

Factory-Verified Replacement

MERYDOM 1450I-12R-100

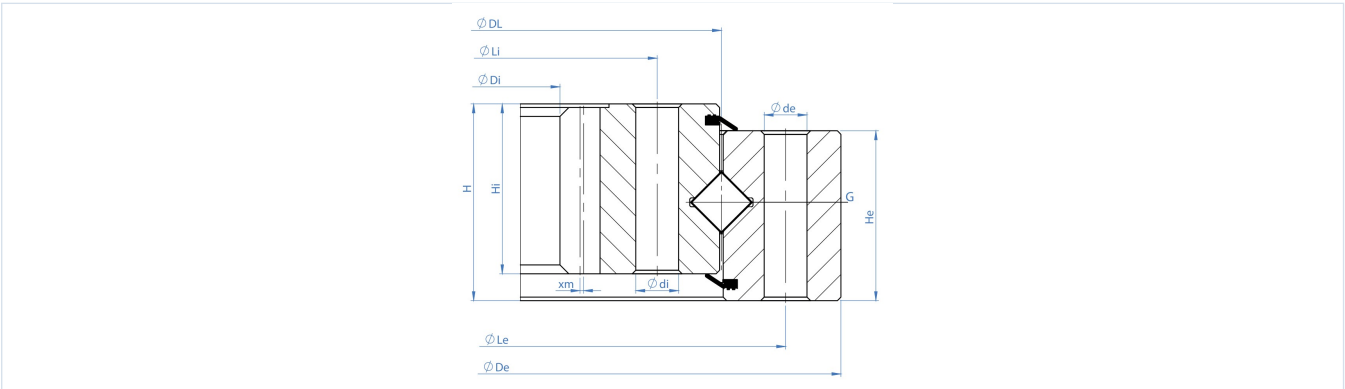
Certified for interchange with Tibet Makina 1450I-12R-100. This document consolidates the public product record, complete published specifications, technical media, source traceability and engineering confirmation notes.

**LEVEL 3 - MERYDOM ENGINEERING VERIFIED**

Reviewed by MERYDOM Engineering Department. Final application approval must confirm loads, duty cycle, mounting rigidity, bolt capacity, lubrication and operating conditions.

|                                   |                            |
|-----------------------------------|----------------------------|
| MERYDOM MODEL                     | REFERENCE                  |
| 1450I-12R-100                     | Tibet Makina 1450I-12R-100 |
| SERIES                            | STRUCTURE                  |
| SINGLE_ROW_ROLLER_INTERNAL Series | Single Row Roller          |
| OVERALL OD                        | OVERALL ID                 |
| 1,570 mm                          | 1,280 mm                   |
| OVERALL HEIGHT                    | GEAR                       |
| 80 mm                             | ten di li                  |

Published Technical Drawing



single\_row\_roller\_internal-drawing.webp

## Complete Product Data

All values below are generated from the current public verified replacement record. Source values are retained and metric references are shown where available.

| MERYDOM CERTIFIED PRODUCT            |                                        |
|--------------------------------------|----------------------------------------|
| Product brand                        | MERYDOM                                |
| MERYDOM model                        | 1450I-12R-100                          |
| Certified interchangeable with       | Tibet Makina 1450I-12R-100             |
| Verification status                  | Level 3 - MERYDOM Engineering Verified |
| Reviewed by                          | MERYDOM Engineering Department         |
| Public record UID                    | QXXZ7KOKVRPJTYJRH57X6RIVPS             |
| MATERIALS                            |                                        |
| Configurable ring material options   | 42CrMo / 50Mn                          |
| Seal material                        | NBR - Nitrile rubber                   |
| Configurable spacer material options | Engineering nylon / Brass              |
| IDENTIFICATION                       |                                        |
| Reference brand                      | Tibet Makina                           |
| Reference series                     | SINGLE_ROW_ROLLER_INTERNAL Series      |
| Reference model                      | 1450I-12R-100                          |
| Bearing structure                    | Single Row Roller                      |
| Gear arrangement                     | ten di li                              |
| DIMENSION                            |                                        |
| Mass (Kg)                            | 300 kg                                 |
| Overall outside diameter (De)        | 1 570 mm                               |
| Overall inside diameter (Di)         | 1 280 mm                               |

Complete Product Data

All values below are generated from the current public verified replacement record. Source values are retained and metric references are shown where available.

| DIMENSION (CONTINUED)                       |                                                            |
|---------------------------------------------|------------------------------------------------------------|
| Overall height (H)                          | 80 mm                                                      |
| Outer ring height (He)                      | 70 mm                                                      |
| Inner ring height (Hi)                      | 70 mm                                                      |
| MOUNTING                                    |                                                            |
| Outer ring bolt circle (Le)                 | 1 525 mm                                                   |
| Inner ring bolt circle (Li)                 | 1 375 mm                                                   |
| Outer ring mounting-hole count (ne)         | 48                                                         |
| Inner ring mounting-hole count (ni)         | 48                                                         |
| Outer ring mounting-hole specification (de) | 22 mm                                                      |
| Inner ring mounting-hole specification (di) | 22 mm                                                      |
| GEAR                                        |                                                            |
| Gear module (m)                             | 10 mm                                                      |
| Gear tooth count (z)                        | 130                                                        |
| PERFORMANCE                                 |                                                            |
| Normal tooth force (Ft_normal)              | 54 kN                                                      |
| Maximum tooth force (Ft_max)                | 108 kN                                                     |
| MISCELLANEOUS                               |                                                            |
| Raceway Pitch Diameter (DL)                 | 1 450 mm                                                   |
| Lubrication Zerk Count (G)                  | 6                                                          |
| PERFORMANCE RATINGS                         |                                                            |
| Rating Tooth Force Normal                   | 54 kN   Not simultaneous with other listed dynamic ratings |

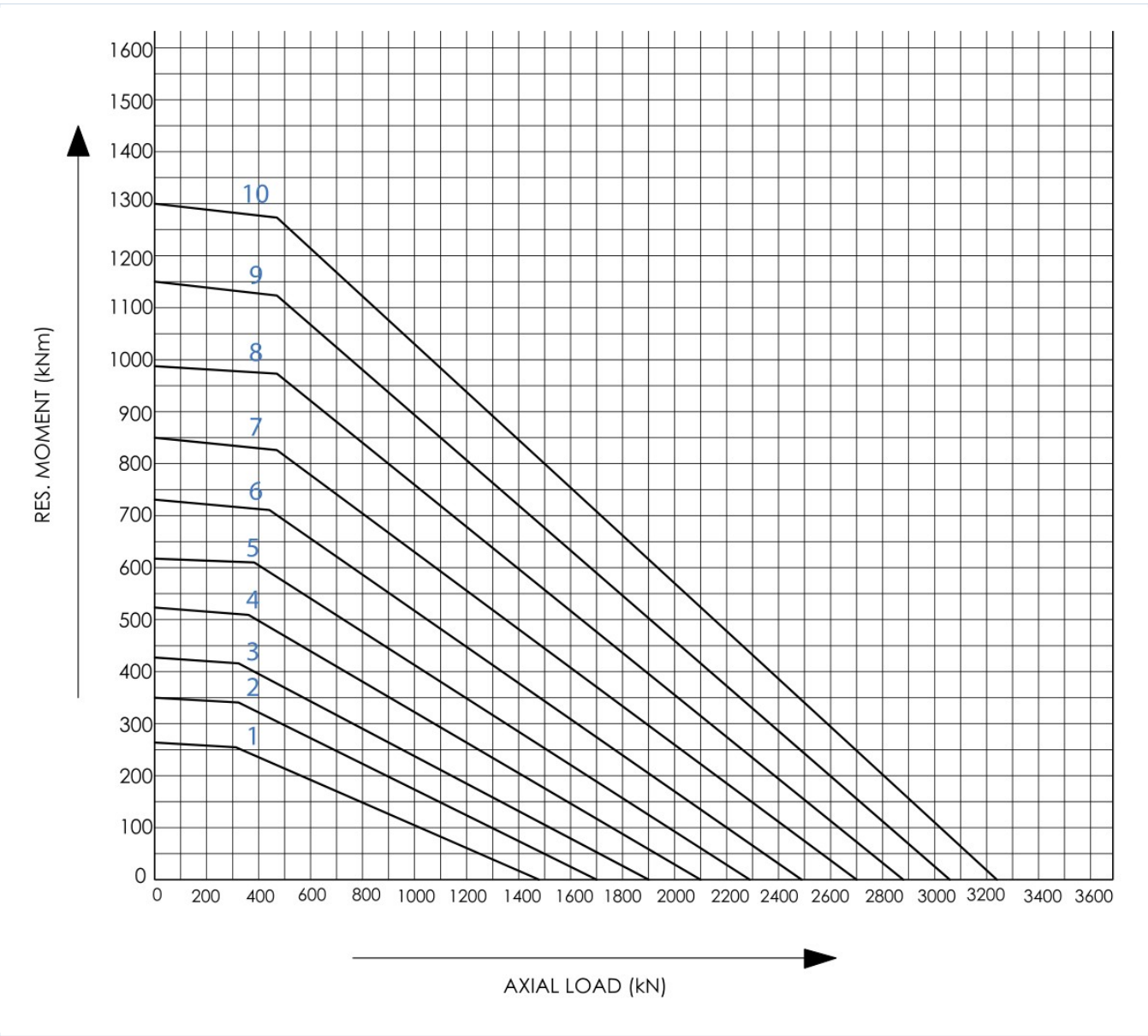
Complete Product Data

All values below are generated from the current public verified replacement record. Source values are retained and metric references are shown where available.

| PERFORMANCE RATINGS (CONTINUED) |                                                                                                                                         |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| Rating Tooth Force Max          | 108 kN   Not simultaneous with other listed dynamic ratings                                                                             |
| MOUNTING INTERFACES             |                                                                                                                                         |
| Outer ring mounting             | 48 holes - de 22 mm                                                                                                                     |
| Inner ring mounting             | 48 holes - di 22 mm                                                                                                                     |
| GEAR INTERFACE                  |                                                                                                                                         |
| Pitch system                    | module                                                                                                                                  |
| Module reference                | 10 mm                                                                                                                                   |
| Number of teeth                 | 130                                                                                                                                     |
| SOURCE TRACEABILITY             |                                                                                                                                         |
| Source document code            | TIBET_MAKINA_2015_CATALOG                                                                                                               |
| Source file                     | tibet_makina_2015.pdf                                                                                                                   |
| PDF page                        | 47                                                                                                                                      |
| Printed page                    | 47                                                                                                                                      |
| Source language                 | TR-EN                                                                                                                                   |
| Original unit system            | Metric                                                                                                                                  |
| PUBLISHED TECHNICAL MEDIA       |                                                                                                                                         |
| Load Curve Chart                | single_row_roller_internal-static-load-curve.webp  <br>SHA-256:<br>1f57508e685a83933fc18281b8a2ce4b69c6233031f8746fafa5dacc09<br>fbdab5 |
| Outline Drawing                 | single_row_roller_internal-drawing.webp   SHA-256:<br>db33cdc438473d3e76b0d23fbe532e652ffa924a88fee3b09c42671e6d<br>dba95b              |

Published Load / Performance Chart

Use the published chart as a preliminary selection aid only. The model legend, curve family and source document must be reviewed together with the operating load case.



single\_row\_roller\_internal-static-load-curve.webp | SHA-256:  
1f57508e685a83933fc18281b8a2ce4b69c6233031f8746fafe5dacc09fbdab5

Engineering note: final approval must also consider mounting rigidity, bolt capacity, duty cycle, lubrication, temperature, environment and installation conditions.

Source and Verification Traceability

|                                                                               |                                                                     |
|-------------------------------------------------------------------------------|---------------------------------------------------------------------|
| <div>PUBLIC RECORD UID</div> <div>QXXZ7KOKVRPJTYJRH57X6RIVPS</div>            | <div>SOURCE DOCUMENT</div> <div>TIBET_MAKINA_2015_CATALOG</div>     |
| <div>SOURCE FILE</div> <div>tibet_makina_2015.pdf</div>                       | <div>SOURCE LOCATION</div> <div>PDF page 47   Printed page 47</div> |
| <div>VERIFICATION</div> <div>Level 3 - MERYDOM Engineering<br/>Verified</div> | <div>REVIEWED BY</div> <div>MERYDOM Engineering Department</div>    |

Engineering Confirmation Boundary

- 1

Confirm the exact model designation and all installation-envelope dimensions.
- 2

Confirm mounting-hole quantity, bolt circle, hole specification, bolt grade and preload.
- 3

Confirm gear arrangement, pitch system, tooth count, backlash and mating-pinion data.
- 4

Confirm axial, radial and moment loads, load combinations, duty cycle and required life.
- 5

Confirm support flatness and stiffness, lubrication, sealing, temperature and environment.
- 6

Final drawing revision, manufacturing tolerances and documentation package are confirmed with the quotation.

Request Price, Delivery and Final Engineering Confirmation

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Product page: <https://rotnex.com/tr/urunler/muadil-doner-tabla-rulmanlari/tibet-makina/1450i-12r-100/>

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