Masters in

Pressure Vessels, Tanks and Equipment

Deprest

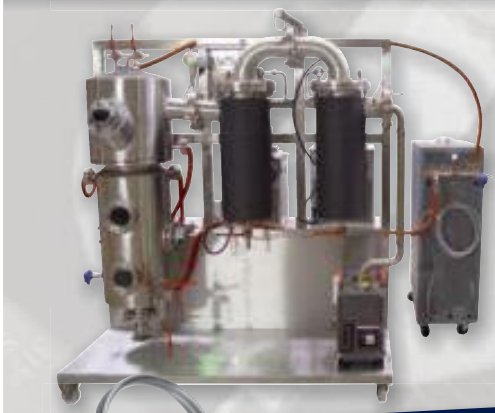
Who is Deprest?

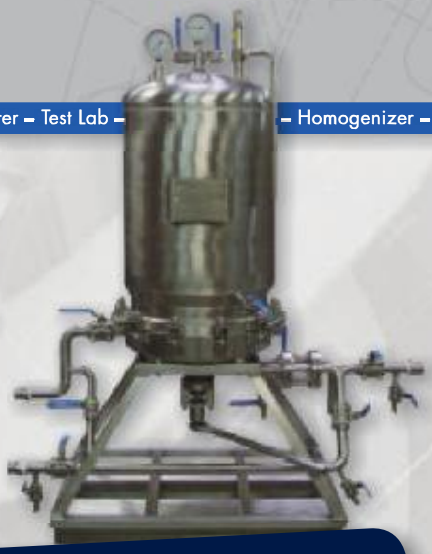
Deprest NV is:

- an independent company in the engineering and fabrication of pressure vessels, tanks and equipment for i.a. the oil and gas, chemical, petrochemical, pharmaceutical and food industry
- a flexible company with more then 75 years of experience in engineering and construction of pressure vessels
- a group of experienced people working with the latest technology in a fully equipped shop, making small and medium vessels up to a diameter of 6 meters
- our customers include both major companies and EPCM contractors

We make vessels and equipment like: reactors, columns, atmospheric tanks, pressure vessels, storage tanks, separators, chocolate tanks, homogenizers, agitators, filters, test labs, double jacket vessels, half pipe jackets, extractors, crystallizers, hoppers, plate filters, absorbers, silos...

Pressure Vessel – Column – Storage Tank – Agitator – Filter – Test Lab – – Homogenizer – Chocolate Tank – Chocolate Pump – Absorber – Plate

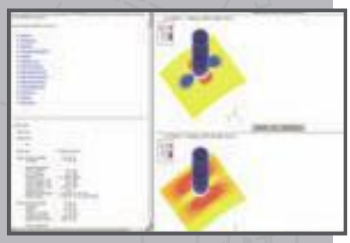




Materials

Deprest has extensive materials knowledge and experience in welding of various alloys. Processed materials include:

- Frequently used carbon steel qualities : vessel plate P265GH, P355GH, P355NL1, P355NL2, SA387Gr11 and ASME SA 516 grade 60.
- Frequently used stainless steel grades: SS304L, SS316L, 1.4541, 1.4571 and 1.4000
- Special stainless steel types and nickel alloy materials such as different types of Hastelloy, Inconel, Incoloy, duplex (e.g. 904L/1.4539, 1.4462), superduplex (e.g. A825), SMO254, Uranus. For a full list of materials we can process, we refer to our website www.deprest.be



Engineering, Calculation and Design

Fabricating pressure vessels starts with the engineering process:

- Deprest designs according to PED 97/23/EG directive and is certified for the welding of pressure vessels according to :
  - EN13445
  - AD2000
  - ASME VIII
- Deprest also designs atmospherical tanks according to API650 and local standards (like Vlarem)
- Cad design software 2D and 3D
- Calculation software for pressure vessels and equipment (Microprotol)
- Software for calculation of nozzle loads (Nozzle Pro)
- Other calculations if necessary by external partners (design by analysis - FEA)

lter – Hopper – Chrystallizer – Extractor – Reactor – Half Pipe Vessel – Double Jacket Vessel – Atmospheric Tank – Separator – Equipment – Process Tank –

Inspections, Quality Assurance and Document Management

Offering a high-quality product and good service is extremely important to us.
Each project, large or small, is prepared and carried out with the utmost care. Our integrated quality system is a guiding principle for constantly monitoring our quality. Moreover, we strive for continuous improvement of internal processes, without losing sight of the general standards and regulations:

- Deprest is certified for the welding of pressure vessels according to various codes (EN13445, AD2000, ASME) and also have welding approval ISO 3834-2/BS in addition to the ISO 9001 certificate.
- All our welders are certified
- Internal pressure testing up to 130 bar
- Deprest works closely with various notified bodies.
- ERP software includes document management, traceability and material certificates management
- The customer receives a fully documented file according to the required specs.

Machinery

Deprest has a fully equipped workshop
and works with machines of the latest technology.

Cutting

Plasma Table 12x4 m with rotating head

- Sheet surface: 12x4 m
- Thickness up to 120 mm of which 50 mm with infeed
- Pipes up to 700 mm diameter
- Preformed heads up to 4000 mm diameter
- Source: Kjellberg 440 A, type Hi Focus 440i
- With endlessly rotating 3D head
- Oblique cutting edges / welding preparation up to 50°
- Gantry is driven by precision linear guide system

Guillotine Shears up to 6000x20 mm

Laser Cutting Machines up to 4000x2000, thickness 20 mm

Filter – Hopper – Chrystallizer – Extractor – Reactor – Half Pipe Vessel – Double Jacket Vessel – Atmospheric Tank – Separator – Equipment – Process Tank – Cond

Equipment and Machines

Plate Bending Rolls up to 40 mm thickness

- 3-roller, length 3000 mm, roll diameter 450 mm, sheets up to 40 mm
- 4-roller, length 3000 mm, roll diameter 250/220 mm, sheets up to 10 mm
- 3-roller, length 2500 mm, roll diameter 300 mm, sheets up to 20 mm
- 4-roller, length 2000 mm, roll diameter 110 mm, sheets up to 8 mm

Presses

- 150 tonne press with movable piston over a width of 1500 mm – stroke 400 mm
- Press brakes and bending machines up to 4000 mm and thickness 15 mm
- Punching machine 60 tonnes
- Profile bending rolls

Machining workshop

- Sliding lathes: max diameter 820 mm
- Milling machine
- Various drill presses
- Various mechanical saws up to 460 mm diameter

Post-treatment/finishing

- Hall for spray pickling and passivating: 20x12 m fitted with overhead cranes
- Various sanding and grinding machines, fine finishing possible
- Surface roughness measuring equipment
- Insulation
- Painting facility; other treatments by external partners

Welding

Welding Crane for Submerged Arc Welding (SAW) and Semi-Automatic Welding

According to the following welding processes:

- Submerged arc welding (SAW) to 1000A, both AC and DC
- MIG/MAG welding (MIG-pulse, Pulse-on-Pulse, Power Mode, Rapid- Arc, STT) up to 500A
- Maximum diameter 5500 mm, length 24000 mm, up to 50 tonnes
- Equipped with a 360° rotating arm
- Equipped with camera and 2D tracking system
- Equipped with 15 tonnes turntable, 2 sets of self-adjusting roller settings up to 25 tonnes/set, so can weld horizontally as well as vertically. The manipulation accessories are also controlled by the central PLC, all equipped with full logging facilities (connected to server)

Various Welding Devices and Accessories

- Various TIG welding stations to 400A
- Various MIG/MAG welding stations
- Shielded metal arc welding (SMAW)
- STT welding station (Surface Tension Transfer)
- Megatoscope for interpretation of weld images
- Turntables and rotators
- Large database of PQRs, cooperation with notified bodies to do destructive and non destructive testing for new PQRs

Infrastructure

Building

- fully equipped workshop area
- With separate halls for processing of stainless steel and special alloys
- 2 test zones for hydraulic tests (reinforced floor on piles)
- Fitted for projects up to 40 tonnes, and maximum diameter 6x6 m, length up to 50 m
- Equipped with overhead cranes everywhere (a total of 13 hoists, at least 2 hoists available at each location)
- Height of the welding and finishing department: 13 m
- Scissor lift and telescopic boomlift
- Located near the Scheldt river for projects with specialist haulage

Deprest is specialised in the design and manufacturing of pressure vessels, tanks, chocolate vessels and pumps. Our customers are mainly situated in the chemical, petrochemical, oil, gas, pharmaceutical and food industry. Pressure vessels are calculated by our own engineering department and executed in conformity with the European legislation.
Projects are realized in stainless steel, carbon steel, duplex or Hastelloy. Deprest is certified according to ISO 9001 and for its welding activities according to ISO 3834-2/BS.

Deprest works merely for the big chemical and petrochemical companies present in the Antwerp Harbor, like Bayer, Lanxess, Exxonmobil, Total, Evonik, Fina Antwerp Olefins, Ineos, as well as for some major pharmaceutical companies, like Johnson and Johnson, Novartis, Pfizer, EPCM contractors and engineering consultants like Jacobs, Technip and Grontmij, other customers like Desmet Ballestra, Styron, and some food companies like Callebaut, Puratos, ...

Deprest nv

Frank Van Dyckelaan 24 • 9140 Temse • Belgium
Tel. +32 (0)3 740 76 60 • fax +32 (0)3 740 76 61
E-mail: info@deprest.be · www.deprest.be