

# 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

### ROCK ON THE RIGHT TRACK... IT'S A DIFFERENT TYPE OF MUSIC (Sui binari... si cambia musica)

A new regional transport train called "Rock" has been designed and built by Hitachi Rail Italy for Trenitalia.

The double-floor electric train minimises consumption and has been designed to group all converter units (which transform the continuous 3000 volts current into alternating power), into an "above carbody" assembly.

This Power Pack structure built using Centro Inox technical advice was made using EN 1.4404 (AISI 316L) stainless steel in sheets and a welded tube with a rectangular section.

The 1250 kg weight of this structure has a dimension of 5000x2020x630 mm. Each train, which normally consists of 4/5 coaches, has two Power Packs installed – one positioned at the top of the train and the other at the rear.

The stainless-steel choice was motivated by the fact that it can simultaneously guarantee a material with excellent workability characteristics, adequate mechanical seal and resistance against corrosion (atmospheric agents and pollutants).

**Customer:** Trenitalia

**"Rock" train construction company:** Hitachi Rail Italy Spa – 80147 Naples – Via Argine 425, <http://italy.hitachirail.com/>

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### KITCHEN STRENGTH, ELEGANCE AND BRILLANCE

(Forza, eleganza e lucentezza in cucina)

This company has always made extensive use of stainless steel in the manufacture of its products. It combined stainless steel with wood and plastic and created a line entirely from this material for the interior spaces of cupboards and kitchen tops. Shelves for the pantry, extensible shelves, fixed and removable bottle racks and equipped walls. Stainless steel shelves for goblets, food containers and drawers in different heights and with tempered glass inserts – not to mention the strictly stainless steel, drawers and basket accessories, waste bins and drains. All accessories or parts in contact with foodstuffs are made of EN 1.4301 (AISI 304) stainless steel with a Scotch-Brite finish. All other products are made of EN 1.4016 (AISI 430) stainless steel with a Scotch-Brite finish. The thickness varies from 0.5 mm for the finishing sheets of the small matching accessories, to 1.5 mm. It is all spot or TIG welded.

**Made by:** Essetre SpA – 61043 Cagli PU – Via Volta 17, tel. 0721 781897, fax 0721 780210, [info@essetreonline.com](mailto:info@essetreonline.com), [www.essetreonline.com](http://www.essetreonline.com)

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### FROM OUR MEMBERS

#### MARCEGAGLIA SPECIALTIES IS A WORLD LEADER IN STAINLESS STEEL WELED TUBE PRODUCTION

Marcegaglia Specialties is part of the Marcegaglia group which has conquered the world with its stainless steel welded tube production. The company has rolled out its ferritic and duplex tubes, extending the range of application sectors to automotive,

chemical/petrochemicals, heat exchangers, construction and carpentry. Marcegaglia Specialties is a key player in the production of flat austenitic and ferritic products including coils, strips and sheets. These are high-quality in terms of surface appearance and mechanical abilities. This led to the approval of important sectors such as automotive and chemical/petrochemicals.

Marcegaglia Specialties has seen important results in long-product production such as cold drawn bars and stainless steel flat bars. These are market segments in which it has always been among the leading companies.

The company's activity is increasingly focused on developing the stainless-steel sector. The new investments included the purchase of "coil to coil" polishing machines, a second cut-to-length machine (in Vladimir, Russia) and the introduction of a slitter for automatic packaging. Marcegaglia Specialties has paid the maximum attention to customer service, speed and efficiency. To further improve its service, new IT investments in an online platform that allows the customer to confirm product availability and select the required material and order it automatically. This aimed to build loyalty through a constant customer dialogue which is the key to a good partnership. Marcegaglia has set up logistics hubs, served by train, ship or truck, to be globally present with its entire products range, optimise flows and provide an accurate, flexible and just-in-time service.

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### 2008 CONSTRUCTION TECHNICAL STANDARDS OFFICIALLY REPLACED: "TECHNICAL STANDARDS FOR CONSTRUCTION" UPDATE HAS BEEN PUBLISHED

(Ufficialmente sostituite le NTC 2008: pubblicato l'aggiornamento delle "Norme Tecniche per le Costruzioni")

The Technical Standards for Construction review which started almost a decade ago, officially ended when it was signed off by the Infrastructure Minister, Graziano Delrio, Interior Minister Marco Minniti and the Civil Protection Department Head Angelo Borrelli. The official publication took place in OJ no. 42 20/02/2018.

The 2018 Construction Technical Standards replace the 2008 Construction Technical Standards, which

were approved by Ministerial Decree 14/01/2008. Art. 2 of Ministerial Decree 17/01/2018 set the transitional provisions and a transitional period within which the previous technical regulations (2008 Construction Technical Standards) may be applied. Chapter 11 is the reference chapter for materials and products for structural use, and it has been significantly updated, following the provisions of EU Regulation 305/2011 on construction products (CPR) which came into force on 01/07/2013. In addition to maintaining what was already set out in 2008, the 2018 Construction Technical Standards introduce some important regulatory references and provisions that were missing from the earlier version. Specifically, section 11.3.2 on reinforced concrete steel sub-section 11.3.2.8.1 defines how to use "rebar" stainless steel.

There are two important stainless-steel updates included in section 11.3.4, on steel for metal and composite structures. Sub-section 11.3.4.8, is dedicated solely to stainless steel and allows its use for the construction of metal and composite structures. It also refers to the use of stainless steel in compliance with the harmonised standards UNI EN 10088-4 (Stainless steel - Part 4: Technical supply conditions of corrosion-resistant steel sheets and strips for construction) and UNI EN 10088-5 (Stainless steel - Part 5: Technical supply conditions of corrosion-resistant steel bars, wire rods, wire, profiles and cold-processed products for construction).

The old text was modified by inserting references to the harmonised standards drawn up and published in the years after the 2008 Construction Technical Standards publication in the OJ. Another important update concerns the stainless steel connecting elements (sub-section 11.3.4.6.3) in the part dedicated to bolts and nails (11.3.4.6). Compared to the 2008 Construction Technical Standards, a gap has been filled thanks to the presence of a specific sub-section on stainless steel and the introduction of new regulatory references (UNI EN 3506 parts 1, 2, 3 and 4).

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### WASTE BECOMES A RESOURCE WITH STAINLESS STEEL

(Con l'acciaio inossidabile, i rifiuti diventano una risorsa)

"Ecodyger" is an innovative and sustainable system that, thanks to a regeneration process, reduces the volume of organic waste up to 90 percent in just a few hours. A machine cycle, which lasts 5-7 hours, regenerates organic waste and releases liquid and solid residues. "Ecodyger" is made of EN 1.4016 (AISI 430) stainless steel with a satin finish. It offers several advantages: it is easy to install, eliminates usage costs and the need to clean and sanitise storage areas. It cuts personnel costs of handling waste and reduces or eliminates the need for biodegradable bags. "Ecodyger" is compliant with waste prevention regulations.

**Producer:** SAL Srl – 21023 Besozzo VA – via Trieste 81, tel. 0332.7761, [info@sal-italy.com](mailto:info@sal-italy.com), [www.sal-italy.com](http://www.sal-italy.com) - <http://ecodyger.com/it/>  
**Stainless steel manufactured by:** Aperam Stainless Services & Solutions Italy S.r.l. – Massalengo Division – 26815 Massalengo LO – Loc. Priora, tel. 0371.49041,



fax 0371 490475, leonardo.frosali@aperam.com, www.aperam.com

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### URA TECHNOLOGY, NON-STICK INNOVATION

**(Tecnologia URA, l'innovazione nell'antiaderenza)** Ultimate Resistant Application (URA) is a new and revolutionary non-stick technology using a unique stainless-steel processing where the pot's steel inner surface is made more compact, hard and uniform. This means that it is structurally non-stick without needing any coatings. A URA treated surface has a satin appearance which is slightly rough to the touch. URA technology has been patented by a key Italian factory that produces steel domestic and food preparation items.

To produce its food preparation items, the company uses EN 1.4404 (AISI 316L) stainless steel which is known for its high performance in the various fields and hygiene safety. URA technology is an integral part of the pot and coating particles cannot detach, so it does not ruin with use. It also effectively protects the pot from mechanical scratches, corrosion and wear, thus creating an indestructible and durable tool which lasts. URA-finished cookware is made of EN 1.4404 (AISI 316L) stainless steel and is high-performance, regarding non-stick ability and for the best results in food cooking.

**Producer:** Menfi Industria Srl, via S. Aleramo 13 – 20092 Cinisello Balsamo MI  
Tel. 02 660931, info@menfi.it, www.menfi.it

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### STAINLESS STEEL TRAYS INSTEAD OF DISPOSABLE BOXES IN SCHOOL CANTEENS

**(Teglie inox al posto dei box usa e getta nelle mense scolastiche)**

The Scandicci (FI) Municipality, has been using 850 lidded stainless steel "gastronorm" containers since September 2017 to replace disposable polypropylene containers in its school catering. Specifically, EN 1.4301 (AISI 304) stainless steel containers of different sizes: 650 x 530/530 x 325/325 x 265/265 x 162/325 x 176/354 x 325/265 x 162/530 x 162 and 176 x 108 mm, with heights ranging from 10 to 200 mm. The stainless-steel trays are used for food packaging and distribution and can be cleaned and sanitised after the meal. Scandicci is the second Municipality, after Milan to adopt the containers. In 2012 school canteens chose stainless steel for environment and hygiene reasons.

**Customer:** Scandicci (FI) Municipality  
**Contracting Company:** CIR food s.c. – 42124 Reggio Emilia – Via Nobel 19, tel. 0522 53011 www.cirfood.com

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### THE GUN WHICH MADE HISTORY (La pistola che ha fatto la storia)

"92" series pistols are semi-automatic weapons designed for military use. They have been adopted by many law enforcement agencies and the army, thanks to the excellent results compared to the more qualified competition. The most famous and known in the series is the "92FS" pistol, better known as "M9" by the US military who chose it as a sidearm. It met all the American military specifications and surpassed them widely. It is the most tested and reliable sidearm in history.

The "92FS inox" uses EN 1.4021 (AISI 420) stainless steel, available in calibres, 9x19 mm and 9x21 IMI (which is known as the "98FS inox" and destined only for the Italian market only).

Stainless steel is used to produce the barrel and the bolt: elements that, together with the aluminium body, represent the weapon's fundamental parts.

This is not the only model that uses stainless steel. The "Px4 inox" and the "Px4 compatta inox" are made of AISI 420 stainless steel. These two are

aesthetically designed semi-automatic sidearms. The lines are designed to enhance their power, handling, performance and reliability and have original and refined aesthetics.

**Company:** Fabbrica d'Armi Pietro Beretta S.p.A - 25063 Gardone Val Trompia, Via Pietro Beretta 18, Brescia, <http://www.beretta.com/it-it/>

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### THE ITALIAN INSTITUTE OF WELDING - THE GROUP

**(Istituto Italiano Della Saldatura – Il Gruppo)**

Centro Inox wishes to remind its members about its synergy with the IIS Group, with which it cooperates for the technical event organisation, and targeted services for companies operating in the welded products market through-out the various industrial sectors.

The IIS Group consists of: Istituto Italiano della Saldatura – Ente Morale (Italian Institute of Welding – Non-profit organisation), IIS CERT, IIS PROGRESS and IIS SERVICE.

The IIS Group provides personnel training, qualification and certification, certification of welding/manufacturing processes and business management systems.

This enables participants to meet the obligations imposed by the latest European Welded Product Directives and obtain the necessary qualifications and certification to optimise production. These certifications include UNI EN ISO 9001, UNI EN ISO 3834, UNI EN 1090, certifications of welding personnel and procedures and the CE product marking.

Since IIS Group has the necessary knowledge, skills and accreditations (engineering consultancy, weldability issues, non-destructive testing, production process optimisation, welding processes development) it offers national and international consulting services, technical assistance, laboratory, diagnostics, controls and engineering.

**For further information:** [www.iis.it](http://www.iis.it)

### STAINLESS STEEL CORROSION TESTS (from theory to practice)

9 May 2018 - 9.00am - 1.00pm

Venue: RTM BREDA - Via Bianche 18 - Carré (VI)  
This course provides in-depth notes on the main corrosion tests normally carried out on stainless steel, including specific regulatory references to the technical audience.

The theoretical part will be followed by a practical application at the BREDA RTM laboratory.

**For information and registration:** CENTRO INOX SERVIZI Srl  
[eventi@centroinox.it](mailto:eventi@centroinox.it) – [www.centroinox.it](http://www.centroinox.it)  
Tel. 02 86450559 – fax 02 86983932

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### SECOND CONFERENCE & EXPO 2018

**"A European event for the Corrosion Prevention."**

**From industry to industry**

**"Magazzini del Cotone" - Genoa, 27 - 29 May 2018**

**NACE Milano Italia Section and NACE Europe**  
NACE Milano Italia Section and Nace Europe are organising the Conference & Expo, which will take place in Genoa 27-29 May 2018 at Magazzini del Cotone.

The Conference will consist of more than 150 presentations, divided into five parallel sessions. The detailed programme (albeit not yet definitive) is published on the Conference website. More than 50 exhibitors will be present.

The main topics discussed will be: Oil&Gas Pipelines and Upstream, Protective Coatings, Cathodic Protection, Corrosion Resistant Alloys and Welding, Failure Analysis, Corrosion Inhibitors and Monitoring, MIC, AD Manufacturing.

Centro Inox is the event's media partner and will have a stand.

**For further information and details:** [www.naceitalia.it/genoa2018](http://www.naceitalia.it/genoa2018)

### ACCADUEO - an exhibition of supply chains that give value to water

**14th ACCADUEO**, the international water exhibition organised by BolognaFiere, has been an Italian water services sector reference event for 28 years. It will take place in dedicated and renewed spaces in Bologna, **from 17-19 October 2018**.

The next meeting will present important innovations and make ACCADUEO a meeting place for Italian companies, technicians, public administration, utilities and foreign buyers organised on **threededicated** exhibition paths:

**H2O Urban** – mainly focused on technologies, products and systems which distribute, control and treat civil water.

**H2O Industry** – focused on technologies, products and systems which control, treat, and process waste water.

**CH4** – focused on technologies and systems for gas transportation and distribution, with a dedicated seminar area and an international conference.

Centro Inox will be present for the duration of the event with a stand and will organise a meeting lasting about half a day with the theme: "Water and stainless steel: a winning combination for the future".

**For further information:** [www.accadueo.com/](http://www.accadueo.com/)  
Centro Inox – tel. 02 86450559/69, [eventi@centroinox.it](mailto:eventi@centroinox.it), [www.centroinox.it](http://www.centroinox.it)

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### MOSQUITOS (Mosquitos)

Another example of the use of stainless steel in sculptures, which allow a sculptor to create natural living forms – in this case from the insect world. They are unique pieces made with a relatively heavy solid central core and with the other parts made of stainless steel wire to simulate the legs. They also make the sculpture oscillating and elastic.

The entire collection presented here, is made up of 12 entirely stainless-steel elements, skilfully processed through industrial cycles, but hand finished; EN 1.4301 (AISI 304) and EN 1.4401 (AISI 316) have been used.

**Sculptor:** Arch. Andrea Forges Davanzati – 09124 Cagliari – Via Carlo Buragna 22, [andrea@forgesdavanzati.com](mailto:andrea@forgesdavanzati.com), [www.forgesdavanzati.com](http://www.forgesdavanzati.com)  
**Photo:** Daniela Zedda

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