



## DX54D+Z (CR3\*)

Mild, galvanised steel grades for cold forming

<b>Material no.</b>	<b>1.0952</b>
according to	DIN EN 10346/ DIN EN 10143 * VDA 239-100

### Surface finish

Thickness ranges

NA	0.50 – 3.00
MA	0.50 – 3.00
MB	0.50 – 3.00
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		0.08
Si		0.50
Mn		0.50
P		0.025
S		0.020
Ti		0.30
Al	0.010	
Cu		0.20

2) Heat analysis

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

Yield strength $R_e^{4)}$ in MPa	
DIN EN	120 – 220
VDA	140 – 210

Tensile strength $R_m$ in MPa	
DIN EN	260 – 350
VDA	270 – 350

Total elongation $A_{80}^{5)}$ in %	
DIN EN	$\geq 36$
VDA	$\geq 38$

### Hardening exponent n

DIN EN	$\geq 0.18$
VDA	$\geq 0.18$

### Anisotropie $r^{6)}$

DIN EN	$\geq 1.6$
VDA	$\geq 1.8$

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.

6) Thickness  $1.50$ mm  $\leq t < 2.00$ mm: minus 0.2 units;  $t \geq 2.0$ mm minus 0.4 units.

### Available dimensions

Thickness in mm	Width in mm
0.50 – 0.55	900 – 1,515
0.56 – 0.64	900 – 1,650 <sup>7)</sup>
0.65 – 2.50	900 – 1,860
2.51 – 3.00	900 – 1,650

7) Widths up to 1,860 by agreement

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