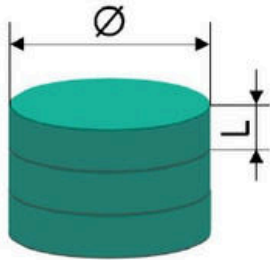


BASIC TYPE SERIES OF OUR TANKS

Number of rows		1	2	3	4	5	6	7	8	9	10	11	12
Height (m)		1,51	2,94	4,37	5,80	7,23	8,66	10,09	11,52	12,95	14,38	15,81	17,24
Diameter (m)	Number of sheets in row	Tank capacity (m³)											
2,04	5	5	9	14	19	23	28	33	37	42	47	51	56
2,45	6	7	13	20	27	34	40	47	54	61	67	74	81
2,86	7	9	18	28	37	46	55	64	73	83	92	101	110
3,27	8	12	24	36	48	60	72	84	96	108	120	132	144
3,67	9	15	30	45	61	76	91	106	121	136	152	167	182
4,08	10	19	37	56	75	94	112	131	150	168	187	206	225
4,29	5	21	41	62	83	103	124	144	165	186	206	227	248
5,14	6	30	59	89	119	149	178	208	238	267	297	327	356
6,00	7	40	81	121	162	202	243	283	323	364	404	445	485
6,86	8	53	106	158	211	264	317	370	422	475	528	581	634
7,71	9	67	134	201	267	334	401	468	535	602	668	735	802
8,57	10	83	165	248	330	413	495	578	660	743	825	908	990
9,43	11	100	200	300	399	499	599	699	799	899	998	1098	1198
10,29	12	119	238	356	475	594	713	832	951	1 069	1 188	1 307	1 426
11,14	13	139	279	418	558	697	837	976	1 116	1 255	1 395	1 534	1 684
12,00	14	162	323	485	647	809	970	1 132	1 294	1 456	1 617	1 785	1 953
12,86	15	186	371	557	743	928	1 114	1 300	1 485	1 671	1 864	2 057	2 249
13,71	16	211	422	634	845	1 056	1 267	1 479	1 690	1 901	2 121	2 340	2 567
14,57	17	238	477	715	954	1 192	1 431	1 669	1 908	2 155	2 403	2 651	2 898
15,43	18	267	535	802	1 069	1 337	1 604	1 871	2 139	2 416	2 694	2 972	3 249
16,29	19	298	596	894	1 192	1 489	1 787	2 085	2 394	2 704	3 013	3 323	3 632
17,14	20	330	660	990	1 320	1 650	1 980	2 310	2 653	2 996	3 339	3 681	4 024
18,00	21	364	728	1 092	1 456	1 819	2 183	2 547	2 925	3 317	3 681	4 059	4 451
18,86	22	399	799	1 198	1 597	1 997	2 396	2 811	3 226	3 640	4 055	4 470	4 885
19,71	23	437	873	1 310	1 746	2 183	2 619	3 072	3 526	3 979	4 432	4 886	
20,57	24	475	951	1 426	1 901	2 376	2 852	3 345	3 839	4 332	4 826	5 320	
21,43	25	516	1 031	1 547	2 063	2 576	3 114	3 650	4 185	4 721	5 256		
22,29	26	558	1 116	1 673	2 231	2 789	3 368	3 948	4 527	5 106	5 685		
23,14	27	602	1 203	1 805	2 406	3 008	3 632	4 257	4 882	5 506	6 131		
24,00	28	647	1 294	1 941	2 588	3 235	3 906	4 578	5 250	5 922			
24,86	29	694	1 388	2 082	2 776	3 470	4 190	4 911	5 632	6 352			
25,71	30	743	1 485	2 228	2 971	3 713	4 484	5 284	6 027	6 798			
26,57	31	793	1 586	2 379	3 172	3 995	4 819	5 642	6 466				
27,43	32	845	1 690	2 535	3 380	4 257	5 135	6 012	6 890				
28,29	33	899	1 797	2 696	3 594	4 528	5 461	6 394	7 327				
29,14	34	954	1 908	2 860	3 816	4 806	5 797	6 787					
30,00	35	1 011	2 022	3 032	4 043	5 093	6 143	7 192					
30,86	36	1 069	2 139	3 208	4 278	5 388	6 499	7 609					
31,71	37	1 130	2 259	3 389	4 519	5 692	6 865	8 038					
32,57	38	1 192	2 383	3 575	4 812	6 049	7 287	8 524					
33,43	39	1 255	2 510	3 765	5 069	6 372	7 675						
34,29	40	1 320	2 640	3 961	5 332	6 703	8 074						
35,14	41	1 387	2 774	4 161	5 602	7 042	8 483						
36,00	42	1 456	2 911	4 367	5 878	7 390	8 901						
36,86	43	1 526	3 051	4 577	6 162	7 746	9 330						
37,71	44	1 597	3 195	4 792	6 451	8 110	9 769						
38,57	45	1 671	3 342	5 013	6 748	8 483	10 218						
39,43	46	1 746	3 492	5 238	7 051	8 864							
40,29	47	1 823	3 646	5 468	7 361	9 254							
41,14	48	1 901	3 802	5 703	7 678	9 652							
42,00	49	1 981	3 962	5 944	8 001	10 135							



From tanks to technological units



WITKOWITZ
ENVI

Ruská 1142/30, 703 00 Ostrava-Vítkovice, Czech Republic

+420 724 937 609 @ envi@witkowitz.cz www.witkowitz-envi.eu





ABOUT US

The company WITKOWITZ ENVI has continued the tradition of bolted steel tanks manufacture with variable surface finish, manufactured since 1966.

Thanks to the high quality of production technology, rich experience and good references, our company exports products to the whole world. Steel tanks can be used to storing liquid and loose materials. Our tanks are also an essential part of environmental technological units, such as wastewater treatment plants, biogas plants or liquid fertilizers storages.

Our tanks are dimensioned in accordance with: ISO 28765, EN 1990, 1991 a AWWA D103

We are part of the WITKOWITZ Group, which boasts a long history and a wealth of experience in heavy industry and engineering. Our focus on modern technologies and eco-friendly practices allows us to develop products and services that not only meet, but very often surpass, current environmental standards.

The return to the WITKOWITZ brand is not just a tribute to its 190-year history. It symbolizes a new beginning that benefits from the unique know-how, technological skills, production transformation and the company's new vision. It includes its own engineering and complete production with high added value.

FIELDS OF OUR FOCUS



ACTIVITY OF WITKOWITZ ENVI a.s.

We have our own engineering, production and assembly capacities that provide the installation of all products and technological units of our own production. Our fitters have the necessary qualifications and are linguistically equipped for installation all over the world.



Design and engineering



Production & realization



Service

- Design and engineering activity with own know-how
- Own production of steel above-ground bolted tanks
- Processing of technical-economical studies within the investment installation
- Technical documentation of steel tanks and technological units
- Energy services with guaranteed savings, energy audit
- Optimal technology solution based on specific input material
- Assessment of the current tank condition and reconstruction of steel tank and silos

USAGE OF OUR TANKS

Loose materials

- limestone
- cement
- fly ash
- wood waste
- gravel
- granules
- salt
- carbon black

Liquids

- potable water
- wastewater
- fire water
- desalinated water
- brine
- kaolin water
- AdBlue

Agriculture

- cereals
- slurry
- urea
- liquid fertilizes
- compound feed
- silage

Industry

- chemical
- dairy
- distillery
- brewing
- food

Others

- tanks for WWTP
- tanks for BGS
- gas holders
- fermenters
- reactors

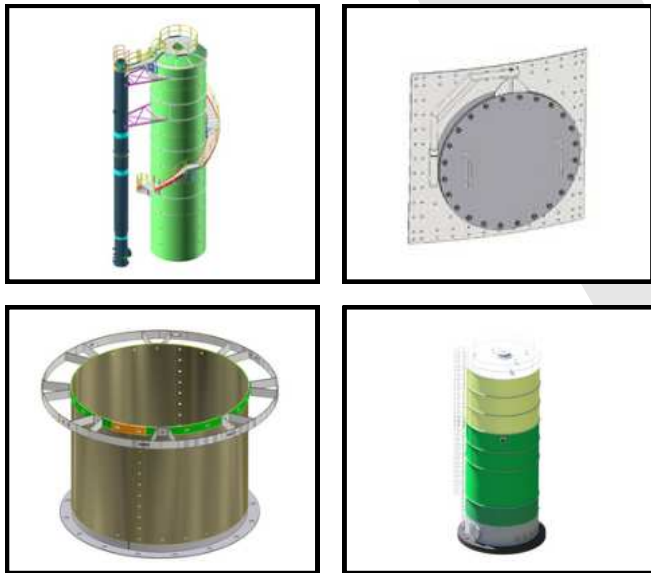


PRODUCTION

We specialize primarily in surface finish and steel plates manufacturing for our designed bolted steel tanks. By using the technology and know-how of our team, we are able to provide first-class quality of the products for the customers around the world.

Our machine park is fully equipped with machines for metalworking, forming, material cutting and also machines for surface finish of our steel plates. These machines guarantee us to process a variety of materials with the max. precision and efficiency.

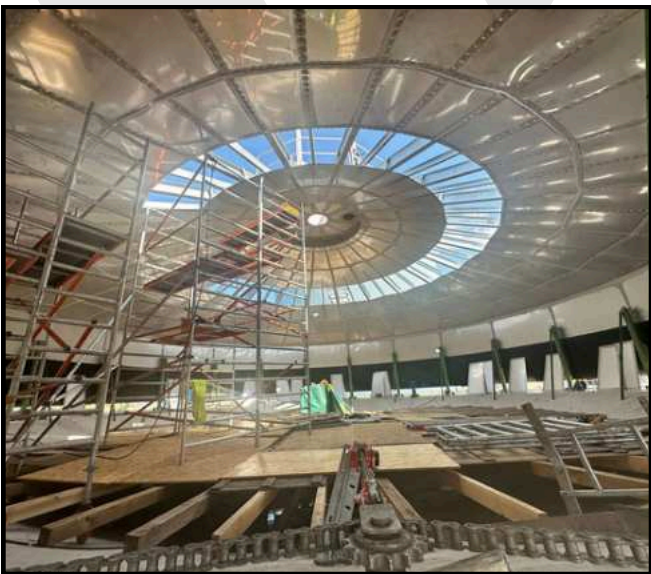
We produce our products according to customer´s drawings or complete turn-key project solution.



DESIGN & ENGINEERING

The main activity of the design and engineering department involve the preparation of the technical documentation of our tanks and technological units. The documentation of our products is prepared in accordance with investor's requirements.

For these purposes, we use the latest versions of 2D and 3D CAD software. We cooperate with external designers, authorized engineers and universities to ensure the highest quality and precision of our products.



ASSEMBLY

The assembly department takes care of the final phase of completion of the projects to a successful end. The main focus of the assembly department is coordination of installation, planning of production, construction deadlines, quality control or transport of materials.

With careful supervision and effective logistics, we are able to ensure that all the necessary materials are in place and ready for use in a timely manner. Our goal is to ensure that each project proceeds according to a set schedule and that the resulting work meets the highest quality standards.

TANK SCHEME

1) Roofs

- self-supporting steel
- textile
- trapezoidal
- membrane
- laminate
- with integrated gas holder

2) Auxiliary structures

- ladders
- platforms
- pedestrian walkways
- other technological constructions

3) Insulation

- thermal insulation covered with trapezoidal sheet

4) Bottom

- waterproofing concrete
- welded steel

5) Joints

- plates are are connected with special plastic-coated pan head bolts
- all joints are sealed with elastic silicone or polyurethane sealant

6) Accessories

- pipes and fittings
- manholes
- flanges, etc.

7) Technologie

- míchadla
- čerpadla
- armatury a jiné

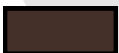
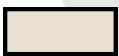


MATERIAL

We produce above-ground large-volume steel bolted tanks, which are, among other things, an essential element for our designed technological units. Our tanks are made of stainless steel plates or plates with coating - enamel or epoxy-coated.

1) Enamel tanks

- Enamel coating is burned in a furnace at 840 °C
- Excellent anti-corrosion properties with long tank service life
- High chemical and abrasion resistance
- Variability of design solution
- Suitable for industrial purposes including the food industry

	RAL 5013		RAL 8017
	RAL 6009		RAL 9001



2) Epoxy-coated tanks

- Electrostatically applied uniform layer of powdered plastic
- High service life depends on the purpose of use
- Easy and fast production and installation
- Suitable also for food industry
- Wide variation in colour according to RAL shades of these following colours

	Blue		Brown
	Green		White
	Grey		Others



3) Stainless steel tanks

- Excellent anti-corrosion properties
- Suitable for use in environments with high purity requirements and absence of contamination
- High resistance to mechanical damage
- Resistant to chemicals
- Low maintenance requirements
- Suitable for combination with enamel or powder-coated plates

	AISI 304		AISI 316
---	-----------------	---	-----------------



ROOF

Our rooftop systems are designed with an emphasis on quality, durability and efficiency of operation to meet the specific needs of applications in a variety of sectors. We use metal and membrane roofs as standard for our tanks. As part of our services, we also offer roofing of concrete tanks.

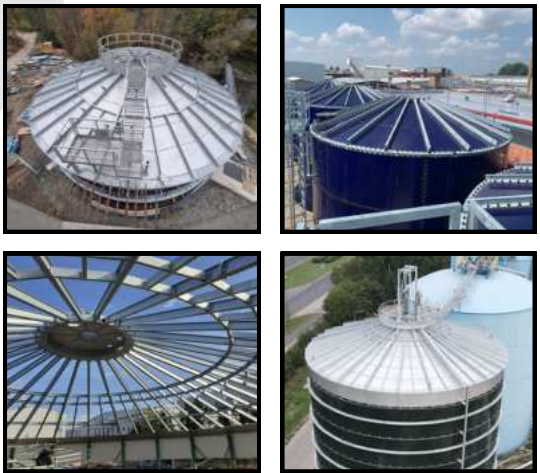
1) Membrane, textile

- **Material:** a) Single membrane
b) Double membrane
- **Parameters:** According to the medium inside the tank and local regulations (gas-tightness, odour-tightness, etc.)
- **Usage for:** a) Biogas plants
b) Fermenters



2) Self-supporting steel

- **Material:** a) Enamel steel
b) Epoxy-coated steel
c) Stainless steel (AISI 304, AISI 316)
- **Parameters:** Possible also in combination with different type of material
- **Usage for:** a) Fermenters
b) Storage tanks for potable water
c) Storage tanks for fertilizers, slurry etc.



3) Trapezoidal

- **Material:** a) Steel construction - column, profiles
b) Trapezoidal sheets
- **Parameters:** Only to protect against pollution of the medium inside the tank
- **Usage for:** a) Storage tanks
b) Storage tanks for fire water



ACCESSORIES & TECHNOLOGY

For design and installation of the tanks or technological units, we meet the requirements for individual accessories and technology. With a flexible approach, we are able to supply the products according to customer specifications, ensuring maximum efficiency of subsequent operation service.

1) Nozzles, manholes

- **Material:** a) Hot-dip galvanized steel
b) Epoxy-coated/painted steel
c) Stainless steel (AISI 304, AISI 316)
- **Parameters:** a) Nozzles
b) Manholes - shell or roof
- **Usage for:** a) Mixers
b) Measurement accessories
c) Sight glass - with or without wiper
d) Pipeline connection



2) Overflow chambers

- **Material:** a) Stainless steel (AISI 304, AISI 316)
- **Parameters:** According to tank dimensions
- **Usage for:** Safety part for regulation and control the medium inside the tank



3) Aeration systems

- **Material:** a) Stainless steel - construction
b) Membrane diffusers
- **Parameters:** Tubular and disc diffusers with different length and diameter
- **Usage for:** Key part in maintaining suitable conditions in the WWTP



4) Mixers

- **Material:** Stainless steel
- **Parameters:** According to parameters of the medium inside the tank
- **Usage for:** a) Biogas plants
b) Fermenters



ACCESSORIES & TECHNOLOGY

5) Pumps and pipeline routes

- **Material:** Stainless steel (AISI 304, AISI 316)
- **Parameters:** According to technology and parameters of the medium inside the tank
- **Usage for:** a) Biogas plants
b) Wastewater treatment plants
c) Storage technological units
d) Large-volume tanks
e) Other fields of industry and agriculture



6) Ladders, stairs and platforms

- **Material:** Hot-dip galvanized/stainless steel
- **Parameters:** According to tank parameters
- **Usage for:** a) Biogas plants
b) Wastewater treatment plants
c) Storage technological units
d) Large-volume tanks
e) Technology service platforms



THERMAL INSULATION

To ensure the required conditions inside the tank, we also offer its insulation as part of our construction. Thermal insulation provides an optimal protection against the heat loss, moisture and mechanical damage, which extends the life of our tanks and increases efficiency in their use in operation.



INSTALLATION OF OUR TANKS

We offer three basic options related to the installation of our tanks: the supply of materials for self assembly, complete assembly by our experienced fitters, and the supply of materials with supervision, when our qualified experts supervise the installation carried out by your team. Each of these variants is designed to provide a smooth installation process and optimal functionality of our tanks or technological units.

1) Material supply

This option is ideal for customers from more distant installation or those who prefer to be assembled by their own team. In this case, we provide only a complete supply of all necessary components, including detailed technical drawings and assembly instructions.



2) Installation by our fitters

If the investor prefers professional installation, we also offer an installation service by our experienced fitters. Our groups have a wealth of experience and expertise to ensure quick and efficient installation. This service includes complete installation and commissioning of the tank.



3) Installation with our supervisors

For the investors who want to combine their own work with our supervision, we offer the possibility of material supply with technical supervision during the installation. Our experts ensures the smooth installation process and all the necessary details for putting the tank or technology into operation service.



INSPECTION AND RECONSTRUCTION

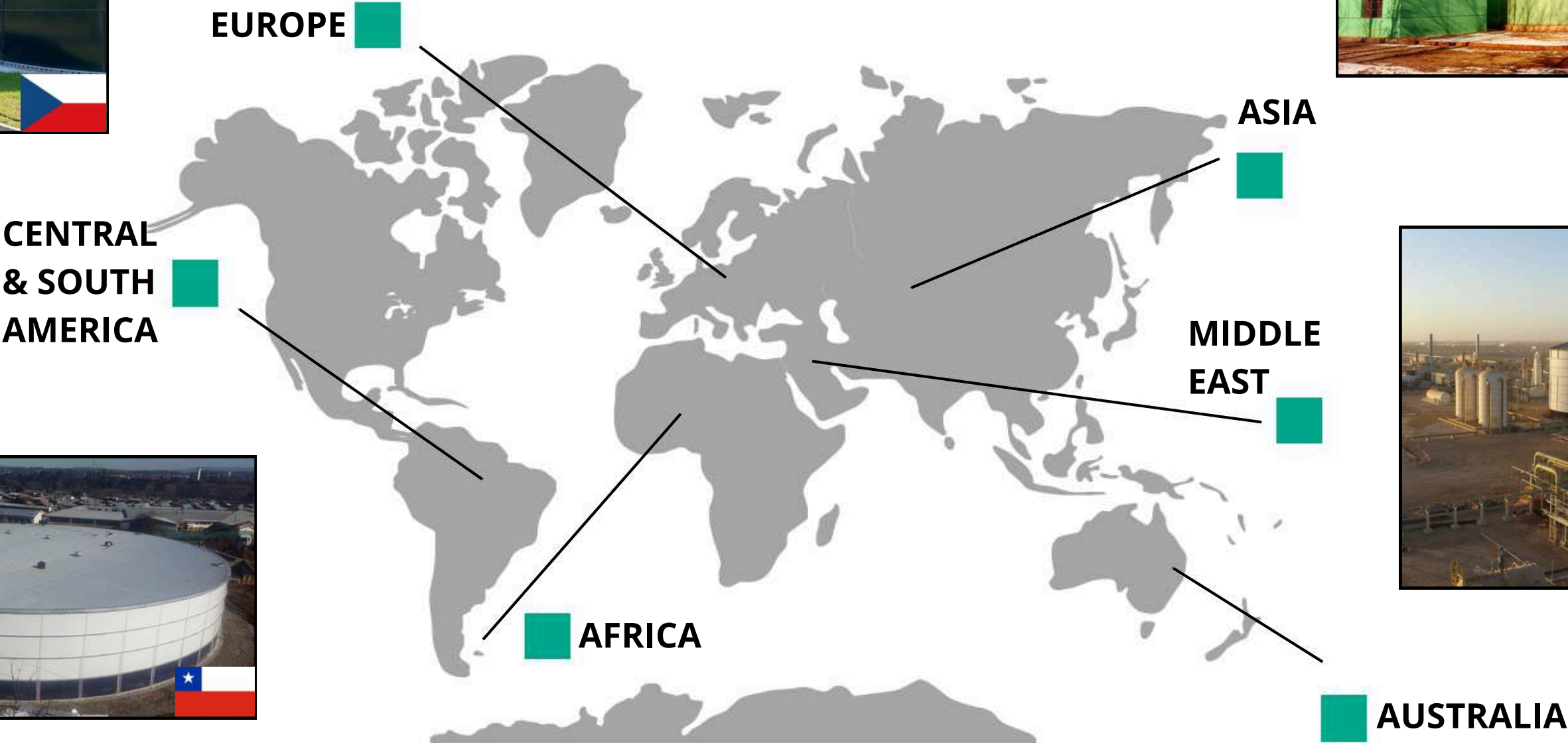
According to our production design documentation of the original projects for tanks or technological units, we are able to ensure the safety of the works carried out and determine the suitability of the reconstruction project carried out. As a traditional Czech manufacturer, we also offer a service by inspecting existing silos and tanks and assessing their current technical condition in relation to further use. In addition to the mentioned services, we also offer roof replacement of concrete tanks with the above mentioned types of roofs.

OUR SERVICES IN THE FIELD OF INSPECTIONS AND RECONSTRUCTIONS

- Assessment of current technical condition of tanks and silos by VÍTKOVICE and WITKOWITZ ENVI production by certified experts
- Issue of a report on the technical condition of tanks and silos
- Design of a possible repair or reconstruction
- Information on the expected further service life of tanks and silos
- Complete reconstruction of tanks and silos including delivery and installation of technology



OUR REFERENCES



BIOGAS PLANTS

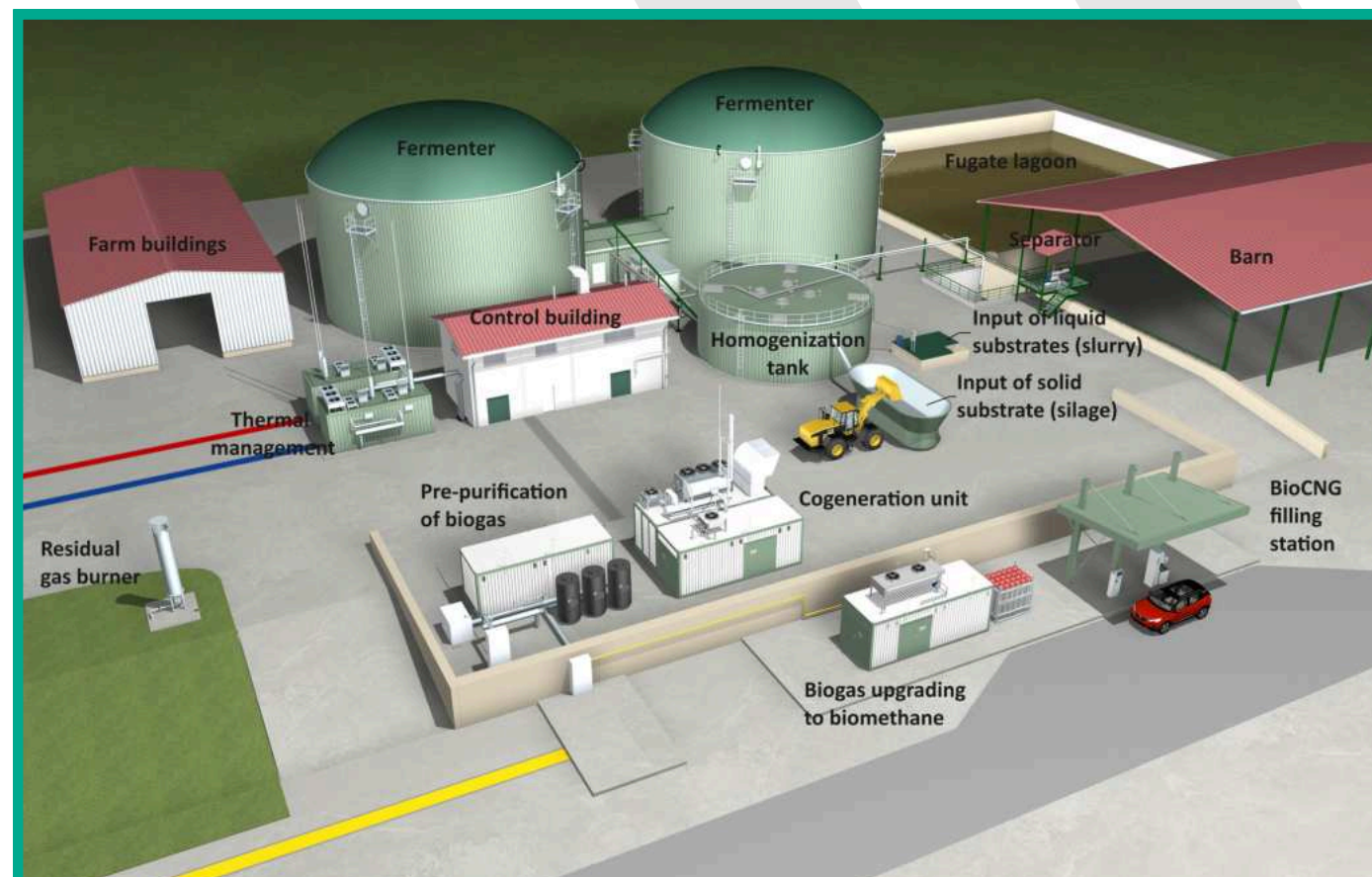
Biogas plants are a modern and ecological way of treating bio-waste and producing renewable energy. This innovative approach not only contributes to environmental protection, but also provides significant economic benefits and promotes sustainable development. Biogas from our biogas plants can be used to generate electricity and heat or upgrade to biomethane.

OUR PROJECTS IN THE FIELD OF BIOGAS PLANTS

- Complete technological units - Biogas plants
- Gas holders
- Fermenters
- Homogenization tanks
- Storage tanks for post fermentation products

ADVANTAGES OF OUR PRODUCTS

- Optimal technology solution based on specific input material
- Own production, installation and reconstruction of steel bolted tanks
- Tank installation - including required technology
- Providing technology to convert thermal energy into electrical energy
- Providing technology for upgrade to biomethane
- Implementation of a project possible also as micro biogas plant
- Warranty and post-warranty service



PIASZCZYNA

Our work: Installation of technological unit
Parameters: 2 MW_e; 2 x 5 300 m³
Tank material: Enamel



SAIFEIYA

Our work: Installation of technological unit
Parameters: 0,3 MW_e; 6 x 657 m³; 2 x 674 m³
Tank material: Enamel



PUSTĚJOV

Our work: Installation of technological unit
Parameters: 1,68 MW_e; 4 x 4 451 m³; 3 x 3 632 m³
Tank material: Enamel



SASINKOVO

Our work: Installation of fermenters
Parameters: 2 x 3 900 m³
Tank material: Enamel



ULTZAMA

Our work: Installation of technological unit
Parameters: 1 MW_e; 2 x 3 300 m³
Tank material: Enamel



DIEPPE

Our work: Installation of EGSR reactor
Parameters: 1 x 814 m³
Tank material: Enamel



AVIGNON

Our work: Installation of EGSR reactor
Parameters: 1 x 903 m³
Tank material: Stainless steel



MOKRA PRAWA

Our work: Installation of fermenter
Parameters: 1 x 1 455 m³
Tank material: Enamel



IMAVERE

Our work: Installation of EGSR reactor
Parameters: 1 x 645 m³
Tank material: Epoxy-coated

WASTEWATER TREATMENT PLANT

Wastewater treatment is a key element in the field of environmental engineering. It is essential to ensure the cleanliness of water resources and the protection of external ecosystems. With a growing emphasis on sustainability and environmental responsibility, our products are becoming an indispensable tool for cities, industry and smaller communities.

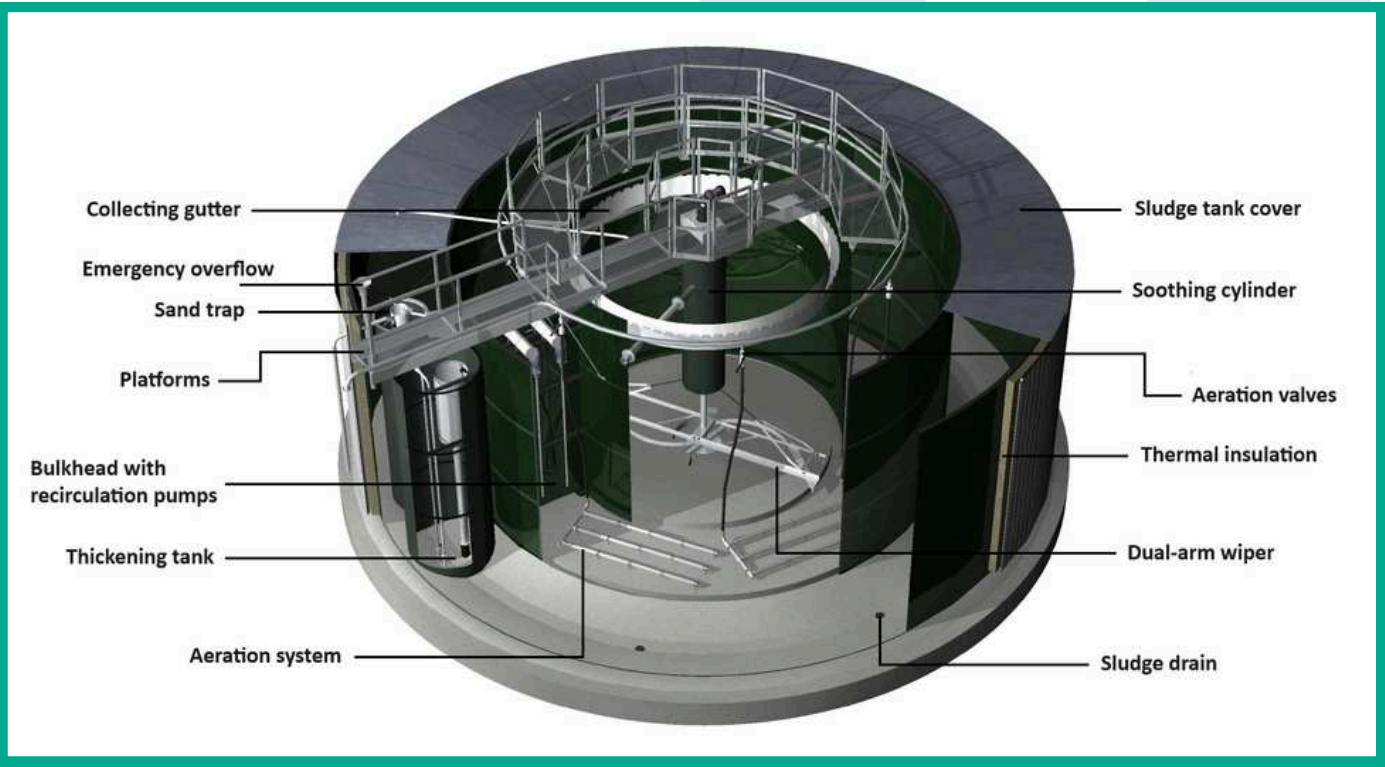
Our technologies and know-how in wastewater treatment plants have become the basis for many successful installations that contribute to sustainable development. Each of our projects is individually customized to specific needs and conditions, ensuring maximum satisfaction of our customers in addition to meeting the highest standards of efficiency and reliability of operation.

OUR PROJECTS IN THE FIELD OF BIOGAS PLANTS

- Complete technological units - industrial, municipal WWTP
- Settling tanks
- Activation tanks
- Stabilization tanks
- Equalization tanks
- Reactors

ADVANTAGES OF OUR PRODUCTS

- Optimal technology solution based on specific input wastewater parameters
- Own production, installation and reconstruction of steel bolted tanks
- Tank installation - including required technology wastewater treatment
- Small built-up area
- Easy modular expansion of existing technology
- Warranty and post-warranty service



STRZYŻÓW

Our work: Installation of technological unit
WWTP capacity: 300 PE
Tank material: Enamel



PANAGYURISHTÉ

Our work: Installation of technological unit
WWTP capacity: 19 000 PE
Tanks material: Enamel



ROKIETNICA

Our work: Installation of technological unit
WWTP capacity: 6 666 PE
Tanks material: Enamel



ÚSTÍ NAD LABEM

Our work: Installation of technological unit
WWTP capacity: 67 000 PE
Tanks material: Enamel



SKAWINA

Our work: Installation of fermenters
Parameters: 2 x 12,86m/10 rows
Tanks material: Enamel



VILNIUS

Our work: Installation of fermenters
Parameters: 3 x 16,29 m/10 rows
Tanks material: Enamel



TYRAWA SOLNA

Our work: WWTP extension
Parameters: 9,43/7,71/4,29 m - 4 rows
Tanks material: Enamel



LOMÉ

Our work: Installation of equalization tank
Parameters: 7,71 m/6 rows; 25,71 m/4 rows
Tanks material: Enamel



AMBATOLAMPY

Our work: Installation of equalization tank
Parameters: 13,71 m/5 rows
Tank material: Enamel

LIQUID & MINERAL FERTILIZER STORAGE TANKS

Our fertilizer storage and handling projects contribute to optimizing operational processes in the agricultural industry. Each storage tank is designed to meet the specific needs of the fertilizer and customer requirements. In addition to a reliable and efficient solution, our designed storage tanks are also equipped with individual safety accessories.

OUR PROJECTS IN THE FIELD OF STORAGE SYSTEMS

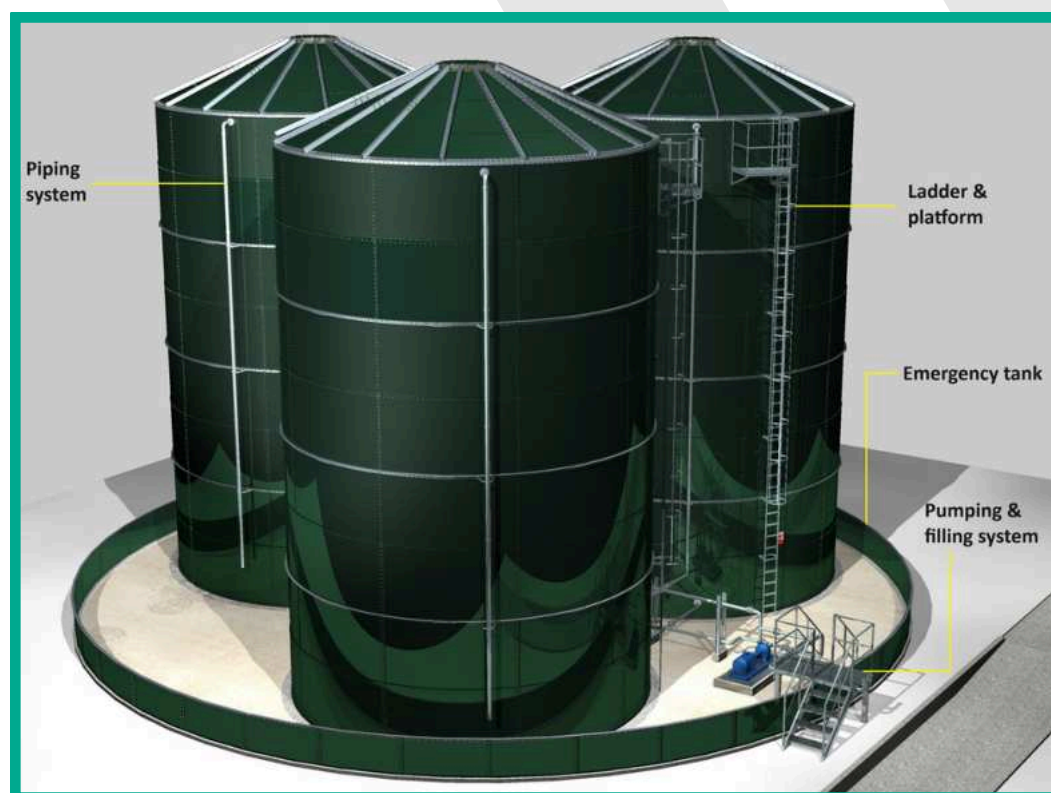
- Storage of liquid mineral fertilizers (LMF)
- Storage of ammonium nitrate & urea (UAN) and AdBlue

PARTS OF STORAGE SYSTEMS

- Large-capacity storage tanks
- Emergency tank (minimum capacity of 1 tank volume)
- Pumping and filling systems
- Piping systems
- Ladders/stairs with platforms
- Stirring device
- Measuring & regulation

ADVANTAGES OF OUR PROJECTS

- Long-term durability and corrosion resistance of the system
- With few changes, it can also be used for storing drinking or fire water
- Optimal solution according to the customer requirements
- Own production and fast installation of steel bolted tanks
- Warranty and post-warranty service



KRSICE

Our work: Installation of LMF storage tanks
Parameters: 3 x 10,29 m/7 rows; 2 x 8,57 m/5 rows;
 1 x 6,00 m/3 rows; 1 x 2,86 m/3 rows
Tank material: Enamel



DOBRE MIASTO

Our work: Installation of LMF storage tanks
Parameters: 6 x 12,00/7 rows; 2 x 6,86 m/4L;
 1 x 2,86 m/3L
Tank material: Enamel



KOLOVEČ

Our work: General repairs of tanks for UAN
Parameters: 2 x 6,00 m/6 rows
Tank material: Enamel



STUDÉNKA

Our work: Reconstruction of LMF storage tanks
Parameters: 6 x 8,57 m/6 rows
Tank material: Enamel



SENNÉ

Our work: Reconstruction of LMF storage tanks
Parameters: 2 x 8,57 m/6 rows
Tank material: Enamel



HOŘESEDLY

Our work: Installation of LMF storage tanks
Parameters: 2 x 11,14 m/8 rows
Tank material: Enamel



KOTOJEDY

Our work: Installation of tanks for UAN and AdBlue
Parameters: 4 x 8,57 m/7 rows
Tank material: Enamel



PODIVÍN

Our work: Reconstruction of storage tanks for UAN
Parameters: 5 x 6,00 m/8 rows
Tank material: Enamel



KATUSICE

Our work: Installation of LMF storage tanks
Parameters: 2 x 8,57 m/6 rows
Tank material: Enamel

OTHER FIELDS

The overview of our major projects and installations is divided across a variety of sectors. This is the use of our tanks in the fields of industry, agriculture or other municipal services.

We provide tanks designed to store various liquids and chemicals with different compositions. Large-capacity storage tanks can also be supplemented with technology for safe handling of the medium inside the tank. Our technologies are designed to withstand challenging operating conditions and minimise the risks associated with handling and storing hazardous substances.

FIELDS

- Industry - chemical
 - distillery
 - food & beverage
 - brewing
- Agriculture - slurry and urea tanks
- AdBlue storage
- Potable and fire water tanks
- Wastewater tanks
- Big capacity water tanks
- Reconstruction of steel tanks and silos designed by VÍTKOVICE and WITKOWITZ ENVI

With our company's long tradition, there are also important projects and technological innovations that have shaped our activities from their beginnings to the present. These important aspects are the basis of our current position on the domestic and global market.



DĚBICA

Our work: Installation of water tanks
Parameters: 2 x 7,71 m/5 rows
Tank material: Enamel



VODŇANY

Our work: Installation of water tanks
Parameters: 2 x 10,29 m/7 rows
Tank material: Enamel



ROPČYCE

Our work: Installation of water tanks
Parameters: 2 x 7,71 m/5 rows
Tank material: Enamel



PETROVICE

Our work: Installation of slurry tanks
Parameters: 2 x 18,00 m/4 rows
Tank material: Enamel



OSORNO

Our work: Installation of large-capacity tank
Parameters: 39,43 m/4 rows
Tank material: Enamel



DOMAŽLICE

Our work: Installation of AdBlue storage tanks
Parameters: 8,57 m/6 rows; 6,00 m/6 rows
Tank material: Enamel



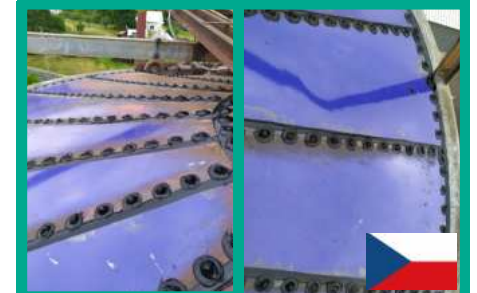
CHEB

Our work: Silos reconstruction, stack repair
Parameters: 8,57 m/6 rows; 6,00 m/6 rows
Tank material: Enamel



BABICE

Our work: Installation of water tanks
Parameters: 4 x 6,86 m/4 rows
Tank material: Enamel



VELKÁ KRAŠ

Our work: Roof resealing – 6 silos
Parameters: 6 x 6,00 m/10 rows
Tank material: Enamel



Ruská 1142/30, 703 00 Ostrava-Vítkovice, Czech Republic

+420 724 937 609

envi@witkowitz.cz

www.witkowitz-envi.eu

WITKOWITZ ENVI

WITKOWITZ ENVI a.s.

