

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

Goods Receiver

Global Steel Trading Ltd. - Rotterdam Warehouse

1.0.0

DN-98761

Harbor District 45

Pier 7

3089 Rotterdam

NL

Digital Material Passport

ID DMP-METAL-006 Version

Issue Date 2025-05-18 Certificate Type EN 10204 3.1

Business Transaction

 Order
 Delivery

 Order ID
 PO-65478
 Delivery ID

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 IDH-79513-03Heat TreatmentNormalizedSurface ConditionHot-rolledProduction Date2025-05-16

Country of Origin DE

Customs Classification

HS Code 721633

Standard Description H sections of iron or non-alloy steel

CN8 (EU) 72163300

Description (EU) H-sections of iron or non-alloy steel

HTS (US) 7216330000

Description (US) H-sections of iron or nonalloy steel

Product Norms

Designation EN 10025-2 (2019)

Grade S355J2+N

Material Designations

System EN
Designation 1.0577

Chemical Analysis

Heat NumberH-79513Melting ProcessBOF+LF

Casting Date
Casting Method

2025-05-15 ContinuousCasting Ladle

Elements

Sample Location

| 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: 0.42 %

Mechanical Properties

| • | | | | | | |
|-----------------------------------|--------|---------|---------|---------|---------------|--------|
| 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.

 $\underline{https://schemas.material identity.org/metals-schemas/v0.1.0/schema.json}$