

# SIQUAL<sup>...</sup> 5531

## ALLOY SPECIAL STEEL WITH BORON ADDITION

**SIQUAL 5531** is alloy special steel with boron addition. The basic effect of boron in steel is the enhancement of hardenability, which is evident at very small concentrations.

It is widely used in agricultural machinery parts production, safety-relevant parts in the automotive industry, machine parts in the mining industry etc. due to its wear resistance, high strength, good deformability and weldability.

High strength and wear resistance can be obtained with quenching and tempering while good formability is acquired in as-rolled condition.

### SPECIFICATIONS

SIQUAL 5531 is designated as 30MnB5 according to EN 10027-1 and as W.Nr. 1.5531, and conforms to the following standard:

- EN ISO 683-2:2018 – Heat treatable steels, alloy steels and free cutting steels – Part 2: Alloy steels for quenching and tempering

### CHEMICAL COMPOSITION

	C	Si	Mn	P	S	Cr	B
Min. in %	0.27	-	1.15	-	-	-	0.0008
Max. in %	0.33	0.40	1.45	0.025	0.035	0.40	0.0050

### MECHANICAL PROPERTIES

For products in as-rolled condition the mechanical properties are not defined.

Any mechanical tests are the subject of agreement during the time of enquiry and order.

### DIMENSIONS

	Hot-rolled strip	Hot-rolled plate	Heavy plates
Thickness [mm]	3–6	3–6	8–*
Width [mm]	100–1000	800–1000	1000–2000/2500
Length [mm]	-	2000–6000	up to 12000
Internal diameter [mm]	610	-	-

\* Max. thickness of heavy plates is to be agreed at the time of inquiry

## **TOLERANCES ON DIMENSIONS**

- Heavy plates: EN 10029
- Hot-rolled strips/sheets: EN 10051

## **SURFACE CONDITION**

According EN 10163-2 or by special agreement.

## **DELIVERY CONDITION**

Hot-rolled strip/sheet		Hot-rolled quarto plates	
as-rolled (+ shot-blasted)	annealed (+ shot-blasted)	as-rolled (+ shot-blasted)	annealed (+ shot-blasted)

## **INSPECTION DOCUMENTS**

The type of document shall be agreed upon at the time of enquiry and order. A test certificate according to EN 10204/3.1 is issued mandatorily.

The information and data in this product data sheet are intended for informative purpose only and may be revised at any time without notice. Presented typical properties of the materials are described only to help readers make their own evaluations and decisions. They are not guaranteed.

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