

DILLIMAX TL

High yield strength fine grained structural steels

With close tolerances on dimension and shape

Specification DH-E48-D, edition April 2016¹

DILLIMAX TL steel plates are delivered with very close tolerances on dimension and shape. These close tolerances are for example necessary for telescopic booms.

Product description

This specification can be specified for the following steel grades in addition to the DILLIMAX data sheets of Dillinger or EN 10025-6:

- DILLIMAX 690 B/T/E (S690Q/QL/QL1 according to EN 10025-6)
- DILLIMAX 890 B/T/E (S890Q/QL/QL1 according to EN 10025-6)
- DILLIMAX 965 B/T (S960Q/QL according to EN 10025-6)
- DILLIMAX 965 E
- DILLIMAX 1100

The steel is designated as e.g. DILLIMAX 965 T TL or S960 QL TL.

Other specifications may be possible on request.

DILLIMAX TL plates can be delivered in the following dimensions:

Plate thickness t [mm]	Width B [mm]	Length L [mm]
$6 \leq t < 8^a$ (0.25 in. \leq t < 0.30 in.) ^b	$1\ 000 \leq B \leq 2\ 500$ (39 in. \leq B \leq 98 in.) ^b	
$8 \leq t < 9.5$ (0.30 in. \leq t < 0.37 in.) ^b	$1\ 000 \leq B \leq 3\ 200^c$ (39 in. \leq B \leq 126 in.) ^b	$2\ 000 \leq L \leq 18\ 000$
$9.5 \leq t < 15$ (0.37 in. \leq t < 0.60 in.) ^b	$1\ 000 \leq B \leq 3\ 300^d$ (39 in. \leq B \leq 130 in.) ^b	(79 in. \leq L \leq 708 in.) ^b
$15 \leq t \leq 25$ (0.60 in. \leq t < 1.00 in.) ^b	$1\ 000 \leq B \leq 3\ 300^e$ (39 in. \leq B \leq 130 in.) ^b	

^a DILLIMAX 1100 for $t \geq 8$ mm (0.31 in.)^b

^b The approximately converted values in brackets are for information only.

^c 3 050 mm (120 in.)^b for DILLIMAX 890/965 and 2 500 mm (98 in.)^b for DILLIMAX 1100

^d 2 500 mm (98 in.)^b for DILLIMAX 1100

^e 3 050 mm (120 in.)^b for DILLIMAX 1100

¹ The current version of this material data sheet can be found on <http://www.dillinger.de>.

General technical delivery requirements

Unless otherwise agreed, the general technical delivery requirements in accordance with EN 10021 apply.

Tolerances

Tolerances on nominal plate thickness

For TL plates, the very close thickness range Δ (upper value – lower value) is distributed as given in the following table. Other distributions of Δ e.g. as in EN 10029 can be agreed.

Nominal thickness t [mm]	Lower limit of thickness [mm]	Upper limit of thickness [mm]
$6 \leq t < 16$	- 0.2	+ 0.4
$16 \leq t \leq 20$	- 0.3	+ 0.5
$20 < t \leq 25$	- 0.3	+ 0.8

The difference in thickness along the bending line (axis in rolling direction from tip to toe of a plate) does not exceed 0.3 mm (0.012 in.)².

Tolerances on width and length

Unless otherwise agreed, the tolerances will be in accordance with EN 10029.

Tolerances on flatness

The following tolerances on flatness apply:

- 3 mm / 1m (0.12 in. / 3.3 ft)² for a corrugation ≤ 1 m (≤ 3.3 ft)²
- 4 mm / 1m (0.16 in. / 3.3 ft)² for a corrugation $> 1 \leq 2$ m (> 3.3 ft ≤ 6.6 ft)²
- 5 mm / 2m (0.20 in. / 6.6 ft)² for a corrugation > 2 m (> 6.6 ft)²

A maximum of 2 ripples or corrugations per m (3.3 ft)² of plate length is allowed. A ripple or corrugation is defined as a flatness deviation > 1 mm (> 0.04 in.)². The flatness control is carried out on a flat support according to EN 10029 using a 1 m (3.3 ft)² - or 2 m (6.6 ft)² - levelling staff.

Surface quality

Unless otherwise agreed, the specification will be in accordance with EN 10163-2, class B2.

Steel grid blasting and shop primer can be agreed.

² The approximately converted values in brackets are for information only.

Identification of plates

Unless otherwise agreed the marking is carried out via steel stamps with at least the following information:

- steel grade (e.g. DILLIMAX 965 T TL)
- heat number
- number of mother plate and individual plate
- the manufacturer's symbol
- inspector's sign

General Note

If particular requirements are demanded and not covered in this specification, please contact us with the specifications for our review and agreement prior to ordering. The information in this specification is a product description. This specification is updated at occasion demands. The latest version is available from the mill or as download at www.dillinger.de.

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