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Digital Material Passport

<i>ID</i>	DMP-METAL-001	<i>Version</i>	1.0.0
<i>Issue Date</i>	2025-05-14	<i>Certificate Type</i>	EN 10204 3.1

Business Transaction

Order		Delivery	
<i>Order ID</i>	PO-78901	<i>Delivery ID</i>	DN-56789
<i>Position</i>	10	<i>Position</i>	1
<i>Date</i>	2025-04-20	<i>Date</i>	2025-05-12
<i>Quantity</i>	5000 kg	<i>Quantity</i>	5000 kg
Specification			
<i>Name</i>	EN 10025-2	<i>Revision</i>	2019

Product Information

<i>Product Name</i>	Structural Steel S355J2
<i>Batch ID</i>	H-10987-02
<i>Surface Condition</i>	Hot-rolled
<i>Production Date</i>	2025-05-09
<i>Country of Origin</i>	DE

Customs Classification

<i>HS Code</i>	720839
<i>Standard Description</i>	Flat-rolled products of iron or non-alloy steel, of a width of 600 mm or more, hot-rolled, not clad, plated or coated
<i>CN8 (EU)</i>	72083900
<i>Description (EU)</i>	Flat-rolled products of iron or non-alloy steel, of a width of 600 mm or more, hot-rolled, not clad, plated or coated, of a thickness of 4.75 mm or more

Product Norms

<i>Designation</i>	EN 10025-2 (2019)
<i>Grade</i>	S355J2

Material Designations

<i>System</i>	EN
<i>Designation</i>	1.0577

Product Shape

<i>Form</i>	RoundBar
<i>Length</i>	6000 mm
<i>Diameter</i>	50 mm

Delivery Conditions

Bundles

<i>Type</i>	Hexagonal
<i>Quantity</i>	5
<i>Material</i>	Wire binding
<i>Condition</i>	Good

Heat Treatment

<i>Process</i>	<i>Lot</i>	<i>Furnace</i>	<i>Date</i>
Normalizing	HT-2024-11-15-B47	FURNACE-03	2024-11-15

Stages

<i>Stage</i>	<i>Temperature</i>	<i>Duration</i>	<i>Cooling</i>	<i>Atmosphere</i>
Austenitizing	920 C			

Chemical Analysis

<i>Heat Number</i>	H-10987
<i>Melting Process</i>	EAF+LF
<i>Casting Date</i>	2025-05-08
<i>Casting Method</i>	ContinuousCasting
<i>Sample Location</i>	Ladle

Elements

<i>Symbol</i>	C	Mn	Si	P	S	N	CEV
<i>Unit</i>	%	%	%	%	%	%	%
<i>Min</i>	-	-	-	-	-	-	-
<i>Max</i>	0.2	1.6	0.5	0.025	0.02	0.009	0.45
<i>Actual</i>	0.18	1.45	0.25	0.018	0.012	0.006	0.42

Formula Definitions

CEV = C+Mn/6+(Cr+Mo+V)/5+(Ni+Cu)/15: 0.42%

Mechanical Properties

Property	Symbol	Actual	Minimum	Maximum	Method	Status
Tensile Strength					EN ISO 6892-1	-
3 specimens tested						
Individual Values		# 1		# 2		# 3
Value [MPa]		508		510		512
Statistics		Mean		Min/Max		Std Dev
		510.0		508 / 512		
Yield Strength					EN ISO 6892-1	-
3 specimens tested						
Individual Values		# 1		# 2		# 3
Value [MPa]		378		380		382
Statistics		Mean		Min/Max		Std Dev
EN ISO 6892-1 statistical analysis		380.0		378 / 382		
Elongation after fracture					EN ISO 6892-1	-
3 specimens tested						
Individual Values		# 1		# 2		# 3
Value [%]		21.5		22.0		22.5
Statistics		Mean		Min/Max		Std Dev
EN ISO 6892-1 statistical analysis		22.0		21.5 / 22.5		0.5 (Sample)

Validation

We hereby certify that the material described above has been manufactured and tested in accordance with the requirements of EN 10204:2004 type 3.1 and the specified standards. The results comply with the requirements.

Validated By

Name	Title	Department	Date
Johann Weber	Quality Inspector	Quality Assurance	2025-05-14

Data schema maintained by [Material Identity](#).

<https://schemas.materialidentity.org/metals-schemas/v0.1.1/schema.json>