

INOSSIDABILE

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Summary

For more detailed information please contact directly the names indicated at the end of each notification

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RESTARTING FROM STEEL: THE STRENGTH OF A STAINLESS COMMUNITY TAKES SHAPE

(Ripartire dall'acciaio: la forza di una comunità inossidabile prende forma)

In Codogno (LO), a municipality known for the Italian alleged 'patient 1', a memorial has been installed dedicated to the local victims of the Covid-19. This work consists of a reinforced concrete base from which three stainless steel stelae rise. Both the base and the stelae are covered with 1.5 mm thick EN 1.4301 (AISI 304) stainless steel sheets, which have two different aesthetic aspects. For the pedestal, a coating with a special electro-coloured finish has been chosen which gives a matt effect. 9EH patterned sheets, on the other hand, dress the frames of the totems with a well-defined "texture" which, by faithfully reproducing the folds of the skin, has helped to enrich the monument with meaning. The stelae are supported by a metal structure made of square-section tubes, also in EN 1.4301 stainless steel.

The monument, which bears at its base the words "Resilience, Community and Restart", was inaugurated exactly one year after the discovery of patient 1, in the presence of the highest civil and religious authorities in Lombardy.

Produced and realised by: Steel Service Srl, holder of exclusive rights of sale in Italy for Rimex Metals UK's rigidized, patterned and coloured stainless steels – I-26845 Codogno LO – Via Armando Diaz 80/C, phone: +39 0377 379821, fax: +39 0377 400818, commerciale@steelservicegroup.com, www.inoxcolorato.com

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FOUNTAIN MADE IN VALTELLINA AND ASSEMBLED IN KUWAIT

(Fontana realizzata in Valtellina e montata in Kuwait)

The article shows an example of specialised Italian technology linked to the transformation of stainless steel components for street furniture, in this example for the construction of a fountain. Installed at the Sahara Kuwait Golf Resort in Kuwait City, the fountain features various elements (manifolds, flanges, support frame) designed and manufactured in Valtellina (valley in the Lombardy region): EN 1.4404 (AISI 316L) stainless steel was used for

all these elements thanks to the wide machining possibilities and its well-known resistance to corrosion, but also to the ease of maintaining the structure in optimal conditions, also from a hygienic point of view.

Project and realization: Della Cagnoletta Srl – I-23010 Albosaggia SO – Via Gerone 4, phone: +39 0342 510190, info@dellacagnoletta.com, www.dellacagnoletta.com / **Project:** Watercube Srl – I-36035 Marano Vicentino VI – Via dell'Industria 2, phone: +39 0445 637576, info@watercube.it, www.watercube.it

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FROM OUR MEMBERS

RODASTEEL CORPORATION AG (RodaSteel Corporation AG)

Dynamism, flexibility and market orientation are the keywords that characterise the presence of RodaSteel Corporation AG in the international steel industry. The Group relies on the historic plants of Rodacciai SpA in Bosisio Parini and Sirone - Lecco province and the Spanish steelworks of Olarra Aceros Inoxidables S.A. It integrates steelmaking with the sector of cold processing; focusing on alloy steel, stainless steel, Nickel-based alloys and free-cutting steels in the O&G, welding, automotive and mechanics sectors.

The Group continues to invest in logistic extensions and plant acquisitions to guarantee an increase in production capacity, the extension of the mix offered and the improvement of product and service quality.

Providing high levels of service and dedicated technical support to customers for the development of customised products, even for niche sectors, is the guideline that RodaSteel Corporation AG has been pursuing for some years now. This strategy has led to the study and development of a range of totally customisable products. This is how the Roda CustomLine was born, where the technical solutions applied are guaranteed and certified by Rodacciai.

Roda CustomLine - This innovation is part of Rodacciai's tradition of studying and developing new solutions internally to offer customers products of excellence. The Quality and Innovation department, working in close contact with the other production areas of the company, has the objective of finding every possible solution to meet customer needs. Roda Custom Line has taken shape through a business development project carried out by the

companies of the RodaSteel Corporation Group to meet the increasingly stringent needs of customers. Specifically with regard to stainless steels, the Group boasts the possibility of having the entire production cycle under control.

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THE NEW REVISION OF EN 10217-7

(La nuova revisione della norma EN 10217-7)

On 21 April 2021, a new revision of the standard EN 10217-7 (Welded steel tubes for pressure purposes - Technical delivery conditions - Part 7: Stainless steel tubes) was published, which regards the technical delivery conditions for welded stainless steel tubes for pressure purposes.

The 2005 (first publication) and 2014 editions of this standard, harmonised with the PED directive, were published with reference to the directive in force at that time, i.e. Directive 97/23/EC of 29 May 1997. Instead, this latest revision contains references to the "new" PED Directive (Directive 2014/68/EU).

The changes compared to the previous edition are listed in the standard in Annex A (informative); some of the most important and relevant changes are listed in the article. The changes mentioned concern the following paragraphs or tables:

- Paragraph 2 (*Normative References*);
- Paragraph 6.2 (*Options*);
- Table 2 (*Delivery conditions*);
- Table 3 (*Chemical composition of austenitic steels*);
- Table 6 (*Mechanical properties of austenitic steels*);
- Paragraph 12.1 (*Marking to be applied*);
- Annex ZA (*Relationship between this European Standard and the Essential Requirements of Directive 2014/68/EU aimed to be covered*).

Text based on the papers presented during the webinar "Day Training: the new EN 10217-7", which took place on 10/6/2021, organised by UNSIDER (Ente Italiano di Unificazione Siderurgica) and Centro Inox.

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NEW DOCKS IN THE PORT OF LIVORNO: THE ROLE OF STAINLESS STEEL



(Nuove banchine al porto di Livorno: il ruolo dell'inox)

Interesting is certainly all the activity carried out in the last few years and aimed at enlarging and upgrading some areas of the port of Livorno. The most noteworthy areas involved are: the Morosini dock, the Elba dock and the completion of the quay on the east side of the Toscana dock. The article gives a quick description of the work carried out in these three areas, highlighting the parts where stainless steel was used.

The first lot of works (Morosini dock) included the construction of a dock with an overall length of 312 metres. For the construction of the bulkheads, prefabricated formwork was used, with the employment of electro-welded reinforcement meshes, obtained from EN 1.4404 (AISI 316L) stainless steel rebars having a diameter of 5 mm.

For the reinforced concrete quay beam built during the extension of the Elba pier, EN 1.4404 stainless steel reinforcement was chosen, again using a long product with improved adherence. In addition to the reinforcements, stainless steel accessories such as edge protectors were also used for this project.

For the quay on the east side of the Toscana dock, the completion works included the construction of a complex of about 355 metres by means of sheet pilings and metal pipes. Also in this third case, for all the reinforced concrete structures, EN 1.4404 stainless steel rebars were used for the metal reinforcement.

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PAGES 12/13**FROM ANCIENT EGYPT TO THE PRESENT DAY: THE HISTORY OF TOOTHPASTE (Dall'Antico Egitto ai giorni nostri: la storia del dentifricio)**

Toothpaste has become a common consumer product since the 20th century. However, its 'discovery' can be traced back as far as Ancient Egypt. Later, the Greeks and then the Romans improved the "recipes" for toothpaste. Obviously, the formulation of this product has varied over the centuries until today's toothpastes.

The mixing of the different ingredients in order to obtain the toothpaste, which is then destined for packaging, is achieved by means of specific machinery: this article will present an emulsifier used for this purpose.

In order to offer total inertia towards the treated product, the emulsifier is entirely made of stainless steel: for its components directly in contact with the product, EN 1.4404 (AISI 316L) stainless steel was chosen, while EN 1.4301 (AISI 304) stainless steel was used for the remaining parts.

Product handling is carried out by a counter-rotating agitator and a turbo bottom emulsifier.

Realization: Euro Inox Srl – I-26020 Cappella Cantone CR - Via Dell'Industria 10, phone:

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PAGE 14**ADVANCED COURSE ON STAINLESS STEELS. METALLURGY – EXPERIENCES – APPLICATIONS. III EDITION - ONLINE (Corso completo sugli acciai inossidabili. Metallurgia – Esperienze - Applicazioni. IIIª edizione online)**

19 • 21 • 26 • 28 October - 4 • 9 November 2021

Centro Inox organized, in collaboration with AQM (Technical Services Center for Companies) and with the sponsorship of Federacciai, the Italian Institute of Welding and Politecnico di Milano, the third edition of the Advanced Course on Stainless Steel. The aim of this six-day course is to provide a broad technical background on stainless steels and an opportunity to update one's knowledge of the stainless industry. Even though the course is delivered in distance learning mode, there will be plenty of room for practical applications as well as theory, thanks to the remote connection to the AQM laboratories.

Days and topics covered:

19 October 2021 - FROM METALLURGY TO THE PROPERTIES

21 October 2021 - TECHNICAL DELIVERY CONDITIONS: LONG PRODUCTS, FLAT PRODUCTS, WELDED TUBES – INSPECTION DOCUMENTS – NORMATIVE REFERENCES

26 October 2021 FINISHES AND TREATMENTS

28 October 2021 - WELDING AND JOINTS

4 November 2021 - CORROSION: CAUSES, TYPICAL MORPHOLOGIES, OPTIMUM SELECTION CRITERIA

9 November 2021 - PRACTICAL APPLICATION MOMENTS IN AQM LABORATORY / METAL ADDITIVE MANUFACTURING

The complete programme and the registration form are available on Centro Inox website:

www.centroinox.it

For further information and registration:

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AQM Srl – phone: +39 030 9291784

e-mail: valentalombardi@aqm.it

PAGE 15**INTERNATIONAL STAINLESS & SPECIAL STEEL CONFERENCE 2021**

(International Stainless & Special Steel Conference 2021)

Como – 28 ÷ 30 September 2021

Lake Como will host the International Stainless & Special Steel Conference 2021, a conference organised by SMR EVENTS and it will be held from 28 to 30 September 2021. The central themes of this event, which will be attended by more than 200 companies from the entire stainless steel production chain, will be sustainability and digitalisation ("Green & Digital"). Centro Inox will support the event.

For information and subscription:

www.stainless-conference.com/stainless-

special-steel-conference.html

MADE IN STEEL 2021

(Made in Steel 2021)

Fieramilano Rho, Milan – 5 ÷ 7 October 2021

The 9th edition of Made in Steel, the leading Conference & Exhibition in Southern Europe dedicated to global iron and steel industry, organised by siderweb - the steel community, will be held from 5 to 7 October 2021. In pavilions 22 and 24 of the Fieramilano Rho exhibition centre, the main players in the steel supply chain will meet to do business and to discuss the key issues for the future of the steel industry. The main theme of this edition will be the "rebirth" of steel from the crisis caused by the Covid emergency, which also hit the steel sector hard.

Centro Inox, as well as supporting the event, will be present with an exhibition space.

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PAGE 16**A "STAINLESS" WELCOME (Un'accoglienza "inossidabile")**

In front of The National Museum of Australia, in the national capital Canberra, a particular stainless steel structure, the "Welcome Wall", has recently been installed. Built on several levels and designed to look like a continuous curve or sail, it is intended to welcome visitors to the National Museum.

The "Welcome Wall" is characterised by an internal steel "skeleton" and an external cladding consisting of multiple panels. Given the marine environment in which the museum is located, EN 1.4401 (AISI 316) stainless steel was chosen for these panels to ensure greater strength and durability. Together with the curvature of the structure, it is certainly the appearance of the panels that aesthetically characterises the "Welcome Wall": the Super Mirror finish was chosen for the upper part of the façade, while the lower part is characterised by a "shot-peened" finish.

Stainless steel sheets produced and furnished

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