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1. SCOPE

This document serves as a technical reference for the comparison of international material standards. It is designed to assist engineers and procurement managers in identifying equivalent grades across **ASTM/ASME** (USA), **EN/DIN**(Europe), and **JIS** (Japan) standards. All materials supplied by **JSS Pipes and Fittings Trading L.L.C** are accompanied by full traceability and Mill Test Certificates (MTC) in accordance with EN 10204 3.1/3.2.

2. CORE MATERIAL COMPARISON TABLE

Material Category	ASTM/ASME	EN/DIN	JIS	Primary Application
Carbon Steel (High Temp)	A105 / A106 Gr. B	P265GH / C22.8	S25C / STS370	Standard Flanges & Seamless Piping
Carbon Steel (Low Temp)	A350 LF2 / A333-6	P355QH / TStE 355	SELA 245	Cryogenic & Low-Temp Service
High Yield Carbon	A694 F52 / F60	L360NB / L415NB	—	High-Pressure Transmission Lines
Stainless Steel 304L	A182 F304L	1.4307	SUS304L	Corrosion Resistant Fittings
Stainless Steel 316L	A182 F316L	1.4404	SUS316L	Marine & Chemical Processing
Alloy Steel (P11)	A182 F11	1.7335	STPA 23	High-Temp Refinery Service
Alloy Steel (P22)	A182 F22	1.7380	STPA 24	Power Plant & High-Pressure Steam

3. TECHNICAL COMPLIANCE & QUALITY ASSURANCE

- **Dual Certification:** Where applicable, JSS stocks materials with dual-certification (e.g., SS316/316L) to ensure compliance with multiple project specifications and optimize inventory liquidity.
 - **Dimensional Accuracy:** All fittings and flanges are supplied in accordance with ASME B16.5, B16.9, or EN 1092-1-dimensional standards as specified by the client.
 - **Verification:** While the grades listed above are widely accepted as equivalents, JSS recommends verifying specific chemical and mechanical requirements (Yield/Tensile strength) against the project's specific design code.
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