DAANG MAHARLIKA**
Pipe Installed: Covered Wall Pipes
Size: ID 2,000 mm
Location: Maharlika Highway,
Santiago City, Isabela



**DPWH - CONSTRUCTION /
REHABILITATION / UPGRADING OF
DRAINAGE ROAD ALONG PANIQUI
POBLACION RD PANIQUI TARLAC**
Pipe Installed: Covered Wall Pipes
Size: ID 2,000 mm
Location: Panique, Tarlac City

TYPES OF PIPES

SOLID WALL PIPE

Solid wall pipes are designed with a distinct outer surface that exhibits slight irregularities, while their inner surface remains exceptionally smooth. This combination of textures is a result of careful manufacturing processes that ensure uniformity throughout the pipe. These pipes undergo tempering, a heat treatment process that eliminates any frozen stresses within the material, enhancing their structural integrity. As a result, solid wall pipes are highly reliable and capable of withstanding high internal working pressures, making them ideal for a variety of applications.

- For pressurized application
- Class: 1 BAR, 2 BAR, 3 BAR, 4 BAR
- Also used to fabricate different fittings such as bends, reducers, and manholes

PROFIED WALL PIPE (PR)

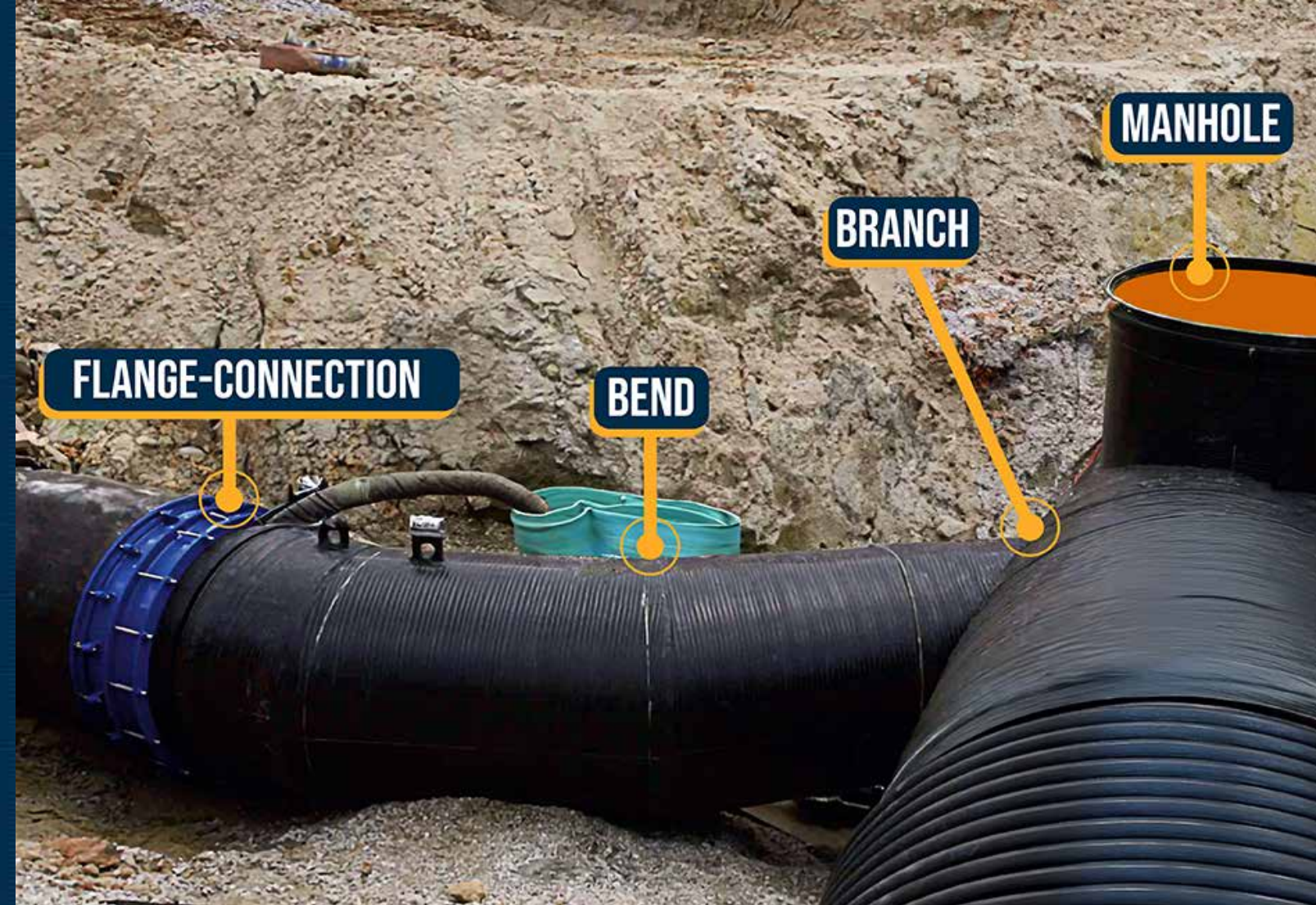
Even though they boast a remarkably low weight, structured wall pipes or profiled pipes are engineered to withstand demanding applications that require the capability to support substantial external loads. By utilizing innovative design, these profiled pipes can achieve an impressive weight reduction of up to 65% compared to traditional solid wall pipes, all while maintaining the same robust ring stiffness. Moreover, our pipes offer customizable wall thicknesses, allowing for precise adjustments across a variety of sizes to expertly meet diverse load requirements, ensuring both strength and efficiency in every application.

- Diameter sizes below 1000 mm (300 mm – 900 mm)
- For Low Ring Stiffness: Class SN2, SN3, SN4, SN5
- Pressurized application for diameter size 1000 mm - 3500 mm
- Class: 1 BAR, 2 BAR, 3 BAR, 4 BAR

COVERED WALL PIPE (CPR)

Covered wall pipes boast smooth and polished surfaces both inside and out, ensuring a seamless flow and an aesthetically pleasing appearance. Their unique internal design, which may consist of one or more layers, is engineered to bear incredibly high loads while maintaining impressive durability over time. This innovative profile makes these pipes particularly well-suited for large diameters, offering unmatched stiffness and resilience. Furthermore, they excel in the fabrication of manholes and fittings, providing robust solutions for various engineering demands.

- For Medium Ring Stiffness: Class SN6, SN8, SN10, SN12, SN13
- Diameter sizes above 1000 mm – 2000 mm
- Pressurized application for diameter size 1000 mm - 3500 mm
- Class: 1 BAR, 2 BAR, 3 BAR, 4 BAR



Your Solution For A Complete Piping & Fitting System

Krah Pipes Manila Inc. (KPMI) specializes in the manufacture of large-diameter HDPE pipes, offering both standard and customized piping systems. Our pipes are known for their durability, cost-effectiveness, and environmentally friendly properties, with a lifespan of up to 100 years. We source our equipment from KRAH GmbH in Germany, a recognized leader in pipe manufacturing since 1968.

KPMI supplies HDPE pipes ranging from DN/ID 300 mm to 3500 mm, with a standard commercial length of 6 meters. In addition to pipes, we offer accessories such as fittings, reducers, flanges, jointing systems, and manholes. Our advanced helical extrusion process allows us to produce profiled pipes suitable for gravity applications, solid wall pressure pipes, and high-quality fittings and accessories. Krah pipes are designed with a seamless, smooth inner surface and feature an integrated socket spigot for electro-fusion jointing, ensuring compatibility with various jointing methods.

From customization to project management, our experts are committed to delivering unparalleled customer satisfaction from start to finish. Our pipes are not only durable and strong but also economical and eco-friendly making them an ideal choice for environmentally conscious projects. At Krah Pipes Manila Inc., we strive to provide innovative and reliable solutions for all your piping needs.

A UNIQUE TECHNOLOGY



SMOOTH INTERIOR

Minimize fluid friction and flow resistance.



TIGHTNESS

100% tight joints, no infiltration and exfiltration. 100% leak-free.



TAILOR-MADE DESIGN

According to your specific project requirements.



FLEXIBILITY

What bends does not break.



EARTHQUAKE PROOF

Even in the event of earth movement, the pipes are secure against damage.



100 YEARS LIFESPAN

The operating costs are reduced by the low initial investment costs and a service life of over 100 years.



HIGH IMPACT STRENGTH

Strong pipes that can withstand impacts throughout shipment, installation and the entirety of their service lives are ensured by high impact resistance, even at low temperatures.



HYDRAULICS

In comparison to current traditional pipe materials, smaller pipe diameters can be used because of their excellent hydraulic properties.



LIGHTWEIGHT

Easy to handle, easy to transport.



UV RESISTANT

Resistant to atmospheric corrosion and UV radiation.

HDPE FITTINGS

To achieve a homogeneous, reliable, and high-performance piping system, Krah Pipes Manila Inc. (KPMI) supplies a comprehensive range of HDPE fittings and system components designed to match all pipe diameters and stiffness classes. Manufactured using advanced KRAH technology, each fitting is engineered to integrate seamlessly with the piping system, ensuring uniform structural behavior, optimal hydraulic performance, and long-term durability.

All KPMI HDPE fittings utilize the same integrated jointing technology as the pipes, including electro-fusion and mechanical joint solutions, ensuring secure, leak-free, and structurally continuous connections. Each fitting is designed in accordance with the required stiffness and application conditions, minimizing stress concentrations and maintaining system integrity across gravity, pressure, and industrial applications.

Bends

Used to change the direction of the pipeline, KRAH HDPE bends are available in various diameters, bending ratios, and angles. They can be manufactured as single-piece or segmented components, providing flexibility in layout while maintaining smooth flow and structural strength.

- Any bending ratios
- In different sizes
- Different degrees



Branches

Designed for flow distribution, HDPE branches allow connections at angles ranging from 15° to 90°. Available as Y-branches or T-branches, they can be customized in size and configuration and supplied with mechanical or electro-fusion joints for reliable integration.

- In different sizes
- Y Branch
- T Branch
- Customizable with mechanical joints

a	number of segments
15°	2
30°	2
45°	3
60°	3
75°	4
90°	4



Reducers

KRAH HDPE reducers are purpose-designed fittings that provide a controlled and seamless transition between different pipe diameters within a piping system. Unlike rigid connectors, these reducers can be manufactured in both centric and eccentric configurations to meet specific design requirements and hydraulic performance goals. This flexibility ensures that flow energy is preserved and that transitions occur smoothly without introducing stress concentrations or turbulence within the system.

Flanges

KRAH HDPE flanges are manufactured to meet specific project requirements and applicable PN pressure standards. Designed for secure and reliable connections to valves, pumps, and other pipeline components, these flanges ensure precise alignment and leak-tight performance.

Available in various sizes and pressure ratings, KRAH flanges offer excellent chemical resistance, durability, and compatibility with both HDPE and non-HDPE piping systems, making them suitable for a wide range of industrial and infrastructure applications. Together, these fittings form a fully compatible and integrated HDPE piping system, delivering reliable performance, ease of installation, and long service life hallmarks of Krah Pipes Manila Inc.'s commitment to quality and innovation.

HDPE PIPE WORKABILITY

PIPE MELTING POINT RANGE: 100°C – 140°C

VIRGIN RAW MATERIALS MELTING POINT: 190°C – 210°C

IGNITION TEMPERATURE: 320°C

NOTE:

All temperature ratings are based on the resin technical data sheets provided by our suppliers.





HDPE MANHOLES

Engineered for Reliability and Long-Term Performance

Krah Pipes Manila Inc. (KPMI) manufactures HDPE manholes using advanced KRAH spiral-wound technology, designed to deliver superior structural integrity, hydraulic efficiency, and long service life for modern sewerage, drainage, and utility systems. Produced as fully integrated system components, KPMI manholes ensure complete compatibility with HDPE piping networks while maintaining consistent performance across all pipeline elements.

Constructed from high-density polyethylene (HDPE), KPMI manholes offer exceptional resistance to corrosion, chemicals, abrasion, and environmental stress. Their lightweight yet robust design simplifies handling and installation while reducing overall project costs. The smooth internal surface minimizes sediment buildup, enhances flow efficiency, and supports reliable operation even under demanding conditions.



Standard



Tangential



Special

Design Flexibility and Customization

KPMI HDPE manholes are custom-designed to meet project-specific requirements, with diameters, heights, inlets, outlets, and connection angles tailored to site conditions. They can be supplied with integrated pipe connections, benches, flow channels, ladders, and access covers as required. The monolithic construction ensures a watertight, leak-free structure, minimizing infiltration and ex-filtration while improving system reliability.

Structural Performance and Sustainability

Engineered to withstand soil loads, traffic loads, and groundwater pressure, KPMI manholes are suitable for a wide range of installation depths and applications. Their long service life up to 100 years combined with low maintenance requirements makes them a cost-effective and environmentally responsible alternative to traditional concrete manholes. Fully recyclable and manufactured with precision, KPMI HDPE manholes support sustainable infrastructure development.

Standard

Standard manholes are used when the manhole shaft diameter is larger than the inlet and outlet pipelines, allowing direct connections while ensuring smooth flow and ease of maintenance. This configuration provides excellent hydraulic performance and accessibility for inspection and cleaning.

Tangential

Tangential manholes are applied when the manhole shaft diameter is smaller than the inlet and outlet pipelines. The tangential inlet design promotes efficient flow guidance, reduces turbulence, and minimizes wear within the manhole structure.

Special

Special manholes are custom-engineered to meet specific project requirements, including unique dimensions, connection layouts, load conditions, and site constraints. These solutions offer maximum flexibility while maintaining structural integrity and system compatibility.



JOINTING TECHNOLOGY

This jointing technology eliminates your concern by guaranteeing a solid, homogeneous pipeline.

✓ 100% Tightness

✓ 100% Leak-Free



REDUCE TOTAL
INSTALLATION COST



FASTER INSTALLATIONS,
QUICKER PROJECT
TURNAROUND



REDUCE
MANPOWER COSTS

ELECTRO-FUSION JOINTING

The electro-fusion technology was established for large-diameter pipes. With this method, the whole pipeline becomes a homogeneous system and is absolutely safe against wanted and unwanted infiltration and ex-filtration. The electro-fusion jointing averages from 15 - 21mins jointing period depending on the diameter of the pipe.

INTEGRATED ELECTRO-FUSION



1 A fusion wire is embedded in the pipe socket.



2 A support ring is installed inside the pipe to provide reinforcement and strengthen the joint.



3 Use the Krah chain tensioning device to secure and tighten the connection.



4 Attach the adapter to the fusion wire and begin welding. The wire is heated using a specialized fusion tool, bonding the socket and spigot ends of the pipe.

“HDPE PIPES ARE LIGHT WEIGHT, FLEXIBLE, AND EASY TO INSTALL”

- Pipes can be installed efficiently using a single welding device ranging 300 mm - 1200 mm.
- Faster installation leads to timely project completion.

Additional advantages include the ability to install in small trenches without the use of heavy equipment and quick piping installation due to the simultaneous use of numerous fusion devices. The final joint is tight and permanently attached.



“THIS ADVANCED JOINTING TECHNIQUE ENABLES PIPE INSTALLATION IN A **SHORT PERIOD OF TIME, ACHIEVING EFFICIENCY PREVIOUSLY UNATTAINED IN THE INDUSTRY.”**

SPECIFICATION AND PROPERTIES

Thermoplastics such as polyethylene and polypropylene offer excellent (PE100) characteristics, making them ideal for building containers that hold both solid and liquid materials. They're also widely used in water sewer systems.



All of these materials are environmentally friendly:

- High-Density Polyethylene (PE100)

The Table Below Highlights The Key Properties

PROPERTIES		STANDARD	UNIT	PE 100
P H Y S I C A L	Density at 23°C (black compound) 1)	ISO 1183	[g/cm³]	0,96
	Melt Flow Rate (MFR 190/5)	ISO 1133	[g/10min]	0,25
	Melt Flow Rate (MFR 190/2,16)	ISO 1133	[g/10min]	< 0,1
	Carbon Black content (black compound) 1)	ASTM D 1603	[%]	> 2
	Carbon Black Dispersion (black compound) 1)	ISO 18553	[-]	≤ 3
M E C H A N I C A L	Tensile stress at yield	ISO 527	[N/mm²]	23
	Strain at yield	ISO 527	[%]	> 8
	Strain at break	ISO 527	[%]	> 600
	E-Modulus (tensile)	ISO 527	[N/mm²]	1000
	Flexural Modulus (Imin)	ISO 178	[N/mm²]	1100
	Flexural Modulus (24 h)	DIN 16841	[N/mm²]	532
	Flexural Modulus (3 month)	DIN 16841	[N/mm²]	339
	Flexural Modulus (50 years)	DIN 16841	[N/mm²]	200
	ESCR	ASTM 1693	[h]	> 10000
	Resistance to slow crack growth	ISO 13479 @ 80°C	[h]	> 500
	Rapid crack propagation	ISO 13477	[bar]	> 10
	Charpy Impact, notched, 23°C	ISO 179	[kJ/m²]	26
	Charpy Impact, notched, -30°C	ISO 179	[kJ/m²]	13
	Hardness, Shore D	ISO 868	[-]	60
E L E C T R I C A L	Surface resistance 2	DIN/EC 60093, DIN/EC 60167	[Ω]	>10 ¹⁴
	Volume resistivity	DIN/EC 60093, DIN/EC 60167	[Ω cm]	>10 ¹⁷
	Dielectric strength	DIN/EC 60093, DIN/EC 60167	[kV/mm]	22
	Thermal conductivity (at 0 °C)	DIN 52612	[W/mK]	0,38
T H E R M A L	Coefficient of linear thermal expansion	DIN 53752	[mm/m°C]	0,18
	Brittleness temperature	ASTM D 746	[°C]	< -70
	Flammability	DIN 4102-1	[-]	B2

PIPE DIAMETER



Krah pipes come in internal diameters (ID) ranging from 300 mm to 3500 mm. The nominal diameter (D/N) matches the internal diameter. If adjustments are needed, the wall thickness can be modified either increased or reduced while keeping the ID unchanged.

This approach helps maintain the required hydraulic capacity of the system.

“COMMERCIAL LENGTH OF 6 METERS”

(Minimum 1M, Maximum 12M Pre-jointed)

Krah pipes typically come in six-meter lengths, but they can be continuously produced in any length from one to six meters. Longer pipes mean fewer joints, making installation easier and more efficient.

For added convenience, the pipes can be delivered pre-jointed, which helps reduce on-site installation time. Standard flatbed trucks, usually 40 feet long, can transport pipes up to 12 meters in length.

DN/ID	DN/OD RANGE
300 mm	310-480 mm
400 mm	410-580 mm
500 mm	510-680 mm
600 mm	610-780 mm
700 mm	710-880 mm
800 mm	810-960 mm
900 mm	910-1080 mm
1000 mm	1010-1360 mm
1200 mm	1210-1560 mm
1400 mm	1410-1760mm
1500 mm	1510-1860 mm
1600 mm	1610-1960 mm
1800 mm	1810-2160 mm
1900 mm	1910-2260 mm
2000 mm	2010-2360 mm
2100 mm	2110-2460 mm
2400 mm	2410-2760 mm
2500 mm	2510-2860 mm
3000 mm	3010-3360 mm
3500 mm	3510-3860 mm

STANDARD: ISO 9969



Available in a wide range of ring stiffness classes: SN2, SN4, SN6, SN8, SN10, SN12, SN14, and SN16.

We also offer tailor-made solutions for lower stiffness classes not listed above.

TEST REQUIREMENT	STANDARD
RING STIFFNESS	DIN EN ISO 9969, ASTM F894
MELT MASS-FLOW RATE (MFR)	DIN EN ISO 1133
WALL THICKNESS	DIN 16917
OVALITY/ DIAMETER	DIN 16917, ISO 3126
FLATTENING TEST	DIN EN ISO 9969, ASTM F894

HANDLING, STORAGE AND INSTALLATION PARAMETERS OF KRAH STRUCTURED WALL PIPES

1. STANDARD:

All installation must be governed by ATV A 127 and DIN EN 1610.

2. UNLOADING:

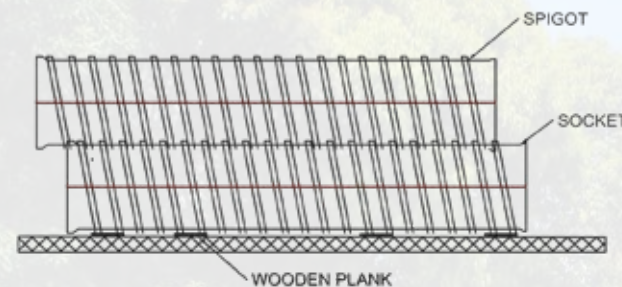
During the unloading of the pipes with hoists only belts should be used. Steel wire ropes, chains as well as sharp-edged hoists should be avoided.

3. STORAGE:

The pipes should be stored on even ground which is free of stones or sharp-edged objects. The pipes are to be stored in such a way that they cannot deform and are protected against dirt, mechanical damages.



With the help of wooden planks, a correct stack height of 3 m can be reached. If no planks are used as underlay, even if the underground is smooth, the maximum stack height of 3m does not apply anymore.



4. INSTALLATION

Krah pipelines are engineered products. The basic installation for these pipes is based on the worksheet ATV A 127. The basis of the installation procedure is EN1610.

NOTE:

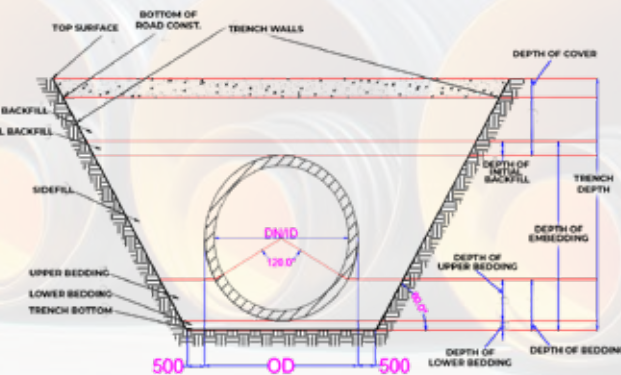
The same definitions apply for trenches with sloping sides and for embankments where appropriate.

4.1 INITIAL AND SIDE BACKFILL:

Material for all backfill material must be granular soil, sand or any material of the same fine size. Materials for initial backfilling should contain no particles with sizes above 40 MM for DN < 200 up to DN > 600.

4.2 BACKFILL:

The maximum size of stones in excavated material used for backfill should be 150 mm or the thickness of the initial backfill or half of the compaction layer thickness, whichever is smallest. The maximum size may be further limited depending on soil conditions, groundwater and pipe material. Special conditions may be specified for rocky areas.

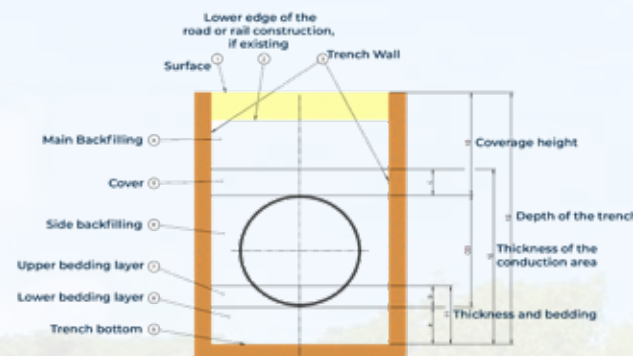


4.3 TRENCH WIDTH:

Trench width must be minimum of 500 mm on each side of the pipe.

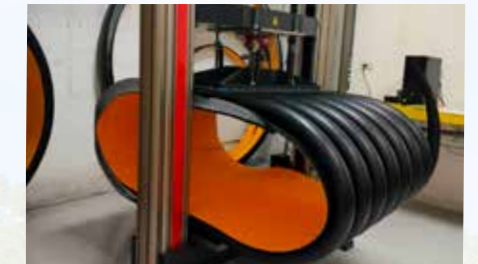
4.4 TRENCH BOTTOM:

The bottom of the trench must be free from rocks and other protruding hard and sharp objects.



Product Testing:

- ✓ Ring Stiffness Test
- ✓ Deflection Test / Flattening Test
- ✓ Inside Pressure Test



Deflection Test / Flattening Test

4.5 BEDDING LAYERS:

Lower bedding cover must be minimum of 100 mm and 150 mm for normal soil condition and for soil with rocks or hard soil, respectively. Material used must be sand or any granular material of the same fine size, free from rocks or protruding sharp and hard materials.

4.6 SAND-CEMENT BACKFILL:

For areas where the groundwater level is 1 meter above the invert of the pipe, it is advisable to use sand-cement mixture backfill to have a firmer cover when the backfill gets moist.

5. COMPACTION:

Proper compaction using a hand plate compactor must be done every 30 cm layer of backfill material, in the case of sand as the main and side backfill material, it must be wetted and compacted every 30 CM, using the same aforementioned equipment. The backfill material must be thoroughly compacted to all sides of the pipe and in-between ribs to stabilize pipe from any movement and deflection afterwards. A mechanical compactor may only be used when the backfill is already 30 CM above the pipe crown to avoid premature deflection. Use of medium to heavy mechanical compacts may be used as in accordance to the recommendation of the manufacturer or designer.

6. CURING TIME:

After the electro-fusion process, a 45-minute curing time must take place before covering the pipes with backfill material.

7. ELECTRO-FUSION REQUIREMENTS:

Client must provide a generator set with following specifications: 220V, Single Phase, 15 KVA and/or 25 KVA for pipes ID < 1400 MM and for pipes ID > 1500 MM > 2000 mm, respectively. In the event of rainfall, the process may still be performed using a shed with a minimum dimension of 3M x 3M. During extreme weather condition, the process must be postponed. Power requirements are 5 kVA per e-box (10 kVA for two units).

NOTE: Any defiance of the aforementioned parameters and guidelines will void the warranty of the pipes. Any modification must be put into writing and be approved by Krah technical team.



KPMI PIPE APPLICATIONS



PARTNERS





ECONOMICAL

KPMI solutions are designed to reduce total life-cycle costs through efficient manufacturing, fast installation, and minimal maintenance requirements.



BEST CHOICE

With proven German technology, local manufacturing expertise, and consistent quality, KPMI is a trusted partner for both public and private infrastructure projects.



HIGHLY SKILLED WORKERS

KPMI employs trained and experienced professionals who ensure precision manufacturing, strict quality control, and reliable project execution.



PRESTIGE

KPMI products are used in landmark and high-value projects, reflecting excellence, reliability, and industry leadership.



IN-HOUSE LOGISTICS

An integrated logistics operation allows KPMI to manage transportation, scheduling, and delivery efficiently, ensuring full control from production to project site.



SUPERIOR QUALITY

Every product is manufactured in accordance with international standards, ensuring strength, durability, and long-term performance.



VALUE

KPMI delivers high-performance solutions that balance quality, cost efficiency, and long service life, providing maximum return on investment.



FINEST MATERIALS

Only premium-grade HDPE raw materials are used to ensure consistent quality, structural integrity, and environmental resistance.



NATIONWIDE DELIVERY

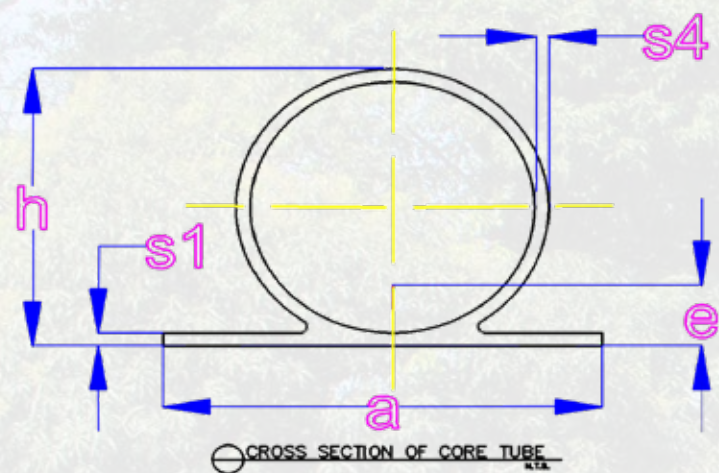
KPMI supports projects across the Philippines with reliable and timely delivery to meet project schedules.

PROJECTS TOPOGRAPHICAL LOCATION



TECHNICAL DATASHEET: 300 MM - 1400 MM

STRUCTURED WALL PIPE LOAD BEARING



MATERIAL SPECIFICATION: VIRGIN PE 100			
PROPERTY	REFERENCE METHOD	UNIT	VALUE
MELT FLOW RATE	ISO 1133	g/10min	0.2300
DENSITY	ISO 1183	kg/m ³	959
OXIDATION INDUCTION TIME (210 °C)	ISO 11357	min	42
MOISTURE CONTENT	ISO 15512	ppm	30
CARBON BLACK CONTENT	ASTM D 1603	%	>2
HYDROSTATIC DESIGN	ASTM F894-07 D2837	Mpa	>8.6

TEST REQUIREMENT	STANDARD
RING STIFFNESS	DIN EN ISO 9969
CREEP MODULUS	DIN EN ISO 899-2
MELT MASS-FLOW RATE (MFR)	DIN EN ISO 1133
WALL THICKNESS	DIN 16917
OVALITY/ DIAMETER	DIN 16917, ISO 3126
FLATTENING TEST	ASTM F894-07

SPIGOT DETAILS		
DN RANGE (mm)	Ls (mm)	Ss (mm)
300 - 1200	159	21.5000
1300 - 1600	165	26.5000
1700 - 2400	171	31.5000

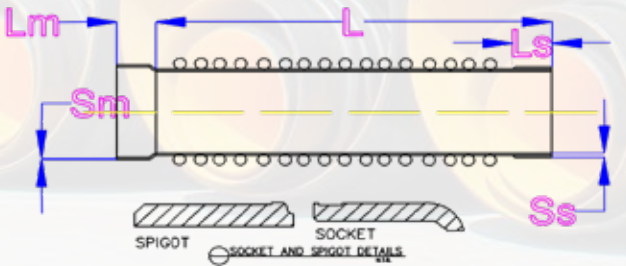
SOCKET DETAILS		
DN RANGE (mm)	Ls (mm)	Ss (mm)
300 -1200	140	26
1300 - 1600	140	29.9600
1700- 2400	140	35.5400
2500 - 3000	140	38.5400
3100 - 3500	140	43.5400
3600 - 4000	140	48.5400

OUTSIDE DIAMETER (OD) (mm)	INSIDE DIAMETER (ID) (mm)	LENGTH (m)
396	300	6
496	400	6
596	500	6
696	600	6
796	700	6
896	800	6
1000	900	6
1119	1000	6
1342	1200	6
1566	1400	6

MARKINGS:

The pipes should be clearly marked with the following information at 1 meter interval:

- 1 Manufacturer's identification
- 2 Nominal diameter
- 3 Name of product, resin type identification (ISO 8772)
- 4 Number of specification where it is manufactured
- 5 The word "gravity pipes"
- 6 Manufacturer's coding
- 7 Year of manufacture



NOTE:

- 1 General requirements ACC. EN 13476, DIN 16961, DIN 16917 with structured or solid wall, raw material approved for gravity and pressure application, with co extruded and inspection friendly inner surface. Minimum wall thickness ACC. ASTM F894/DIN 16917, standard dimensions according mentioned standards.
- 2 With integrated electro-fusion socket and spigot.
- 3 Welding-joints according. Manual pipe supplier electro-fusion socket with integrated brass 3 heating wire in meander-shape, diameter 2 mm (3/100).
- 4 Actual quantity shall be as per approved contract documents.

TECHNICAL DATASHEET: 1500 MM - 3500 MM

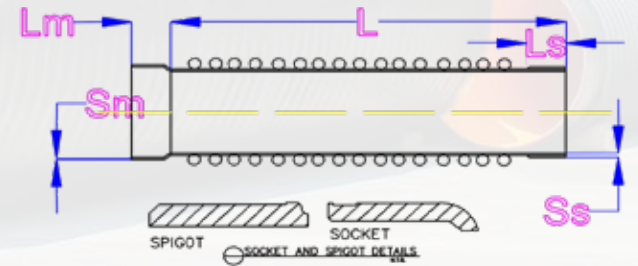
STRUCTURED WALL PIPE LOAD BEARING

OUTSIDE DIAMETER (OD) (mm)	INSIDE DIAMETER (ID) (mm)	LENGTH (m)
1650	1500	6
1770	1600	6
1962	1800	6
2080	1900	6
2184	2000	6
2278	2100	6
2734	2400	6
2834	2500	6
3334	3000	5.6
3892	3500	5.6

MARKINGS:

The pipes should be clearly marked with the following information at 1 meter interval:

- 1 Manufacturer's identification
- 2 Nominal diameter
- 3 Name of product, resin type identification (ISO 8772)
- 4 Number of specification where it is manufactured
- 5 The word "gravity pipes"
- 6 Manufacturer's coding
- 7 Year of manufacture

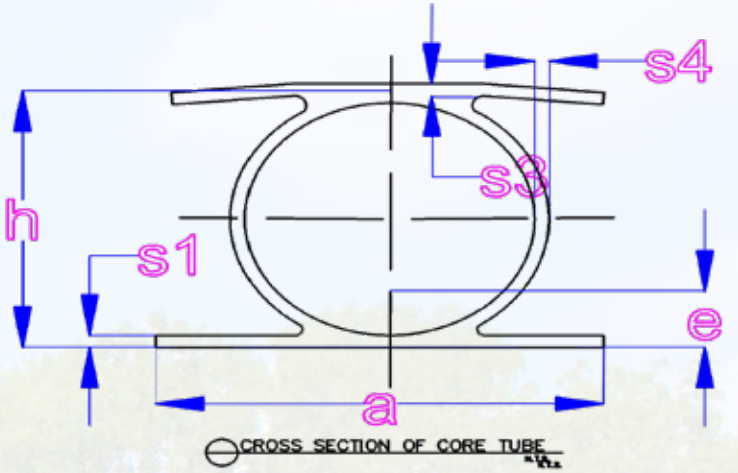


NOTE:

- 1 General requirements ACC. EN 13476, DIN 16961, DIN 16917 with structured or solid wall, raw material approved for gravity and pressure application, with co extruded and inspection friendly inner surface. Minimum wall thickness ACC. ASTM F894/DIN 16917, standard dimensions according mentioned standards.
- 2 With integrated electro-fusion socket and spigot.
- 3 Welding-joints according. Manual pipe supplier electro-fusion socket with integrated brass 3 heating wire in meander-shape, diameter 2 mm (3/100).
- 4 Actual quantity shall be as per approved contract documents.

Disclaimer:

Detailed drawings and technical documentation are available upon request. Email at marketing@krah-pipes.com.ph.



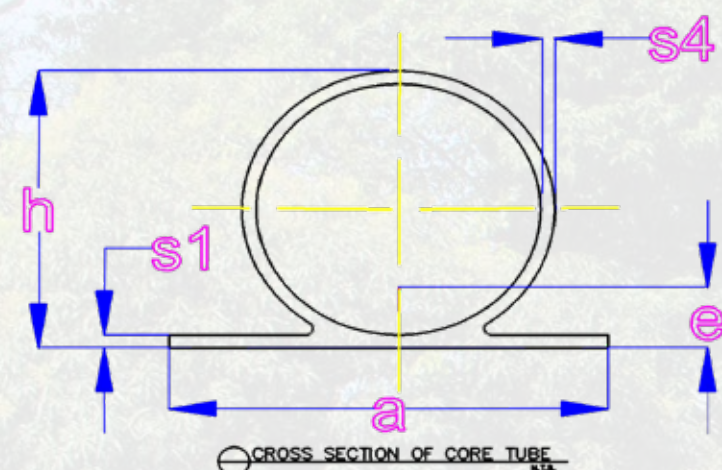
MATERIAL SPECIFICATION: VIRGIN PE 100			
PROPERTY	REFERENCE METHOD	UNIT	VALUE
MELT FLOW RATE	ISO 1133	g/10min	0.2300
DENSITY	ISO 1183	kg/m ³	959
OXIDATION INDUCTION TIME (210 °C)	ISO 11357	min	42
MOISTURE CONTENT	ISO 15512	ppm	30
CARBON BLACK CONTENT	ASTM D 1603	%	>2
HYDROSTATIC DESIGN	ASTM F894-07 D2837	Mpa	>8.6

TEST REQUIREMENT	STANDARD
RING STIFFNESS	DIN EN ISO 9969
CREEP MODULUS	DIN EN ISO 899-2
MELT MASS-FLOW RATE (MFR)	DIN EN ISO 1133
WALL THICKNESS	DIN 16917
OVALITY/ DIAMETER	DIN 16917, ISO 3126
FLATTENING TEST	ASTM F894-07

SPIGOT DETAILS		
DN RANGE (mm)	Ls (mm)	Ss (mm)
300 - 1200	159	21.5000
1300 - 1600	165	26.5000
1700 - 2400	171	31.5000

SOCKET DETAILS		
DN RANGE (mm)	Ls (mm)	Ss (mm)
300 -1200	140	26
1300 - 1600	140	29.9600
1700- 2400	140	35.5400
2500 - 3000	140	38.5400
3100 - 3500	140	43.5400
3600 - 4000	140	48.5400

TECHNICAL DATASHEET: 300 MM - 1900 MM STRUCTURED WALL PIPE NON-LOAD BEARING

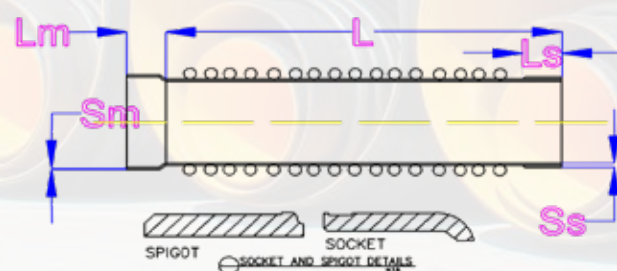


OUTSIDE DIAMETER (OD) (mm)	INSIDE DIAMETER (ID) (mm)	LENGTH (m)
396	300	6
496	400	6
596	500	6
696	600	6
796	700	6
896	800	6
996	900	6
1096	1000	6
1319	1200	6
1542	1400	6
1642	1500	6
1746	1600	6
1966	1800	6
2050	1900	6

MARKINGS:

The pipes should be clearly marked with the following information at 1 meter interval:

- 1 Manufacturer's identification
- 2 Nominal diameter
- 3 Name of product, resin type identification (ISO 8772)
- 4 Number of specification where it is manufactured
- 5 The word "gravity pipes"
- 6 Manufacturer's coding
- 7 Year of manufacture



NOTE:

- 1 General requirements ACC. EN 13476, DIN 16961, DIN 16917 with structured or solid wall, raw material approved for gravity and pressure application, with co extruded and inspection friendly inner surface. Minimum wall thickness ACC. ASTM F894/DIN 16917, standard dimensions according mentioned standards.
- 2 With integrated electro-fusion socket and spigot.
- 3 Welding-joints according. Manual pipe supplier electro-fusion socket with integrated brass 3 heating wire in meander-shape, diameter 2 mm (3/100).
- 4 Actual quantity shall be as per approved contract documents.

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TECHNICAL DATASHEET: 2000 MM - 3500 MM STRUCTURED WALL PIPE NON-LOAD BEARING

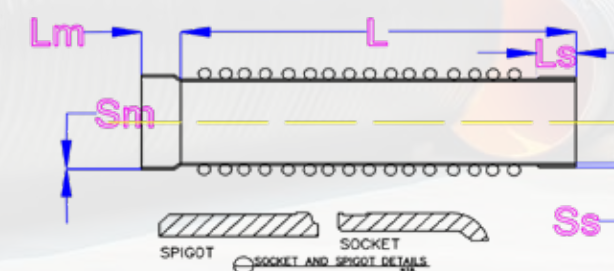
OUTSIDE DIAMETER (OD) (mm)	INSIDE DIAMETER (ID) (mm)	LENGTH (m)
2170	2000	6
2270	2100	6
2566	2400	6
2684	2500	6
3334	3000	5.6
3834	3500	5.6

TEST REQUIREMENT	STANDARD
RING STIFFNESS	DIN EN ISO 9969
CREEP MODULUS	DIN EN ISO 899-2
MELT MASS-FLOW RATE (MFR)	DIN EN ISO 1133
WALL THICKNESS	DIN 16917
OVALITY/ DIAMETER	DIN 16917, ISO 3126
FLATTENING TEST	ASTM F894-07

MARKINGS:

The pipes should be clearly marked with the following information at 1 meter interval:

- 1 Manufacturer's identification
- 2 Nominal diameter
- 3 Name of product, resin type identification (ISO 8772)
- 4 Number of specification where it is manufactured
- 5 The word "gravity pipes"
- 6 Manufacturer's coding
- 7 Year of manufacture

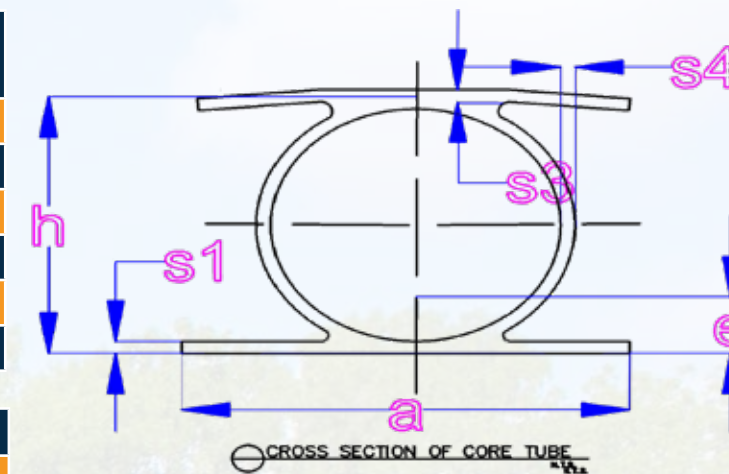


NOTE:

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- 2 With integrated electro-fusion socket and spigot.
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MATERIAL SPECIFICATION: VIRGIN PE 100			
PROPERTY	REFERENCE METHOD	UNIT	VALUE
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DENSITY	ISO 1183	kg/m³	959
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MOISTURE CONTENT	ISO 15512	ppm	30
CARBON BLACK CONTENT	ASTM D 1603	%	>2
HYDROSTATIC DESIGN	ASTM F894-07 D2837	Mpa	>8.6

SPIGOT DETAILS		
DN RANGE (mm)	Ls (mm)	Ss (mm)
300 - 1200	159	21.5000
1300 - 1600	165	26.5000
1700 - 2400	171	31.5000

SOCKET DETAILS		
DN RANGE (mm)	Ls (mm)	Ss (mm)
300 -1200	140	26
1300 - 1600	140	29.9600
1700- 2400	140	35.5400
2500 - 3000	140	38.5400
3100 - 3500	140	43.5400
3600 - 4000	140	48.5400

KPMI GALLERY

(KRAH Global Community, Achievements & Events)



KRAH Global Community Meeting 2025



President Ferdinand R. Marcos Jr. inspects HDPE pipe installation along Sumulong Highway, Marikina City on August 11, 2025



Golden Globe Annual Awards



Philippine Constructors Association, Golf Tournament



Philhydro General Assembly and Elections 2025



PAWD Convergence 2025



1st PSME Cordillera Summit



DELP Midyear National Convention



Philconstruct Visayas



Water Philippines 2025



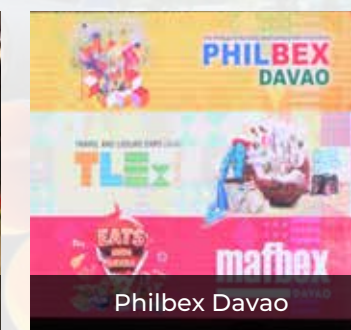
REAP National Convention



Philippine Mining Club Luncheon Meeting



Philconstruct Mindanao



Philbex Davao

These moments capture the milestones, meaningful connections, and shared experiences that define who we are as part of the global KRAH community. From international gatherings and industry conventions to local exhibitions and project milestones, each image reflects our commitment to innovation, collaboration, and excellence.

They showcase KPMI's active participation across global and local platforms where ideas are exchanged, achievements are celebrated, and partnerships are strengthened. They also highlight the dedication of our people, whose expertise and teamwork continue to drive progress across industries and communities.

More than a collection of photographs, these images tell the story of our journey, shaped by shared goals, continuous learning, and a steadfast pursuit of quality as we contribute to building sustainable infrastructure for the future.

KPMI a proud partner of:

