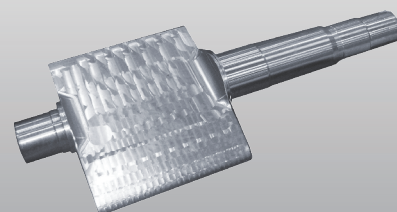
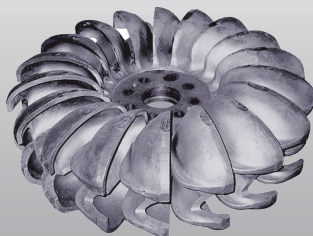
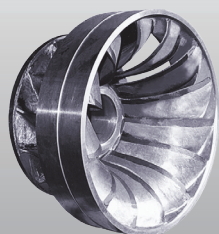


**CORROSION RESISTANT STAINLESS STEELS**
**Martensitic, Ferritic, Austenitic Ferritic and  
Precipitation Hardenable Steels**

	Altona Reference EA	Equivalent Trade Reference / Name	Basic Chemical Composition (%)					Minimum Mechanical Properties				Hardnes HB
			C	Cr	Ni	Mo	Others	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation (%)	Reduction of area	
Martensitic	09528	CA - 15 1.4008	≤ 0,12	13,0	1,0	0,4	—	450	620	18,0	30,0	170 240
	09531	CA - 40	0,30	13,0	1,0	0,4	—	485	690	15,0	25,0	220 270
	07336	CA 6 - NM	≤ 0,06	13,0	4,0	0,7	—	550	755	15,0	35,0	230 275
	07673	1.4405	≤ 0,06	17,0	4,0	1,0	—	550	755	13,0	30,0	230 275
Ferritic	10904	1.4136	0,40	29,0	1,0	2,0	Cu-1,0	—	350	—	—	250 320
Austenitic - Ferritic (Duplex)	07819	~ CD4 M Cu N 1.4517	≤ 0,03	26,0	6,0	3,0	Cu-3,0 N-0,15	480	650	22,0	—	220 270
	07817	~ CD3MN 1.4515	≤ 0,03	26,0	6,0	3,0	Cu-1,0 N-0,15	480	650	22,0	—	220 270
	07818	CE 3 M N	≤ 0,03	25,0	7,0	4,5	N-0,20	515	690	18,0	—	220 270
Precipitation Hardenable	07319	CB 7Cu 1	≤ 0,07	16,5	4,0	—	Cu-3,0	1020	1200	5,0	—	≥ 375


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ISO/TS 16949  
BUREAU VERITAS  
Certification



**CORROSION RESISTANT STAINLESS STEELS****Martensitic, Ferritic, Austenitic Ferritic and  
Precipitation Hardenable Steels****General Features and Recommended Applications****Martensitic Steels**

Microstructure: Martensitic

Response to heat treatment: Hardenable

Mechanical features: High hardness, mechanical resistance and toughness. Steels that are resistant to corrosion, abrasion and cavitation, designed for applications involving organic acids, food and liquids containing suspended solid particles.

**EA-09507**  
**EA-09531**

Examples of application: Pump parts, valves, hydraulic turbines and machinery in general.

**EA-07336**

Examples of application: Parts of hydraulic turbines like wicket gates, Kaplan, Francis, Pelton-type rotor vanes and other turbine parts.

**EA-07673**

**Ferritic Steels**

Microstructure: Ferrite and carbides

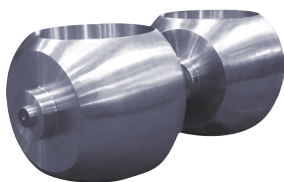
Response to heat treatment: Non hardenable

Mechanical features: Medium hardness and mechanical resistance, medium to low toughness.

**EA-10904**

Steels resistant to corrosion and abrasion, suitable for the use in connection with highly concentrated sulphuric acid (> 95%) at temperatures up to approx. 150 °C, phosphoric acid and potassium salts.

Examples of application: Pump parts and other components, particularly those used in the industry of fertilizers.

**Austenitic-Ferritic (Duplex) Steels**

Microstructure: Austenite and Ferrite

Response to heat treatment: Some hardening is possible, but normally not recommended.

Mechanical features: Medium hardness, high mechanical strength and impact values.

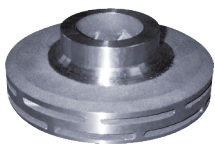
**EA-07819**

**EA-07817**

**EA-07818**

Steels with high mechanical properties having excellent resistance to corrosion including a good resistance to abrasion, recommended for corrosive mediums containing suspended particles, rough phosphoric acid, solutions with high contents of chlorides, sea water, sulphuric acid, solutions of various salts containing chlorine ions.

Examples of application: Pump parts, fittings and various components for the Chemical Industry.

**Precipitation Hardenable Steels**

Microstructure: Martensitic

Response to heat treatment: Hardenable

Mechanical features: High hardness, mechanical properties and impact strength.

**EA-07319**

Steels with corrosion resistance almost similar to the austenitic and martensitic steels, but with higher mechanical strength, excellent resistance to fatigue, high and consistent hardness.

Examples of application: Pump Parts, Agitators and various components for the Chemical, Paper and Cellulose Industry.