

SPECIFICATIONS

Gerdau Steel Grades for PZC and PS Profiles

North American Grades		
ASTM	Yield Strength	
	(ksi)	(MPa)
A 328	39	270
A 572 Grade 50	50	345
A 572 Grade 60	60	415
A 572 Grade 65	65	450
A 690*	50	345

European Grades		
EN 10248	Yield Strength	
	(ksi)	(MPa)
S 240 GP	35	240
S 270 GP	39	270
S 355 GP	51	355
S 430 GP	62	430
S 450 GP	65	450

* A690 contains specified levels of Ni, Cu, and P at higher levels than the other listed grades on the table.

A572 Grade 60 is the most economical and readily available grade. Please inquire for minimum order requirements for other grades.

For most sections, S 240 GP, S 270 GP, and S 355 GP Z-profiles can be supplied for European projects requiring the ÜHP proof of conformity.

Gerdau Sheet Piling Grades and their Chemistries

	ASTM A328	ASTM A572-50	ASTM A572-60	ASTM A572-65	ASTM A690
C %	**	0.23 max	0.26 max	0.23 max	0.22 max
Mn %	**	1.35 maxA	1.35 maxA	1.65 maxB	0.60 - 0.90C
P %	0.035 max	0.04 max	0.04 max	0.04 max	0.08 - 0.15
S %	0.04 max	0.05 max	0.05 max	0.05 max	0.04 max
Si %	**	0.40 max	0.40 max	0.40 max	0.40 max
Cu %	**	**	**	**	0.50 min
Ni %	**	**	**	**	0.40 - 0.75
Cr %	**	**	**	**	**
Mo %	**	**	**	**	**
Sn %	**	**	**	**	**
V %	**	0.010 -0.15*	0.010 -0.15*	0.010 -0.15*	**
Cb / Nb %	**	0.005 - 0.05*	0.005 - 0.05*	0.005 - 0.05*	**
Yield ksi [MPa]	39 min [270]	50 min [345]	60 min [415]	65 min [450]	50 min [345]
Tensile ksi [MPa]	65 min [450]	65 min [450]	75 min [520]	80 min [550]	70 min [485]
Elong %	17 @ 8 in.	18 @ 8 in.	16 @ 8 in.	15 @ 8 in.	18 @ 8 in.

*would contain singly or in combination, dependent on production type(1, 2 or 3)

**= not specified (Where **is shown for copper a minimum of 0.20 may be specified).

(A) For each reduction of 0.01% below C maximum, an increase of 0.06% Mn above specified maximum is permitted, up to a maximum of 1.50%. (B) For material with thickness of 1/2" (13mm) or less, Mn maximum of 1.35% would apply when C is greater than 0.21%.

(C) For each reduction of 0.01% below C maximum, an increase of 0.06% Mn above specified maximum is permitted, up to a maximum of 1.10%.