



TITANIUM REACTORS

Field: **PHARMACEUTICAL**

Location: **ITALY**

Year: **2020**

Project: **No 2 Reactors**

Design code: ASME VIII Div.1

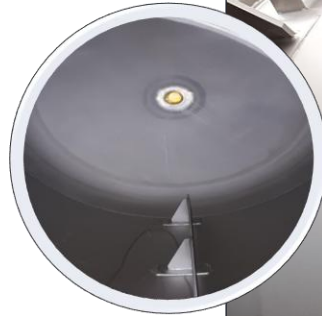
Diameter: 1800 mm

Height: 1,500 mm

Thickness: 6 mm

Material: SB 265 Titanium Gr2

Design Pressure: +0,050Mpa



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DISTILLATION PLANT COLUMNS FULL SUPPLY

Client: Field: **Distillery**

Country: **Greece**

Year: **2025/26**

Design code: EN 13445

Material AISI 316L/304L

No. 10 Columns

Diam 600 to 1600mm

Height 5500 to 40.000 mm

Thickness: 5 to 20 mm

PED: CAT. 4 Mod. G



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DISTILLATION COLUMN IS SUPER DUPLEX

Year: **2025**

Client: **Non disclosed**

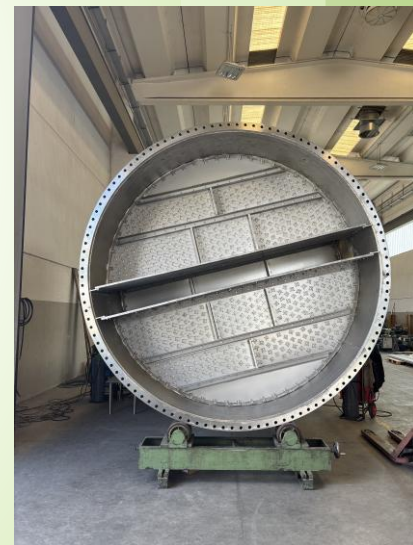
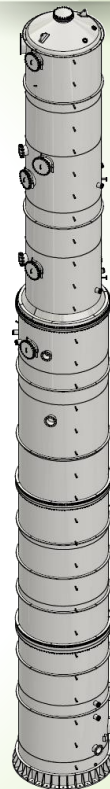
Field: **Distillery - Whisky**

Location: **Scotland**

Project: **Distillation Column**

Material: EN 1.4501 / SUPER DUPLEX UNS
S32760

Diam: Ø2724-Ø3430
Height: 32974 mm



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TANK FARM EMULSION RUBBER

Field: **EMULSION RUBBER**

Location: **FRANCE**

Year: **2019 - 2021**

Project: ***Tank Farm***

Design code: EN14015/

API650

Diameter: 4000 to 8100 mm

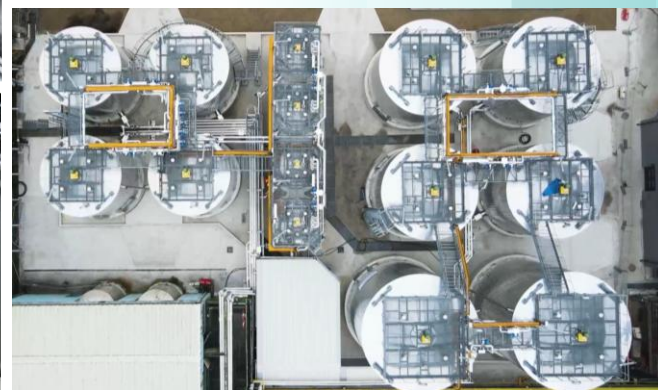
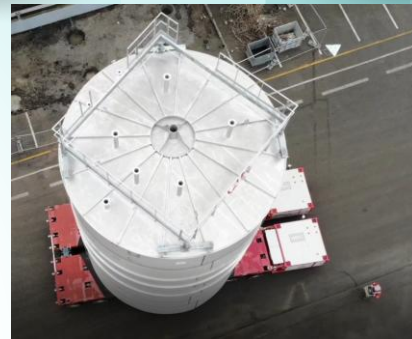
Height: 4000 to 12000 mm

Tanks capacity: 8 x 600m³

And 12 from 45 to 300m³

Material: EN 1.4307 / AISI

304L





MVR PROJECT

Field: **Food & Beverages**

Design code: EN 13445
Material AISI 316
Diameter: 1,900 mm
Total weight: 40 Tons
Height: 22,000 mm
Weight 23,000 kg
Material: AISI 316
Design Pressure: -1 / + 0,49
Thickness: 8 mm
Tube Bundle No.592d.42,4x1,25



No 4 MVR - Year 2023
Diameter: 2,000 mm
Height: 22,000 mm
AISI 316

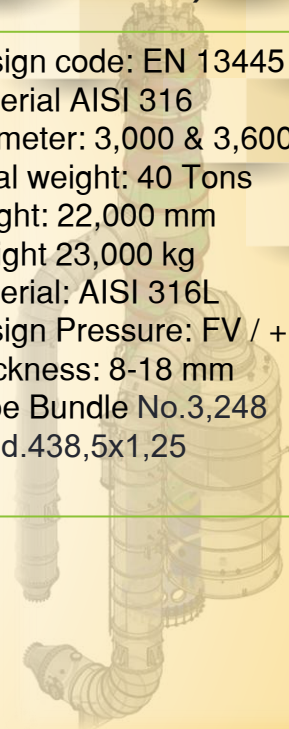
PROJECT MVR 6.000 mc



Client: Field: **Distillery (Brownfield)**



Design code: EN 13445
Material AISI 316
Diameter: 3,000 & 3,600 mm
Total weight: 40 Tons
Height: 22,000 mm
Weight 23,000 kg
Material: AISI 316L
Design Pressure: FV / + 0,49
Thickness: 8-18 mm
Tube Bundle No.3,248
d.438,5x1,25





AUSTRALIA PROJECT

2017

Field: **CHEMICALS, DISTILLATION UNIT**



- No. 4 units AISI316
- Ø2400 to 2700mm
- Height 31 to 42m
- Weight 40 to 66 tons

AUSTRALIA PROJECT

2020



- No. 5 units AISI316L 316Ti, 304L
- Design code AD2000 / PED
- Ø 2.000 to 3.800
- Height 30 to 55m
- Weight 32 to 85 tons



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FERRARA PROJECT

Year 2002 (ref. 1263)

No. 1 Distillation column

No. Heat Exchangers



NESLE



Year 2003 (ref. 1217)

No. 2 Distillation column

No. 10 Heat Exchangers

NESLE



Plant equipment Distillery

Year 2003 (ref. 1322)

Distillation columns

Fermentors

Steel Structure





BIOTECH

Year 2000 (ref. 1092)

Scope of work: Mec. Design&Construction
of no.1 bioreactor FERMETER Capacity 48.000 l

Design code: AD-Merkblatt

AISI 304

Agitator: Top Mounted



RYSEN Alcools

Year 2004 (ref. 1388)

No. 22 Storage Tanks

Stainless steel - Distillation



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DIESTER -BioEthanol

Year 2005 (ref. 1425)
No. 5 Hea Exchangers



Year 2005 (ref. 1433)
D510 column

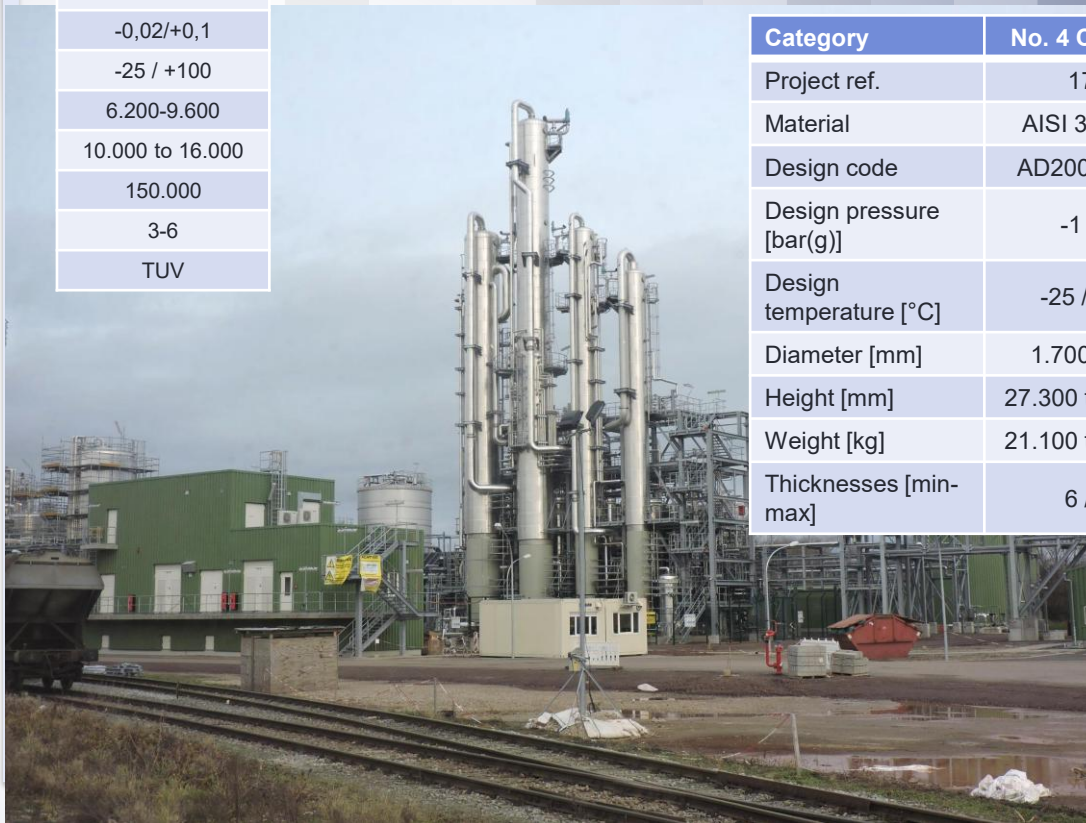


No. 7 tanks
AISI 304/316
VdTUV/ AD-2000
-0,02/+0,1
-25 / +100
6.200-9.600
10.000 to 16.000
150.000
3-6
TUV

Distillation Unit



Category	No. 4 Columns
Project ref.	1730
Material	AISI 304 /316
Design code	AD2000 / PED
Design pressure [bar(g)]	-1 / +4
Design temperature [°C]	-25 / +160
Diameter [mm]	1.700-2.600
Height [mm]	27.300 to 41.000
Weight [kg]	21.100 to 59.000
Thicknesses [min-max]	6 / 12



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CHEMICAL SLUDGE REACTOR

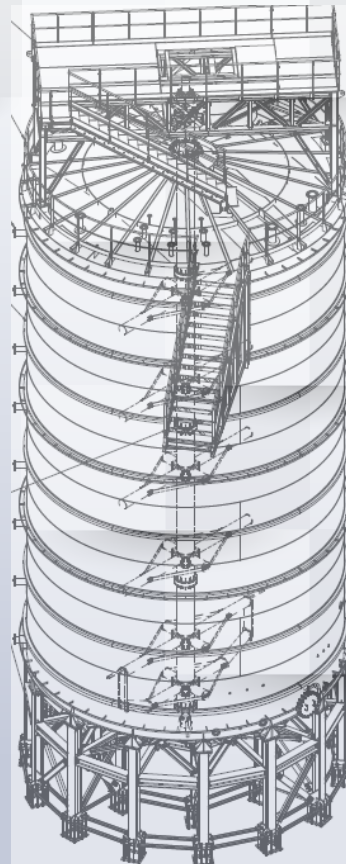


Zero accidents

Zero near missing



Project ref.	1893_1894_1902 1912_1930
Main scope of work	Design&Construction of no.1 reactor
Design code	EN13445
Material	SAF 2205
Additional scope	Demolition Civil works Mechanical works Agitator Insulation
Weight total	100 t



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HEAT EXCHANGERS DISTILLATION PLANT

Field: **DISTILLATION UNIT**

Location: **FRANCE**

Year: **2023**

Design code: EN13445

Diameter: 300 to 1300 mm

Height: 1890 to 7800 mm

Tube bundles: from No.48 to 460,
length 2000 to 9000mm, Ø38,1

Material: EN 1.4307 / AISI 304L





2017

Client: ---

Field: **Distillery (Brownfield)**

Location: **Australia**

Project: **MVR 6.000 mq/each
(CO1835 & 1859)**

MVR UNITS

2023

Client: ***the same***

Field: ***Distillery (Brownfield)***

Location: ***Australia***

Project: **No. 3 MVR 6.000 mq/each
(CO2044 & 2050)**

Ø3000 x 28500 mm evaporators

Ø4250 x 9800 mm separators



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TIGER PROJECT



- No. 5 units AISI316Ti
- Design code AD2000 / PED
- Ø 1.600 to 4.200
- Height 27 to 51m
- Weight 24 to 123 tons

NEDALCO /CARGILL Project



Year 2005 (ref. 1414)
No. 7 Distillation column



Year 2005 (ref. 1415)
No. Hea Exchangers





PHARMACEUTICAL PLANT

Field: **PHARMA PLANT**

Location: **SWIZERLAND**

Year: **2022 - 2023**

Design code: EN13445-3

No. 25 Vessels and Tanks

Diameter: 900 to 2900 mm

Height: 1970 to 12500 mm

Weight: 490 to 11,000 kg

Material: EN 1.4304 / AISI 316L





LAB
SCALE-UP



QUALITY



BIOPOLYMERS



Project ref.	1903
Application field	Biochemical
Material	AISI 304
Design code	ASME VIII Div.1
Capacity	60 m ³
Design temperature	204°C
Design pressure	-1 / +2.1 barg

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GRAAL PROJECT

Client:

Field: **CHEMICALS**

Location: **CITAL WORKSHOP**

Project: **LOW PRESSION COOKING REACTOR**

CORE EQUIPMENT FOT BIOETHANOL 2G PLANT



Project ref.	1670
Material	UNS S31803 – SAF2205
Design code	ASME VIII Div.1
Design pressure [bar(g)]	-1 / +10
Design temperature [°C]	0 / +177
Diameter [mm]	4.500
Height [mm]	33.500
Weight [kg]	90.000
Thicknesses [min-max]	16 / 20
No.Bo	TUV

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COLUMNS

Field: **Chemical**



Location: **Italy**

Design code: ASME VIII

Diameter: 850 mm

Total weight: 40 Tons

Height: 26,000 mm

Material: AISI 316

Design Pressure: FV / +5

Thickness: 6/12 mm

PED: CAT. 4 Mod. G

DISTILLATION UNIT

Field: **Chemical**



No. 4 Columns AISI 304 /316

Design code AD2000 / PED

Design pressure -1 / +4

Ø 1.700 to 2.600 mm

Height 27 to 41m

Weight 21 to 59 tons

No. 7 Tanks AISI 304 /316

Design code VdTUV / AD2000

Design pressure -0,02 / +0,1

Ø 6,200 to 9,600 mm

Height 10 to 16m

Thickness 3-6mm

Weight 150 tons

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Bonus for early
delivery awarded



Quality



CHEMICAL IRON OXIDES

Project ref.	1840-1870
Project type	Replacement project
Main scope of work	Design&Construction of no.1 reactor
Product	Yellow iron powder
Design code	EN13445
Material	SAF 2205
Additional scope	Civil works, Demolition, Mechanical works, Insulation
Weight total	120 t

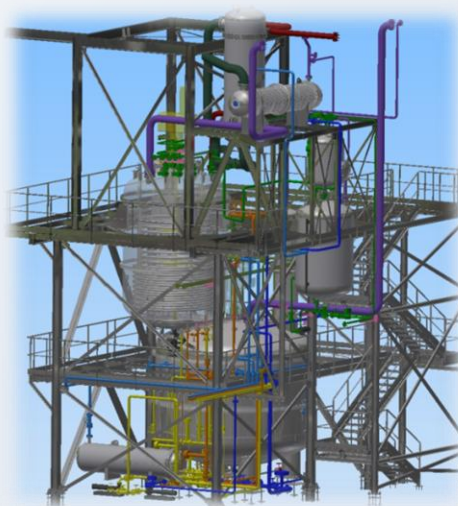


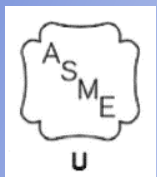
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RESIN PLANT

Client:
Field: **CHEMICAL**
(Brownfield)
Location: **ITALY**
Project: **Shop vessels,
steel structure, piping
and site mechanical
installation, testing
(1715)**





FINE CHEMICALS



<u>Project ref.</u>	1734 (1 piece) 1756 (2 pieces)	<u>Design temperature</u> [°C]	120
<u>Country</u>	US	<u>Diameter</u> [mm]	2920
<u>Application field</u>	Chemical	<u>Height</u> [mm]	9500
<u>Material</u>	AISI 316	<u>Weight</u> [kg]	17360
<u>Design code</u>	ASME VIII Div.1	<u>Thicknesses</u> [min-max]	8
<u>Design pressure</u> [bar(g)]	-0,08 / +0,48	<u>No.Bo</u>	SGS

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RESIN PLANT

Client:

Field: **CHEMICAL** (Brownfield)

Location: **ITALY**

Project: **Shop vessels, steel structure,
piping and site mechanical
installation, testing (1753)**



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REACTORS UNDER FATIGUE

Scope of work: No.3 reactors

Design code: EN13445

Total weight: 14000 Kg

Material: SS 316L

Design Main: Fatigue





SHIP SCRUBBER

Scrubbers for MARINE Installation
Material: 254SMO

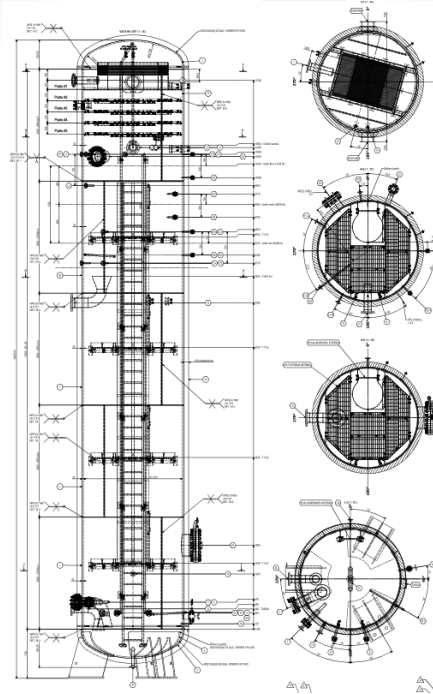


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REBOILER



Client:
Field: **Replacement of No. 1 water Boiler**
Location: **Italy**
Year: **2018**
Project: **REBOILER**
Diameter: 2200 mm
Total weight: 40 Tons
Height: 12,500 mm
Material: P265GH
Volume: 50 m3
Av. Thiok 30 mm
Design: 22 barg / 220°

Additional:
Failure analysis of existing one
Fatigue verification
Stress analysis
Piping 3D Scan and Modelling



«BIOETHANOL 2G PROJECT»

Client:

Field:

Location: **CRESCENTINO,
ITALY**

Year: **2015**

Project main scope: **23
PROCESS TANKS IN in
LDX2101/304 (1630)**

Additional scopes:

- **Core equipment**
- **Pipe racks**
- **Piping work**
- **Steel structures**
- **Mechanical Installation**
- **Supervision**



Tank no.	Total m ³	Installed [t]	Site activities for tank erection (weeks)	Maximum site workload for tank erection (no.)
23	30.000	1.000	56	18

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«PET PROJECT»

Client:

Field: **Petrochemical**

Location: **Corpus Christi, TX
(USA)**

Year: **2015 - 2016**

Project: **19 STORAGE TANKS
(1739)**

- Diameter: from 6 to 46 m
- Weight: from 17 to 310 ton
- Total weight: from
- Height: from 6 to 24 m
- Material: 1300 Ton
 - Carbon steel (A53),
 - Stainless steel (304L 316L)
 - Duplex (LDX2101)
 - Superduplex.



Design
Material
procurement
Shop works
Erection
Testing



«CARBOXYLATE PROJECT»

Owner:

EPC:

Field: **PETROCHEMICAL**

Location: **SINGAPORE**

Year: **2015 - 2016**

Project: **11 STORAGE TANKS (1740)**

- Diameter: from 7 to 9,5 m
- Height: from 9 to 22 m
- Weight: from 15 to 51 ton
- Total weight: 350 ton
- Material: Stainless steel (304L / 316L)
- Manpower: up to 20

Design

Material procurement

Shop works

Erection

Testing

Insulation

Scaffolding

Painting

Fire water system

Pipe racks

Steel structures

Supervision





«BIOETHANOL PROJECT»

Client: Confidential

Field:

Location: **HULL, UNITED KINGDOM**

Year: **2008**

Project: **11 STORAGE TANKS (1561)**

- **Material: Stainless steel (304L) and Duplex 2101**
- **Total weight: 1100 ton**

**Design
Prefabrication
Erection
Testing**





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The logo for CITAL S.R.L. features the word "CITAL" in a large, bold, red, sans-serif font. The letter "C" is stylized with a thick, rounded bottom that extends into a horizontal bar. To the right of this bar, the letters "S.R.L." are written in a smaller, red, sans-serif font.

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