

Serica®

Tightly controlled low surface waviness

Serica is a premium hot-dip galvanised surface finish, providing finely balanced surface characteristics that result in a minimised waviness of the metallic coated surface. The guaranteed low waviness after forming enables an excellent paint result, even when thinner or fewer paint layers are used. The Serica product family provides different guaranteed waviness levels, enabling the harmonisation of paint

appearance across the various outer panels.

Serica 35, which provides a guaranteed waviness after deformation of 0.35 µm, is the first product in the range and is followed by Serica 32 and Serica 29 that guarantee even lower waviness values at respectively 0.32 and 0.29 µm.

Surface aspects

Zinc layer

	Coating weight double sided	Coating thickness single sided
Pure Zinc (GI)	90 - 140 g/m ²	7 - 10 µm

Roughness

Ra (cut-off 2.5mm)	0.9 - 1.4 µm
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Peak count

RPC	≥ 75 cm ⁻¹
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Waviness Wsa(1-5) after forming*

Serica 35	≤ 0.35 µm
Serica 32	≤ 0.32 µm
Serica 29	≤ 0.29 µm

* At a biaxial strain of 5%

Surface quality

Serica is the highest possible surface quality for hot-dip galvanised steels as it provides an optimisation of the long wave surface structures of the steel in addition to the controlled quality level that is provided by the MC quality standard.

Oiling

The material surface is oiled with preservative oil. The amount of supplied oil ranges from 0.5 g/m² to 2.0 g/m². Other types of oil or different levels are available upon request.

Grades and dimensions

Grade availability for Serica 35, 32 and 29

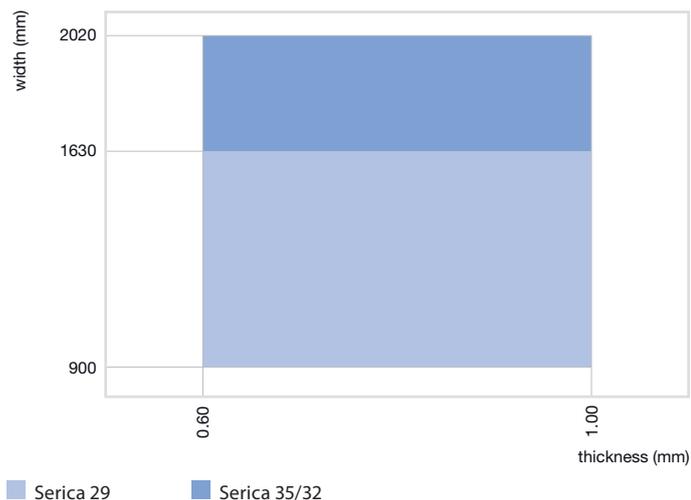
Serica 35 and Serica 32 are available on all hot-dip galvanised forming and bake hardening steels and are in development for the interstitial free grades. Serica 29 is currently available on BH180 and under development for BH220 and BH260.

Product group	Product subgroup	Product	EN 10346	VDA 239-100
Steel for forming		DX54	DX54D	CR3
		DX56	DX56D	CR4
		DX57	DX57D	CR5
High-strength steel	Phosphorus alloyed interstitial free	IF180	HX180YD	CR180IF
		IF220	HX220YD	CR210IF
		IF260	HX260YD	CR240IF
	Bake hardening	BH180*	HX180BD*	CR180BH*
		BH220	HX220BD	CR220BH
		BH260	HX260BD	CR260BH

Blue = in development

* Available in Serica 29

Dimensional window of Serica® product family



The available dimensions can differ between grades. Please refer to Tata Steel or your local sales representative for final confirmation on dimensional capability.

Our material experts are there to support the deployment of our products in your specific application area.

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