Various Product Indian Standards available for fasteners:

1) Some of the Indian Standards/International standards available for nuts and bolts with flange are:

1. IS 15581 : 2018/ISO 4161 : 2012 Hexagon nuts with flange, style 2 — Coarse thread (*first revision*)
2. IS 15582 : 2018/ISO 4162 : 2012 Hexagon Bolts with Flange — Small Series — Product Grade A with Driving Feature of Product Grade B ( *first revision*)
3. ISO 7043:2012 Prevailing torque type hexagon nuts with flange (with non-metallic insert), style 2 — Product grades A and B
4. ISO 7044:2012 Prevailing torque type all-metal hexagon nuts with flange, style 2 — Product grades A and B
5. ISO 10663:2012 Hexagon nuts with flange, style 2 — Fine pitch thread
6. ISO 12125 : 2012 Prevailing torque type hexagon nuts with flange (with non-metallic insert) with metric fine pitch thread, style 2 — Product grades A and B
7. ISO 12126 : 2012 Prevailing torque type all-metal hexagon nuts with flange with metric fine pitch thread, style 2 — Product grades A and B
8. ISO 21670:2014 Fasteners — Hexagon weld nuts with flange
9. ISO 15071:2011 Hexagon bolts with flange — Small series — Product grade A
10. ISO 15072:2012 Hexagon bolts with flange with metric fine pitch thread — Small series — Product grade A

2) Dimension of tapping screws threads are covered under IS 5957 : 2003/ISO 1478:1999 ‘Screw threads for thread forming tapping screws dimensions (*second revision*)’. Drilling screws with tapping screw threads as per IS 5957 : 2003 are covered under the following standards which are under wide circulation:

1. ISO 15480:2019 Fasteners — Hexagon washer head drilling screws with tapping screw thread
2. ISO 15481:1999 Cross recessed pan head drilling screws with tapping screw thread
3. ISO 15482:1999 Cross recessed countersunk head drilling screws with tapping screw thread
4. ISO 15483:1999 Cross recessed raised countersunk head drilling screws with tapping screw thread

3) Dimensions for Type H or Type Z Cross Recess for screws is covered under IS 7478 : 2011/ISO 4757 : 1983. The following Indian Standards are available for cross recessed screws with metric screw threads :

1. IS 7485 (Part 1) : 2018/ISO 7046-1 : 2011 Countersunk Flat Head Screws (Common head Style) With Type H or Type Z Cross Recess — Product Grade A Part 1 Steel Screws of Property Class 4.8 (*third revision*)
2. IS 7485 (Part 2) : 2018/ISO 7046-2 : 2011 Countersunk flat head screws (common head style) with type H or Type Z Cross Recess — Product Grade A Part 2 Steel Screws of Property Class 8.8, Stainless Steel Screws and Non-Ferrous Metal Screws (*third revision*)
3. IS 7486 : 2018/ISO 7047 : 2011Raised countersunk head screws (Common Head Style) with type H or type Z cross recess — Product grade A (*third revision*)

4) Dimension of tapping screws threads are covered under IS 5957 : 2003/ISO 1478:1999 ‘Screw threads for thread forming tapping screws dimensions (*second revision*)’. The following standards for cross recessed tapping screws are under wide circulation:

a) ISO 7049 : 2011 Cross Recessed Tapping Screws: Part 1 Pan Head

b) ISO 7050 : 2011Cross Recessed Tapping Screws Part 2 Countersunk Flat Head

c) ISO 7051 : 2011 Cross Recessed Tapping Screw Part 3 Raised Countersunk Oval Head

5) The following Indian Standards are available for rivets:

a) IS 866 : 1957 Tinmen’s Rivets

b) IS 1928 : 1961Specification for boiler rivets

c) IS 1929 : 1982 Specification for hot forged steel rivets for hot closing (12mm to 36 mm)

d) IS 2155 : 1982 Specification for cold forged solid steel rivets for hot closing (6mm to 16 mm) (*first revision*)

e) IS 2907 : 1998 Non Ferrous rivets — Specification (First Revision)

f) IS 2998 : 1982 Specification for cold forged steel rivets for cold closing (1 mm to 16 mm Diameter) (*first revision*)

f) IS 3974 : 1967 Specification for bifurcated rivets for general purposes

g) IS 4040 : 1998 Fasteners — Solid drilled tubular and semi-tubular rivets — Specification (*first revision*)

h) IS 4732 : 1968 Specification for rivets for shipbuilding.

6) The following Indian Standards are available for lock nuts. They are:

1. IS 1364 (Part 4) : 2003/ISO 4035 Hexagon head bolts, screws and nuts of product grades A and B: Part 4 hexagon thin nuts (Chamfered) (Size Range M1.6 to M64) (*fourth revision*)
2. IS 1364 (Part 5) : 2002/ISO 4036:1999 Hexagon head bolts, screws and nuts of product grades A and B: Part 5 hexagon thin nuts Product grade B (Unchamfered) (Size Range M1.6 to M10) (*fourth revision*)

7) IS 1363 and IS 1364 covers bolts, screws and nuts for property class up to 12.9/12.9. The mechanical requirements are covered under IS 1367(Part 3) : 2017/ISO 898-1 : 2013(for bolts and screws made of steel/alloy steel) and IS 1367 (Part 6) : 2018/ISO 898-2 : 2012. (for nuts).

8) As per the revised standards(to be published), the marking shall include at least the following:

— the reference to the particular IS, for e.g. IS 1364 (Part 1),

— the thread size d and nominal length l,

— the symbol of the property class,

— the type of surface condition (finish and/or coating),

— the manufacturer's and/or distributor's identification and/or name,

— the manufacturing lot number as specified in ISO 1891-4,

— the quantity of pieces in the package.

For further clarification, please go through IS 1367(Part 3) : 2017 (clause 10) and IS 1367 (Part 6) : 2018 (clause 10).

10) Some of the standards under IS 1363 and IS 1364 series are under revision and are under publication. The standards are to be published as per the following details:

a) IS 1363 (Part 1) : 2023/ISO 4016 : 2022 Hexagon Head Bolts, Screws and Nuts of Product Grade ‘C’ Part 1 Hexagon Head Bolts (Size Range M5 to M64) (*sixth revision*)

b) IS 1364 (Part 1) : 2023/ISO 4014 : 2022 Hexagon Head Bolts, Screws and Nuts of Product Grades A and B Part 1 Hexagon Head Bolts (Size Range M1.6 to M64) (*sixth revision*)

c) IS 1364 (Part 2) : 2023/ISO 4017 : 2022 Hexagon Head Bolts, Screws and Nuts of Product Grades A and B Part 2 Hexagon Head Screws (Size Range M1.6 to M64) (*sixth revision*)

The standard which is already published is:

a) IS 1363 (Part 2) : 2023/ISO 4018 : 2022 Hexagon head bolts, screws and nuts of product grade C Part 2 Hexagon head screws (Size range M5 to M64) (*sixth revision*)

11) Regarding the coating, the standards (IS 1363 and IS 1364 series) clearly specify that ‘Other finishes, coatings and/or additional requirements shall be agreed between the purchaser and the supplier’ (*see* Table on Requirements and reference International Standards).