

## 2. Continuously cast steel slabs

Concast slabs are made of killed and semi-killed structural low-carbon and low-alloy quality steels designated for rolling into plate, sheet and skelp.

**Table 2.1. Nominal slab dimensions**

Thickness, mm	Width, mm	Length, mm
200	950–1850	3500–12000
250	950–1850	3500–12000

### Deviation limits for slab shape and dimensions

Deviation limits for slab shape and dimensions meet the requirements of TS 14-106-530-99, TS 14-106-550-98, TS 14-106-596-99 and TS 14-106-689-2003.

### Chemical analysis

Chemical analysis of steel complies with technical specifications, domestic and foreign standards:

GOST 380-94, GOST 9045-93, GOST 1050-88, GOST 5521-93, GOST19281-89; TS 14-106-502-96, TS 14-1-1950-89, TS 14-1-3464-82, TS 14-1-3764-84, TS 14-106-329-89, TS 14-15-275-92, EN, DIN, ASTM, SAE, API, BS, JIS.

On customer demand NLMK produces steel slabs with the content of main elements within narrow tolerances and limited content of detrimental impurities and non-ferrous substances in accordance with the table 2.2.

**Table 2.2. Content, % max.**

C	Si	S	P	Cr	Ni	Cu	N
0.04	0.015	0.005	0.015	0.03	0.06	0.06	0.006

For special application steel slabs the company manufactures products on customer demand with C max 0.003 %, Cr max. 0.01 %, Ni max. 0.03 % and Cu max. 0.03 %, microalloyed with V, Ti, Nb, Mo, B, P and other elements, as well as modified with Ca.

### Macrostructure

Macrostructure of the slabs for all types of the defects is in accordance with class 3 or better in «Mannesmann» scales with grading of Class 1, 2, 3, 4, 5. The slabs with the Class 2 macrostructure or better are produced upon a special agreement.

On customer demand we provide sulfur prints of slab cross-sections for macrostructure control.