

Alloy Steel Pipe Manufacturer

An alloy steel pipe manufacturer supplies pipe with alloy elements such as chromium, molybdenum, nickel, manganese or vanadium to improve strength, hardenability, heat resistance or high-temperature stability. Alloy steel pipe is commonly selected for boilers, power plants, refineries, petrochemical units, high-temperature steam lines and pressure systems.

ASTM A335 is a key seamless ferritic alloy-steel pipe specification for high-temperature service. It covers several grades and requires the steel material to meet chemical composition, tensile property and hardness requirements; ASTM also notes that each pipe length shall be subjected to hydrostatic testing under the specification.

Alloy Pipe Grade	Main Alloy Route	Typical Use
ASTM A335 P11	Cr-Mo alloy steel	High-temperature pressure piping
ASTM A335 P22	Higher Cr-Mo route than P11	Power plant, refinery, steam service
ASTM A335 P91	High Cr-Mo-V-Nb route	Severe high-temperature service
ASTM A213 T11 / T22 / T91	Alloy boiler and heat-exchanger tubes	Boiler, superheater and heat exchanger service

For alloy steel pipe, buyers should not rely only on the grade name. The order should confirm chemical composition, heat treatment, hardness, impact test if required, NDT, hydrostatic test, MTC and heat number traceability. For P22, P91 or other Cr-Mo grades, heat treatment and hardness review are especially important.

Buyer review focus: verify grade route, heat treatment condition, mechanical test values, hardness range, NDT release and MTC heat-number mapping before shipment.