



**Manufacturer**  
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**Digital Material Passport**

ID	DMP-METAL-007	Version	1.0.0
Issue Date	2025-05-20	Certificate Type	EN 10204 3.1

**Business Transaction**

<b>Order</b>		<b>Delivery</b>	
Order ID	PO-98765	Delivery ID	DN-12345
Position	5	Position	1
Date	2025-04-20	Date	2025-05-19
Quantity	20000 kg	Quantity	20000 kg

**Product Information**

Product Name	Structural Steel S420N Plate
Batch ID	H-45678-01
Heat Treatment	Normalized
Surface Condition	Shot blasted and primed
Production Date	2025-05-18
Country of Origin	DE

**Product Norms**

Designation	EN 10025-3 (2019)
Grade	S420N
Designation	EN 1090-2 (2018)
Grade	EXC3

**Material Designations**

System	EN
Designation	1.8902

**Product Shape**

Form	Plate
Length	12000 mm
Width	2500 mm
Thickness	25 mm

**Chemical Analysis**

Heat Number	H-45678
Melting Process	EAF+LF+VD

Casting Date  
Sample Location

2025-05-17  
Ladle

Elements

Symbol	C	Mn	Si	P	S	Nb	V	Ti	CEV
Unit	%	%	%	%	%	%	%	%	%
Min	-	1.0	-	-	-	-	-	-	-
Max	0.22	1.7	0.6	0.025	0.02	0.05	0.05	0.03	0.48
Actual	0.16	1.38	0.32	0.016	0.008	0.022	0.034	0.009	0.4

Formula Definitions

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

Mechanical Properties

Property	Symbol	Actual	Minimum	Maximum	Method	Status
Tensile Strength	Rm	550 MPa	520	680	EN ISO 6892-1	✓
Yield Strength	ReH	440 MPa	420		EN ISO 6892-1	✓
Elongation after fracture	A	21 %	19		EN ISO 6892-1	✓
Charpy V-notch Impact - Energy	KV	65 J	40		EN ISO 148-1	✓


Supplementary Tests

Property	Actual	Target/Min	Maximum	Method	Status
Ultrasonic Testing Class S2E2	Yes No recordable indications exceeding acceptance criteria	-		EN 10160	✓
Through-thickness Properties	Z25	-		EN 10164	✓
Weldability	Yes Satisfactory welding properties	-		Internal Method based on - EN ISO 15614-1	✓

Validation

We hereby certify that the material described above has been manufactured and tested in accordance with the requirements of EN 10025-3:2019 and EN 10204:2004 type 3.1. The product complies with the Construction Products Regulation (EU) No 305/2011 and is suitable for use in structural applications according to EN 1090-2:2018, up to and including Execution Class EXC3.

Validated By

Name	Title	Department	Date
John Smith	Quality Manager	Quality Assurance	2025-05-20
 Maria Schmidt	Quality Manager	Quality Assurance	2025-05-20