

1. Unique identification code of the product-type : Structural Bolting Assemblies according to EN 15048
2. Type, batch or serial number identification of the construction product: Type and FIR No./Lot No. displayed on the packing and Material Test Certificate according to EN 10204 type 3.1
3. Intended use or uses of the construction product, in accordance with the applicable harmonized technical specification, as foreseen by the manufacturer:

Generic Type and use	Non preloading structural bolting assemblies
Product size covered	M10-M27
Base and fastener material	Steel specification in ISO:898-1 Screws/ Bolts & ISO:898-2 for Nuts
Base and material condition	Hardened and Tempered
Fastener head type	Hexagon Head Screws/Bolts & Nuts
Fastener coating – hot dip galvanized, thread type	<ol style="list-style-type: none"> 1. Screws/Bolts manufactured with thread under size tolerance 6az class before coating, Nuts in tolerance position 6H after coating. 2. Screws/Bolts manufactured with thread tolerance 6g/6h class before coating, Nuts in tolerance position 6AZ after coating.
Fastener coating- Zinc plated, Thread type	Screw/Bolts manufactured with thread tolerance 6g class before coating and 6h after coating, Nuts in tolerance position 6H after coating.

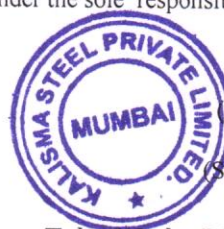
4. Name, registered trade name and contract address of the manufacturer: Kalisma Steel Pvt. Limited
Corporate: # 406, 4th Floor, Shree Krishna Building, New Link Road, Andheri (West), Mumbai-400053, India
Factory: Survey # 45/2, 45/3, 47, Gorha Village, Wada Taluk, Thane District, Maharashtra 421303 (India)
5. System of the assessment and verification of constancy of performance of the construction product: System2+
6. Declared Performance:
 - a) Harmonized standard: EN 15048-2007. b) Notified body: NB2292, Certificate no. : 2292-CPR-4323

Essential characteristics	Performance	Harmonized technical specification
Tolerance on dimension and shape	Tolerance Class A	ISO:4014, ISO:4017, for Screws/ Bolts and ISO:4032 for Nuts
Tensile Strength [N/mm ²]	830 Min.	ISO: 898-1
Elongation after fracture [%]	12% Min.	ISO: 898-1
Stress at 0.2% no proportional elongation [N/mm ²]	660 Min.	ISO: 898-1
Stress under proof load [N/mm ²]	600 Min.	ISO: 898-1
Tensile Test under wedge loading [N/mm ²]	830 Min.	ISO: 898-1
Hardness [HRC]	23-34	ISO: 898-1
Impact Strength Kv at -20°C [Joule]	27 Min.	ISO: 898-1
Hardness of Nut [HV] Grade 8	≤ M16 - 200-302 HV & > M16 233-353 HV	ISO: 898-2
Proof Load of Nut [N]	For M12- 74200, M16 - 138200 & M20- 225400,	ISO: 898-2
Suitability Test for assemblies nut & bolt [N]	For M12- 70000, M16- 130000 & M20- 203000,	EN 15048-1 & 2
Release of dangerous substance	< 0.1%	EN 15048-1
Durability	NPD	EN 15048-1

Related Directive and Annex.: 305/2011/EU Construction Product Directive –Annex 5, Cl.1 1.3(b)

We hereby certify that the products : Bolts to ISO 4014, ISO:4017 grade 8.8 and Nut ISO: 4032 grade 8 are produced according to the specification in the appendix ZA of EN 15048-1 and statement on certificate of factory production control, issued by UDEM, Mutlukent Mahallesi 2073 Sokak (Eski 93Sokak) No:10 Cankaya-Ankara-TURKEY notified authority. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 6. This declaration of performance (DOP) is issued under the sole responsibility of the manufacturer identified in point 4. Signed for and on behalf of the manufacturer by:

(Place and date of issue)
(Wada, Thane (INDIA))



(Name and Function)
(S.C. Tiwari)
(Sr. G.M.-QA & MR)