

# Product portfolio

## A complete range of stainless steel grades

		AUSTENITIC																					
		CHROME NICKEL										CHROME NICKEL MOLYBDENUM				HEAT RESISTANT							
ACCIAI SPECIALI TERNI		301	301 L	304	304 L	304 DL	304 MSA	304 MS	304 PSA	304 PS		304 PSQ	321	316	316 L	316 SLD	316 Ti	304 H ****	309 S *****	310 S *****	321 H *****	4828 *****	
EN 10088-2		1.4310	1.4318	1.4301	1.4306	1.4307	1.4301	1.4301	1.4301	1.4301		1.4301	1.4541	1.4401	1.4404	1.4435	1.4571	1.4948	1.4833	1.4845	1.4878	1.4828	
DELIVERY CONDITIONS																							
HOT ROLLED COILS AND SHEETS	N°1 Finish	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	Floor plate				✓	✓	✓	✓						✓	✓								
COLD ROLLED COILS AND SHEETS	2E	✓		✓		✓						✓		✓			✓						
	2D / 2B	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	BA	✓		✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓		✓	✓	✓		
	Work hardened	✓	✓	✓					✓	✓													
	Patterned			✓		✓	✓	✓	✓	✓					✓								
TYPICAL COMPOSITION	C	0,10	0,03	0,04	0,03	0,025	0,04	0,04	0,04	0,04		0,04	0,05	0,06	0,03	0,03	0,05	0,06	0,06	0,05	0,05	0,05	
	Cr	17,4	17,2	18,2	18,2	18,2	18,2	18,2	18,2	18,2		18,2	17,3	16,7	16,7	17,4	16,7	18,2	22,6	24,3	17,2	19,3	
	Ni	7,6	6,6	8,1	10,1	8,1	8,1	8,6	8,6	9,1		9,6	9,1	10,6	10,3	13,0	10,6	8,1	13,1	19,1	9,1	11,1	
	Mo	-	-	-	-	-	-	-	-	-		-	-	2,1	2,1	2,7	2,1	-	-	-	-	-	
	Others	-	N	-	-	-	Cu	-	Cu	-		-	Ti	-	-	-	Ti	N	Si	Si	Ti	Si	
MECHANICAL PROPERTIES AT 20 °C - TYPICAL VALUES	0.2% Yield Strength Mpa	280	350	270	250	250	260	250	250	250		240	250	300	270	300	270	300	300	260	260	290	
	Rm tensile Strength MPa	700	800	650	570	630	630	630	620	600		600	590	610	580	600	580	600	600	580	600	640	
	Elongation A% A <sub>80</sub> (thickness < 3mm) A <sub>5</sub> (thickness ≥ 3mm)	50	45	54	55	54	56	56	58	58		60	57	50	52	50	55	54	45	45	57	55	
FOOD CONTACT M.D.21/3/73		✓		✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓		✓						
CORROSION RESISTANCE	General	+	++	++	++	++	++	++	++	++		++	+++	+++	+++	++++	+++	++	+++	+++	+++	+++	
	Pitting	+	++	++	++	++	++	++	++	++		++	+++	+++	+++	++++	+++	++	+++	+++	+++	++	
	SCC	o	o	o	o	o	o	o	o	o		o	o	o	o	o	o	o	o	o	o	o	
	Heat resistance	+	++	++	++	++	++	++	++	++		++	+++	++	++	++	++	++	++++	++++	++	+++	
COLD FORMABILITY		++	++	++	+++	++	+++	+++	++++	++++		++++	+++	++	+++	+++	+++	++	+	+	++	+	
WELDABILITY		++	++++	+++	++++	++++	+++	+++	+++	+++		+++	+++	+++	++++	++++	++++	+++	+++	++	++	+++	

\*\*\*\* Chemical composition and mechanical properties according to EN 10028

\*\*\*\*\* Chemical composition and mechanical properties according to EN 10095

o Not applicable/not required  
+ Acceptable  
++ Good  
+++ Excellent  
++++ Superior performance

The above table reports the main steels produced and traded by Arvedi AST. Other steel grades are also available. You can check them out on our website. For any different requirements, please contact marketing.ast@acciaitermi.it

The above mentioned figures, which refer to 1 mm CR, 2B finish, are approximate; they can vary according to thickness and finishing

# Product portfolio

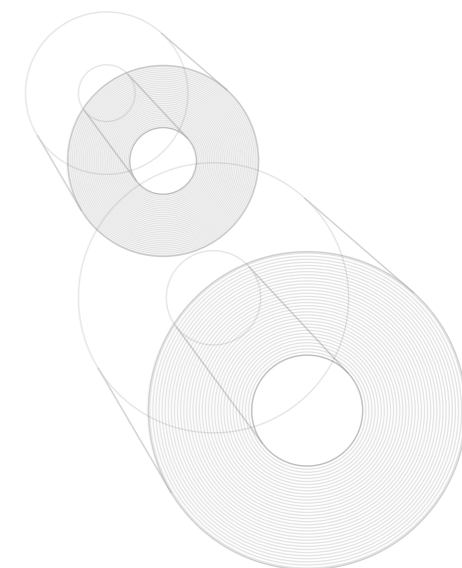
## A complete range of stainless steel grades

		FERRITIC											
		FERRO CHROME			FERRO CHROME STABILIZED					FERRO CHROME MOLYBDENUM			
ACCIAI SPECIALI TERNI		410 S	STR 12	430	409	409 LI	430 TI	439 M	441 LI		434	444	4513
EN 10088-2		1.4000	1.4003	1.4016	1.4512	1.4512	1.4520	1.4510	1.4509		1.4113	1.4521	1.4513
DELIVERY CONDITIONS													
HOT ROLLED COILS AND SHEETS	N°1 Finish	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓
	Floor plate												
COLD ROLLED COILS AND SHEETS	2E												
	2D / 2B	✓	✓	✓ *	✓	✓	✓	✓	✓		✓	✓	✓
	BA			✓		✓	✓	✓ ***	✓ ***		✓	✓ ***	✓
	Work hardened			✓ **									
	Patterned			✓									
TYPICAL COMPOSITION	C	0,03	0,02	0,04	0,02	0,01	0,02	0,02	0,02		0,06	0,02	0,02
	Cr	12,2	11,3	16,2	11,5	11,5	16,2	17,7	18,2		16,7	17,7	16,3
	Ni	-	0,5	-	-	-	-	-	-		-	-	-
	Mo	-	-	-	-	-	-	-	-		1,0	2,1	1,2
	Others	-	-	-	Ti	Ti	Ti	Ti, Nb	Ti, Nb		-	Ti, Nb	Ti
MECHANICAL PROPERTIES AT 20 °C - TYPICAL VALUES	0.2% Yield Strength Mpa	300	320	300	250	250	300	280	300		320	330	300
	Rm tensile Strength MPa	450	500	500	420	420	450	450	470		500	500	470
	Elongation A%												
	A <sub>5</sub> (thickness < 3mm)	25	23	27	30	32	27	30	28		25	28	28
FOOD CONTACT M.D.21/3/73				✓				✓	✓			✓	
CORROSION RESISTANCE	General	°	°	+	°	°	+	+	+		++	+++	++
	Pitting	°	°	+	°	+	++	+	++		++	+++	++
	SCC	+	+	++	+	+	++	++	++		++	+++	++
	Heat resistance	°	°	+	°	++	+	++	+++		+	+	+
COLD FORMABILITY		+	+	+	++	++	++	++	++		+	+	++
WELDABILITY		+	++	+	++	+++	+++	+++	+++		+	+++	+++

\* 2D/2B finish is feasible only in relation to the final use

\*\* 430 HT and 430 AR grades coil after work hardening process

\*\*\* Only for max. thickness 1.0 mm, larger thicknesses will be agreed according to the use



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