





This is to certify that:

Tata Steel Limited Metaliks Division, PO: Samraipur, **PS: Kharagpur** District: Paschim Midnapur Kharagpur, West Bengal 721301 India

Holds Certificate Number:

KM 639498

In respect of:

BS ISO 2531 Ductile iron pipes, fittings, accessories and their joints for water applications

This issues the right and licence to use the Kitemark in accordance with the Kitemark Terms and Conditions governing the use of the Kitemark, as may be updated from time to time by BSI Assurance UK Ltd (the "Conditions"). All defined terms in this Certificate shall have the same meaning as in the Conditions.

The use of the Kitemark is authorized in respect of the Product(s) detailed on this Certificate provided at or from the above address.

For and on behalf of BSI:

Shahm Barhom, Group Product Certification Director

First Issued: 2024-06-11 Latest Issue: 2024-06-11 Effective Date: 2024-06-11 Expiry Date: 2027-06-02

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No. KM 639498

BS ISO 2531:2009 - Ductile iron pipes, fittings, accessories and their joints for water applications

| Product: | Pipes (non- | flange | type |) | | | | | | | | | | | |
|---------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|-----------------|------|---------------------------------------------------------------------------------------|--------------|---------------|---------------------|--------|-------------|-------|-------|----------------------------------|--------|-------------|
| | Material: | | Ductile iron | | | | | | | | | | | | |
| | Installation | Above or below | | | | | | | | | | | | | |
| | External co | External coating: | | | Zinc layer followed either: * ¹ Bitumen * ² Blue epoxy | | | Internal lining: | | | | | ⁴³ Cement 44 Epoxy | | |
| | Branded as | Branded as: Mfg Loc 000: Tata Ductura Mfg Loc 001: Tata Ductura | | | | | | | | | | | | | |
| | | | Pressure rating | | | | | | | | | | | | |
| Description | Nominal size, DN/OD (mm) | Lgth (m) | PN10 | PN16 | PN25 | K9 *5 | K12 *5 | C20 | C25 | C 30 | C40 | C50 | C64 | C100 | Mfg. Loc |
| Pipes with push-in flexible joints *1, 2* 3* | DN 80 - 300 | 5.5 | - | - | - | ~ | ~ | - | - | _ | ~ | ~ | ~ | ~ | 000 |
| Pipes with push-in flexible joints ^{*1, 2* 3*} | DN 350 - 600 | 5.5 | _ | - | - | ~ | ~ | - | - | ~ | ~ | ~ | ~ | - | 000 |
| Pipes with push-in flexible joints $_{*1, 2^* 3^*}$ | DN 700 - 800 | 5.5 | _ | - | - | ~ | ~ | - | ~ | ~ | ~ | ~ | - | - | 000 |
| Notes: | * ^{1, *2} External coatings in accordance with BS ISO 2531:2009 (clause 4 holding WRAS material approval. | | | | | | | | e 4.5. | 1) ar | nd | | | | |
| | *^{3, *4} Internal linings in accordance with BS ISO 2531:2009 (clause 4.5.2) and holding WRAS material approval. *⁵ Denotes class K9 and K12 are as per BS ISO 2531:1998. | | | | | | | | | | | | | | |
| General note: | Only product | s denote | ed by | a `√ | '' are | cove | ered | for th | ne sp | ecific | ; pre | ssure | e ratii | ng sta | ated. |

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No. KM 639498

BS ISO 2531:2009 - Ductile iron pipes, fittings, accessories and their joints for water applications

| Product: | Pipes (flang | Pipes (flange type) | | | | | | | | | | | | | |
|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-----------------|----------------|------|--------------|---------------|---------------|-----|-----------------------------------------------|-----|-----|-----|------|-------------|
| | Material: | | Ductile iron | | | | | | | | | | | | |
| | Installation/use: | | | Above or below | | | | | | | | | | | |
| | External co | ating: | | | | | | nter ining | | * ³ Cement * ⁴ Epoxy | | | | | |
| | Branded as | : | | J Loc | | | | | | | | | | | |
| | | | Pressure rating | | | | | | | | | | | | |
| Description | Nominal size, DN/OD (mm) | Lgth (m) | PN10 | PN16 | PN25 | K9 *5 | K12 *5 | C20 | C25 | C30 | C40 | C50 | C64 | C100 | Mfg. Loc |
| Pipes with Cast-on Flanges (non-centrifugally casted) *1, 2* 3*, 4* | DN 80 - 300 | <u><</u> 2 | ~ | ~ | ~ | - | - | - | - | - | - | - | - | - | 001 |
| Pipes with Cast-on Flanges (non-centrifugally casted) ^{*1, 2*} 3 ^{*, 4*} | DN 350 - 600 | <u><</u> 2 | ~ | ~ | ~ | - | - | - | - | - | - | - | - | - | 001 |
| Pipes with Cast-on Flanges (non-centrifugally casted) ^{*1, 2*} 3 ^{*, 4*} | DN 700 - 1000 | <u><</u> 2 | ~ | ~ | ~ | - | - | _ | _ | - | - | - | - | - | 001 |
| Notes: | * ^{1, *2} External coatings in accordance with BS ISO 2531:2009 (clause 4.5.1) and holding WRAS material approval. | | | | | | | | nd | | | | | | |
| | ^{*3, *4} Internal linings in accordance with BS ISO 2531:2009 (clause 4.5.2) and holding WRAS material approval. | | | | | | | and | | | | | | | |
| Consultantes | | * ⁵ Denotes class K9 and K12 are as per BS ISO 2531:1998. | | | | | | | | | | | | | |
| General note: | Unly product | Only products denoted by a ' \checkmark ' are covered for the specific pressure rating stated. | | | | | | | | | | | | | |

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BS ISO 2531:2009 - Ductile iron pipes, fittings, accessories and their joints for water applications

| Product: | Fittings (flang | e type) | | | | | | | | |
|-----------------------------------------|--------------------------------|------------------------------------------------------------------------------------------------------------|--|---------------------|-------------|--------------|-----------------------------------------------|-----------|--|--|
| | Material: | Ductile iron | | | | | | | | |
| | Installation/us | Above or below Zinc layer followed by either: * ¹ Bitumen * ² Blue epoxy | | | | | | | | |
| | External coating: | | | | erna ng: | l | * ³ Cement * ⁴ Epoxy | | | |
| | Branded as: | d as: Mfg Loc 001: Tata Duct | | | | | | | | |
| | | | | | | essu atin | | | | |
| Description | Nominal Size, DN/OD (mm) | Externa Coating | | Internal Coating | | PN16 | PN25 | Mfg. Loc. | | |
| Flanged socket | DN 80 - 1000 | *1, 2* | | *3, 4* | ~ | ~ | ~ | 001 | | |
| Flanged spigot | DN 80 - 1000 | *1, 2* | | *3, 4* | ~ | ~ | ~ | 001 | | |
| Double Flanged 11.25° Bends | DN 80 - 1000 | *1, 2* | | *3, 4* | ~ | ~ | ~ | 001 | | |
| Double Flanged 22.5° Bends | DN 80 - 1000 | *1, 2* | | *3, 4* | ~ | ~ | ~ | 001 | | |
| Double Flanged 45° Bends | DN 80 - 1000 | *1, 2* | | *3, 4* | ~ | ~ | \checkmark | 001 | | |
| Double Flanged 90° Bends | DN 80 - 1000 | *1, 2* | | *3, 4* | ~ | ~ | ~ | 001 | | |
| Double Flanged Duckfoot 90° Bend | DN 80 - 1000 | *1, 2* | | *3, 4* | ~ | ~ | ~ | 001 | | |
| Double Flanged Long Radius 90° Bends | DN 80 - 1000 | *1, 2* | | *3, 4* | ~ | ~ | ~ | 001 | | |
| Flanges | DN 80 - 1000 | *1, 2* | | *3, 4* | ~ | ~ | ~ | 001 | | |

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BS ISO 2531:2009 - Ductile iron pipes, fittings, accessories and their joints for water applications

| Product: | Fittings (flang | e type) coı | ntinue | ed | | | | |
|--------------------------------------------------------------------|------------------------|------------------------------------------------------------------------------------|--------|---------------------|--------------------|------|-----------------------------------------------|-----------|
| | Material: Ductile iron | | | | | | | |
| | Installation/u | Above or below Zinc layer followed by either: *1 Bitumen *2 Blue epoxy | | | | | | |
| | External coating: | | | | erna ing: | el | * ³ Cement * ⁴ Epoxy | |
| | Branded as: | | Mfg l | Loc 001: Tata Duo | tura | | | |
| | Nominal | | | | Pressure rating | | | |
| Description | Size, DN/OD (mm) | External Coating | | Internal Coating | PN10 | PN16 | PN25 | Mfg. Loc. |
| Blank flanges | DN 80 - 1000 | *1, 2* | | *3, 4* | ~ | ~ | ~ | 001 |
| Reducing flanges | DN 80 - 1000 | *1, 2* | | *3, 4* | ~ | ~ | ~ | 001 |
| Double Flanged Tapers (Concentric & Eccentric) | DN 80 - 1000 | *1, 2* | | *3, 4* | ~ | ~ | ~ | 001 |
| All Flanged Radial Tees | DN 50 - 1000 | *1, 2* | | *3, 4* | ~ | ~ | ~ | 001 |
| All Flanged Tees (Level Invert Outlet) | DN 50 - 1000 | *1, 2* | | *3, 4* | ~ | ~ | \checkmark | 001 |
| All Flanged Tees | DN 50 - 1000 | *1, 2* | | *3, 4* | ~ | ~ | ~ | 001 |
| Double Socket Tees with Flanged Branch | DN 50 - 1000 | *1, 2* | | *3, 4* | ~ | ~ | ~ | 001 |
| Double Socket Tees with Flanged Branch (Level Invert Outlet) | DN 50 - 1000 | *1, 2* | | *3, 4* | ~ | ~ | ~ | 001 |

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| Product: | Fittings (non-flang | je type) | | | | | | | |
|--------------------------------------------------|-----------------------------|---------------------------------------------------------|-----------------------------------------------|-----------|--|--|--|--|--|
| | Material: | Ductile iron | | | | | | | |
| | Installation/use: | Above or bel | Above or below | | | | | | |
| | External coating: | Zinc layer fol either: *1 Bitumen *2 Blue epox | * ³ Cement * ⁴ Epoxy | | | | | | |
| | Branded as: | Mfg Loc 001: | Tata Ductura | | | | | | |
| Description | Nominal Size, DN/OD (mm) | External Coating | Internal Lining | Mfg. Loc. | | | | | |
| | | | | | | | | | |
| Mechanical Joint & Socket Joint Collars | DN 80 - 1000 | *1, 2* | *3, 4* | 001 | | | | | |
| Double Socket 11.25° Bends | DN 80 - 1000 | *1, 2* | *3, 4* | 001 | | | | | |
| Double Socket 22.5° Bends | DN 80 - 1000 | *1, 2* | *3, 4* | 001 | | | | | |
| Double Socket 45° Bends | DN 80 - 1000 | *1, 2* | *3, 4* | 001 | | | | | |
| Double Socket 90° Bends | DN 80 - 1000 | *1, 2* | *3, 4* | 001 | | | | | |
| All Socket Tees | DN 80 - 1000 | *1, 2* | *3, 4* | 001 | | | | | |
| All Socket Tees (Level Invert Outlet) | DN 80 - 1000 | *1, 2* | *3, 4* | 001 | | | | | |
| Double Socket Tapers (Concentric & Eccentric) | DN 50 – 1000 | *1, 2* | *3, 4* | 001 | | | | | |

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