

ASTM A563/A563M - Structural nuts

Technical reference sheet | Rev. 29.09.2026

Nuts for structural and mechanical enquiries, including Grade DH where specified by the project.

Nuts for structural bolting

A563 covers carbon and alloy steel nuts. Grade and Hex / Heavy Hex geometry are separate characteristics. Select nuts alongside the bolt, considering diameter, finish and proof load.

How to identify the nut

Field	What to specify
Grade	C / DH / DH3 or another specified grade
Type / material	Grade-specific steel; DH3 for applicable weathering applications
Filetto / Thread	UNC / 8UN / specified metric series
Geometry	Hex / Heavy Hex
Finish	Plain or coated, with verified thread fit

Any use of A194 2H instead of A563 DH must be checked against the applicable specification and project requirements. Do not extend this option to all grades or combinations.

Grade DH

Identify grade, geometry, thread and finish. The mating nut is confirmed within the documented configuration, not merely by matching the bolt diameter.

Project-specific documentation

Assembly and traceability

Lot, markings, component list and conformity documents relevant to the supply.

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State the required documents. Applicability and availability are confirmed during enquiry review.

Testing and coatings

Dimensional reports, mechanical tests, coating reports and ROCAP where applicable to the specification.

Related standards and components

From grade to assembly configuration: Heavy Hex bolts and Twist-Off assemblies, with dedicated A325 and A490 grades.

A325 is handled as a grade within ASTM F3125/F3125M, with nut, washer and finish requirements captured in the enquiry.

A490 bolting: coating, components and documentation are assessed against the applicable specification rather than inherited from A325.

Hardened washers for specified assemblies, with type, dimensions and finish maintained as separate parameters.

Application sectors

Industrial and EPC projects, according to the specified application.

Enquiries and supply

Specify standard, grade, dimensions, finish, quantity and required documents. This technical reference sheet does not replace the lot documentation, manufacturer installation instructions or project design.