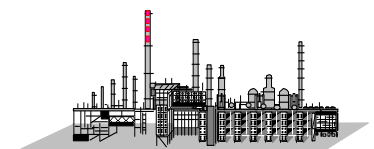


ITALCHEM CHEMICAL CLEANING REFERENCES

Italchem providing Italian and International customers quality service since 1973. We point out, here following, our references concerning the main chemical cleanings of HRSG, Boilers and plants performed by us, recently.

- ◆ **2023**, Cooling system water flushing, Wartsila n. 6 Motors, on **A2A** site, located in **Cassano D'Adda (MI)**, for our customer **Cefla S.C.**
- ◆ **2023**, Chemical cleaning of equipments, for our customer **ALTUGLAS (Italy)**.
- ◆ **2023**, Preoperational chemical cleaning of **Pipe Superheater** for our customer **DEPRETTO INDUSTRIE** on Plant Amel 2 **Belgio**.
- ◆ **2023**, Preoperational chemical cleaning with monophasic method "Citrosolv Procedure" of **N. 2 Superheater** on Plant **Hera Ambiente Ferrara (FE) - Italy**
- ◆ **2023**, Preoperational chemical cleaning with monophasic method "Citrosolv Procedure" of **N. 2 Superheater** on Plant **Ruths Spa Genova (GE) - Italy**
- ◆ **2023**, Chemical cleaning of n. 1 **HRSG HP EVA**, installed in **ERG-POWER in Priolo G. (SR) - Italy**, for our customer **ERG-POWER**.
- ◆ **2023**, Boiling Out of **N. 1 Boiler WASTE-TO-ENERGY Hera** in the Power Station in Ravenna - Italy, for our customer **Area Impianti**.
- ◆ **2022**, Preoperational chemical cleaning with monophasic method "Citrosolv Procedure" of **N. 1 Superheater** on Plant **Hera Ambiente Isernia - Italy**
- ◆ **2022**, Chemical cleaning of equipments, for our customer **ALTUGLAS (Italy)**.
- ◆ **2021**, Preoperational chemical cleaning of **N. Pipe Superheater** for our customer **STC POWER** on Plant Riva del Garda - **Italy**
- ◆ **2021**, Preoperational chemical cleaning with monophasic method "Citrosolv Procedure" of **N. Superheater** on Plant **Hera Ambiente Ferrara - Italy**
- ◆ **2021**, remediation of equipments, for our customer **COLINES** San Pietro Mosezzo (NO) - **Italy**
- ◆ **2021**, remediation of equipments, for our customer **SIMER** Villanova d'Asti (AT) - **Italy**
- ◆ **2021**, Chemical cleaning of equipments, for our customer **ALTUGLAS (Italy)**.
- ◆ **2021**, Chemical cleaning, hot oil flushing, high pressure hydrodynamic flushing, **hydrostatic** pressure tests, oil pressure tests concerning new piping and systems for on shore platforms, on **Rosetti Marino** site, located in **Ravenna**, for our customer **Rosetti Marino SpA**



- ◆ **2021**, remediation of equipments, **PRAXAIR** Monte Marengo (LC) - Italy
- ◆ **2021**, Chemical cleaning of n. 2 **HRSG HP EVA**, installed in **TENARIS DALMINE** in **Dalmine (BG)** - Italy
- ◆ **2021**, Chemical cleaning of equipments, installed in **CRH (Slovensko) a.s. Plant** in **ROHOZNIK (SLOVAKIA)** for our customer **CRH (Slovensko)**.
- ◆ **2020**, Chemical cleaning of n. 1 Boiler installed in **POMODORO – MUTTI S.p.A.** **Parma Italy**.
- ◆ **2020**, Chemical cleaning of equipments, for our customer **ARKEMA (Italy)**.
- ◆ **2020**, Chemical cleaning of equipments, for our customer **PRAXAIR (Italy)**.
- ◆ **2020**, Chemical cleaning of equipments, installed in **Cesano Boscone Italy** for our customer **TURBODEN (Italy)**.
- ◆ **2020**, Chemical cleaning, hot oil flushing, high pressure hydrodynamic flushing, **hydrostatic** pressure tests, oil pressure tests concerning new piping and systems for on shore platforms **Tulmuont**, on **Rosetti Marino** site, located in **Ravenna Italy**, for our customer **Rosetti Marino S.p.A.**
- ◆ **2019**, Chemical cleaning of equipments, installed in **CRH (Slovensko) a.s. Plant** in **ROHOZNIK (SLOVAKIA)** for our customer **CRH (Slovensko)**.
- ◆ **2019**, Chemical cleaning of equipments, installed in **Jura-Cement-Fabriken AG** (Wildegg Switzerland) for our customer **TURBODEN (Italy)**.
- ◆ **2018**, Preoperational Chemical cleaning of **N. 1 Boiler Termovalorizzatore (Pensotti, Sices)** in the New Biomass Combined Cycle Power Station in Macchiareddu-Cagliari - Italy, (procedure with mono-phase method), for our customer **STC-Forlì-Italy**
- ◆ **2018**, Chemical cleaning of **N. 1 BOILERS TOSI 160 MW** in the Thermoelectric Power Station of **A2A Milazzo (ME)-Italy**, (procedure with HCl three-phase method), for our customer **A2A**.
- ◆ **2017÷2018** Chemical cleaning of **HP HRSG 21 and HP HRSG 23**, in Shuweihat 1 Power Plant (Abu Dhabi, UAE), for our customer **SCIPCO Al Shuweihat CMS International Power Company / NOOTER ERIKSEN**.
- ◆ **2017** Chemical cleaning of n. 1 Boilers **TOSI 160 MW**, Power Plant **A2A San Filippo del Mela (ME)- ITALY**, for our customer **A2A**.
- ◆ **2016**, Preoperational chemical cleaning with monophasic method “Citrosolv Procedure” of **N. 8 MSR Moisture Separator Reheater (STF)**, on Nuclear Power Plant **Slovenské Elektrárne ENEL** on Mochovce, **(SLOVAKIA)**, for our customer **Slovenské Elektrárne**
- ◆ **2015**, Chemical cleaning of equipments, installed in **CRH (Slovensko) a.s. Plant** in **ROHOZNIK (SLOVAKIA)** for our customer **TURBODEN**
- ◆ **2014÷2015**, Preoperational chemical cleaning with mono-phase method Procedure Citrosolv of **N. 6 HRSG 400 MW each. (STF)**, in the new Combined Cycle Power Plant **CAIRO ELECTRICITY** in GIZA NORTH (Egypt), for our customer **STF**.

- ◆ **2014**, Chemical cleaning of equipments, installed in the Plant **ESF Elbe Stahlwerke Feralpi** on **Riesa (Germany)** for our customer **TURBODEN**
- ◆ **2013**, Chemical cleaning of new piping, circuits and equipments, installed in the new Units (Est Project) of **Eni Refinery**, located on **Sannazzaro Dé Burgondi** for our customer **ENI Div. R&M**
- ◆ **2013**, Chemical cleaning, hot oil flushing, high pressure hydrodynamic flushing, **hydrostatic** pressure tests, oil pressure tests concerning new piping and systems for on shore platforms **West Franklin and Elgin B**, TOTAL Project, on **Rosetti Marino** site, located in **Ravenna**, for our customer **Rosetti Marino SpA**
- ◆ **2013**, Chemical cleaning of n. 2 Boilers **Macchi** installed on ship LNG Lerici of **LNG Shipping S.p.A.** for our customer **MACCHI, Div. SOFINTER SpA.**
- ◆ **2013**, Preoperational Chemical cleaning of of **N. 1 Incinerator Boiler (RUTHS)** in the New Biomass Power Station **IREN** sited in Parma (Italy), for our customer **RUTHS**
- ◆ **2013**, Chemical cleaning of boiler **Pensotti Idrotermici**, installed on the Thermoelectric Power Station of **Cartiera Reno De Medici** located on **Villa Santa Lucia (FR)** for our customer **Reno De Medici SpA**
- ◆ **2012**, Chemical cleaning, hot oil flushing and high-pressure hydrodynamic flushing of piping and systems installed on the new Thermoelectric Power Station (bio-fuel) **STC** site on **FERRERO** plant, located on Sant'Angelo dei Lombardi (AV) for our customer **CMA**
- ◆ **2012**, Pickling and passivation of inox steel piping and systems for on shore platform **HALFDAN BC, CONOCOPHILLIPS PETROLEUM COMPANY U.K. LIMITED** Project, on **Rosetti Marino** site, located in **Ravenna**, for our customer **Rosetti Marino SpA**
- ◆ **2012**, Preoperational chemical cleaning of steam lines and superheater systems of Combined Cycle Power Plant installed on the new Power Plant **Energia Pulita SpA**, located on Gorizia, for our customer **TECNO TERM SpA**
- ◆ **2011**, Preoperational chemical cleaning of condenser systems and steam piping of new Combined Cycle Power Plant installed on Malagrotta (Roma), for our customer **E. Giovi S.r.l.** and **ELEPRO PROJECTS S.r.l.**
- ◆ **2011**, Chemical cleaning of n. 2 Boilers **Macchi** installed on ship LNG Portovenere for our customer **LNG Shipping S.p.A. / Carbofin Energia Trasporti S.p.A.**
- ◆ **2011**, Preoperational chemical cleaning of piping systems and steam lines of new Combined Cycle Power Plant **Tamarete Energia** located on Tamarete (CH) for our customer **S.T.C. SpA.**
- ◆ **2011**, Chemical cleaning of piping and equipments concerning the maintenance shutdown 2011 of the Urea Units production plant of YARA **Italia** on **Ferrara**, for our customer **YARA Italia**

- ◆ **2011**, Preoperational chemical cleaning of circuits installed on board of cruise ships of new constructions (Costa Project) on shipyards **FINCANTIERI** of **Marghera** and **Monfalcone**, for our customer **Alessandrin Srl**.
- ◆ **2011**, Chemical cleaning of **N. 1 Boiler GdV (Tosi)** on Combined Cycle Power Plant of **ENIPOWER Mantova**, for our customer **ENIPOWER**
- ◆ **2010**, Chemical cleaning of **N. 1 HRSG 400 MW (ANSALDO)** on Combined Cycle Power Plant of **ENIPOWER Ravenna**, for our customer **ENIPOWER**
- ◆ **2010**, Chemical cleaning of piping and equipments concerning the maintenance shutdown 2010 of the Urea Units production plant of **YARA Italia** on **Ferrara**, for our customer **YARA Italia**
- ◆ **2010**, Preoperational chemical cleaning, monophasic method "**Citrosolv Procedure**" of **N. 2 HRSG 400 MW each**. (Nooter Eriksen **America**), on new Combined Cycle Power Plant **Enerji sa**, located on Bandirma (Turkey), for our customer **A-TEC Power Plant System (AE&E Power Plant Systems GmbH)**, **Austria**.
- ◆ **2009**, Preoperational chemical cleaning (three phase method) of **N. 2 HRSG 400 MW each (Ansaldo)**, on new Combined Cycle Power Plant **ErgoSud**, located on Scandale (Crotone), (**TECHINT and ALSTOM POWER** Project) for our customer **TECHINT**
- ◆ **2009**, Chemical cleaning with monophasic method "**Citrosolv Procedure**" of **N. 1 HRSG 400 MW (Ansaldo)**, on Combined Cycle Power Plant **ENIPOWER**, located in Livorno, for our customer **ENIPOWER**
- ◆ **2009**, Preoperational Chemical cleaning with monophasic method of **N. 1 Boiler Termovalorizzatore (Mercegaglia CCT)** on new Biomass Combined Cycle Power Station **HERA**, located in Modena, for our customer **HERA**
- ◆ **2008**, Preoperational chemical cleaning of **N. 2 HRSG 400 MW each (STF)**, on the new Combined Cycle Power Station **EON**, located on Livorno Ferraris (Vercelli), for our customer **SIEMENS**, (procedure with three phase method by HF hydrofluoric acid followed by wastewater treatment on pit),
- ◆ **2008**, Degreasing of new plant and Boiling-out of boilers for the new units (**FWI Foster Wheeler Italia** project) on **Saras Refinery**, located on Sarroch (Ca) for our customer **SARAS** and **FWI Foster Wheeler Italia**
- ◆ **2008**, Preoperational chemical cleaning of **N. 1 HRSG (Pensotti)**, in the new Combined Cycle Power Station **Barilla**, located on Parma, for our customer **FENICE EDF**
- ◆ **2008**, Preoperational chemical cleaning of **N. 2 HRSG 400 MW each (NOOTER ERIKSEN)** on the new Combined Cycle Power Station **Polimeri Europa**, located on Ferrara, for our customer **NOOTER ERIKSEN** (procedure monophasic Citrosolv method")
- ◆ **2008**, Preoperational Chemical cleaning of **N. 1 Boiler Termovalorizzatore (Ruths, Sices)** in the New Biomass Combined Cycle Power Station **HERA** in Forlì, (procedure with mono-phase method), for our customer **HERA**

- ◆ **2007**, Preoperational Chemical cleaning of **N. 2 HRSG 400 MW each (NOOTER ERIKSEN)** in the Thermoelectric Power Station **EDIPOWER** in Turbigo - Milan, (procedure with HCl three-phase method), for our customer **TECHINT** and **Maire Engineering**
- ◆ **2007**, Chemical cleaning of Superheater system SH of Boiler Breda installed on Polimeri **Europa** plant on **Sarroch (CA)**, for our customer **ANSALDO Caldaie**
- ◆ **2007**, Pickling and passivation of inox steel piping and systems for on shore platform, on **Rosetti Marino** site, located in **Ravenna**, for our customer **Rosetti Marino SpA**
- ◆ **2006**, Preoperational Chemical cleaning of **N. 2 HRSG 120 MW each (MACCHI)** and Steam Lines in the Thermoelectric Power Station of TENARIS in DALMINE, (procedure with "citrosolv" mono-phase method), for our customer **TENARIS**
- ◆ **2006**, Preoperational Chemical cleaning of **N. 1 HRSG 400 MW (NOOTER ERIKSEN)** in the Thermoelectric Power Station of **Polimeri Europa**, Ferrara, (procedure with "citrosolv" mono-phase method), for our customer **NOOTER ERIKSEN**
- ◆ **2006**, Chemical cleaning of **N. 3 BOILERS** in the Thermoelectric Power Station of CARSID in **Marcinelle – Belgium**, (procedure with HCl three-phase method), for our customer **CARSID**
- ◆ **2006**, Preoperational Chemical cleaning of **N. 1 HRSG 400 MW (ANSALDO)** and Steam Lines in the Thermoelectric Power Station of **ANSALDO ENERGIA** in Rosignano (LI), (procedure with "citrosolv" mono-phase method, following by air blowing), for our customer **ANSALDO ENERGIA**,
- ◆ **2006**, Preoperational Chemical cleaning of **N. 1 HRSG 400 MW (ANSALDO)** in the Thermoelectric Power Station of **ENIPOWER** Ravenna, (procedure with "citrosolv" mono-phase method), for our customer **ENIPOWER**
- ◆ **2005**, Preoperational Chemical cleaning of **N. 1 HRSG 400 MW (STF)** and Steam Lines in the Thermoelectric Power Station of **ENEL POWER** in Cassano D'Adda (MI), (procedure with "citrosolv" mono-phase method, following by air blowing), for our customer **ENEL POWER**
- ◆ **2005**, Preoperational Chemical cleaning of **N. 1 HRSG 400 MW (ALSTOM)** and Steam Lines in the Thermoelectric Power Station of **METKA/PPC**, Lavrion - Grecia, (procedure with "citrosolv" mono-phase method, following by air blowing), for our customer **METKA/PPC**
- ◆ **2005**, Preoperational Chemical cleaning of **N. 3 HRSG 400 MW each (NOOTER ERIKSEN)** in the Thermoelectric Power Station of **ENIPOWER** Brindisi; (procedure with "citrosolv" mono-phase method), for our customer **NOOTER ERIKSEN**
- ◆ **2005**, Preoperational Chemical cleaning of **N. 2 HRSG 400 MW each (STF)** and Steam Lines in the Thermoelectric Power Station of **ENEL POWER**, Tavazzano, Lodi, for our customer **ENEL POWER**

- ◆ **2004**, Chemical cleaning of **N. 2 HRSG 400 MW each (NOOTER ERIKSEN)** in the Thermoelectric Power Station of **ENIPOWER** Ferrera Erbognone - Pavia, (procedure with "citrosolv" mono-phase method), for our customer **NOOTER ERIKSEN**
- ◆ **2004**, Preoperational Chemical cleaning of **N. 2 HRSG 400 MW each (NOOTER ERIKSEN)** in the Thermoelectric Power Station of **ENIPOWER** Mantova, (procedure with "citrosolv" mono-phase method), for our customer **NOOTER ERIKSEN**
- ◆ **2004**, Preoperational Chemical cleaning of **N. 2 HRSG 400 MW each (NOOTER ERIKSEN)** in the Thermoelectric Power Station of **ENIPOWER** Ravenna, (procedure with "citrosolv" mono-phase method), for our customer **NOOTER ERIKSEN**

moreover:

- ◆ Preoperational Chemical cleaning of **N. 1 HRSG 400 MW (FWI)** and Steam Lines, in the Thermoelectric Power Station of **Tamoil**, Collombey - Svizzera, (procedure with HCl three-phase method), for our customer **Irem – FWI**
- ◆ **Chemical cleaning of alkylation plant refinery SARAS di Sarroch (CA)**
- ◆ **Chemical cleaning of alkylation plant refinery AGIP in Gela and ESSO in Augusta**
- ◆ **Chemical cleaning of alkylation plant refinery MOBIL OIL of Napoli**
- ◆ **Chemical cleaning of alkylation plant refinery Liquichimica of Augusta**
- ◆ **Chemical cleaning of alkylation plant refinery IP of Rho**
- ◆ Preoperational chemical cleaning of **N. 1 HRSG (STF)** and Steam Lines, in the Thermoelectric Power Station of **ENEL POWER**, Ponti sul Mincio – Mantova, for our customer **ENEL POWER**
- ◆ Preoperational chemical cleaning of **N. 2 HRSG 400 MW each (FWI Foster Wheeler Italia)** and Steam Lines, in the Thermoelectric Power Station of **ENICHEM**, Ferrara, for our customer **FWI**
- ◆ Preoperational chemical cleaning of **N. 4 HRSG 400 MW (ANSALDO)** and Steam Lines, in the Thermoelectric Power Station of **ENEL** in Trino Vercellese - Vercelli, for our customer **ANSALDO ENERGIA**
- ◆ Preoperational chemical cleaning of **N. 4 HRSG 400 MW each** and Steam Lines in the Thermoelectric Power Station of **T.R.E.C.** Ghom – Iran, for our customer **A.B.B. Sadelmi**
- ◆ **N. 3 HRSG** and Steam Lines, in the Thermoelectric Power Station of **Power Center**, Damietta - Egitto, (pre-operational chemical cleaning with HCl three-phase method) for our customer **Nuova Cimi Montubi**.
- ◆ **N. 2 HRSG (FWI)** and Steam Lines in the Thermoelectric Power Station of **Fiat Auto**, Mirafiori - Torino, (pre-operational chemical cleaning with HCl three-phase method) for our customer **FWI**

Chemical cleaning and passivation of high potentiality steam generators

ENEL

Steam Generators:

- ✓ ANSALDO/BABCOCK up to 250, 500, 1000 T/h, and more
- ✓ ANSALDO/BENSON up to 850 T/h
- ✓ TOSI/C.E. up to 250, 500, 1000 T/h, and more

Feed water and condenser heaters

Condenser Steam side (alkaline cleaning)

Thermal cycles (before start-up)

- ✓ Compartment of Milan (GIT of La Casella, Piacenza, Sermide, Turbigo)
- ✓ Compartment of Torino (GIT of La Spezia, Vado Ligure, Genova, Chivasso)
- ✓ Compartment of Venezia (GIT of Monfalcone, Porto Tolle, Fusina)
- ✓ Compartment of Firenze (GIT of Piombino, Livorno, Portocorsini)
- ✓ Compartment of Roma (GIT of Civitavecchia, Torrevaldaliga Sud)
- ✓ Compartment of Napoli (GIT of Brindisi, Mercure)
- ✓ Compartment of Palermo (GIT of S.Filippo del Mela, Porto Empedocle)
- ✓ Compartment of Cagliari (GIT of Sulcis)

ENICHEM

Chemical cleaning of steam generators:

- ✓ Porto Torres, chemical cleaning 11 Boilers Tosi and Breda
- ✓ Sarroch (CA) Polimeri, chemical cleaning Boiler Tosi B2
- ✓ Sarroch (CA) Saras, chemical cleaning Boiler Tosi B1C
- ✓ Sarroch (CA) Saras, chemical cleaning CO Boiler
- ✓ Mafredonia, chemical cleaning CO Boiler
- ✓ Gela, chemical cleaning boiler Tosi
- ✓ Priolo, chemical cleaning boiler Shulzer, Tosi, Breda
- ✓ Ravenna, chemical cleaning boiler Tosi
- ✓ Mantova, chemical cleaning boiler Tosi
- ✓ Brindisi, chemical cleaning boiler Tosi

And numerous other boilers of several potentiality cleaned, also periodically, as in Italy than abroad.

Besides, more other numerous chemical cleanings of

- Boilers of average potentiality,
- Different kind of pressure equipments for the most important chemical companies.
- Equipments and circuits on Refinery plants:

- Refinery Saras di Sarroch (CA)
- Refinery ENI di Sannazzaro (PV)
- Refinery ESSO di Trecate (NO)
- Refinery Tamoil di Cremona (CR)
- Refinery AGIP/ERG di Priolo Gargallo (SR)
- Refinery AGIP di Marghera (VE)