Iran-Transfo

ITS-ME11-01

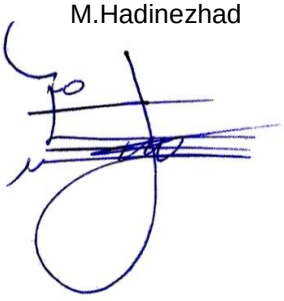
Edition 1.0 2018-10

Rollers for Transformers

Technical Terms of Delivery

IRAN TRANSFO STANDARD
Iran Transformer Research Institute

Compiled:	**Edited:**	**Approved:**
M.Jozedaemi	M.Faridi	M.Hadinezhad



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FOREWORD

Iran Transfo Standard consists of a series of standards which are prepared on the basis of valid International standards, in conformity with Iran Transfo's technical requirements.

The initial draft has been prepared in Iran Transformer Research Institute (ITRI) which is also responsible to issue the final documents approved by professional committees in the form of ITS standards. It should be mentioned that all departments of Iran Transfo Co. are obligated to apply the issued ITS Standards.

All users must be assured that the latest edition of this standard will be used. The latest edition of ITS standards is also available on the ITRI web site:

http://irtri.com

About this standard:

The present standard has been approved in Iran Transfo Co.'s Mechanical Equipment Committee by:

- ✓ S.Bigdeli
- ✓ M. Shariati
- ✓ J. Afshari
- ✓ A. Abati Zadeh
- ✓ V. Ansari
- ✓ A. Bazhrang
- ✓ Z. Abdollahi
- ✓ M. Faridi

All users should ensure that they have the latest edition of this publication.

CONTENTS

1 Scope

These technical terms of delivery applies to Rollers used in distribution and power transformers and reactors upon following types:

Rollers with load carrying capacity from 2 ton up to 100 ton generally applied for transformers.

2 Designation

Main assembly size and load capacity of the rollers are using for designation code.

For example: roller with load capacity of 6 tons and without flange wheel

ITS-ME11-01 – Roller-6ton-flat

Max load capacity per roller-ton	Designation	Drawing No.	Weight (kg)
2	ITS-ME11-01 – Roller – 2 ton – Flat	G.D-026	20
3	ITS-ME11-01 – Roller – 3 ton – Flat- one screw	N.D-0A 06 019	24
	ITS-ME11-01 – Roller – 3 ton – Flat-two screws	Ski.Nr.Z-39013/3	24
6	ITS-ME11-01 – Roller – 6 ton – Flat	N.D-0A 06 020	36
9	ITS-ME11-01 – Roller – 9 ton – Flat	G.Z.1002/2	61
	ITS-ME11-01 – Roller – 9 ton – Flanged	G.Z.1002	61
25	ITS-ME11-01 – Roller – 25 ton – Flat	G.Z.1486	74.5
	ITS-ME11-01 – Roller – 25 ton –Flanged	G.Z.1159	82
50	ITS-ME11-01 – Roller – 50 ton –Flanged	G.Z.1543	94
70	ITS-ME11-01 – Roller – 70 ton –Flanged	G.Z.1544	165
100	ITS-ME11-01 – Roller – 100 ton –Flanged	G.Z.1545	308

3 Dimensions and Assembly

General tolerances according to DIN ISO 2768–g

3.1 Roller 2 ton - flat wheel

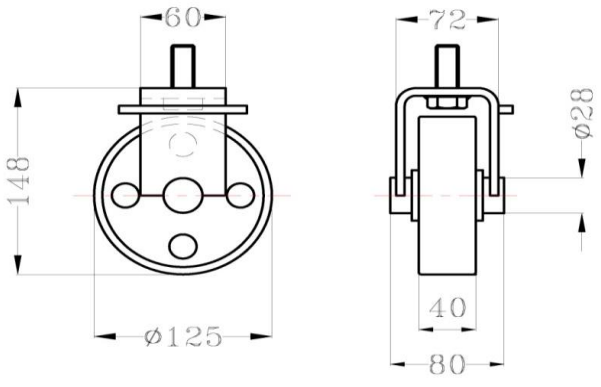

Figure 1

3.2 Roller 3 ton

3.2.1 Roller 3ton-flat wheel-with one screw

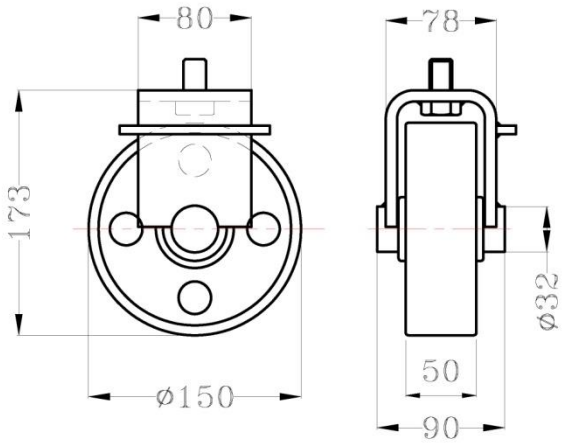

Figure 2

3.2.2 Roller 3ton-flat wheel-with two screw

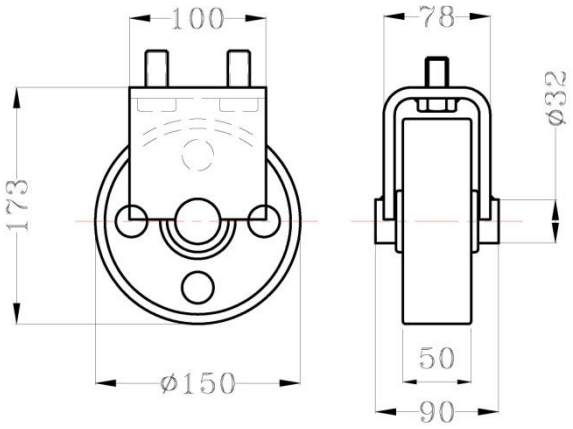

Figure 3

3.3 Roller 6 ton - flat wheel

The Roller consist of Roller wheel, frame with welding nut and axes.

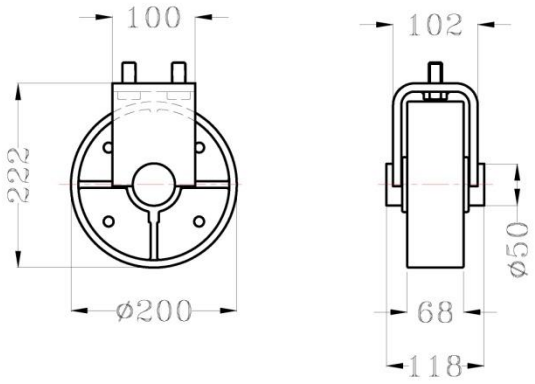

Figure 4

3.4 Roller 9 ton

3.4.1 Roller 9 ton - flanged wheel

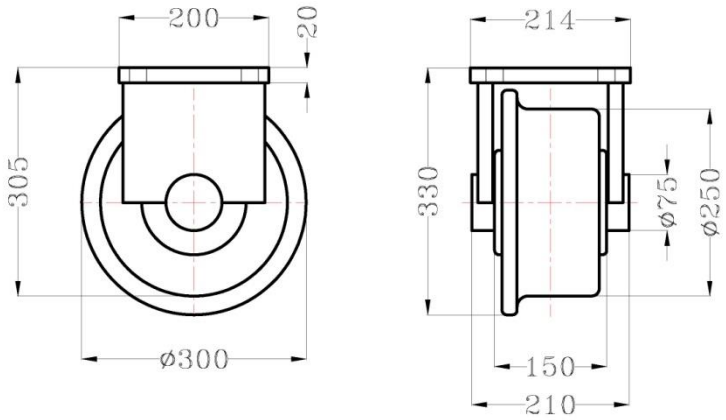

Figure 5

3.4.2 Roller 9 ton - flat wheel

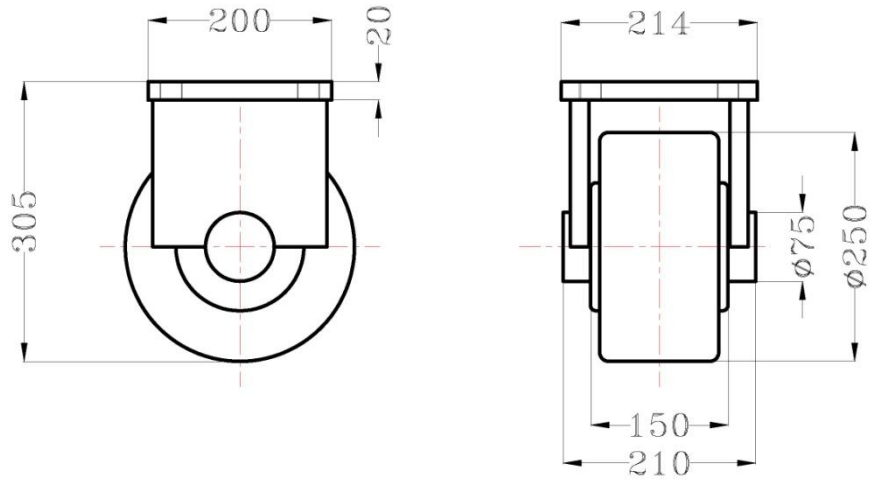

Figure 6

3.5 Roller 25 ton

3.5.1 Roller 25 ton - flanged wheel

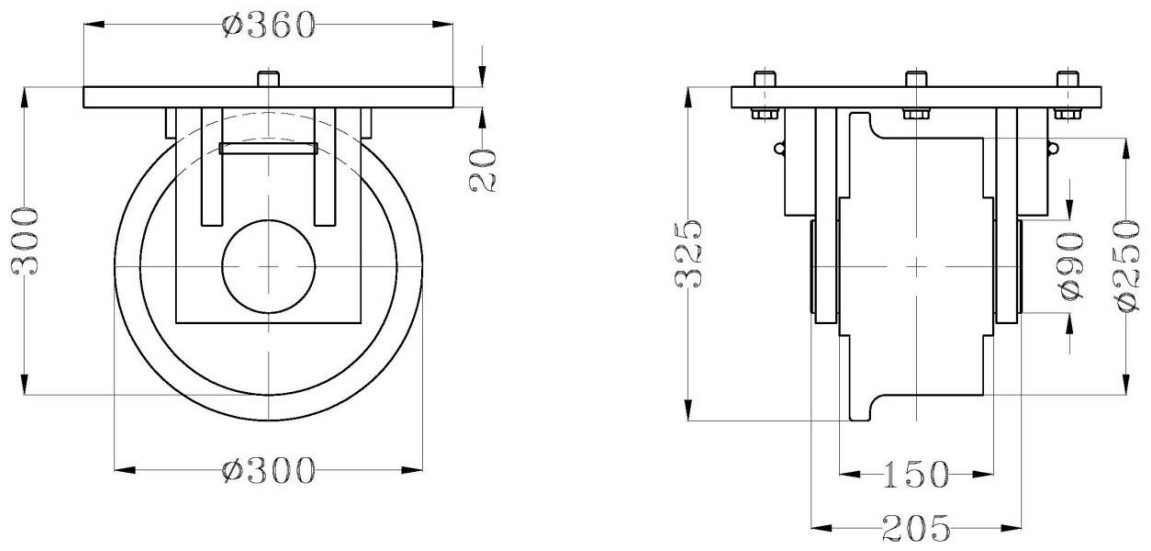

Figure 7

3.5.2 Roller 25 ton - flat wheel

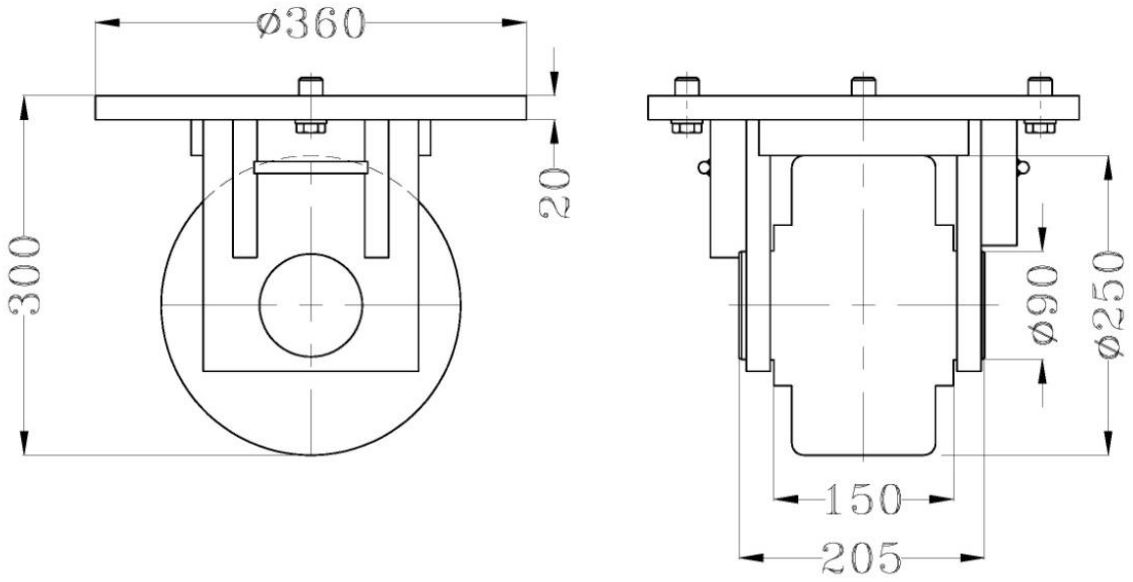

Figure 8

3.6 Roller 50 ton, 70 ton and 100 ton flanged double wheels with trolley

The sizes and load carrying capacity of the double wheel rollers; however the roller frame should swivel to transformer body or adjustable for adapting to rail path.

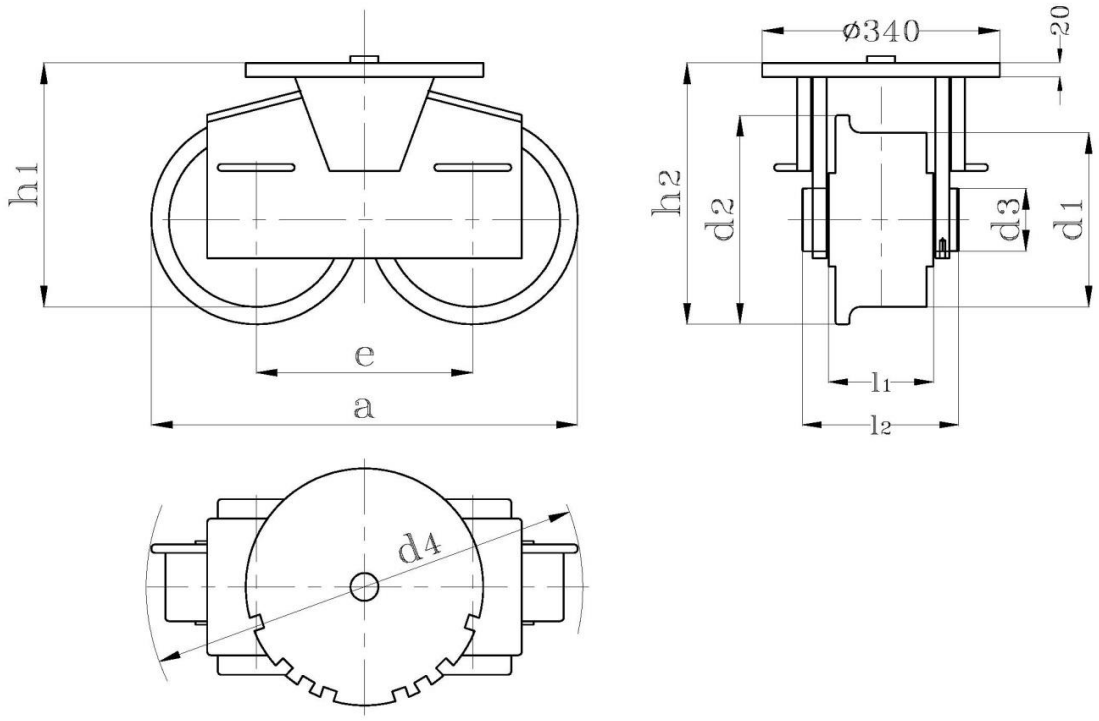

Figure 9

Table 1: size, load carrying capacity to figure 8

Loading capacity- ton	d_1	d_2	d_3	d_4	a	e	h_1	h_2	l_1	l_2
50	200	250	70	510	490	250	285	310	120	165
70	250	300	90	625	610	310	350	375	150	205
100	300	350	140	750	740	390	420	445	150	338

3.7 Assembly Point

All Roller types should be assembled on the transformers so that, by using of block fixtures to be possible an optional alignment on length and cross direction drive. (See DIN 42561 part 3).

4 Coating

Final coating and color of rollers should be according to the ITS-MP01-01.

5 Inspection and tests

Iran Transfo Company will qualify each delivered cargo of the rollers by visual test check according to AQL 2.5. The roller manufacturer should represent material analysis certificate of the rollers. Including this certificate, Iran Transfo will take specimen from the cargoes for the material analysis. There is not any casting defects.

6 Packing and Delivery

The Rollers should be delivered in proper standard packing so that, protect it against mechanical damages and for long duration keeping in warehouse.

Labeling: each package of Rollers must be marked with the following information by a label:

- Manufacturer name and factory mark.
- Order No.
- Quantity.
- Identification.
- Gross and net weight.