

Customer

**Global Steel Trading Ltd.** 

Commerce Way 789 2000 Antwerp, BE orders@globalsteel.example.com

## Manufacturer ACME Metal Works GmbH

Industrial Park 123 52066 Aachen, DE quality@acme-metal.example.com

# **Digital Material Passport**

ID	DMP-METAL-006	Version	1.0.0
Issue Date	2025-05-18	Certificate Type	EN 10204 3.1

## **Business Transaction**

<b>Order</b> Order ID	PO-65478	<b>Delivery</b> Delivery ID	DN-98761
Position	1-10	Position	All
Date	2025-04-15	Date	2025-05-17
Quantity	75000 kg	Quantity	75000 kg

# **Product Information**

Product Name	Structural Steel S355J2+N - Various Shapes
Batch ID	H-79513-03
Heat Treatment	Normalized
Surface Condition	Hot-rolled
Production Date	2025-05-16
Country of Origin	DE

#### **Product Norms**

Designation	EN 10025-2 (2019)
Grade	S355J2+N

# **Material Designations**

System	EN
Designation	1.0577

# **Chemical Analysis**

Heat Number	H-79513
Melting Process	BOF+LF
Casting Date	2025-05-15
Sample Location	Ladle

#### Elements

Symbol	С	Mn	Si	P	S	CEV
Unit	%	%	%	%	%	%
Min	-	-	-	-	-	-
Max	0.2	1.6	0.5	0.025	0.02	0.45
Actual	0.17	1.47	0.25	0.017	0.011	0.42

## **Formula Definitions**

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

# **Mechanical Properties**

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Property	Symbol	Actual	Minimum	Maximum	Method	Status
Tensile Strength	Rm	525 MPa	470	630	EN ISO 6892-1	-
Yield Strength	ReH	385 MPa	355		EN ISO 6892-1	-
Elongation after fracture	Α	23 %	20		EN ISO 6892-1	-
Charpy V-notch Impact - Energy	KV	42 J	27		EN ISO 148-1	-

# **Supplementary Tests**

Beam

Property	Actual	Target/Min	Maximum	Method	Status
Product Details Item 1: IPE - Beam	Array data (see below)	-		Dimensional Inspection	$\checkmark$

Parameter	Value	Unit
Form		
Beam		
Height		
200		
mm		
FlangeWidth		
100		
mm		
FlangeThickness		
8.5		
mm		
WebThickness		
5.6		
mm		
Length		
12000		
mm		
Quantity		
15		
pieces		
Weight		
15000		
kg		

Parameter	Value	Unit
Form		
Beam		
Height		
240		
mm		
FlangeWidth		
240		
mm		
FlangeThickness		
12		
mm		
WebThickness		
7.5		
mm		
Length		
8000		
mm		
Quantity		
20		
pieces	3/4	
Weight	3/ 4	
20000		
kg		

## **Validation**

We hereby certify that all material described above has been manufactured and tested in accordance with the requirements of EN 10025-2:2019 and EN 10204:2004 type 3.1. The results comply with the requirements for S355J2+N steel grade.

## **Validated By**

Name Title Department Date

Klaus Müller Quality Control Manager Quality Assurance 2025-05-18

Data schema maintained by Material Identity.

 $\underline{https://schemas.material identity.org/metals-schemas/v0.0.1/schema.json}$