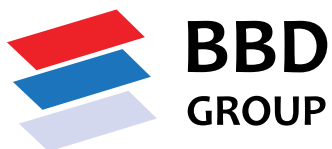




WATER TREATMENT EQUIPMENT

LAMELLA CLARIFIER



LAMELLA CLARIFIER

A clarifier is a separator of particles, which is used mainly as a sedimentation device for the separation of solid particles from the liquid. In addition to the sedimentation of solid particles, clarifier is also suitable for capturing and removing of floating material.

As a filling, clarifiers can use:

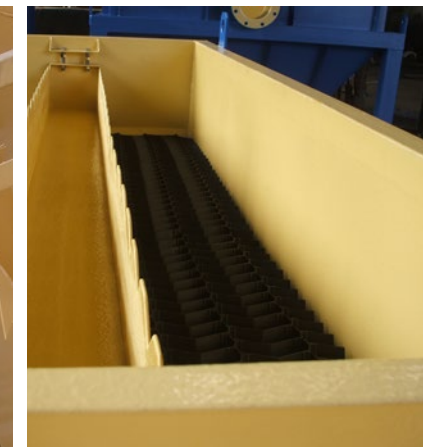
- plates (lamellas),
- tube settlers.

Solid particles with easy sedimentation are separated and collected in the first (smaller) cone in a large amount, while the rest of the relatively slow settling particles is separated in the package of plates (or tube settlers) with a cross-flow and collected in the second cone for sludge. Sediments are thickened and automatically discharged through the drainage pipe.

Clarifiers were created due to the need to bring the efficiency of the sedimentation closer to the theoretically expected. The retention time of water in the clarifier, which is quite long compared to other stages of water treatment, should be reduced as much as possible, while achieving the desired degree of sedimentation.

Clarifiers are constructed as pools, in which a system of parallel plates (lamellas) is installed in the form of a bundle, at a certain angle to the horizontal. The characteristic dimension - distance between the lamellas, is in the range of 2 to 5 cm. Between the installed plates, water loaded with floating particles flows upstream, and releases at that point a large part of the suspension for a significantly shorter time compared to conventional clarifiers. Optimum hydraulic parameters are also achieved.

Clarifiers are produced in accordance with customer requests, in a capacity of 8 - 100 m³ / h per unit, most often in the dimensions of a standard shipping container in order to facilitate their transport to the installation site.



SURFACE PROTECTIONS:

Degreasing, Sandblasting: Sa-2,5

INSIDE COATING:

Epoxy, Food grade, 300 microns*
or lamella plates material PP

OUTSIDE COATING:

3-layer epoxy system, 120 microns*

* Other materials and thickness of coating are available at client's request.

PLATE SETTLER DIMENSION
according to standard transport container

RAW WATER inlet distributor

OVERFLOW OUTLET

CLEAR WATER CHANNEL

LIFTING LUGS

CLEAR WATER CHAMBER

CLEAR WATER OUTLET

LAMELLAS
made from PP or PE, package under 55. angle inclination

FIRST CONE
without lamellas for sedimentation of large solid particles

CONNECTION
for air-blower washing

OPTIONAL AUTOMATIC GATE VALVES
gate valves for cones separate discharge

CONNECTION
for main water washing of drainage pipe

SUPPORTING STRUCTURE
made from carbon steel, epoxy coated drainage pipe

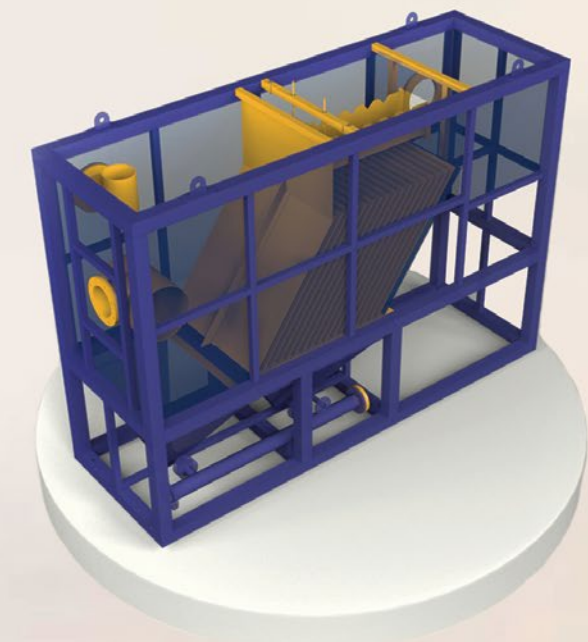
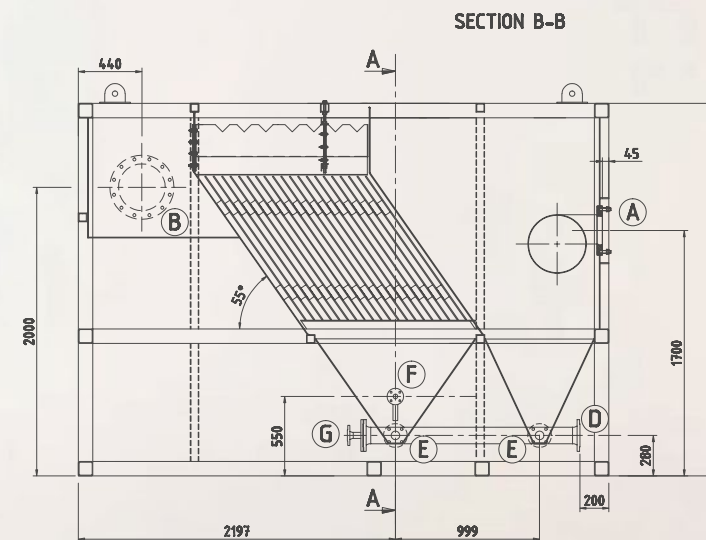
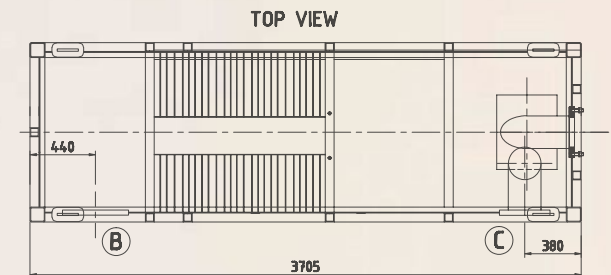
STANDARD LAMELA CLARIFIER TYPES

MATERIAL:	Carbon Steel S235JR (St37.2)
EXTERNAL SURFACE PROTECTION:	total layer thickness (dry layer): 120 µm
INTERNAL SURFACE PROTECTION:	total layer thickness (dry layer): 300 µm

WORK PRESSURE/TEST PRESSURE:	ATM
WORK TEMPERATURE:	max. 50°C
MAX. FLUSHING SPEED:	30 m/h
WATER FLOW SPEED THROUGH PIPES:	max. 2,5 m/s
CALCULATION / DOCUMENTATION:	PED 2014/68 CE art 3.3

TYPE LC-008

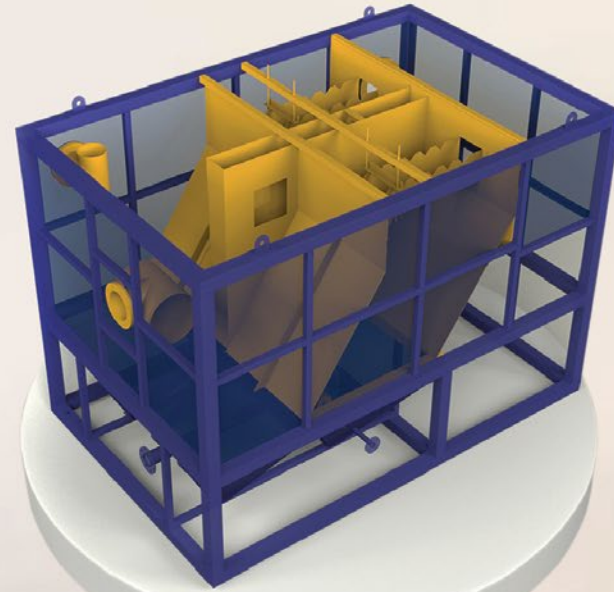
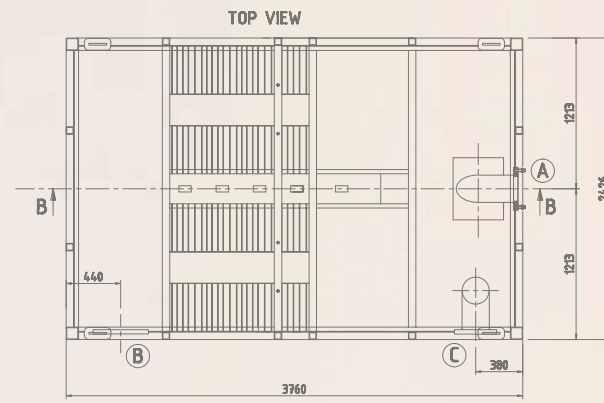
CONNECTIONS				
	DN	STANDARD	PN	FUNCTION
A	200	DIN 28117	PN10	RAW WATER INLET
B	300	DIN 28117	PN10	CLEAR WATER OUTLET
C	200	DIN 28117	PN10	OVER FLOW
D	100	DIN 2576	PN10	MAIN SLUDGE OUTLET
E	50	DIN 2576	PN10	COMPARTMENT SLUDGE OUTLET
F	25	DIN 2576	PN10	COMPARTMENT AIR BLOW INLET
G	32	DIN 2576	PN10	MAIN SLUDGE PIPE WATER WASHING



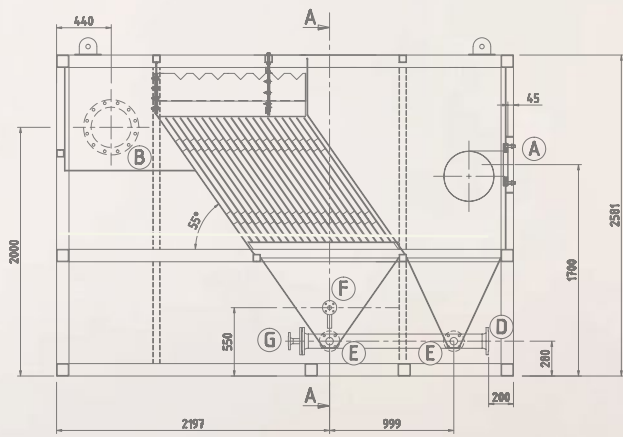
TYPE LC-016

CONNECTIONS

DN	STANDARD	PN	FUNCTION
A	200 DIN 28117	PN10	RAW WATER INLET
B	300 DIN 28117	PN10	CLEAR WATER OUTLET
C	200 DIN 28117	PN10	OVER FLOW
D	100 DIN 2576	PN10	MAIN SLUDGE OUTLET
E	50 DIN 2576	PN10	COMPARTMENT SLUDGE OUTLET
F	25 DIN 2576	PN10	COMPARTMENT AIR BLOW INLET
G	32 DIN 2576	PN10	MAIN SLUDGE PIPE WATER WASHING



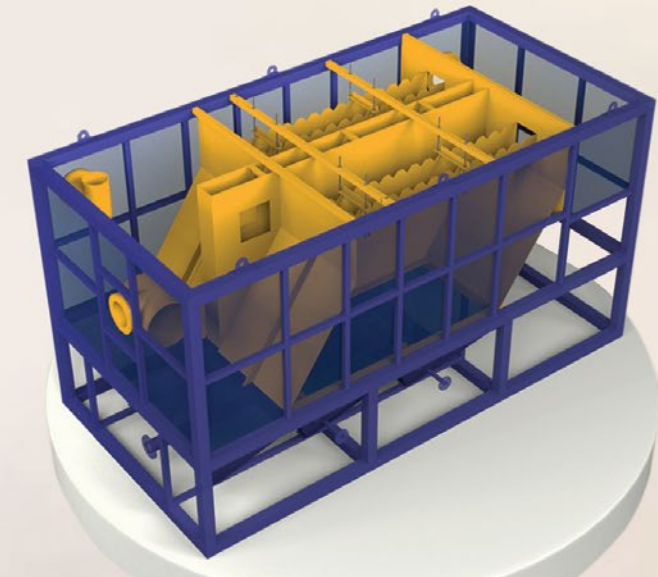
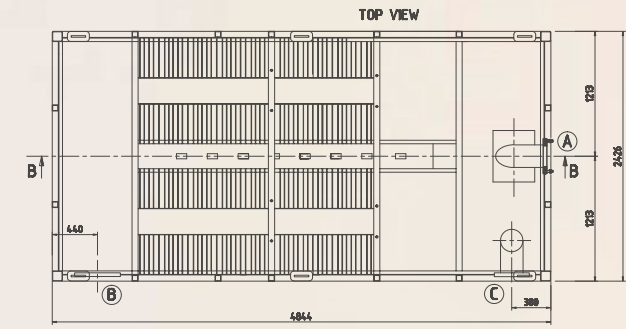
SECTION B-B



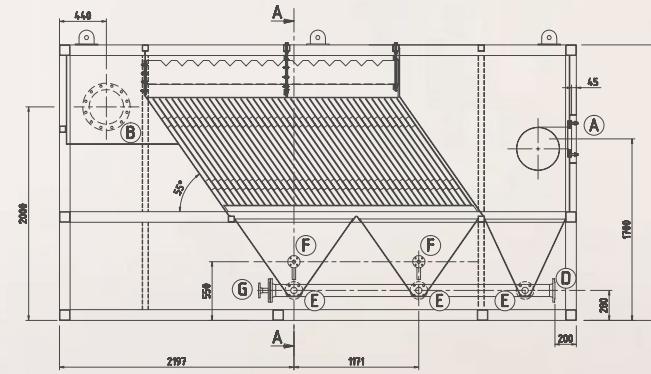
TYPE LC-032

CONNECTIONS

DN	STANDARD	PN	FUNCTION
A	200 DIN 28117	PN10	RAW WATER INLET
B	300 DIN 28117	PN10	CLEAR WATER OUTLET
C	200 DIN 28117	PN10	OVER FLOW
D	100 DIN 2576	PN10	MAIN SLUDGE OUTLET
E	50 DIN 2576	PN10	COMPARTMENT SLUDGE OUTLET
F	25 DIN 2576	PN10	COMPARTMENT AIR BLOW INLET
G	32 DIN 2576	PN10	MAIN SLUDGE PIPE WATER WASHING



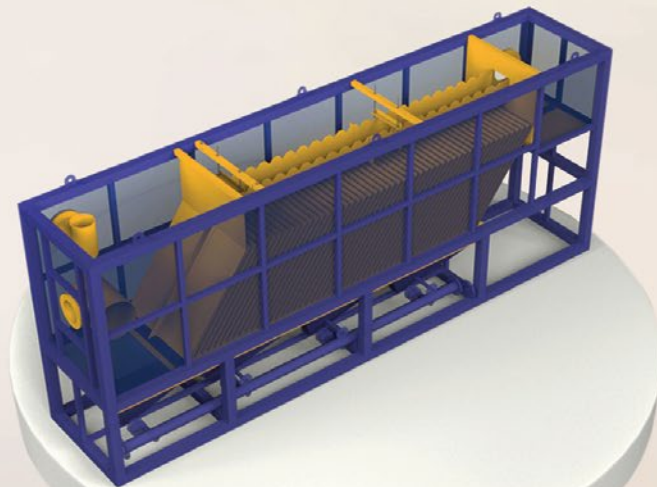
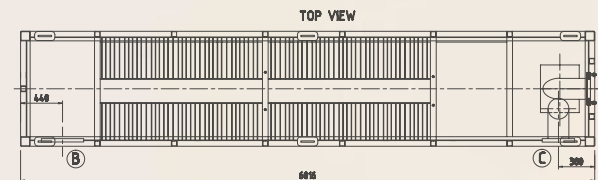
SECTION B-B



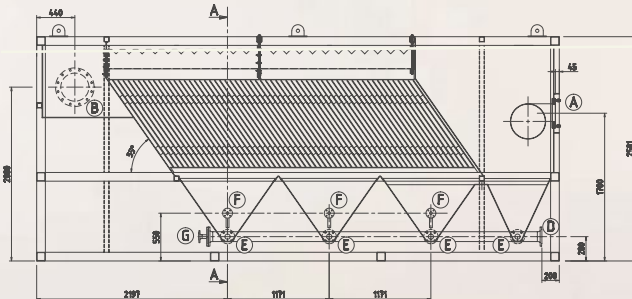
TYPE LC-025

CONNECTIONS

DN	STANDARD	PN	FUNCTION
A	200 DIN 28117	PN10	RAW WATER INLET
B	300 DIN 28117	PN10	CLEAR WATER OUTLET
C	200 DIN 28117	PN10	OVER FLOW
D	100 DIN 2576	PN10	MAIN SLUDGE OUTLET
E	50 DIN 2576	PN10	COMPARTMENT SLUDGE OUTLET
F	25 DIN 2576	PN10	COMPARTMENT AIR BLOW INLET
G	32 DIN 2576	PN10	MAIN SLUDGE PIPE WATER WASHING



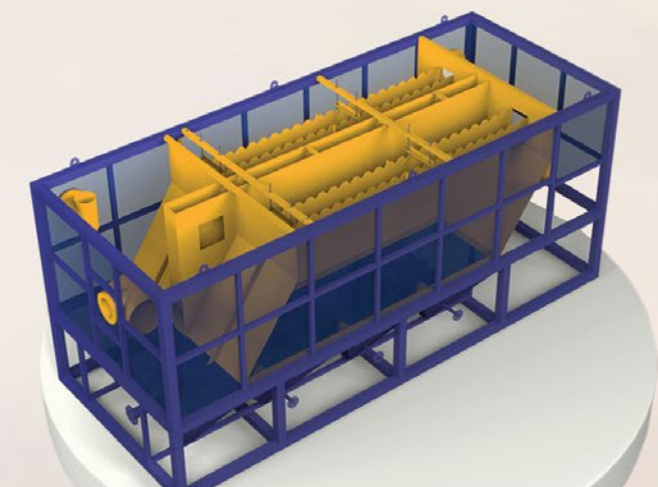
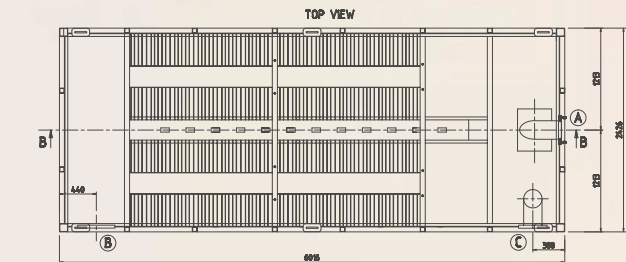
SECTION B-B



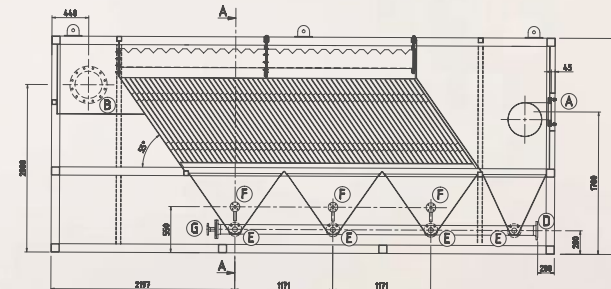
TYPE LC-050

CONNECTIONS

DN	STANDARD	PN	FUNCTION
A	200 DIN 28117	PN10	RAW WATER INLET
B	300 DIN 28117	PN10	CLEAR WATER OUTLET
C	200 DIN 28117	PN10	OVER FLOW
D	100 DIN 2576	PN10	MAIN SLUDGE OUTLET
E	50 DIN 2576	PN10	COMPARTMENT SLUDGE OUTLET
F	25 DIN 2576	PN10	COMPARTMENT AIR BLOW INLET
G	32 DIN 2576	PN10	MAIN SLUDGE PIPE WATER WASHING

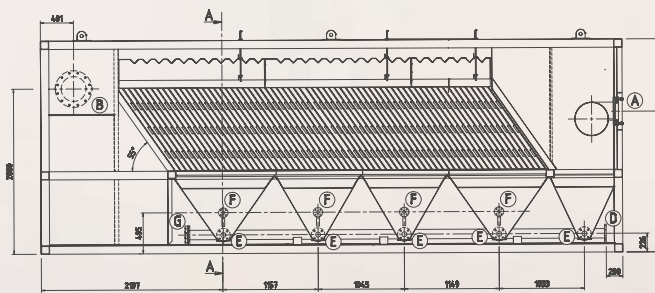
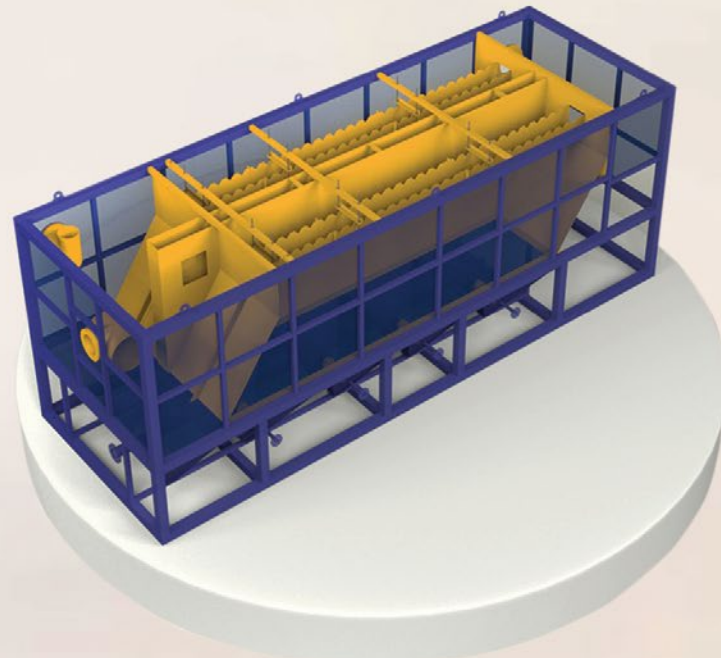
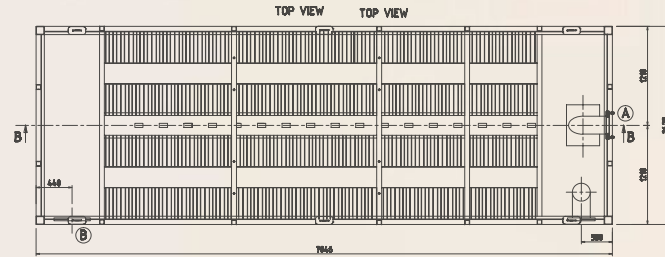


SECTION B-B



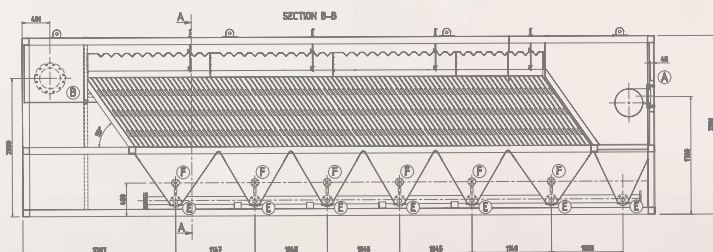
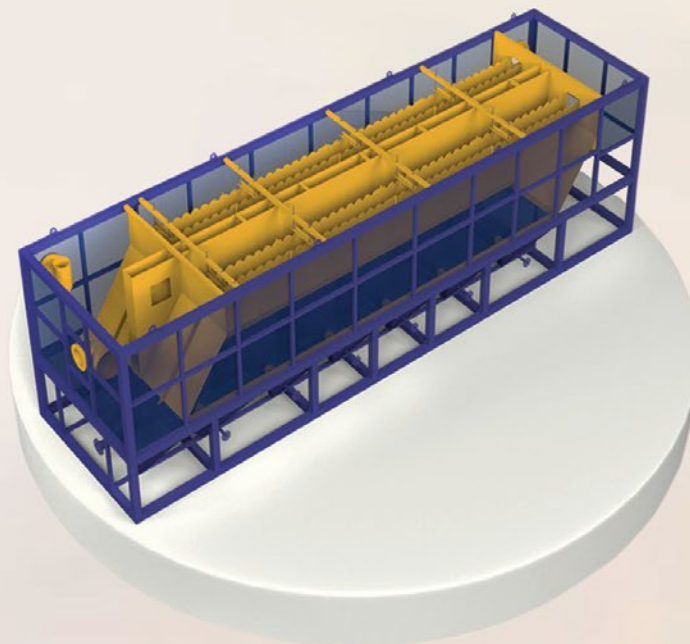
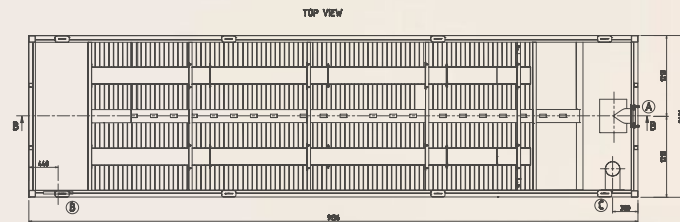
TYPE LC-70

CONNECTIONS				
	DN	STANDARD	PN	FUNCTION
A	200	DIN 28117	PN10	RAW WATER INLET
B	300	DIN 28117	PN10	CLEAR WATER OUTLET
C	200	DIN 28117	PN10	OVER FLOW
D	100	DIN 2576	PN10	MAIN SLUDGE OUTLET
E	50	DIN 2576	PN10	COMPARTMENT SLUDGE OUTLET
F	25	DIN 2576	PN10	COMPARTMENT AIR BLOW INLET
G	32	DIN 2576	PN10	MAIN SLUDGE PIPE WATER WASHING

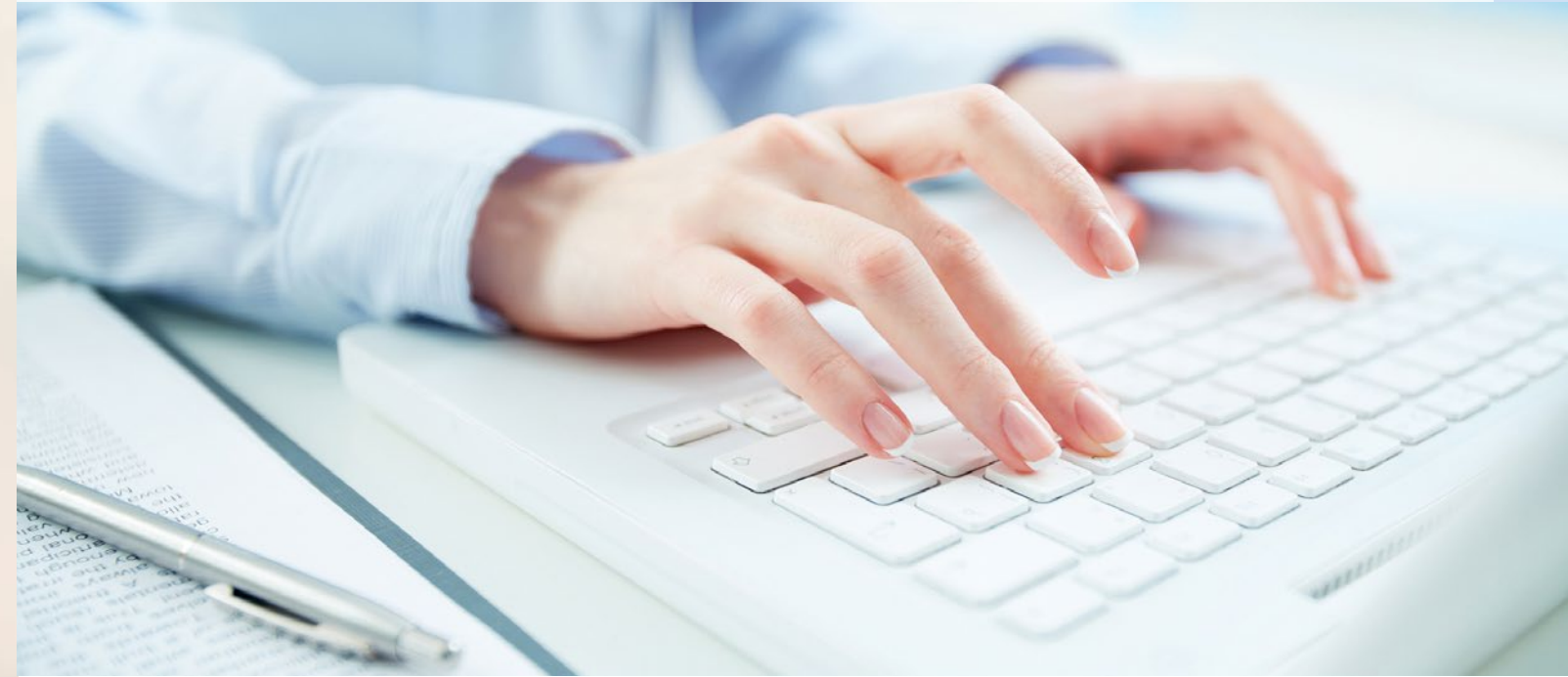


TYPE LC-100

CONNECTIONS				
	DN	STANDARD	PN	FUNCTION
A	200	DIN 28117	PN10	RAW WATER INLET
B	300	DIN 28117	PN10	CLEAR WATER OUTLET
C	200	DIN 28117	PN10	OVER FLOW
D	100	DIN 2576	PN10	MAIN SLUDGE OUTLET
E	50	DIN 2576	PN10	COMPARTMENT SLUDGE OUTLET
F	25	DIN 2576	PN10	COMPARTMENT AIR BLOW INLET
G	32	DIN 2576	PN10	MAIN SLUDGE PIPE WATER WASHING



DOCUMENTATION



In order to provide the highest quality of products and services, we follow PED regulations. At the request of the client, we are able to manufacture products with accompanying documentation in accordance with other standards (ASME and GOST- R).

In relation to specific requests and the implementation of specific procedures, we prepare documentation for the following:

- SEP,
- third party control (notified body),
- CE mark,
- products where the PED is not applicable.

Documentation can be prepared in Serbian, Croatian, English, Russian and German language or as bilingual.



CERTIFICATIONS



Quality management system
ISO 9001

- Customer focus
- Customer satisfaction
- Continuous improvement
- System/process effectiveness

ID 15 100 159250



Environmental management system
ISO 14001

- Environmental protection as management task
- Improvement of environmental performance
- Reduction of environmental risks

ID 15 104 181604

We have introduced the Quality Management System, control of welds and non-destructive testing in accordance with the highest European and international standards.

We are committed to follow and implement QMS procedures in every operation phase, from design to production. We produce vessels with CE certificate.

We have the following certificates:

- ISO 9001: 2015
- EN ISO 3834-2
- AD Merkblatt HPO
- INTERNATIONAL WELDING ENGINEER
- EUROPEAN WELDING ENGINEER
- NON - DESTRUCTIVE TESTING



We are in the process of obtaining of GOST-R and ASME certificates.



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