



## DX53D+Z (CR2\*)

Mild, galvanised steel grades for cold forming

<b>Material no.</b>	<b>1.0951</b>
according to	DIN EN 10346/ DIN EN 10143
* VDA 239-100	

### Surface finish

Thickness ranges

NA	0.50 – 4.00
MA	0.50 – 4.00
MB	0.50 – 4.00
MC <sup>1)</sup>	0.50 – 2.00

1) By agreement

### Chemical composition<sup>2)</sup>

(in percent by weight according to DIN EN)

	min. in %	max. in %
C		0.12
Si		0.50
Mn		0.60
P		0.10
S		0.045
Ti		0.30

(in percent by weight according to VDA)

	min. in %	max. in %
C		0.10
Si		0.50
Mn		0.50
P		0.025
S		0.020
Ti		0.30
Al	0.10	
Cu		0.20

2) Heat analysis

### Mechanical properties<sup>3)</sup>

Yield strength $R_e^{4)}$ in MPa	
DIN EN	140 – 260
VDA	140 – 240

Tensile strength $R_m$ in MPa	
DIN EN	270 – 380
VDA	270 – 370

Total elongation $A_{80}^{5)}$ in %	
DIN EN	$\geq 30$
VDA	$\geq 34$

### Hardening exponent n

DIN EN	-
VDA	$\geq 0.16$

### Anisotropie r

DIN EN	-
VDA	$\geq 1.3$

3) Test direction is according to DIN EN and according to VDA in transverse rolling direction.

4)  $R_{p0.2}/R_{eL}$

5) Thickness  $\geq 0.71$ mm. Thickness  $0.50$ mm  $< t \leq 0.70$ mm: minus two units. Thickness  $\leq 0.50$ mm: minus four units.

### Available dimensions<sup>6)</sup>

Thickness in mm	Width in mm
0.50 – 0.64	900 – 1,590 <sup>6)</sup>
0.65 – 2.50	900 – 1,860
2.51 – 4.00	900 – 1,650

6) Widths up to 1,860 by agreement

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