

INOSSIDABILE

Edited and published by Centro Inox Servizi S.r.l.

Summary

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

AN ANNOUNCEMENT TO THE READERS OF INOSSIDABILE

Dear readers, as you may know, environmental sustainability, intrinsically linked to the reduction of primary resources required for production and the emissions associated with it, is highly topical today in all production sectors. This also applies to the stainless steel sector, aided by the fact that this material, thanks to its characteristics and peculiarities, plays an important role in terms of circular economy.

We at Centro Inox also do not want to be outdone. In addition to disseminating through our activity the advantages of using stainless steel in terms of environmental sustainability, we want to do something concrete. Therefore, not only to optimise distribution costs, but also to reduce our impact on the environment, we have decided not to send our magazine in printed format outside of Italy starting from the next issue of Inossidabile (March 2024). This is to reduce the consumption of raw material and the CO₂ emissions associated with its production and transport around the world.

This does not mean that our dear foreign readers will no longer be able to read our magazine: the issues of Inossidabile and their English summaries will be made available for download on our website and through our social networks (LinkedIn and Facebook) completely free of charge.

In addition, they will be distributed via e-mail to a dedicated mailing list. We therefore ask you to provide us with your e-mail address by writing to: redazione.inossidabile@centroinox.it

The director, Fausto Capelli

PAGE 3

LET'S CALL THEM BY FULL NAME

(Chiamiamoli col loro nome e cognome)

Editorial by Fausto Capelli

The editorial aims to frame the main points to exactly define, at the time of the enquiry and order, a steel product that it is to be purchased, to avoid cases of "after-sale" disputes. The basic reference is obviously the product standards, which also define the delivery conditions; these standards can also provide, in specific paragraphs, useful indications for a correct order. The regulatory framework identifies both mandatory and optional requirements.

It is also necessary to mention the importance of any additional documents, the request for which must always be made at the time of the enquiry and order. Finally, additional tests and compliance with several product standards may be requested, again at the time of the offer and order.

COVER/ PAGES 4/5

ASTONISHING STAINLESS ARCHES

(ARCHISTAR... non solo architetti di fama!)

The article describes a series of five stainless steel "misting" arches recently installed at the McArthurGlen Serravalle Designer Outlet in Serravalle Scrivia (province of Alessandria - Italy).

All the arches (diameter of 4200 mm), were made from EN 1.4301 (AISI 304) stainless steel sheets, with a 2R (BA) finish but mechanically re-polished. Each arch is composed of four truncated cones, laser-cut, calendered and welded together by TIG welding. On the

flat part inside the arches, nozzles were then installed to atomise water. So, the arches are enhanced, not only from an aesthetic point of view, but also from a functional one.

Special custom elements: Della Cagnoletta Srl - I-23010 Albosaggia SO - Via Gerone 4, phone: +39 0342 510190, info@dellacagnoletta.com, www.dellacagnoletta.com / **Project and construction management:** HYDEA SpA - I-50142 Firenze FI - Via del Rosso Fiorentino 2/G / **Coordination and safety:** R&P Engineering Srl - I-15069 Serravalle Scrivia AL - Via Novi 39 / **Civil works contractor:** Impresa Tre Colli SpA - I-43036 Fidenza PR - Via Sandro Pertini 17 / **Specialised fountain installations:** Watercube Srl - I-36035 Marano Vicentino VI - Via dell'Industria 2

PAGES 6/7

FROM OUR MEMBERS

1963-2023: ILTA INOX CELEBRATES ITS 60th ANNIVERSARY THIS YEAR

(1963-2023: Ilta inox celebra quest'anno il suo sessantesimo anniversario)

The first and most important company belonging to the Arvedi Group, Ilta inox is considered today one of the leading manufacturers of welded round-section stainless steel tubes. Along with the traditional austenitic stainless steel grades 304, 304L, 316L, 316Ti, 321 and 310S, the company recently introduced in its production range also the 309 grade and 444 grade.

Laser welding technology - The largest welding systems investments were focused on Laser technology: today, there are 22 Laser welding

plants in operation. Ilta inox has developed its expertise in the rolling and monitoring of the roughness of the Laser weld seams.

The new range of High Frequency (HF)

welded structural and decoration tubes - Since spring 2020, new High Frequency (HF) welding lines for the production of structural and decorative round, square and rectangular tubes have been in operation at the new Robecco d'Oglio (province of Cremona - Italy) plant.

Ilta inox, a strategic partner - Ilta inox proposes itself as a strategic partner with a range of round and shaped tubes that is unique in Europe. With the introduction of the new automatic warehouse, the logistics service becomes an integral part of the production process.

Ilta inox and the environment - In 2021, the energy management was certified according to ISO 50001:2018, complemented by the latest Carbon Footprint certification according to ISO 14067:2018. As of July 2022, the photovoltaic panels installed on the roof of the new HF plant contribute to significantly increase the portion of energy used by Ilta inox from renewable sources.

ILTA INOX SPA - I-26010 Robecco d'Oglio CR - Strada Statale 45 bis, Km 13, phone: +39 0372 9801, fax: +39 0372 921538, sales@ilta.arvedi.it, www.arvedi.it/ilta

PAGES 8/9/10

STAINLESS STEEL WELDED TUBES FOR HEAT EXCHANGERS

(Tubi inox saldati per scambiatori di calore)

The tubes used in shell-and-tube heat exchang-



ers can be made of various metals and with different production methods: welded or seamless. The focus in this article is on the former. Although the absence of longitudinal welding often makes seamless pipes more suitable and in demand for very severe applications, one should not make the mistake of thinking of welded pipes, in general, as an inferior product. On the contrary, for many applications seamless and welded pipes are technically equivalent, with an economic advantage in favour of the latter.

An easy and immediate confirmation of the quality currently assured by the product “welded tube” can be obtained by analysing any of the main product specifications according to which it is furnished. They detail all the mandatory requirements concerning materials, production processes, mechanical testing, heat treatment, non-destructive testing, dimensional tolerances and marking, which must be met by tubes that are placed on the market. These main requirements are described in detail within the article.

We thank Eng. Vittorio Maddonini of ISG SpA for the technical and photographic material provided.

PAGE 11

ALL IN ONE... ONE FOR ALL (Tutto in uno... uno per tutti)

The professional cutters described in the article offer such versatility that the manufacturer wanted to accompany the market introduction of a new line, which includes important implementations with a view to “Industry 4.0”, with the motto quoted in the article title: reduction of the different processing stages to a single uninterrupted cycle (“All in One”) and the possibility of addressing several sectors (“One for All”). The entire structure is made of EN 1.4301 (AISI 304) stainless steel, while all parts in contact with the product are made of EN 1.4401 (AISI 316) stainless steel. Their capacity can range from 5 litres up to a maximum of 860 litres.

Realization: Roboqbo Srl - I-40010 Bentivoglio BO - Via Mazzini 1, phone: +39 051 892483, info@roboqbo.com, www.roboqbo.com

PAGES 12/13

SIGNIFICANT ENERGY SAVINGS THROUGH INNOVATIVE SOLUTIONS (Notevoli risparmi energetici tramite soluzioni innovative)

A recent line of MVR (“mechanical vapour recompression”) evaporators is presented in this article. These are concentrators that can operate mainly with fruit juices, purees or tomato concentrates. The plant consists of several in-line effects, typically six, each of which consists of a shell-and-tube heat exchanger and a subsequent vacuum separator.

What allows this type of plant to be characterised

by a low environmental impact is due to the fact that the steam used to heat the foodstuff is supplied by the system itself: the water in the form of steam that is removed from the foodstuff in the vacuum separators is recompressed, heated and sent to the subsequent exchangers. This results in energy cost savings of 46% to 59% compared to a conventional three-effect system.

The parts in contact with the food are made of EN 1.4307 (AISI 304L) or EN 1.4404 (AISI 316L) stainless steel.

Realization: FENCO Food Machinery Srl - I-43124 Parma (PR) - Via Monte Sporno 10/A, phone: +39 0521 303429, contact@fenco.it, www.fenco.it

PAGE 14

GREAT SUCCESS FOR THE MEETING ORGANISED AT ACCADUEO 2023 (Grande successo per l'incontro organizzato ad ACCADUEO 2023)

Centro Inox, during the 16th edition of Accadueo (the reference event for Italian and international water services, held from 11 to 13 October 2023 in Bologna), organised the meeting “Winning the challenge of water loss reduction with stainless steel - new applications and experiences, cost/benefit analysis”. The meeting was a great success and was attended by around 100 delegates.

The meeting, organised in cooperation with Isle Utilities, was sponsored by the International Molybdenum Association (IMOA), the Nickel Institute and Team Stainless.

NEW PROMOTIONAL PROPOSAL FOR COMPANIES PRESENT IN THE VIRTUAL SHOWCASE “CHI FA CHE COSA” (Nuova proposta promozionale per le aziende presenti nella vetrina virtuale “CHI FA CHE COSA”)

The virtual showcase “CHI FA CHE COSA – Alcuni orientamenti” (“WHO DOES WHAT - Some orientations”), available on the Centro Inox website, is a list of “manufacturers and suppliers” of complementary materials and services that may involve the stainless steel sector in various ways.

As of September 2023, the companies present in this virtual showcase can organise, with the support of Centro Inox Servizi, a short distance meeting to present themselves and their products.

For further information:
www.centroinox.it/chi-fa-che-cosa-alcuni-orientamenti - centroinoxservizi@centroinox.it

PAGE 15

AMPP ITALY CHAPTER 3RD INTERNATIONAL CONFERENCE & EXPO FOR CORROSION PREVENTION (AMPP Italy Chapter 3rd International Conference & Expo for Corrosion Prevention)

AMPP Italy Chapter (formerly Nace Italia Milano Section) is organising from 9 to 11 June 2024 the 3rd Edition of the Conference & Expo “Sharing knowledge, the way to go! An International event for the Corrosion Prevention”. The event will take place at the Porto Antico of Genoa. The main topics to be covered will be coatings, cathodic protection, the choice of materials in the petrochemical industry, the use of chemicals, and the use of highly corrosion-resistant steels. Hydrogen and renewable sources will also be discussed.

Centro Inox will be a patron of the event.

For further information and details:

www.amppitaly.org/genoa/2024
genoa2024@amppitaly.org

THE VOLUME “L'ACCIAIO INOX” IS AVAILABLE

(È disponibile il volume «L'Acciaio Inox»)

The volume “L'Acciaio Inox” (“Stainless Steel”) is now available, a practical compendium on stainless steels published by Centro Inox Servizi Srl and written by Eng. Fausto Capelli. The 380-page book is available at a cover price of 39 Euros + postage.

For further information and for the purchase:

Centro Inox - phone: +39 02 86450559 -
e-mail: centroinoxservizi@centroinox.it

PAGE 16

QUALITY REFRIGERATOR CABINETS FOR QUALITY WINES

(Armadi frigo di qualità per vino di qualità)

The realisations described in the article are custom-made refrigerated display cabinets intended for the storage of quality products such as wines and spirits. For their main structure, EN 1.4301 (AISI 304) stainless steel was chosen. To manufacture it, the producer starts with a 0.7/0.8 mm thick strip, which is laser-cut, press-folded and TIG-welded, with or without filler material. The final surface finish is obtained by mechanical polishing or satin finishing, depending on the user's requirements.

Realization: Modulsystem - I-33032 Bertio UD - Via Stradalta 29, phone: +39 0432 917744, info@modulsystem.it, www.modulsystem.it /
Stainless steel furnished by: Nord Est Metalli Srl - I-33078 Z.I.P.R. San Vito al Tagliamento PN - Via Clauzetto 26, phone: +39 0434 85236, info@nordestmetalli.it, www.nordestmetalli.it

CENTRO INOX The Italian Stainless Steel Development Association

Via Rugabella, 1 - 20122 Milano - Italy
Telephone +39 02 86450559 - +39 02 86450569
Fax +39 02 86983932
redazione.inossidabile@centroinox.it
www.centroinox.it

*The subscription to the quarterly INOSSIDABILE,
outside Italy, is free of charge.*

