

Practical difference between PSL 1 and PSL 2

API 5L line-pipe grades: A25 to X80

Topic	PSL 1	PSL 2	Technical effect
Scope boundary	Base product requirements	Broader process, property and traceability control	PSL is an explicit part of the product definition.
Chemistry and CE	Base chemical limits	More explicit chemistry and CE/Pcm control by product	A grade name alone is not enough for MTC review.
Mechanical properties	Specified minima	Broader range and Y/T controls where applicable	Thickness and route affect verification.
Toughness	May be added by project requirements	Broader requirements by grade, size and service	Test temperature and energy must be defined.
Special service	Not inherent	Requires a separate annex or project requirement	PSL2 does not automatically mean sour service.

Source / basis: <https://niktrd.com/api-line-pipe-grades>