

DATA

# DUCTILE IRON PIPES



**MANUFACTURER LOCATION, PRODUCT RANGE AND CERTIFICATION**

| Sl.# | Particulars                             | Unit | Supplier's Response   |
|------|---|------|---|
| 1    | Name of Manufacturer                    | -    | Wespun DI Pipes Ltd.  |
| 2    | Corporate Office Address                | -    | Wespun House, 5th Floor, Kamala City, Senapati Bapat Marg, Lower Parel (West), Mumbai - 400 013, INDIA<br>Tel: +91 -22-6613 6000<br>Fax: +91-22-2490 8020<br><a href="http://www.wespuncorp.com">www.wespuncorp.com</a> |
| 3    | Plant Address                           | -    | Wespun City, Village Versamedi, Tal. Anjar, District Kutch, Gujarat 370 110, INDIA  |
| 4    | Certificate of Incorporation            | -    | Certificate of Incorporation with Corporate Identity No. U27320GJ2020PLC115329 issued by Ministry of Corporate Affairs, Govt. of India dated 06/08/2020   |
| 5    | Factory License                         | -    | Factory License No. 48082 issued by Directorate of Industrial Safety & Health, Gujarat, on 01/06/2022 valid till 31/12/2026   |
| 6    | Income Tax Registration                 | -    | Income Tax Permanent Account No. (PAN) AACCW7129H issued by Income Tax Department, Govt. of India on 06/08/2020   |
| 7    | Goods & Services Tax (GST) Registration | -    | GST Registration Certificate No. 24AACCW7129H1ZA issued by Govt. of India on 18/11/2021   |
| 8    | Importer-Exporter Code (IEC)            | -    | IEC No. AACCW7129H issued by Ministry of Commerce & Industry on 21/09/2020  |
| 9    | Products manufactured                   | -    | Centrifugally cast (spun) Ductile Iron Pipes for potable water and sewerage   |
| 10   | Brand Name                              | -    | Wespunflow - Certificate of Registration of Trademark issued by Trade Marks Registry, Govt of India - Trade Mark No. 5264178 dated 28/12/2021   |
| 11   | Installed Capacity                      | MT   | 500,000 MTPA<br>Certificate of Capacity No. 1083/SIA/IMO/2020 issued by Ministry of Commerce & Industry dated 14/09/2020  |
| 12   | Diameter Range                          | mm   | DN 80mm to DN 1200mm  |
| 13   | Manufacturing Capability Certification  | -    | Manufacturing Plant Capability Certificate No. IND.A.4.24.0056.BVIL issued by Bureau Veritas (India) Pvt Ltd. dated 07/02/2024  |
| 14   | Quality Management System               | -    | ISO 9001: 2015 - Certificate No: FM777319 issued on 27/09/2022 valid till 26/09/2025  |
| 15   | Environmental Management System         | -    | ISO 14001: 2015 - Certificate No: EMS782566 issued on 06/01/2024 valid till 05/01/2027  |

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|------|---|------|---|
| 16   | Occupational Health & Safety Management System                      | -    | ISO 45001: 2018 - Certificate No: OHS785158 issued on 06/01/2024 valid till 05/01/2027  |
| 17   | Competence of Testing & Calibration Laboratory                      | -    | ISO/IEC 17025: 2017 - Certificate No: TC-12894 issued by NABL on 13/01/2024 valid till 12/01/2026   |
| 18   | Manufacturing Standard  | -    | IS 8329: 2000<br>ISO 2531: 1998 & ISO 2531: 2009<br>EN 545: 2006 & EN 545: 2010<br>EN 598: 2007 + A1: 2009<br>ISO 7186: 2011  |
| 19   | Type of Joint   | -    | Tyton Push-on Flexible Joints<br>Restrained Joints  |
| 20   | Nominal Lengths   | m    | 5.5m  |
| 21   | Product Quality Marks: BIS Licence                                  | -    | BIS CM/L-No. 7900109820 issued by Bureau of Indian Standards to IS 8329: 2000, issued on 14/06/2022 valid till 08/06/2028 - DN 80mm to DN 1200mm Class K7, K8 & K9  |
| 22   | Product Quality Marks: BSI Kitemark Approval                        | -    | BSI Kitemark Certificate No. KM 773532 for BS EN 545: 2006 & 2010, issued on 05/07/2023 valid till 18/01/2026 - DN 100mm to DN 1200mm Class K9 and Class C25, C30, C40  |
|      |   |      | BSI Kitemark Certificate No. KM 773559 for BS ISO 2531: 1998 & 2009, issued on 05/07/2023 valid till 18/01/2026 - DN 100mm to DN 1200mm Class K9 and Class C25, C30, C40  |
| 23   | Product Certificate of Conformity: SGS India Pvt. Ltd.              | -    | Certificate of Conformity No. C2304240159 dated 24/04/2023 issued by SGS India Pvt. Ltd., to EN 545: 2006 & 2010 valid till 17/04/2024 - DN 100mm to DN 1000mm Class K9 and Class C25, C30, C40, C50, C64 & C100                |
|      |   |      | Certificate of Conformity No. C23042402ED dated 24/04/2023 issued by SGS India Pvt. Ltd., to ISO 2531: 1998 & 2009 valid till 17/04/2024 - DN 100mm to DN 1000mm Class K9 and Class C25, C30, C40, C50, C64 & C100              |
| 24   | Product Certificate of Conformity: Bureau Veritas (India) Pvt. Ltd. | -    | Certificate of Conformity as per Inspection Report No. WDIPL/KAN/DIP/ISO2531/EN545/IR/001 dated 08/02/2024 to ISO 2531: 1998/2009 & EN 545: 2006/2010 - DN 100mm to DN 1200mm Class K9 and Class C25, C30, C40, C50, C64 & C100 |
| 25   | Drinking Water Approvals: WRAS Approval, U.K.                       | -    | WRAS Approval No. 2212530 dated 06/01/2023 for Welmortar-III cement mortar lining for use with water upto 65°C, valid till Dec. 2027  |

**PRODUCT TECHNICAL DATA**

| Sl.#      | Particulars                          | Unit        | Supplier's Response   |         |                |
|-----------|--------------------------------------|-------------|---|---------|----------------|
| 1         | Product Description                  | -           | Centrifugally cast (Spun) Ductile Iron Pipes for Potable Water Supply   |         |                |
| 2         | Manufacturing Standard               | -           | BS EN 545 : 2010<br>ISO 2531 : 2009<br>BS EN 545 : 2006<br>ISO 2531 : 1998<br>BS EN 598 : 2007 + A1:2009<br>ISO 7186 : 2011   |         |                |
| 3         | Pipe Class                           | -           | C,K & PP Class  |         |                |
| 4         | Type of Joint                        | -           | Integral Push-on Tyton Joint<br>Min. Deflection for DN ≤300mm: 3° 30'<br>Min. Deflection for DN 350-600mm: 2° 30'<br>Min. Deflection for DN 700-1200mm: 1° 30'<br>Joint Tolerance: as per Clause 2.2 of ISO 2531:1998 |         |                |
| 5         | Pipe Length (excl. socket)           | mtr         | 5.5m  |         |                |
| 6         | Nominal Diameter (DN)                | mm          | DN 80 mm to DN 1200 mm  |         |                |
| 7         | External Diameter (DE)               | mm          | DN (mm)   | DE (mm) | Tolerance (mm) |
|           |                                      |             | DN 80mm   | 98mm    | +1.0 / -2.7    |
|           |                                      |             | DN 100mm  | 118mm   | +1.0 / -2.8    |
|           |                                      |             | DN 150mm  | 170mm   | +1.0 / -2.9    |
|           |                                      |             | DN 200mm  | 222mm   | +1.0 / -3.0    |
|           |                                      |             | DN 250mm  | 274mm   | +1.0 / -3.1    |
|           |                                      |             | DN 300mm  | 326mm   | +1.0 / -3.3    |
|           |                                      |             | DN 350mm  | 378mm   | +1.0 / -3.4    |
|           |                                      |             | DN 400mm  | 429mm   | +1.0 / -3.5    |
|           |                                      |             | DN 450mm  | 480mm   | +1.0 / -3.6    |
|           |                                      |             | DN 500mm  | 532mm   | +1.0 / -3.8    |
|           |                                      |             | DN 600mm  | 635mm   | +1.0 / -4.0    |
|           |                                      |             | DN 700mm  | 738mm   | +1.0 / -4.3    |
|           |                                      |             | DN 800mm  | 842mm   | +1.0 / -4.5    |
|           |                                      |             | DN 900mm  | 945mm   | +1.0 / -4.8    |
| DN 1000mm | 1048mm                               | +1.0 / -5.0 |   |         |                |
| DN 1100mm | 1152mm                               | +1.0 / -6.0 |   |         |                |
| DN 1200mm | 1255mm                               | +1.0 / -6.2 |   |         |                |
| 8         | Nominal Wall Thickness For K-9 Class | mm          | DN (mm)   | e (mm)  | e,min (mm)     |
|           |                                      |             | DN 80mm   | 6.0mm   | 4.7mm          |
|           |                                      |             | DN 100mm  | 6.0mm   | 4.7mm          |
|           |                                      |             | DN 150mm  | 6.0mm   | 4.7mm          |
|           |                                      |             | DN 200mm  | 6.3mm   | 4.8mm          |
|           |                                      |             | DN 250mm  | 6.8mm   | 5.3mm          |

|     |   |                   |  |        |            |
|-----|---|-------------------|--|--------|------------|
|     |   |                   | DN 300mm                                       | 7.2mm  | 5.6mm      |
|     |   |                   | DN 350mm                                       | 7.7mm  | 6.0mm      |
|     |   |                   | DN 400mm                                       | 8.1mm  | 6.4mm      |
|     |   |                   | DN 450mm                                       | 8.6mm  | 6.8mm      |
|     |   |                   | DN 500mm                                       | 9.0mm  | 7.2mm      |
|     |   |                   | DN 600mm                                       | 9.9mm  | 8.0mm      |
|     |   |                   | DN 700mm                                       | 10.8mm | 8.8mm      |
|     |   |                   | DN 800mm                                       | 11.7mm | 9.6mm      |
|     |   |                   | DN 900mm                                       | 12.6mm | 10.4mm     |
|     |   |                   | DN 1000mm                                      | 13.5mm | 11.2mm     |
|     |   |                   | DN 1100mm                                      | 14.4mm | 12.0mm     |
|     |   |                   | DN 1200mm                                      | 15.3mm | 12.8mm     |
| 9   | Nominal Wall Thickness<br>For C Class (Preferred Class) | mm                | DN (mm)  | e (mm) | e,min (mm) |
|     |   |                   | DN 80mm  | 4.4mm  | 3.0mm      |
|     |   |                   | DN 100mm                                       | 4.4mm  | 3.0mm      |
|     |   |                   | DN 150mm                                       | 4.5mm  | 3.0mm      |
|     |   |                   | DN 200mm                                       | 4.7mm  | 3.2mm      |
|     |   |                   | DN 250mm                                       | 5.5mm  | 3.9mm      |
|     |   |                   | DN 300mm                                       | 6.2mm  | 4.6mm      |
|     |   |                   | DN 350mm                                       | 6.3mm  | 4.7mm      |
|     |   |                   | DN 400mm                                       | 6.5mm  | 4.8mm      |
|     |   |                   | DN 450mm                                       | 6.9mm  | 5.1mm      |
|     |   |                   | DN 500mm                                       | 7.5mm  | 5.7mm      |
|     |   |                   | DN 600mm                                       | 8.7mm  | 6.8mm      |
|     |   |                   | DN 700mm                                       | 8.8mm  | 6.8mm      |
|     |   |                   | DN 800mm                                       | 9.6mm  | 7.5mm      |
|     |   |                   | DN 900mm                                       | 10.6mm | 8.4mm      |
|     |   |                   | DN 1000mm                                      | 11.6mm | 9.3mm      |
|     |   |                   | DN 1100mm                                      | 12.6mm | 10.2mm     |
|     |   |                   | DN 1200mm                                      | 13.6mm | 11.1mm     |
| 10  | Rubber Gaskets for Joints                               |                   | EN 681-1<br>ISO 4633 :2015<br>EPDM Gasket      |        |            |
| 11  | Mechanical Properties                                   |                   |  |        |            |
| 11a | Minimum Tensile Strength                                | N/mm <sup>2</sup> | ≥ 420  |        |            |
| 11b | Minimum Yield Strength                                  | N/mm <sup>2</sup> | ≥ 300  |        |            |
| 11c | Min. Elongation at Break                                | %                 | ≥ 10% up to DN 1000 and 7% above DN 1000       |        |            |
| 11d | Max. Brinell Hardness                                   | HB                | ≤ 230  |        |            |
| 12  | Internal Lining   |                   | Ordinary Portland Cement Lining, WRAS approved |        |            |
|     | Applicable Standard                                     |                   | ISO 4179: 2005/BS EN 545                       |        |            |
|     | Material  |                   | Ordinary Portland Cement                       |        |            |
|     | Mortar Mix Ratio (by mass)                              |                   | 1 part cement to ≤ 3.5 parts sand (by mass)    |        |            |
|     | C.M. Application Method                                 |                   | Centrifugal                                    |        |            |

|    |   |                  |  |
|----|---|------------------|--|
|    | Nominal Thickness of Cement Mortar Lining | mm               | DN ≤300mm: 4.0mm<br>DN 350-600mm: 5.0mm<br>DN 700-DN 1200mm: 6.0mm |
|    | Minimum Thickness of Lining (at any spot) | mm               | DN ≤300mm: 2.5mm<br>DN 350-600mm: 3.0mm<br>DN 700-DN 1200mm: 3.5mm |
| 13 | External Coating                          |                  | Zinc 400 gsm + epoxy 70 microns                                    |
|    | Zinc Content                              |                  | Zinc - 99.99%  |
|    | Applicable Standard                       |                  | ISO 8179-1:2017  |
|    | Application Method                        |                  | Spray  |
|    | Min. Mass of Zinc Layer                   | g/m <sup>2</sup> | 400 gsm  |
|    | Min. Thickness of epoxy                   | μm               | 70 μm  |

| Sl.# | Particulars   | Unit      | Supplier's Response |  |          |          |          |          |
|------|---|-----------|---------------------|--|----------|----------|----------|----------|
| 14   | Pressure Ratings for K9 pipes                             | Bar       | Diameter            | Class  | PFA      | PMA      | PEA      |          |
| 14.1 | PFA (Allowable Operating Pressure)                        |           | DN 80mm             | K9   | 64.0 bar | 77.0 bar | 96.0 bar |          |
| 14.2 | PMA (Allowable Maximum Operating Pressure)                |           | DN 100mm            | K9   | 64.0 bar | 77.0 bar | 96.0 bar |          |
| 14.3 | PEA (Allowable Site Test Pressure)                        |           | DN 150mm            | K9   | 64.0 bar | 77.0 bar | 96.0 bar |          |
|      |   |           | DN 200mm            | K9   | 62.0 bar | 74.0 bar | 79.0 bar |          |
|      |   |           | DN 250mm            | K9   | 54.0 bar | 65.0 bar | 70.0 bar |          |
|      |   |           | DN 300mm            | K9   | 49.0 bar | 59.0 bar | 64.0 bar |          |
|      |   |           | DN 350mm            | K9   | 45.0 bar | 54.0 bar | 59.0 bar |          |
|      |   |           | DN 400mm            | K9   | 42.0 bar | 51.0 bar | 56.0 bar |          |
|      |   |           | DN 450mm            | K9   | 40.0 bar | 48.0 bar | 53.0 bar |          |
|      |   |           | DN 500mm            | K9   | 38.0 bar | 46.0 bar | 51.0 bar |          |
|      |   |           | DN 600mm            | K9   | 36.0 bar | 43.0 bar | 48.0 bar |          |
|      |   |           | DN 700mm            | K9   | 34.0 bar | 41.0 bar | 46.0 bar |          |
|      |   |           | DN 800mm            | K9   | 32.0 bar | 38.0 bar | 43.0 bar |          |
|      |   |           | DN 900mm            | K9   | 31.0 bar | 37.0 bar | 42.0 bar |          |
|      |   |           | DN 1000mm           | K9   | 30.0 bar | 36.0 bar | 41.0 bar |          |
|      |   |           | DN 1100mm           | K9   | 29.0 bar | 35.0 bar | 40.0 bar |          |
|      |   |           | DN 1200mm           | K9   | 28.0 bar | 34.0 bar | 39.0 bar |          |
| 15   | Pressure Ratings for C Class pipes-As per preferred class |           | Bar                 | Diameter   | Class    | PFA      | PMA      | PEA      |
| 15.1 | PFA (Allowable Operating Pressure)                        |           |                     | DN 80mm  | C40      | 40.0 bar | 48.0 bar | 53.0 bar |
| 15.2 | PMA (Allowable Maximum Operating Pressure)                | DN 100mm  |                     | C40  | 40.0 bar | 48.0 bar | 53.0 bar |          |
| 15.3 | PEA (Allowable Site Test Pressure)                        | DN 150mm  |                     | C40  | 40.0 bar | 48.0 bar | 53.0 bar |          |
|      |   | DN 200mm  |                     | C40  | 40.0 bar | 48.0 bar | 53.0 bar |          |
|      |   | DN 250mm  |                     | C40  | 40.0 bar | 48.0 bar | 53.0 bar |          |
|      |   | DN 300mm  |                     | C40  | 40.0 bar | 48.0 bar | 53.0 bar |          |
|      |   | DN 350mm  |                     | C30  | 30.0 bar | 36.0 bar | 41.0 bar |          |
|      |   | DN 400mm  |                     | C30  | 30.0 bar | 36.0 bar | 41.0 bar |          |
|      |   | DN 450mm  |                     | C30  | 30.0 bar | 36.0 bar | 41.0 bar |          |
|      |   | DN 500mm  |                     | C30  | 30.0 bar | 36.0 bar | 41.0 bar |          |
|      |   | DN 600mm  |                     | C30  | 30.0 bar | 36.0 bar | 41.0 bar |          |
|      |   | DN 700mm  |                     | C25  | 25.0 bar | 30.0 bar | 35.0 bar |          |
|      |   | DN 800mm  |                     | C25  | 25.0 bar | 30.0 bar | 35.0 bar |          |
|      |   | DN 900mm  |                     | C25  | 25.0 bar | 30.0 bar | 35.0 bar |          |
|      |   | DN 1000mm |                     | C25  | 25.0 bar | 30.0 bar | 35.0 bar |          |
|      |   | DN 1100mm |                     | C25  | 25.0 bar | 30.0 bar | 35.0 bar |          |
|      |   | DN 1200mm |                     | C25  | 25.0 bar | 30.0 bar | 35.0 bar |          |
| 15   | Marking:<br>Inside Socket (cast)<br><br>On Socket face    |           |                     | Material of pipe, Manufacturer's name (initial only)/Logo, Pipe Nominal Diameter, Year of manufacturing (Last 2 digits)<br><br>Class of Pipe, Batch Number |          |          |          |          |

|    |  |  |   |
|----|--|--|---|
|    | On Barrel - Standard marking by enamel paint           |  | Manufacturers logo, Reference standard, Nominal Diameter, Length at Spigot  |
|    | On Barrel - Customized by enamel paint                 |  | As per customer/client requirement  |
|    | On Pipe Barrel - Other Marking by enamel paint         |  | BSI Kitemark Logo and Licence No  |
| 16 | Accessories:   |  | EPDM Tyton Gaskets to ISO 4633 / EN 681-1, WRAS approved, supplied free of cost along with pipes Lubricant for jointing of pipes, WRAS approved, supplied in 1 kg (1 litre) tins.<br>PE Sleeves 400 microns black/blue color as per ISO 8180-2006. ( Qty supplied will be as per order) |
| 17 | Packing & Shipment:<br>Packing<br><br>Mode of Shipment |  | Export-worthy shipping in Container, in bundles upto DN 250mm, stowed loose DN 300 and above.<br><br>By Sea on FCL basis, shipped in 20' G/P and/or 40' HQ/OT Containers.   |
| 18 | Pre-Shipment Inspection                                |  | Pre-shipment Third Party Inspection carried out by SGS India Pvt. Ltd. offered for each shipment, as per manufacturing standard/ approved QA Plan   |

**LIST OF ANNEXURES SUBMITTED ALONG WITH THIS DATA SHEET:**

We declare that the above information is accurate and correct to the best of our knowledge and belief.

For and on behalf of Welspun DI Pipes Limited,



*Aggarwal*

**Name: Nipun Aggarwal**

**Designation: DGM**

Place: Mumbai, India

Dated this 11<sup>th</sup> day of March 2024