LARSSEN SHEET PILING

Larssen sheet piling is one of universal types of sheet-piled enclosures protecting from water and preventing soil destruction. Piles are connected with groove interlock. There are several methods of enclosures construction, including vibration driving, conventional driving, and pile pressing. Larssen sheet pile is formed by driving into soil.

Main application filed for Larssen sheet piling is creating enclosures in construction of hydraulic engineering structures and bridges.

Larssen sheet piling has a number of advantages, such as: variety of types (depending on technical characteristics of the object), good static properties, configuration symmetry, simple and reliable installation, corrosive resistance, increase of working process productivity.

Technological parameters of Larssen sheet piling are quite high and correspond to the international standards.

Larssen sheet piling L4Specification requirements

Following specification requirements apply for hot-rolled steel for L4 type sheet piles, intended for construction of hydraulic engineering structures, bridge engineering, foundation pits and trenches enclosures. The shape, cross-section, extreme dimension deviations, reference values should correspond to figures 1, 2 and the table:

Drag torque cm3		Profile cross-section area, cm2	Weight of 1 m of sheet pile, kg	Profile wall thickness		
For single sheet pile	For 1 metre of sheet piling			Nominal size, mm	Extreme deviation, accuracy	
					Ordinary	High
405	2200	94,26	74,0	14,8	±2	+1; -2

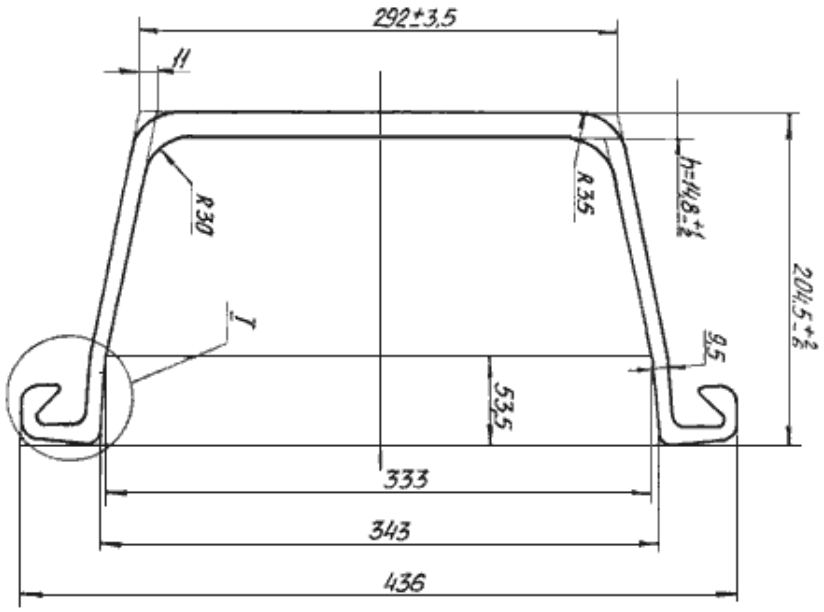

Figure 1. L4 sheet piling profile

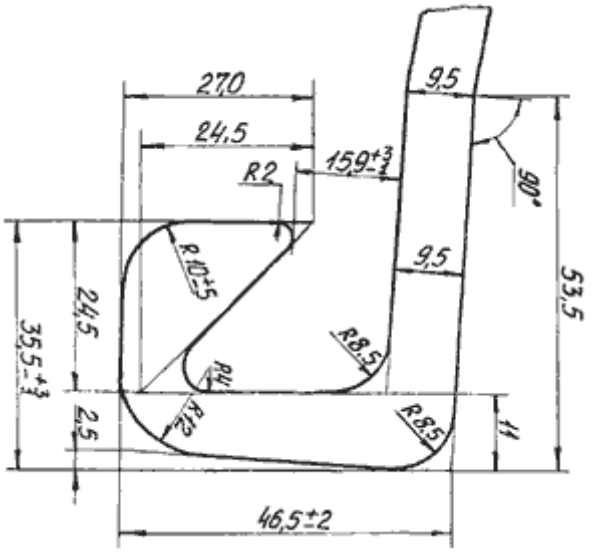

Figure 2. Locking part of L4 sheet piling profile

Dimensions without extreme deviations are given for profile design, and are not controlled on finished rolled metal. The profiles are manufactured 5 to 22 metres in length and supplied:

- With specific cut length - from 10 to 22 m;
- With variable length from 5 to 22 m.

When manufacturing a profile with specific cut length, delivery of rolled metal with variable length in the amount less than 25% of the ordered volume is allowed.

Maximum deviation for profile specific cut length should not exceed +100 mm.

Larssen sheet piling L5 Specification requirements

Following specification requirements apply for hot-rolled steel for L5 type sheet piles, intended for construction of hydraulic engineering structures, bridge engineering, foundation pits and trenches enclosures.

Sample identification code for L5 sheet pile profile made from 16 ХГ steel grade: 'sheet pile profile Л5-16ХГ-ТУ14-2-879-89.

The shape, cross-section, extreme dimension deviations, reference values should correspond to figures 1, 2 and the table:

Drag torque cm3		Profile cross-section area, cm2	Weight of 1 m of sheet pile, kg	Profile wall thickness		
For single sheet pile	For 1 metre of sheet piling			Nominal size, mm	Extreme deviation, accuracy	
					Ordinary	High
461	2962	127,40	100,0	21,0	±2	+1; -2

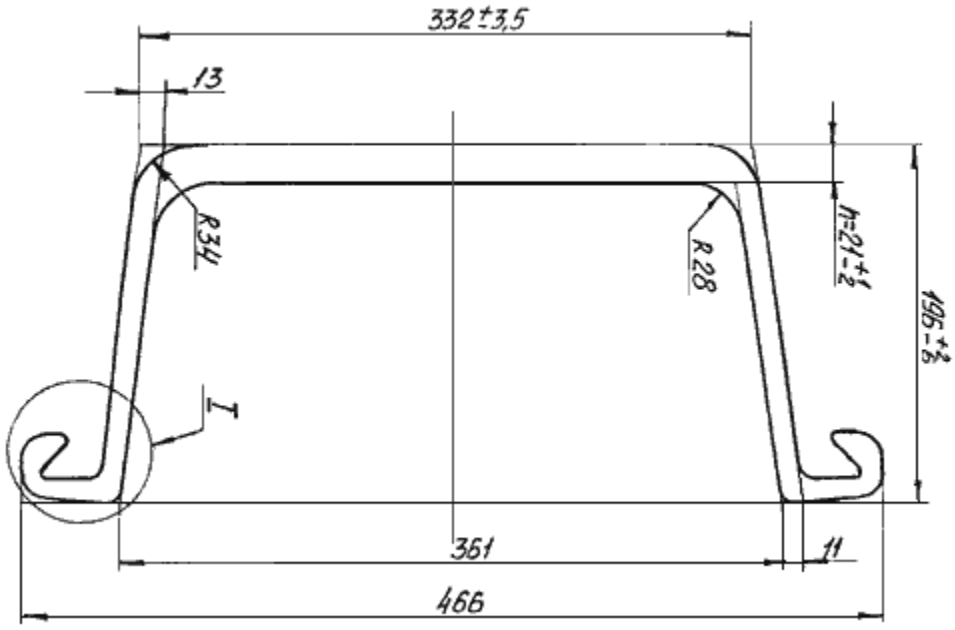

Figure 3. L5 sheet piling profile

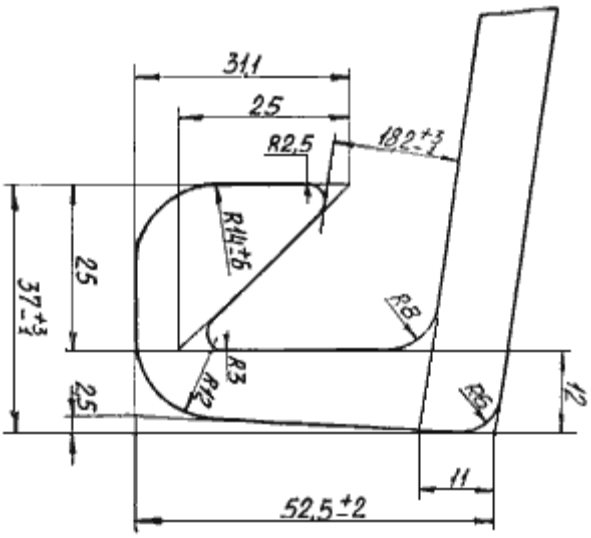

Figure 4. Locking part of L5 sheet piling profile

Dimensions without extreme deviations are given for profile design, and are not controlled on finished rolled metal.

The profiles are manufactured 5 to 22 metres in length and supplied:

- With specific cut length - from 10 to 22 m;
- With variable length from 5 to 22 m.

When manufacturing a profile with specific cut length, delivery of rolled metal with variable length in the amount less than 25% of the ordered volume is allowed.

Maximum deviation for profile specific cut length should not exceed +100 mm.

Larssen sheet pile is formed by driving into soil. This enclosure is waterproof.

Larssen sheet piling L5-UM

Specification requirements

Following specification requirements apply for trial batch of hot-rolled steel for L5-UM trough-type sheet piles, intended for construction of hydraulic engineering structures, bridge engineering, foundation pits and trenches enclosures. The L5-UM sheet pile represent L5-U profile with special lock design implying easier connection of sheet piling elements.

Sample identification code for L5-UM sheet pile made from steel with 235 strength index with technical specifications according to TU 14-102-8-2003: 'Steel pile Л5-УМ, 235 ТУ 14-102-8-2003
The shape and dimensions of the profile should correspond to figure 1.

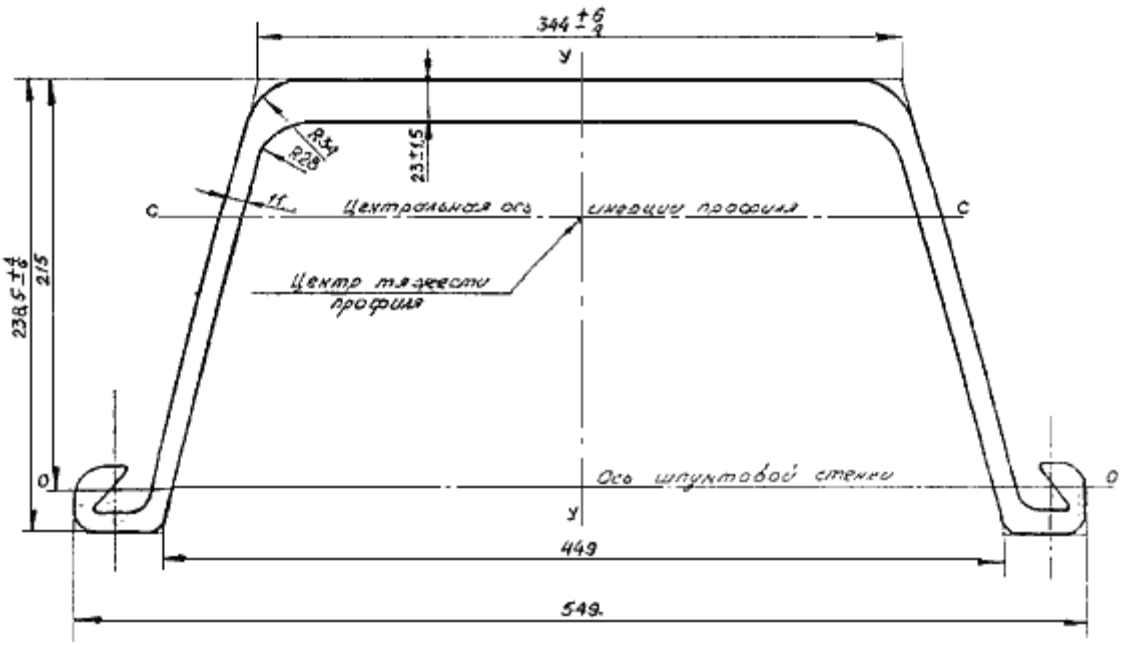

Figure 5. L5-UM sheet piling profile

The design and dimensions of the locking element should correspond to figure 6

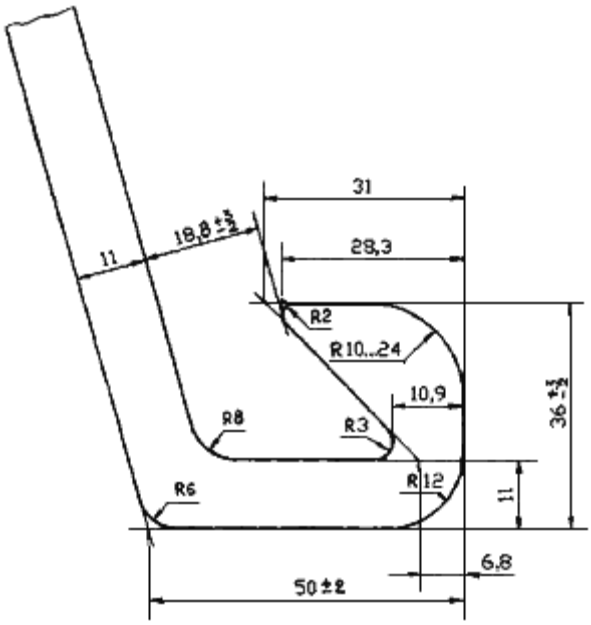

Figure 6. Locking element of L5-UM sheet piling

Dimensions without extreme deviations are given for profile design, and are not controlled on finished rolled profile. Adjustment of particular dimensions not hindering connection of sheet piles in the wall is allowed with the approval by customer.

Cross-section area*	Profile weight	Calculated perimeter
Fn, cm2	W_{linear}, kg/m	P_c**, cm
145,07	113,88	188,4

* Cross-section area is calculated for cam bending radius of 18 mm.
** For calculation of ground resistance when driving the profile.

The profile is manufactured:

- With specific cut length - from 12 to 24 m;
- With variable length from 5 to 24 m.

When manufacturing a profile with specific cut length, delivery of rolled metal with variable length in the amount less than 25% of the ordered volume is allowed.

Maximum deviation for profile specific cut length should not exceed +100 mm.

Larssen sheet piling can be used in any type of soil.