INDUSTRIAL
HEAT EXCHANGERS
Cutting-edge technology and in-house manufacturing guarantees best quality. Experienced team of designers is constantly working on developing innovative and more efficient heat exchangers adapting them to customers’ requirements. We are eager to undertake complex and technologically demanding projects.

SECESPOL is focused on innovation and development which is evidenced by numerous patents and awards. Best quality standards are proven by certificates and approvals: ASME (U&UM), PED 2014/68/EU, EAC, China ML, 3-A, ISO 9001, ISO 3834-2.

SECESPOL, with its headquarter in Poland, is present worldwide thanks to its subsidiaries:

- SECESPOL USA
- SECESPOL Canada
- SECESPOL Czech Rep.
- SECESPOL Deutschland
- SECESPOL Ukraine
- SECESPOL Russia
- SECESPOL Asia

and over 500 distributors worldwide.
**DESIGN**

- complex and technologically demanding projects
- thermodynamic and vibration calculations using AspenTech ONE
- strength calculations using Visual Vessel Design
- Computational Fluid Dynamics analysis
- experienced team of designers

**PRODUCTION**

- rich experience and know-how with a great number of units produced
- 90% of components produced in-house
- newest technology
- systematic investment in machinery
- well-known and selected suppliers of components and materials
- materials: carbon steel, stainless steel, duplex, titanium, monel, copper, Incoloy and others
- applications: steam condensers, process fluid/gas heaters and coolers, storage tanks, etc.
### TESTING AND INSPECTION

- In-house non-destructive and destructive tests incl. dye penetrant inspection PT, eddy current ET, VT, surface roughness test, macroscopic examination, positive material identification, ultrasonic thickness measurement.
- Cooperation with major testing labs: X-ray examination RT, ultrasonic examination UT, impact tests, magnetic particle inspection MT.
- Experienced team of internal inspectors.
- Certificates and approvals: ASME U, ASME UM [Internal CI], PED 2014/68/EU, EAC, 3-A, ISO 9001, ISO 3834–2, DNV.

### OUR REALIZATIONS

<table>
<thead>
<tr>
<th>INDUSTRY</th>
<th>CUSTOMER</th>
<th>PRODUCT</th>
<th>WEIGHT</th>
<th>MATERIAL</th>
<th>MEDIA</th>
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</thead>
<tbody>
<tr>
<td>Petroleum</td>
<td>Crude oil refinery, Mexico</td>
<td>Crude oil heater</td>
<td>31 085 lb /14 100 kg</td>
<td>tubes and head: stainless steel other elements: carbon steel</td>
<td>crude oil /water</td>
</tr>
<tr>
<td>Mining</td>
<td>Mine, Canada</td>
<td>Heat exchanger</td>
<td>20 944 lb /9 500 kg</td>
<td>tubes: titanium Gr. 2 heads and tubesheets: carbon steel shell: carbon steel</td>
<td>brine (tubes) /water (shell)</td>
</tr>
</tbody>
</table>
**INDUSTRY** Power engineering  
**CUSTOMER** ORC power plant, Italy  
**PRODUCT** Biomass toluene evaporator  
**WEIGHT** 8 281 lb / 3 756 kg  
**MATERIAL**  
- tubes: heat-resistant steel, stainless steel  
- shell: stainless steel  
- toluene (tubes) / exhaust gases (shell)  
**MEDIA** steam / water

**INDUSTRY** Power engineering  
**CUSTOMER** Biomass heating plant, France  
**PRODUCT** Economizer  
**WEIGHT** 15 013 lb / 6 810 kg  
**MATERIAL**  
- tubes: duplex  
- heads: stainless steel  
- shell: carbon steel  
**MEDIA**  
- exhaust gases resulting from combustion of biomass (tubes) / water (shell)

**INDUSTRY** HVAC  
**CUSTOMER** Production plant, Russia  
**PRODUCT** Reboiler heat exchanger  
**WEIGHT** 5 225 lb / 2 370 kg  
**MATERIAL**  
- tubes and head: stainless steel  
- shell: carbon steel  
**MEDIA**  
- ethylene glycol 40% (tubes) / refrigerant R290 (shell)

**INDUSTRY** Power engineering  
**CUSTOMER** Heating plant, Czech Republic  
**PRODUCT** Steam condenser  
**WEIGHT** 16 270 lb / 7 380 kg  
**MATERIAL**  
- tubes: stainless steel  
- other elements: carbon steel  
**MEDIA** steam / water

**INDUSTRY** Petroleum  
**CUSTOMER** Refinery, Klaipeda, Lithuania  
**PRODUCT** Heat exchanger for heavy fuel oil heating and subcooler of the condensate  
**WEIGHT** 31 306 lb / 14 200 kg  
**MATERIAL** carbon steel  
**MEDIA**  
- heavy fuel oil (shell) / steam (tubes)

**INDUSTRY** Power engineering  
**CUSTOMER** Power plant, Poland  
**PRODUCT** Steam condenser  
**WEIGHT** 60 995 lb / 27 667 kg  
**MATERIAL**  
- tubes: stainless steel  
- tubesheet: carbon steel with stainless steel cladding  
- other elements: carbon steel  
**MEDIA** water / steam
**INDUSTRY**
Petroleum

**CUSTOMER**
Synthetic fuels production plant, Poland

**PRODUCT**
Gas heater

**YEAR**
2017

**WEIGHT**
9,987 lb / 4,530 kg

**MATERIAL**
High-temperature steel (EN X10CrMoVNb9-1, ASTM P91)

**MEDIA**
Regeneration gas [tubes & shell]

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**INDUSTRY**
Food processing

**CUSTOMER**
Vegetable processing plant, Belgium

**PRODUCT**
Ammonia evaporator

**YEAR**
2015

**WEIGHT**
2,646 lb / 1,200 kg

**MATERIAL**
Carbon steel, stainless steel

**MEDIA**
ammonia (tubes) / water (shell)