

ASTM A354 - High-strength bolts and studs

Technical reference sheet | Rev. 29.09.2026

Bolts, studs and other externally threaded fasteners, through a route separate from F3125 structural bolts.

Bolts, rods and studs: BC and BD grades

A354 covers quenched and tempered alloy-steel threaded fasteners with specified geometry. It supports industrial requirements and configurations needing a specification other than F3125 structural bolts.

Reference mechanical properties · inch series

Grade	Diameter	Tensile · ksi	Yield min. · ksi	HRC
BC	1/4-2 1/2"	≥125	109	26-36
BC	2 3/4-4"	≥115	99	22-33
BD	1/4-4"	150-173	130	33-38

Similar strength does not establish equivalence with A325 or A490. Specify geometry, supplementary testing, coating and mating components.

Specification-led dimensions and configuration

Specify grade, diameter, length, thread and configuration for a supply assessment. Dedicated production is subject to minimum quantity and technical feasibility.

Project-specific documentation

Assembly and traceability

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

EN 10204 3.1 · DoP · CoC

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.

Bolts and studs for flanges, valves and pressure equipment: specify grade, class, dimensions and service conditions.

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.