



**Cogne Acciai Speciali**

**COGNE ACCIAI SPECIALI**  
at the heart of  
**Automotive**

[www.cogne.com](http://www.cogne.com)



# CAS PRODUCTS FOR AUTOMOTIVE



## EXHAUST SYSTEMS

**CATALYTIC**  
(WELDING WIRE, WOOL WIRE, WIRE FOR SUPPORT RINGS AND BARS FOR FIXING ELEMENTS)



## BRAKING SYSTEMS

**ANTI-LOCK BRAKING SOLENOIDS**



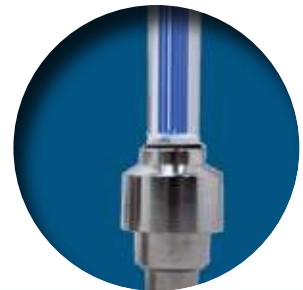
## SAFETY

**WINDSHIELD WIPERS**  
(SUPPORT WIRE)

**AIRBAG**  
(BARS FOR CARTRIDGE AND KNITTED WIRE)

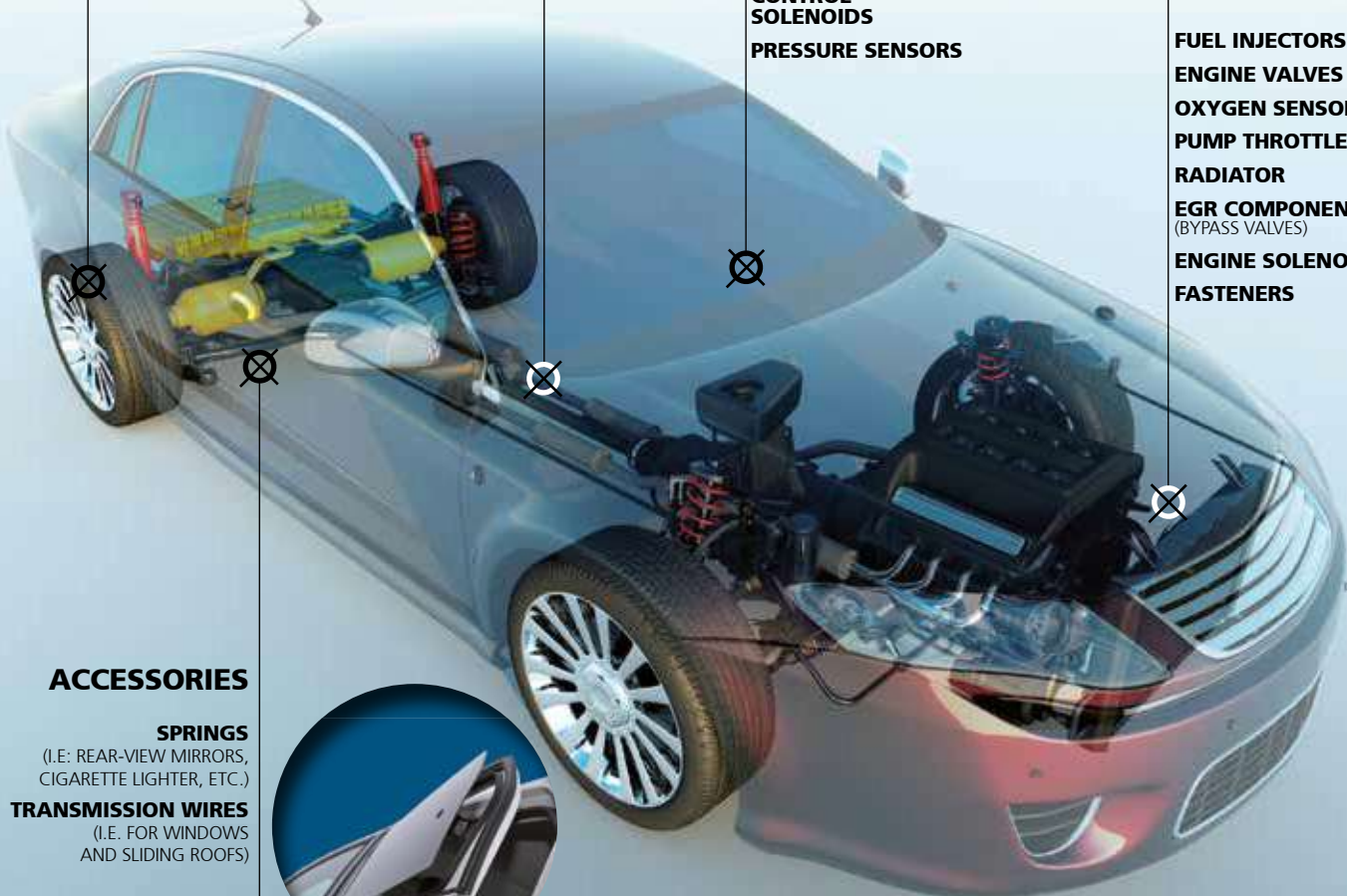
**CRUISE CONTROL**  
**ABS AND RIDE CONTROL SOLENOIDS**

**PRESSURE SENSORS**



## ENGINE MANAGEMENT

**FUEL INJECTORS**  
**ENGINE VALVES**  
**OXYGEN SENSORS FUEL PUMP THROTTLE SHAFT**  
**RADIATOR**  
**EGR COMPONENTS**  
(BYPASS VALVES)  
**ENGINE SOLENOIDS**  
**FASTENERS**



## ACCESSORIES

**SPRINGS**  
(I.E. REAR-VIEW MIRRORS, CIGARETTE LIGHTER, ETC.)

**TRANSMISSION WIRES**  
(I.E. FOR WINDOWS AND SLIDING ROOFS)



# Cogne Acciai Speciali is focusing on the Automotive market

## Why?

**WE ARE FULLY COMMITTED TO THE AUTO INDUSTRY'S DEMANDS FOR HIGH-PERFORMANCE STAINLESS STEELS**

- > significant growth in the automotive Industry's application of stainless steel long products;
- > technological developments tied to reducing carbon emissions increasingly require the use of high performance stainless steels;
- > since 2007 the automotive use of stainless steel long products has doubled and it is forecasted to double again within a few years.

## How?

**BY OFFERING A GLOBAL FOOTPRINT WITH TAILORED SOLUTIONS**

- > Technological collaboration with our research-driven partners;
- > Development of high performance steels;
- > Plant restructuring supported by a 100 year-long history of quality know-how;
- > Global footprint (the only stainless steel supplier with world-wide locations);

Significant share in premium and technology-driven OEMs.





# OUR STAINLESS STEEL for automotive

Steel Class	Cogne Grade	Lavorabilità	EN/DIN/UNI migliorata	W.N.	BS	AISI/ASTM/ASME
Austenitic grades	303/1	IMCO®	X8CrNiS 18-9	1.4305	303S31	303 8F B8F
	303K	IMCO®	X6CrNiCuS 18-9-2	1.4570		
	304R		X2CrNi 19-11	1.4306	304S12	304 L
	F304	IMCO®	X5CrNi 18-10	1.4301	304S31	304 B8
	304K		X3CrNiCu 18-9-4	1.4567	394S17	304 Cu
	F304L	IMCO®	X2CrNi 19-11	1.4306	304S12	304 L
	F304L1	IMCO®	X2CrNi 18-9	1.4307	304S11	
	304 BS		x2CrNi18-9	1.4307	304S11	
	309Si		X15CrNiSi 20-12	1.4828	309S24	309
	F316	IMCO®	X5CrNiMo 17-12-2	1.4401	316S31	316 8M B8M
	316K		X3CrNiCuMo 17-11-3-2	1.4578	396S17	
	F316L	IMCO®	X2CrNiMo 17-12-2	1.4404	316S11	316L 8M B8M
	316LK	IMCO®		1.4427		
	316LM2	IMCO®	X2CrNiMo 18-14-3	1.4435	316S13	316L
	316LM1		X2CrNiMo 18-14-3	1.4441	4341/8	316L F138gr2
	316LM		X2CrNiMo 18-14-3	1.4435	316S13	316L
	316R		X2CrNiMo 17-12-2	1.4404	316S12	316L
	316T/1	IMCO®	X6CrNiMoTi 17-12-2	1.4571	320S31	316Ti
321/3	IMCO®	X6CrNiTi 18-10	1.4541	321S31	321	
Ferritic grades	430/1		X6Cr17	1.4016	430S17	430
	430/4	IMCO®	X6Cr17	1.4016	430S17	430
	430F2	IMCO®	X6CrMoS17	1.4105		430F
	430F4	IMCO®	X6CrMoS17	1.4105		430F
	430F6	IMCO®	X6CrMoS17	1.4105		430F
	434		X6CrMo17-1	1.4113	434S17	434
	430NB		X3CrNb17	1.4511		430Cb
Duplex grades	329/1	IMCO®	X3CrNiMoN 27-5-2	1.4460		329
	329A		X2CrNiMoN 22-5-3	1.4462	318S13	F51 Cr22
	329S		X2CrNiMoCuWN 25-7-4	1.4501		F55
	329S/1		X2CrNiMoN 25-7-4	1.4410		F53 Cr25
Heat resisting grades	310/1		X8CrNi 25-21	1.4845	310S31	310 S
	347		X6CrNiNb 18-10	1.4550	347S31	347
	354		X1CrNiMoCuN 25-18-7	1.4547		F44
Precipitation hardening grades	630/3	IMCO®	X5CrNiCuNb 16-4	1.4542		
	SF286		X6NiCrTiMoVB 25-15-2	1.4980	286S31	660
Super alloy grades	904L		X1NiCrMoCu 25-20-5	1.4539	904S13	904L
Martensitic grades	410/2		X12Cr13	1.4006	410S21	410
	410/6	IMCO®	X12Cr13	1.4006	410S21	410
	E415		X3CrNiMo 13-4	1.4313	425C12	F6NM
	415M		X4CrNiMo 16-5-1	1.4418		
	416/1	IMCO®	X12CrS13	1.4005	416S21	416
	420A/7	IMCO®	X20Cr13	1.4021	420S29	420L
	420B/4	IMCO®	X30Cr13	1.4028	420S37	420M
	420BF/2	IMCO®	X29CrS13	1.4029	416S37	420F
	420C		X39Cr13	1.4031	420S45	420H
	420C/1		X46Cr13	1.4034		
	420CF	IMCO®	X45CrS13	1.4035		
	420C/4	IMCO®	X46Cr13	1.4034		
	420D		X65Cr13	1.4037		
	420RM1		X39CrMo 17-1	1.4122		
	430F/3	IMCO®	X14CrMoS17	1.4104		430F
	431/1	IMCO®	X17CrNi 16-2	1.4057	431S29	431
	440B		X90CrMoV18	1.4112		440B
	440C/2		X105CrMo17	1.4125		440C
	616C		X20CrMoV 12-1	1.4922		
	616		X20CrMoWV 12-1	1.4935		422

IC  
CERT  
CER  
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# OUR QUALITY Focused on our customer



## CAS Safety Policy:

- 1) Safety management manual
- 2) Prevention policy of relevant accidents and fires
- 3) Plant general rescue plan

Our quality and R&D service has the responsibility of guaranteeing that Cogne products respond to both the most demanding International Standards and to each customer's individual specifications. Our company is certified according ISO 9001:2008; ISO/TS 16949:2009; ISO14001:2004. Our goal is the continuous improvement of our products, the complete satisfaction of our customers and the constant search for competitive advantage on a global scale. Our search for innovative solutions and the promotion of a customer-orientated Company Culture lead us to develop the following:

- Customer service
- Metallurgical process control
- Laboratory and testing
- Research and Development
- Quality Certification
- Customer homologation



# OUR DASHBOARD

Quality<sup>o</sup> every step of the way



**H**igh purity  
**M**icrocleannes  
**M**acrostructure online control



**P**roduct defectivity online control  
**H**eat treatment diagram control





- P**eeling
- D**rawing
- G**rinding
- M**agnetic annealing treatment
- M**echanical characteristic control



- D**imensional laser control
- M**agnatest
- E**ddy current testing machine
- U**S testing
- F**inal approval

## OUR COGNE ENGINE VALVE STEELS

Grade	C	Si	Mn	P	S	Cr	Mo	Ni	Nb	W	N <sub>2</sub>	Annealed HRC	Hardened & tempered HRC	EN 10090	SAE	JIS	Others
VA34	0.28-0.38	0.5-1.0	1.5-3.5	≤ 0.050	≤ 0.030	22-24	≤ 0.5	7.0-9.0		≤ 0.5	0.25-0.35	≤ 38		1.4866	X33CrNiMnN23.8	EV16	23-8N
VA61	0.48-0.58	≤ 0.45	8-10	≤ 0.050	≤ 0.030	20-22		3.25-4.5			0.35-0.50	≤ 40		1.4871	X53CrMnNiN21.9	EV8	SUH35 21-4N
VA66/2	0.5-0.6	≤ 0.25	7-10	≤ 0.050	≤ 0.030	19.5-21.5		1.5-2.75			0.20-0.40	≤ 40		1.4875	X55CrMnNiN21.9	EV12	21-2N
VA63	0.45-0.55	≤ 0.45	8-10	≤ 0.050	≤ 0.030	20-22		3.5-5.5	1.8-2.5	0.8-1.5	0.40-0.60	≤ 40		1.4882	X50CrMnNiNbN21.9	EV8NbW	21-4NWNb
VM09	0.45-0.55	1.0-2.0	≤ 0.60	≤ 0.030	≤ 0.030	7.5-9.5		≤ 0.50				≤ 30	30-35		X50CrSi8.2		SUH11
VM11	0.40-0.50	2.7-3.3	≤ 0.80	≤ 0.040	≤ 0.030	8.0-10.0		≤ 0.50				≤ 30	30-35 / 35-43	1.4718	X45CrSi9.3	HNv3	SUH1
VM12D/1	0.35-0.45	2.0-3.0	≤ 0.80	≤ 0.040	≤ 0.030	9.0-11.0	0.8-1.3					≤ 30	30-35	1.4731	X40CrSiMo10.2		SUH3