# COMPLETE PRODUCTION WORK ORDER PACKAGE

**ROOT / MAIN: WO-2026-000119  SELECTED BOM: BOM-000010 / Rev.0**

Contains full frozen details for MAIN + every nested Child BOM Work Order.
PDF Generated: 2026-11-20 05:27:08

## WORK ORDER / BOM RELATIONSHIP INDEX

| Level | Work Order | Parent | Parent Operation | Product / BOM | Qty | Status |
|---|---|---|---|---|---|---|
| MAIN | WO-2026-000119 | | ROOT | C1 1000 02X05BB5LYYGDC0Y \| BOM-000010 | 2000 m | PLANNED |
| L1 | WO-2026-000120 | WO-2026-000119 | 10 OP090 Cabling / Lay-up | > S1001 01B5YLY070B5YYYA22 \| BOM-000008 | 2030 m | PLANNED |
| L2 | WO-2026-000121 | WO-2026-000120 | 10 OP060 Insulation Extrusion | > > BCL5 U-S000-0027-0250A04Y \| BOM-000006 | 2030 kg | PLANNED |
| L3 | WO-2026-000122 | WO-2026-000121 | 10 OP030 Bunching / Double Twist | > > > BCL5 N-N000-0009-0250007Y \| BOM-000005 | 676.666599 kg | PLANNED |
| L4 | WO-2026-000123 | WO-2026-000122 | 10 OP020 Multiwire Drawing | > > > > BCL1 N-N000-0001-1250005Y \| BOM-000004 | 679.373265 kg | PLANNED |
| L3 | WO-2026-000124 | WO-2026-000121 | 10 OP030 Bunching / Double Twist | > > > BCL5 N-N000-0009-0250007Y \| BOM-000005 | 676.666599 kg | PLANNED |
| L4 | WO-2026-000125 | WO-2026-000124 | 10 OP020 Multiwire Drawing | > > > > BCL1 N-N000-0001-1250005Y \| BOM-000004 | 679.373265 kg | PLANNED |
| L3 | WO-2026-000126 | WO-2026-000121 | 10 OP030 Bunching / Double Twist | > > > BCL5 N-N000-0009-0250007Y \| BOM-000005 | 676.666599 kg | PLANNED |
| L4 | WO-2026-000127 | WO-2026-000126 | 10 OP020 Multiwire Drawing | > > > > BCL1 N-N000-0001-1250005Y \| BOM-000004 | 679.373265 kg | PLANNED |
| L1 | WO-2026-000128 | WO-2026-000119 | 10 OP090 Cabling / Lay-up | > S1001 01B5YLY070B5YYYA22 \| BOM-000008 | 2030 m | PLANNED |
| L2 | WO-2026-000129 | WO-2026-000128 | 10 OP060 Insulation Extrusion | > > BCL5 U-S000-0027-0250A04Y \| BOM-000006 | 2030 kg | PLANNED |
| L3 | WO-2026-000130 | WO-2026-000129 | 10 OP030 Bunching / Double Twist | > > > BCL5 N-N000-0009-0250007Y \| BOM-000005 | 676.666599 kg | PLANNED |
| L4 | WO-2026-000131 | WO-2026-000130 | 10 OP020 Multiwire Drawing | > > > > BCL1 N-N000-0001-1250005Y \| BOM-000004 | 679.373265 kg | PLANNED |
| L3 | WO-2026-000132 | WO-2026-000129 | 10 OP030 Bunching / Double Twist | > > > BCL5 N-N000-0009-0250007Y \| BOM-000005 | 676.666599 kg | PLANNED |
| L4 | WO-2026-000133 | WO-2026-000132 | 10 OP020 Multiwire Drawing | > > > > BCL1 N-N000-0001-1250005Y \| BOM-000004 | 679.373265 kg | PLANNED |
| L3 | WO-2026-000134 | WO-2026-000129 | 10 OP030 Bunching / Double Twist | > > > BCL5 N-N000-0009-0250007Y \| BOM-000005 | 676.666599 kg | PLANNED |
| L4 | WO-2026-000135 | WO-2026-000134 | 10 OP020 Multiwire Drawing | > > > > BCL1 N-N000-0001-1250005Y \| BOM-000004 | 679.373265 kg | PLANNED |

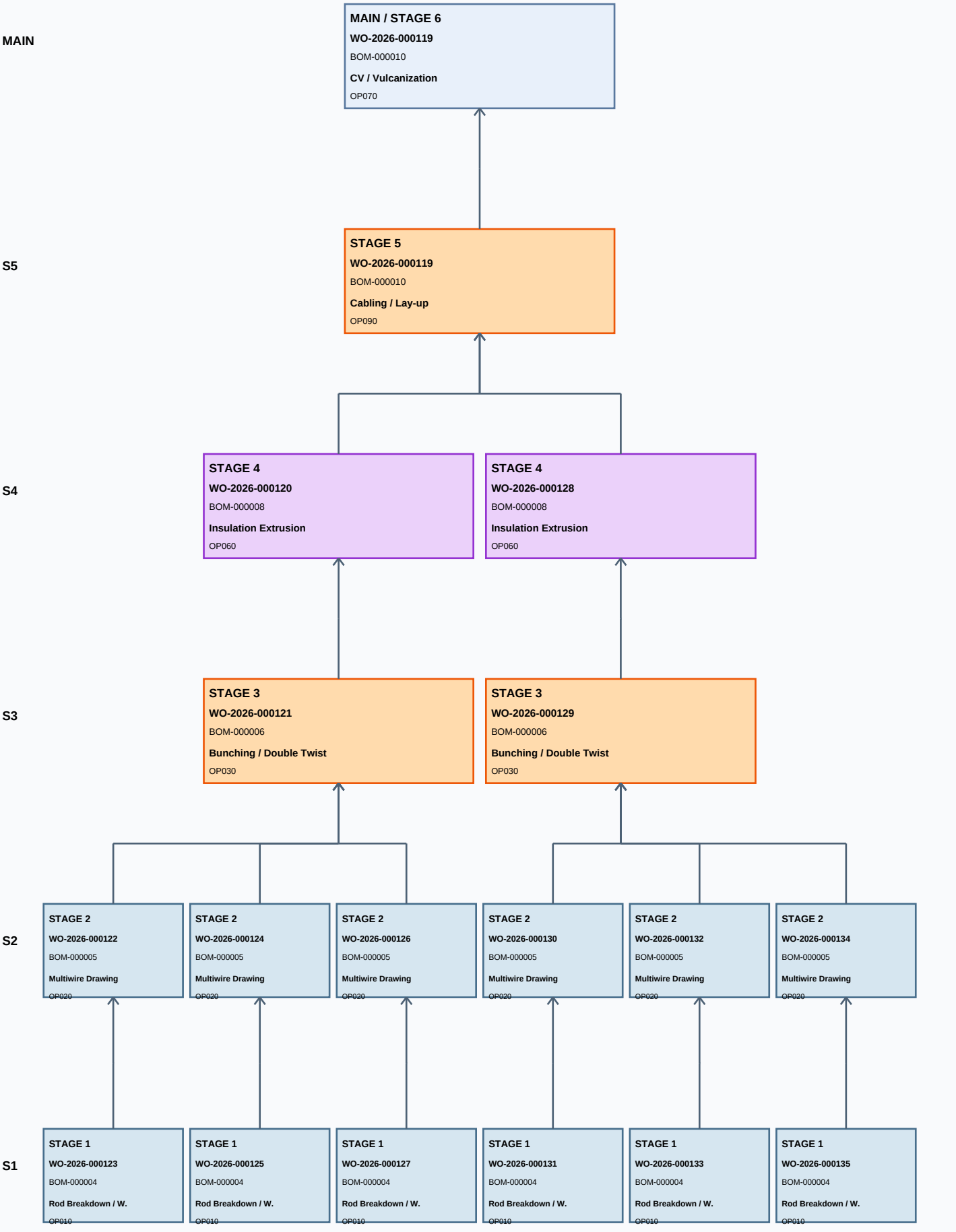
## PRODUCTION / MANUFACTURING SEQUENCE - PRODUCE FROM DEEPEST CHILD TO MAIN

| Prod Seq | Level | Work Order | Parent | Parent Operation | Product / BOM | Qty |
|---|---|---|---|---|---|---|
| 1 | L4 | WO-2026-000123 | WO-2026-000122 | 10 OP020 Multiwire Drawing | BCL1 N-N000-0001-1250005Y \| BOM-000004 | 679.373265 kg |
| 1 | L4 | WO-2026-000125 | WO-2026-000124 | 10 OP020 Multiwire Drawing | BCL1 N-N000-0001-1250005Y \| BOM-000004 | 679.373265 kg |
| 1 | L4 | WO-2026-000127 | WO-2026-000126 | 10 OP020 Multiwire Drawing | BCL1 N-N000-0001-1250005Y \| BOM-000004 | 679.373265 kg |
| 1 | L4 | WO-2026-000131 | WO-2026-000130 | 10 OP020 Multiwire Drawing | BCL1 N-N000-0001-1250005Y \| BOM-000004 | 679.373265 kg |
| 1 | L4 | WO-2026-000133 | WO-2026-000132 | 10 OP020 Multiwire Drawing | BCL1 N-N000-0001-1250005Y \| BOM-000004 | 679.373265 kg |
| 1 | L4 | WO-2026-000135 | WO-2026-000134 | 10 OP020 Multiwire Drawing | BCL1 N-N000-0001-1250005Y \| BOM-000004 | 679.373265 kg |
| 2 | L3 | WO-2026-000122 | WO-2026-000121 | 10 OP030 Bunching / Double Twist | BCL5 N-N000-0009-0250007Y \| BOM-000005 | 676.666599 kg |
| 2 | L3 | WO-2026-000124 | WO-2026-000121 | 10 OP030 Bunching / Double Twist | BCL5 N-N000-0009-0250007Y \| BOM-000005 | 676.666599 kg |
| 2 | L3 | WO-2026-000126 | WO-2026-000121 | 10 OP030 Bunching / Double Twist | BCL5 N-N000-0009-0250007Y \| BOM-000005 | 676.666599 kg |
| 2 | L3 | WO-2026-000130 | WO-2026-000129 | 10 OP030 Bunching / Double Twist | BCL5 N-N000-0009-0250007Y \| BOM-000005 | 676.666599 kg |
| 2 | L3 | WO-2026-000132 | WO-2026-000129 | 10 OP030 Bunching / Double Twist | BCL5 N-N000-0009-0250007Y \| BOM-000005 | 676.666599 kg |
| 2 | L3 | WO-2026-000134 | WO-2026-000129 | 10 OP030 Bunching / Double Twist | BCL5 N-N000-0009-0250007Y \| BOM-000005 | 676.666599 kg |
| 3 | L2 | WO-2026-000121 | WO-2026-000120 | 10 OP060 Insulation Extrusion | BCL5 U-S000-0027-0250A04Y \| BOM-000006 | 2030 kg |
| 3 | L2 | WO-2026-000129 | WO-2026-000128 | 10 OP060 Insulation Extrusion | BCL5 U-S000-0027-0250A04Y \| BOM-000006 | 2030 kg |
| 4 | L1 | WO-2026-000120 | WO-2026-000119 | 10 OP090 Cabling / Lay-up | S1001 01B5YLY070B5YYYA22 \| BOM-000008 | 2030 m |
| 4 | L1 | WO-2026-000128 | WO-2026-000119 | 10 OP090 Cabling / Lay-up | S1001 01B5YLY070B5YYYA22 \| BOM-000008 | 2030 m |
| 5 | MAIN | WO-2026-000119 | | FINAL / MAIN | C1 1000 02X05BB5LYYGDC0Y \| BOM-000010 | 2000 m |

| | |
|---|---|
| 1. | **Production Stage 1 = ALL Work Orders on the deepest hierarchy level. They may be produced in parallel.** |
| 2. | **After every Work Order in a stage is completed, move one level upward to the next Production Stage.** |
| 3. | **The MAIN Work Order is the final stage and starts after all required child/semi-finished stages are completed.** |

# VISUAL WORK ORDER / BOM HIERARCHY

Real operation flow: parallel BOM branches merge at the consuming process, then continue as ONE line.




**OPERATION TYPE LEGEND**

- CONDUCTOR / STRANDING
- CABLING / LAY-UP (BUKUM)
- INSULATION EXTRUSION
- PROCESS

Parallel inputs converge into ONE consuming operation. After the merge, the route continues as ONE process line. MAIN = actual final operation.

**MAIN WORK ORDER** **ROOT OF SELECTED BOM TREE**

THIS SECTION CONTAINS THE COMPLETE FROZEN BOM / ROUTING / PARAMETERS / MATERIALS FOR THIS WORK ORDER.

# PRODUCTION WORK ORDER
# WO-2026-000119

**PRODUCT**

**C1 1000 02X05BB5LYYGDC0Y | H07RN-F 2X2.5** mm2

Qty: 2000 m Customer: |

WO Date/Time: 2026-10-04 15:01:21

**MAIN WO BARCODE**

WO-2026-000119-MAIN-000120

## WORK ORDER DETAILS

| | | | |
|---|---|---|---|
| **Selected BOM** | BOM-000010 / Rev.0 | **Status / Priority** | PLANNED / NORMAL |
| **WO Role / Level** | MAIN / L0 | **Parent WO** | |
| **Parent Operation** | -- | **Frozen Snapshot** | v1 |
| **Standard / Voltage** | 450/750 | **Core / Section** | 2 / 2.5 mm2 |
| **Factory** | | **Department** | |
| **Work Centre** | | **Responsible** | |
| **Order / Due** | 2026-10-04 | **Planned Start** | |
| **WO Created Date / Time** | 2026-10-04 15:01:21 | **PDF Generated Date / Time** | 2026-11-20 05:27:08 |

## THIS WORK ORDER - PRODUCT TREE / BOM SEQUENCE

| | |
|---|---|
| **1.** | **BOM-000010 / Rev.0** |

## THIS WORK ORDER - ROUTING / OPERATION SEQUENCE

| WO Seq | Source BOM | Operation | Machine | Work Centre |
|---|---|---|---|---|
| **10** | BOM-000010 / Rev.0 | **OP090 \| Cabling / Lay-up** | F02-M03 \| Rigid Strander | \| |
| **20** | BOM-000010 / Rev.0 | **OP070 \| CV / Vulcanization** | F03-M08 \| Outer Sheathing Line | \| |

## OP 10 - OP090 | Cabling / Lay-up

BOM: BOM-000010 / Rev.0 Source Seq: 10

Machine: F02-M03 | Rigid Strander Work Centre: |

**Speed: 144 m/min**

Setup: 34324 min Scrap: 0%

WO-2026-000119-010-OP090-130

## PLANNED PRODUCTION

| Start | Finish | Input Qty | Output Qty | Speed | Setup | Duration | Semi-Finished Output |
|---|---|---|---|---|---|---|---|
| | | **2000 m** | **m** | **144 m/min** | 34324 min | 131 min | |

## TECHNICAL / ENGINEERING PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Lay Type** | **234324** | | | | |
| **Lay Direction** | **234324** | | | | |
| **Minimum Lay Length** | **23432** | 4324 | 234 | | |
| **Nominal Lay Length** | | | | | |
| **Maximum Lay Length** | | | | | |
| **Lay Ratio** | | | 234 | | |
| **Minimum Diameter** | | | | | |
| **Nominal Diameter** | | | | | |
| **Maximum Diameter** | | | | | |
| **Filler Cord Count** | | | | | |
| **Filler Cord Diameter** | | | | | |
| **Dummy Core Count** | | | | | |
| **Dummy Core Diameter** | | | | | |
| **Filler Cord Material** | | | | | |
| **Filler Cord Weight** | | | | | |
| **Yarn Material** | | | | | |
| **Yarn Weight** | | | | | |
| **Color and Number Sequence** | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| **Process Type** | **4324** | | | | |
| **Material Standard** | **234** | | | | |
| **Color** | | | | | |
| **Color Masterbatch Ratio (%)** | | | | % | |
| **Color Masterbatch Type** | | | | | |
| **Input Diameter** | | | | | |
| **Manufacturing Wall Thickness (mm)** | | | | mm | |
| **Manufacturing Minimum Wall Thickness (mm)** | | | | mm | |
| **Manufacturing Maximum Wall Thickness (mm)** | | | | mm | |
| **Manufacturing Nominal Diameter (mm)** | | | | mm | |
| **Manufacturing Minimum Diameter (mm)** | | | | mm | |
| **Manufacturing Maximum Diameter (mm)** | **234** | | 234 | mm | |
| **Standard Minimum Diameter** | | | | | |
| **Standard Maximum Diameter** | **42** | 4234 | | | 42334 |
| **Material Weight (kg/km)** | | | 4 | kg/km | |
| **Note** | | | | | |

## PRODUCTION PROCESS PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Line Speed** | | | | m/min | |

## QUALITY / TEST PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Assembly OD** | | | | mm | |

## CHILD BOM / NEXT WORK ORDER(S) FROM THIS OPERATION

| Child Product | Child BOM | Qty/Output | WO Required | Generated Child WO | Relationship |
|---|---|---|---|---|---|
| **S1001 01B5YLY070B5YYYA22 \| Single \| H07RN-F \| - \| 0.5 \| Bare bunched class 5 \| YOK \| P-EPR \| YOK \| 0,7 \| B \| YOK \| Y \| YOK \| NO CLOUR \| EN 50525-2-21** | BOM-000008 / Rev.0 | 1015 m | 2030 m | **WO-2026-000120** | NEXT: WO-2026-000119 -> WO-2026-000120 |
| **S1001 01B5YLY070B5YYYA22 \| Single \| H07RN-F \| - \| 0.5 \| Bare bunched class 5 \| YOK \| P-EPR \| YOK \| 0,7 \| B \| YOK \| Y \| YOK \| NO CLOUR \| EN 50525-2-21** | BOM-000008 / Rev.0 | 1015 m | 2030 m | **WO-2026-000128** | NEXT: WO-2026-000119 -> WO-2026-000128 |

## RAW MATERIALS / COMPONENTS - OP 10 ONLY

| Material Code | Material Name | BOM Qty | WO Required | Unit | Role | Scrap % | Notes |
|---|---|---|---|---|---|---|---|
| - | No material line stored for this operation. | | | | | | |

## OP 10 - OPERATOR / QC SIGN-OFF

| Operator / Sign | Actual Start / Stop | Actual Output / Scrap | QC / Supervisor / Sign |
|---|---|---|---|
| | | | |

## OP 20 - OP070 | CV / Vulcanization

BOM: BOM-000010 / Rev.0 Source Seq: 20

Machine: F03-M08 | Outer Sheathing Line Work Centre: |

**Speed: 45 m/min**

Setup: 4545 min Scrap: 1%

WO-2026-000119-020-OP070-131

## PLANNED PRODUCTION

| Start | Finish | Input Qty | Output Qty | Speed | Setup | Duration | Semi-Finished Output |
|---|---|---|---|---|---|---|---|
| | | **2000 m** | **1000 m** | **45 m/min** | 4545 min | 4545 min | |

## TECHNICAL / ENGINEERING PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Process Type** | | | | | |
| **Material Standard** | | | | | |
| **Color** | | | | | |
| **Color Masterbatch Ratio (%)** | | | | % | |

| | | | | | |
|---|---|---|---|---|---|
| **Color Masterbatch Type** | | | | | |
| **Catalyst Ratio (%)** | | | | % | |
| **Insulation Input Diameter** | | | | | |
| **Nominal Wall Thickness (mm)** | | | | mm | |
| **Minimum Point Wall Thickness (mm)** | | | | mm | |
| **Maximum Point Wall Thickness (mm)** | | | | mm | |
| **Manufacturing Nominal Diameter (mm)** | | | | mm | |
| **Manufacturing Minimum Diameter (mm)** | | | | mm | |
| **Manufacturing Maximum Diameter (mm)** | | | | mm | |
| **Insulation Resistance (M?.km)** | | | | Mohm/km | |
| **Standard Minimum Diameter** | | | | | |
| **Standard Maximum Diameter** | | | | | |
| **Material Weight (kg/km)** | | | | kg/km | |
| **Insulation Marking** | | | | | |
| **Note** | | | | | |
| **Tensile Strength / Elongation Values** | | | | | |

## PRODUCTION PROCESS PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Curing Pressure** | | | | bar | |
| **Curing Temperature** | | | | ?C | |
| **Line Speed** | | | | m/min | |

## QUALITY / TEST PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Hot Set Elongation** | | | | % | |

## RAW MATERIALS / COMPONENTS - OP 20 ONLY

| Material Code | Material Name | BOM Qty | WO Required | Unit | Role | Scrap % | Notes |
|---|---|---|---|---|---|---|---|
| **CMP-RUB-002** | CPE Rubber Sheathing Compound | 100 | **210** | kg | | 5% | |

## OP 20 - OPERATOR / QC SIGN-OFF

| Operator / Sign | Actual Start / Stop | Actual Output / Scrap | QC / Supervisor / Sign |
|---|---|---|---|
| | | | |

**CHILD WORK ORDER - LEVEL 1** **PARENT WO-2026-000119 / OP 10 OP090 Cabling / Lay-up**

THIS SECTION CONTAINS THE COMPLETE FROZEN BOM / ROUTING / PARAMETERS / MATERIALS FOR THIS WORK ORDER.

# PRODUCTION WORK ORDER
# WO-2026-000120

**PRODUCT**

**S1001 01B5YLY070B5YYYA22 | Single |** H07RN-F | - | 0.5 | Bare bunched class 5 | YOK | P-EPR | YOK | 0,7 | B | YOK | Y | YOK | NO CLOUR | EN 50525-2-21

Qty: 2030 m Customer: |

WO Date/Time: 2026-10-04 15:01:21

**MAIN WO BARCODE**

WO-2026-000120-MAIN-000121

## WORK ORDER DETAILS

| | | | |
|---|---|---|---|
| **Selected BOM** | BOM-000008 / Rev.0 | **Status / Priority** | PLANNED / NORMAL |
| **WO Role / Level** | CHILD / L1 | **Parent WO** | WO-2026-000119 |
| **Parent Operation** | 10 \| OP090 Cabling / Lay-up | **Frozen Snapshot** | v1 |
| **Standard / Voltage** | | **Core / Section** | mm2 |
| **Factory** | | **Department** | |
| **Work Centre** | | **Responsible** | |
| **Order / Due** | 2026-10-04 | **Planned Start** | |
| **WO Created Date / Time** | 2026-10-04 15:01:21 | **PDF Generated Date / Time** | 2026-11-20 05:27:08 |

## WORK ORDER NOTES

Generated from parent WO-2026-000119 / OP 10 OP090

## THIS WORK ORDER - PRODUCT TREE / BOM SEQUENCE

| | |
|---|---|
| **1.** | **BOM-000008 / Rev.0** |

## THIS WORK ORDER - ROUTING / OPERATION SEQUENCE

| WO Seq | Source BOM | Operation | Machine | Work Centre |
|---|---|---|---|---|
| **10** | BOM-000008 / Rev.0 | **OP060 \| Insulation Extrusion** | F02-M04 \| XLPE Insulation Line | \| |

## OP 10 - OP060 | Insulation Extrusion

BOM: BOM-000008 / Rev.0 Source Seq: 10

Machine: F02-M04 | XLPE Insulation Line Work Centre: |

**Speed: 100 m/min**

Setup: 45 min Scrap: 5%

WO-2026-000120-010-OP060-132

## PLANNED PRODUCTION

| Start | Finish | Input Qty | Output Qty | Speed | Setup | Duration | Semi-Finished Output |
|---|---|---|---|---|---|---|---|
| | | **2030 m** | **1000 m** | **100 m/min** | 45 min | 23 min | |

## TECHNICAL / ENGINEERING PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Process Type** | | | | | |
| **Material Standard** | | | | | |
| **Color** | | | | | |
| **Color Masterbatch Ratio (%)** | | | | % | |
| **Color Masterbatch Type** | | | | | |
| **Catalyst Ratio (%)** | | | | % | |
| **Anti-Rodent Additive Ratio (%)** | | | | % | |
| **Anti-Termite Additive Ratio (%)** | | | | % | |
| **Flame-Retardant Additive Ratio (%)** | | | | % | |
| **Foaming Additive Ratio (%)** | | | | % | |
| **Nominal Wall Thickness (mm)** | | | | mm | |
| **Minimum Point Wall Thickness (mm)** | | | | mm | |
| **Nominal Diameter (mm)** | | | | mm | |
| **Minimum Diameter (mm)** | | | | mm | |
| **Maximum Diameter (mm)** | | | | mm | |
| **Manufacturing Wall Thickness (mm)** | | | | mm | |
| **Manufacturing Minimum Wall Thickness (mm)** | | | | mm | |

| | | | | | |
|---|---|---|---|---|---|
| **Manufacturing Maximum Wall Thickness (mm)** | | | | mm | |
| **Material Weight (kg/km)** | | | | kg/km | |
| **Manufacturing Nominal Diameter (mm)** | | | | mm | |
| **Manufacturing Minimum Diameter (mm)** | | | | mm | |
| **Manufacturing Maximum Diameter (mm)** | | | | mm | |
| **Insulation Input Diameter** | | | | | |
| **Maximum Point Wall Thickness (mm)** | | | | mm | |
| **Insulation Resistance (M?.km)** | | | | Mohm/km | |
| **Standard Minimum Diameter** | | | | | |
| **Standard Maximum Diameter** | | | | | |
| **Insulation Marking** | | | | | |
| **Note** | | | | | |
| **Tensile Strength / Elongation Values** | | | | | |

## PRODUCTION PROCESS PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Extruder Zone Temperatures** | | | | ?C | |
| **Head Temperature** | | | | ?C | |
| **Screw Speed** | | | | rpm | |
| **Line Speed** | | | | m/min | |

## QUALITY / TEST PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Minimum Thickness** | | | | mm | |
| **Spark Test Voltage** | | | | kV | |
| **Insulated Core OD** | | | | mm | |

## CHILD BOM / NEXT WORK ORDER(S) FROM THIS OPERATION

| Child Product | Child BOM | Qty/Output | WO Required | Generated Child WO | Relationship |
|---|---|---|---|---|---|
| **BCL5 U-S000-0027-0250A04Y \| Bare Copper \| IEC \| Round/Bunch \| IEC 60028 Class 5 \| Unilay concentric EU \| S Left \| 27 x 0.25 mm \| Lay 16D \| 1.5 mm2** | BOM-000006 / Rev.0 | 1000 kg | 2030 kg | **WO-2026-000121** | NEXT: WO-2026-000120 -> WO-2026-000121 |

## RAW MATERIALS / COMPONENTS - OP 10 ONLY

| Material Code | Material Name | BOM Qty | WO Required | Unit | Role | Scrap % | Notes |
|---|---|---|---|---|---|---|---|
| - | No material line stored for this operation. | | | | | | |

## OP 10 - OPERATOR / QC SIGN-OFF

| Operator / Sign | Actual Start / Stop | Actual Output / Scrap | QC / Supervisor / Sign |
|---|---|---|---|
| | | | |

**CHILD WORK ORDER - LEVEL 2** **PARENT WO-2026-000120 / OP 10 OP060 Insulation Extrusion**

THIS SECTION CONTAINS THE COMPLETE FROZEN BOM / ROUTING / PARAMETERS / MATERIALS FOR THIS WORK ORDER.

# PRODUCTION WORK ORDER
# WO-2026-000121

**PRODUCT**

**BCL5 U-S000-0027-0250A04Y | Bare Copper |**
IEC | Round/Bunch | IEC 60028 Class 5 |
Unilay concentric EU | S Left | 27 x 0.25
mm | Lay 16D | 1.5 mm2
Qty: 2030 kg Customer: |
WO Date/Time: 2026-10-04 15:01:21

**MAIN WO BARCODE**

WO-2026-000121-MAIN-000122

## WORK ORDER DETAILS

| | | | |
|---|---|---|---|
| **Selected BOM** | BOM-000006 / Rev.0 | **Status / Priority** | PLANNED / NORMAL |
| **WO Role / Level** | CHILD / L2 | **Parent WO** | WO-2026-000120 |
| **Parent Operation** | 10 \| OP060 Insulation Extrusion | **Frozen Snapshot** | v1 |
| **Standard / Voltage** | IEC | **Core / Section** | mm2 |
| **Factory** | | **Department** | |
| **Work Centre** | | **Responsible** | |
| **Order / Due** | 2026-10-04 | **Planned Start** | |
| **WO Created Date / Time** | 2026-10-04 15:01:21 | **PDF Generated Date / Time** | 2026-11-20 05:27:08 |

## WORK ORDER NOTES

Generated from parent WO-2026-000120 / OP 10 OP060

## THIS WORK ORDER - PRODUCT TREE / BOM SEQUENCE

| | |
|---|---|
| **1.** | **BOM-000006 / Rev.0** |

## THIS WORK ORDER - ROUTING / OPERATION SEQUENCE

| WO Seq | Source BOM | Operation | Machine | Work Centre |
|---|---|---|---|---|
| **10** | BOM-000006 / Rev.0 | **OP030 \| Bunching / Double Twist** | F03-M05 \| Cabling Machine | \| |

## OP 10 - OP030 | Bunching / Double Twist

BOM: BOM-000006 / Rev.0 Source Seq: 10
Machine: F03-M05 | Cabling Machine Work Centre: |

**Speed: 232323 m/min**
Setup: 3434324 min Scrap: 55555%

WO-2026-000121-010-OP030-133

## PLANNED PRODUCTION

| Start | Finish | Input Qty | Output Qty | Speed | Setup | Duration | Semi-Finished Output |
|---|---|---|---|---|---|---|---|
| | | **2030 kg** | **m** | **232323 m/min** | 3434324 min | 234324 min | |

## TECHNICAL / ENGINEERING PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Material Type** | **ADSAD** | | | | |
| **Construction** | **SADSAD** | | | | |
| **Conductor Stranding Type** | | | | | |
| **Layer Diameters for Rolling** | | | | | |
| **Lay Direction** | | | | | |
| **Diameter** | | | | | |
| **Nominal Lay Length** | | | | | |
| **Maximum Lay Length** | | | | | |
| **Theoretical Conductor Resistance** | | | | | |
| **Maximum Conductor Resistance** | | | | | |
| **Maximum Standard Resistance** | | | | | |
| **Material Weight (kg/km)** | | | | kg/km | |
| **Note** | **AD** | | | | |
| **Lay Type** | | | | | |
| **Minimum Lay Length** | | | | | |
| **Lay Ratio** | | | | | |
| **Minimum Diameter** | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| **Nominal Diameter** | | | | | |
| **Maximum Diameter** | | | | | |
| **Filler Cord Count** | | | | | |
| **Filler Cord Diameter** | | | | | |
| **Dummy Core Count** | | | | | |
| **Dummy Core Diameter** | | | | | |
| **Filler Cord Material** | | | | | |
| **Filler Cord Weight** | | | | | |
| **Yarn Material** | **DASD** | | | | |
| **Yarn Weight** | | | | | |
| **Color and Number Sequence** | | | | | |

## PRODUCTION PROCESS PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Bow / Rotor Speed** | | | | rpm | |
| **Line Speed** | | | | m/min | |

## QUALITY / TEST PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Conductor OD** | | | | mm | |

## CHILD BOM / NEXT WORK ORDER(S) FROM THIS OPERATION

| Child Product | Child BOM | Qty/Output | WO Required | Generated Child WO | Relationship |
|---|---|---|---|---|---|
| **BCL5 N-N000-0009-0250007Y \| Bare Copper \| IEC \| Round/Bunch \| IEC 60028 Class 5 \| NOT \| NOT \| 9 x 0.25 mm \| Lay NOT \| 6 mm2** | BOM-000005 / Rev.0 | 333.3333 kg | 676.666599 kg | **WO-2026-000122** | NEXT: WO-2026-000121 -> WO-2026-000122 |
| **BCL5 N-N000-0009-0250007Y \| Bare Copper \| IEC \| Round/Bunch \| IEC 60028 Class 5 \| NOT \| NOT \| 9 x 0.25 mm \| Lay NOT \| 6 mm2** | BOM-000005 / Rev.0 | 333.3333 kg | 676.666599 kg | **WO-2026-000124** | NEXT: WO-2026-000121 -> WO-2026-000124 |
| **BCL5 N-N000-0009-0250007Y \| Bare Copper \| IEC \| Round/Bunch \| IEC 60028 Class 5 \| NOT \| NOT \| 9 x 0.25 mm \| Lay NOT \| 6 mm2** | BOM-000005 / Rev.0 | 333.3333 kg | 676.666599 kg | **WO-2026-000126** | NEXT: WO-2026-000121 -> WO-2026-000126 |

## RAW MATERIALS / COMPONENTS - OP 10 ONLY

| Material Code | Material Name | BOM Qty | WO Required | Unit | Role | Scrap % | Notes |
|---|---|---|---|---|---|---|---|
| - | No material line stored for this operation. | | | | | | |

## OP 10 - OPERATOR / QC SIGN-OFF

| Operator / Sign | Actual Start / Stop | Actual Output / Scrap | QC / Supervisor / Sign |
|---|---|---|---|
| | | | |

**CHILD WORK ORDER - LEVEL 3** **PARENT WO-2026-000121 / OP 10 OP030 Bunching / Double Twist**

THIS SECTION CONTAINS THE COMPLETE FROZEN BOM / ROUTING / PARAMETERS / MATERIALS FOR THIS WORK ORDER.

# PRODUCTION WORK ORDER
# WO-2026-000122

**PRODUCT**

**BCL5 N-N000-0009-0250007Y | Bare Copper |**
IEC | Round/Bunch | IEC 60028 Class 5 |
NOT | NOT | 9 x 0.25 mm | Lay NOT | 6 mm2

Qty: 676.666599 kg Customer: |

WO Date/Time: 2026-10-04 15:01:21

**MAIN WO BARCODE**

WO-2026-000122-MAIN-000123

## WORK ORDER DETAILS

| | | | |
|---|---|---|---|
| **Selected BOM** | BOM-000005 / Rev.0 | **Status / Priority** | PLANNED / NORMAL |
| **WO Role / Level** | CHILD / L3 | **Parent WO** | WO-2026-000121 |
| **Parent Operation** | 10 \| OP030 Bunching / Double Twist | **Frozen Snapshot** | v1 |
| **Standard / Voltage** | IEC | **Core / Section** | mm2 |
| **Factory** | | **Department** | |
| **Work Centre** | | **Responsible** | |
| **Order / Due** | 2026-10-04 | **Planned Start** | |
| **WO Created Date / Time** | 2026-10-04 15:01:21 | **PDF Generated Date / Time** | 2026-11-20 05:27:09 |

## WORK ORDER NOTES

Generated from parent WO-2026-000121 / OP 10 OP030

## THIS WORK ORDER - PRODUCT TREE / BOM SEQUENCE

| | |
|---|---|
| **1.** | **BOM-000005 / Rev.0** |

## THIS WORK ORDER - ROUTING / OPERATION SEQUENCE

| WO Seq | Source BOM | Operation | Machine | Work Centre |
|---|---|---|---|---|
| **10** | BOM-000005 / Rev.0 | **OP020 \| Multiwire Drawing** | F03-M02 \| Fine Wire Drawing Machine | \| |

## OP 10 - OP020 | Multiwire Drawing

BOM: BOM-000005 / Rev.0 Source Seq: 10

Machine: F03-M02 | Fine Wire Drawing Machine Work Centre: |

**Speed: 33333 m/min**

Setup: 545 min Scrap: 1%

WO-2026-000122-010-OP020-134

## PLANNED PRODUCTION

| Start | Finish | Input Qty | Output Qty | Speed | Setup | Duration | Semi-Finished Output |
|---|---|---|---|---|---|---|---|
| | | **676.666599 kg** | **m** | **33333 m/min** | 545 min | 30 min | |

## TECHNICAL / ENGINEERING PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Material Type** | **ERSDF** | | | | |
| **Construction** | **DSF** | | | | |
| **Conductor Stranding Type** | | | | | |
| **Layer Diameters for Rolling** | **4534** | 4544 | | | |
| **Lay Direction** | | | | | |
| **Diameter** | | 4 | 44 | | |
| **Nominal Lay Length** | | | 44 | | |
| **Maximum Lay Length** | | | | | |
| **Theoretical Conductor Resistance** | | 44 | 6 | | |
| **Maximum Conductor Resistance** | | 4 | 4 | | |
| **Maximum Standard Resistance** | | | | | |
| **Material Weight (kg/km)** | **4** | 4 | 4 | kg/km | |
| **Note** | | | | | |

## PRODUCTION PROCESS PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Line Speed** | **12** | 8 | 15 | m/min | |

## QUALITY / TEST PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Wire Diameter** | **8768** | 6767 | 6767 | mm | |

## CHILD BOM / NEXT WORK ORDER(S) FROM THIS OPERATION

| Child Product | Child BOM | Qty/Output | WO Required | Generated Child WO | Relationship |
|---|---|---|---|---|---|
| **BCL1 N-N000-0001-1250005Y \| Bare Copper \| IEC \| Round/Bunch \| IEC 60228 Class 1 \| NOT \| NOT \| 1 x 1.25 mm \| Lay NOT \| 2.5 mm2** | BOM-000004 / Rev.0 | 1004 kg | 679.373265 kg | **WO-2026-000123** | NEXT: WO-2026-000122 -> WO-2026-000123 |

## RAW MATERIALS / COMPONENTS - OP 10 ONLY

| Material Code | Material Name | BOM Qty | WO Required | Unit | Role | Scrap % | Notes |
|---|---|---|---|---|---|---|---|
| - | No material line stored for this operation. | | | | | | |

## OP 10 - OPERATOR / QC SIGN-OFF

| Operator / Sign | Actual Start / Stop | Actual Output / Scrap | QC / Supervisor / Sign |
|---|---|---|---|
| | | | |

**CHILD WORK ORDER - LEVEL 4** **PARENT WO-2026-000122 / OP 10 OP020 Multiwire Drawing**

THIS SECTION CONTAINS THE COMPLETE FROZEN BOM / ROUTING / PARAMETERS / MATERIALS FOR THIS WORK ORDER.

# PRODUCTION WORK ORDER
# WO-2026-000123

**PRODUCT**

**BCL1 N-N000-0001-1250005Y | Bare Copper |** IEC | Round/Bunch | IEC 60228 Class 1 | NOT | NOT | 1 x 1.25 mm | Lay NOT | 2.5 mm2

Qty: 679.373265 kg Customer: |

WO Date/Time: 2026-10-04 15:01:21

**MAIN WO BARCODE**

WO-2026-000123-MAIN-000124

## WORK ORDER DETAILS

| | | | |
|---|---|---|---|
| **Selected BOM** | BOM-000004 / Rev.0 | **Status / Priority** | PLANNED / NORMAL |
| **WO Role / Level** | CHILD / L4 | **Parent WO** | WO-2026-000122 |
| **Parent Operation** | 10 \| OP020 Multiwire Drawing | **Frozen Snapshot** | v1 |
| **Standard / Voltage** | IEC | **Core / Section** | mm2 |
| **Factory** | | **Department** | |
| **Work Centre** | | **Responsible** | |
| **Order / Due** | 2026-10-04 | **Planned Start** | |
| **WO Created Date / Time** | 2026-10-04 15:01:21 | **PDF Generated Date / Time** | 2026-11-20 05:27:09 |

## WORK ORDER NOTES

Generated from parent WO-2026-000122 / OP 10 OP020

## THIS WORK ORDER - PRODUCT TREE / BOM SEQUENCE

| | |
|---|---|
| **1.** | **BOM-000004 / Rev.0** |

## THIS WORK ORDER - ROUTING / OPERATION SEQUENCE

| WO Seq | Source BOM | Operation | Machine | Work Centre |
|---|---|---|---|---|
| **10** | BOM-000004 / Rev.0 | **OP010 \| Rod Breakdown / Wire Drawing** | F03-M01 \| Rod Breakdown Machine | \| |

## OP 10 - OP010 | Rod Breakdown / Wire Drawing

BOM: BOM-000004 / Rev.0 Source Seq: 10

Machine: F03-M01 | Rod Breakdown Machine Work Centre: |

**Speed: 4 m/min**

Setup: 30 min Scrap: 1%

WO-2026-000123-010-OP010-135

## PLANNED PRODUCTION

| Start | Finish | Input Qty | Output Qty | Speed | Setup | Duration | Semi-Finished Output |
|---|---|---|---|---|---|---|---|
| | | **679.373265 kg** | **1000 kg** | **4 m/min** | 30 min | 15 min | |

## TECHNICAL / ENGINEERING PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Material Type** | **copper** | | | | |
| **Construction** | | | | | |
| **Conductor Stranding Type** | | | | | |
| **Layer Diameters for Rolling** | | | | | |
| **Lay Direction** | **33** | | | | |
| **Diameter** | **33** | 5 | 333 | | |
| **Nominal Lay Length** | | | 33 | | |
| **Maximum Lay Length** | **3** | | 3 | | |
| **Theoretical Conductor Resistance** | **3** | | 3 | | |
| **Maximum Conductor Resistance** | **3** | 3 | | | |
| **Maximum Standard Resistance** | **3** | | 3 | | |
| **Material Weight (kg/km)** | **3** | | 3 | kg/km | |
| **Note** | | | | | |

## PRODUCTION PROCESS PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Inlet Diameter** | **333** | 33 | 33 | mm | |
| **Outlet Diameter** | **3** | 3 | | mm | |

| | | | | | |
|---|---|---|---|---|---|
| **Line Speed** | **3333** | 33 | 3 | m/min | |
| **Annealer Current** | **333** | 3 | 33 | A | |

## QUALITY / TEST PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Conductor Resistance** | **33** | 3 | 33 | ohm/km | |
| **Wire Diameter** | **333333** | 33333 | 3 | mm | |

## RAW MATERIALS / COMPONENTS - OP 10 ONLY

| Material Code | Material Name | BOM Qty | WO Required | Unit | Role | Scrap % | Notes |
|---|---|---|---|---|---|---|---|
| **BCL1 N-N000-0001-8000012Y** | Bare Copper \| IEC \| Round/Bunch \| IEC 60228 Class 1 \| NOT \| NOT \| 1 x 8 mm \| Lay NOT \| 50 mm2 | 1000 | **686.166998** | kg | | 1% | |

## OP 10 - OPERATOR / QC SIGN-OFF

| Operator / Sign | Actual Start / Stop | Actual Output / Scrap | QC / Supervisor / Sign |
|---|---|---|---|
| | | | |

**CHILD WORK ORDER - LEVEL 3** **PARENT WO-2026-000121 / OP 10 OP030 Bunching / Double Twist**

THIS SECTION CONTAINS THE COMPLETE FROZEN BOM / ROUTING / PARAMETERS / MATERIALS FOR THIS WORK ORDER.

# PRODUCTION WORK ORDER
# WO-2026-000124

**PRODUCT**

**BCL5 N-N000-0009-0250007Y | Bare Copper |**
IEC | Round/Bunch | IEC 60028 Class 5 |
NOT | NOT | 9 x 0.25 mm | Lay NOT | 6 mm2

Qty: 676.666599 kg Customer: |

WO Date/Time: 2026-10-04 15:01:21

**MAIN WO BARCODE**

WO-2026-000124-MAIN-000125

## WORK ORDER DETAILS

| | | | |
|---|---|---|---|
| **Selected BOM** | BOM-000005 / Rev.0 | **Status / Priority** | PLANNED / NORMAL |
| **WO Role / Level** | CHILD / L3 | **Parent WO** | WO-2026-000121 |
| **Parent Operation** | 10 \| OP030 Bunching / Double Twist | **Frozen Snapshot** | v1 |
| **Standard / Voltage** | IEC | **Core / Section** | mm2 |
| **Factory** | | **Department** | |
| **Work Centre** | | **Responsible** | |
| **Order / Due** | 2026-10-04 | **Planned Start** | |
| **WO Created Date / Time** | 2026-10-04 15:01:21 | **PDF Generated Date / Time** | 2026-11-20 05:27:09 |

## WORK ORDER NOTES

Generated from parent WO-2026-000121 / OP 10 OP030

## THIS WORK ORDER - PRODUCT TREE / BOM SEQUENCE

| | |
|---|---|
| **1.** | **BOM-000005 / Rev.0** |

## THIS WORK ORDER - ROUTING / OPERATION SEQUENCE

| WO Seq | Source BOM | Operation | Machine | Work Centre |
|---|---|---|---|---|
| **10** | BOM-000005 / Rev.0 | **OP020 \| Multiwire Drawing** | F03-M02 \| Fine Wire Drawing Machine | \| |

## OP 10 - OP020 | Multiwire Drawing

BOM: BOM-000005 / Rev.0 Source Seq: 10

Machine: F03-M02 | Fine Wire Drawing Machine Work Centre: |

**Speed: 33333 m/min**

Setup: 545 min Scrap: 1%

WO-2026-000124-010-OP020-136

## PLANNED PRODUCTION

| Start | Finish | Input Qty | Output Qty | Speed | Setup | Duration | Semi-Finished Output |
|---|---|---|---|---|---|---|---|
| | | **676.666599 kg** | **m** | **33333 m/min** | 545 min | 30 min | |

## TECHNICAL / ENGINEERING PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Material Type** | **ERSDF** | | | | |
| **Construction** | **DSF** | | | | |
| **Conductor Stranding Type** | | | | | |
| **Layer Diameters for Rolling** | **4534** | 4544 | | | |
| **Lay Direction** | | | | | |
| **Diameter** | | 4 | 44 | | |
| **Nominal Lay Length** | | | 44 | | |
| **Maximum Lay Length** | | | | | |
| **Theoretical Conductor Resistance** | | 44 | 6 | | |
| **Maximum Conductor Resistance** | | 4 | 4 | | |
| **Maximum Standard Resistance** | | | | | |
| **Material Weight (kg/km)** | **4** | 4 | 4 | kg/km | |
| **Note** | | | | | |

## PRODUCTION PROCESS PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Line Speed** | **12** | 8 | 15 | m/min | |

## QUALITY / TEST PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Wire Diameter** | **8768** | 6767 | 6767 | mm | |

## CHILD BOM / NEXT WORK ORDER(S) FROM THIS OPERATION

| Child Product | Child BOM | Qty/Output | WO Required | Generated Child WO | Relationship |
|---|---|---|---|---|---|
| **BCL1 N-N000-0001-1250005Y \| Bare Copper \| IEC \| Round/Bunch \| IEC 60228 Class 1 \| NOT \| NOT \| 1 x 1.25 mm \| Lay NOT \| 2.5 mm2** | BOM-000004 / Rev.0 | 1004 kg | 679.373265 kg | **WO-2026-000125** | NEXT: WO-2026-000124 -> WO-2026-000125 |

## RAW MATERIALS / COMPONENTS - OP 10 ONLY

| Material Code | Material Name | BOM Qty | WO Required | Unit | Role | Scrap % | Notes |
|---|---|---|---|---|---|---|---|
| - | No material line stored for this operation. | | | | | | |

## OP 10 - OPERATOR / QC SIGN-OFF

| Operator / Sign | Actual Start / Stop | Actual Output / Scrap | QC / Supervisor / Sign |
|---|---|---|---|
| | | | |

**CHILD WORK ORDER - LEVEL 4** **PARENT WO-2026-000124 / OP 10 OP020 Multiwire Drawing**

THIS SECTION CONTAINS THE COMPLETE FROZEN BOM / ROUTING / PARAMETERS / MATERIALS FOR THIS WORK ORDER.

# PRODUCTION WORK ORDER
# WO-2026-000125

**PRODUCT**

**BCL1 N-N000-0001-1250005Y | Bare Copper |** IEC | Round/Bunch | IEC 60228 Class 1 | NOT | NOT | 1 x 1.25 mm | Lay NOT | 2.5 mm2

Qty: 679.373265 kg Customer: |

WO Date/Time: 2026-10-04 15:01:22

**MAIN WO BARCODE**

WO-2026-000125-MAIN-000126

## WORK ORDER DETAILS

| | | | |
|---|---|---|---|
| **Selected BOM** | BOM-000004 / Rev.0 | **Status / Priority** | PLANNED / NORMAL |
| **WO Role / Level** | CHILD / L4 | **Parent WO** | WO-2026-000124 |
| **Parent Operation** | 10 \| OP020 Multiwire Drawing | **Frozen Snapshot** | v1 |
| **Standard / Voltage** | IEC | **Core / Section** | mm2 |
| **Factory** | | **Department** | |
| **Work Centre** | | **Responsible** | |
| **Order / Due** | 2026-10-04 | **Planned Start** | |
| **WO Created Date / Time** | 2026-10-04 15:01:22 | **PDF Generated Date / Time** | 2026-11-20 05:27:09 |

## WORK ORDER NOTES

Generated from parent WO-2026-000124 / OP 10 OP020

## THIS WORK ORDER - PRODUCT TREE / BOM SEQUENCE

| | |
|---|---|
| **1.** | **BOM-000004 / Rev.0** |

## THIS WORK ORDER - ROUTING / OPERATION SEQUENCE

| WO Seq | Source BOM | Operation | Machine | Work Centre |
|---|---|---|---|---|
| **10** | BOM-000004 / Rev.0 | **OP010 \| Rod Breakdown / Wire Drawing** | F03-M01 \| Rod Breakdown Machine | \| |

## OP 10 - OP010 | Rod Breakdown / Wire Drawing

BOM: BOM-000004 / Rev.0 Source Seq: 10

Machine: F03-M01 | Rod Breakdown Machine Work Centre: |

**Speed: 4 m/min**

Setup: 30 min Scrap: 1%

WO-2026-000125-010-OP010-137

## PLANNED PRODUCTION

| Start | Finish | Input Qty | Output Qty | Speed | Setup | Duration | Semi-Finished Output |
|---|---|---|---|---|---|---|---|
| | | **679.373265 kg** | **1000 kg** | **4 m/min** | 30 min | 15 min | |

## TECHNICAL / ENGINEERING PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Material Type** | **copper** | | | | |
| **Construction** | | | | | |
| **Conductor Stranding Type** | | | | | |
| **Layer Diameters for Rolling** | | | | | |
| **Lay Direction** | **33** | | | | |
| **Diameter** | **33** | 5 | 333 | | |
| **Nominal Lay Length** | | | 33 | | |
| **Maximum Lay Length** | **3** | | 3 | | |
| **Theoretical Conductor Resistance** | **3** | | 3 | | |
| **Maximum Conductor Resistance** | **3** | 3 | | | |
| **Maximum Standard Resistance** | **3** | | 3 | | |
| **Material Weight (kg/km)** | **3** | | 3 | kg/km | |
| **Note** | | | | | |

## PRODUCTION PROCESS PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Inlet Diameter** | **333** | 33 | 33 | mm | |
| **Outlet Diameter** | **3** | 3 | | mm | |

| | | | | | |
|---|---|---|---|---|---|
| **Line Speed** | **3333** | 33 | 3 | m/min | |
| **Annealer Current** | **333** | 3 | 33 | A | |

## QUALITY / TEST PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Conductor Resistance** | **33** | 3 | 33 | ohm/km | |
| **Wire Diameter** | **333333** | 33333 | 3 | mm | |

## RAW MATERIALS / COMPONENTS - OP 10 ONLY

| Material Code | Material Name | BOM Qty | WO Required | Unit | Role | Scrap % | Notes |
|---|---|---|---|---|---|---|---|
| **BCL1 N-N000-0001-8000012Y** | Bare Copper \| IEC \| Round/Bunch \| IEC 60228 Class 1 \| NOT \| NOT \| 1 x 8 mm \| Lay NOT \| 50 mm2 | 1000 | **686.166998** | kg | | 1% | |

## OP 10 - OPERATOR / QC SIGN-OFF

| Operator / Sign | Actual Start / Stop | Actual Output / Scrap | QC / Supervisor / Sign |
|---|---|---|---|
| | | | |

**CHILD WORK ORDER - LEVEL 3** **PARENT WO-2026-000121 / OP 10 OP030 Bunching / Double Twist**

THIS SECTION CONTAINS THE COMPLETE FROZEN BOM / ROUTING / PARAMETERS / MATERIALS FOR THIS WORK ORDER.

# PRODUCTION WORK ORDER
# WO-2026-000126

**PRODUCT**

**BCL5 N-N000-0009-0250007Y | Bare Copper |**
IEC | Round/Bunch | IEC 60028 Class 5 |
NOT | NOT | 9 x 0.25 mm | Lay NOT | 6 mm2

Qty: 676.666599 kg Customer: |

WO Date/Time: 2026-10-04 15:01:22

**MAIN WO BARCODE**

WO-2026-000126-MAIN-000127

## WORK ORDER DETAILS

| | | | |
|---|---|---|---|
| **Selected BOM** | BOM-000005 / Rev.0 | **Status / Priority** | PLANNED / NORMAL |
| **WO Role / Level** | CHILD / L3 | **Parent WO** | WO-2026-000121 |
| **Parent Operation** | 10 \| OP030 Bunching / Double Twist | **Frozen Snapshot** | v1 |
| **Standard / Voltage** | IEC | **Core / Section** | mm2 |
| **Factory** | | **Department** | |
| **Work Centre** | | **Responsible** | |
| **Order / Due** | 2026-10-04 | **Planned Start** | |
| **WO Created Date / Time** | 2026-10-04 15:01:22 | **PDF Generated Date / Time** | 2026-11-20 05:27:09 |

## WORK ORDER NOTES

Generated from parent WO-2026-000121 / OP 10 OP030

## THIS WORK ORDER - PRODUCT TREE / BOM SEQUENCE

| | |
|---|---|
| **1.** | **BOM-000005 / Rev.0** |

## THIS WORK ORDER - ROUTING / OPERATION SEQUENCE

| WO Seq | Source BOM | Operation | Machine | Work Centre |
|---|---|---|---|---|
| **10** | BOM-000005 / Rev.0 | **OP020 \| Multiwire Drawing** | F03-M02 \| Fine Wire Drawing Machine | \| |

## OP 10 - OP020 | Multiwire Drawing

BOM: BOM-000005 / Rev.0 Source Seq: 10

Machine: F03-M02 | Fine Wire Drawing Machine Work Centre: |

**Speed: 33333 m/min**

Setup: 545 min Scrap: 1%

WO-2026-000126-010-OP020-138

## PLANNED PRODUCTION

| Start | Finish | Input Qty | Output Qty | Speed | Setup | Duration | Semi-Finished Output |
|---|---|---|---|---|---|---|---|
| | | **676.666599 kg** | **m** | **33333 m/min** | 545 min | 30 min | |

## TECHNICAL / ENGINEERING PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Material Type** | **ERSDF** | | | | |
| **Construction** | **DSF** | | | | |
| **Conductor Stranding Type** | | | | | |
| **Layer Diameters for Rolling** | **4534** | 4544 | | | |
| **Lay Direction** | | | | | |
| **Diameter** | | 4 | 44 | | |
| **Nominal Lay Length** | | | 44 | | |
| **Maximum Lay Length** | | | | | |
| **Theoretical Conductor Resistance** | | 44 | 6 | | |
| **Maximum Conductor Resistance** | | 4 | 4 | | |
| **Maximum Standard Resistance** | | | | | |
| **Material Weight (kg/km)** | **4** | 4 | 4 | kg/km | |
| **Note** | | | | | |

## PRODUCTION PROCESS PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Line Speed** | **12** | 8 | 15 | m/min | |

## QUALITY / TEST PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Wire Diameter** | **8768** | 6767 | 6767 | mm | |

## CHILD BOM / NEXT WORK ORDER(S) FROM THIS OPERATION

| Child Product | Child BOM | Qty/Output | WO Required | Generated Child WO | Relationship |
|---|---|---|---|---|---|
| **BCL1 N-N000-0001-1250005Y \| Bare Copper \| IEC \| Round/Bunch \| IEC 60228 Class 1 \| NOT \| NOT \| 1 x 1.25 mm \| Lay NOT \| 2.5 mm2** | BOM-000004 / Rev.0 | 1004 kg | 679.373265 kg | **WO-2026-000127** | NEXT: WO-2026-000126 -> WO-2026-000127 |

## RAW MATERIALS / COMPONENTS - OP 10 ONLY

| Material Code | Material Name | BOM Qty | WO Required | Unit | Role | Scrap % | Notes |
|---|---|---|---|---|---|---|---|
| - | No material line stored for this operation. | | | | | | |

## OP 10 - OPERATOR / QC SIGN-OFF

| Operator / Sign | Actual Start / Stop | Actual Output / Scrap | QC / Supervisor / Sign |
|---|---|---|---|
| | | | |

**CHILD WORK ORDER - LEVEL 4** **PARENT WO-2026-000126 / OP 10 OP020 Multiwire Drawing**

THIS SECTION CONTAINS THE COMPLETE FROZEN BOM / ROUTING / PARAMETERS / MATERIALS FOR THIS WORK ORDER.

# PRODUCTION WORK ORDER
# WO-2026-000127

**PRODUCT**

**BCL1 N-N000-0001-1250005Y | Bare Copper |** IEC | Round/Bunch | IEC 60228 Class 1 | NOT | NOT | 1 x 1.25 mm | Lay NOT | 2.5 mm2

Qty: 679.373265 kg Customer: |

WO Date/Time: 2026-10-04 15:01:22

**MAIN WO BARCODE**

WO-2026-000127-MAIN-000128

## WORK ORDER DETAILS

| | | | |
|---|---|---|---|
| **Selected BOM** | BOM-000004 / Rev.0 | **Status / Priority** | PLANNED / NORMAL |
| **WO Role / Level** | CHILD / L4 | **Parent WO** | WO-2026-000126 |
| **Parent Operation** | 10 \| OP020 Multiwire Drawing | **Frozen Snapshot** | v1 |
| **Standard / Voltage** | IEC | **Core / Section** | mm2 |
| **Factory** | | **Department** | |
| **Work Centre** | | **Responsible** | |
| **Order / Due** | 2026-10-04 | **Planned Start** | |
| **WO Created Date / Time** | 2026-10-04 15:01:22 | **PDF Generated Date / Time** | 2026-11-20 05:27:09 |

## WORK ORDER NOTES

Generated from parent WO-2026-000126 / OP 10 OP020

## THIS WORK ORDER - PRODUCT TREE / BOM SEQUENCE

| | |
|---|---|
| **1.** | **BOM-000004 / Rev.0** |

## THIS WORK ORDER - ROUTING / OPERATION SEQUENCE

| WO Seq | Source BOM | Operation | Machine | Work Centre |
|---|---|---|---|---|
| **10** | BOM-000004 / Rev.0 | **OP010 \| Rod Breakdown / Wire Drawing** | F03-M01 \| Rod Breakdown Machine | \| |

## OP 10 - OP010 | Rod Breakdown / Wire Drawing

BOM: BOM-000004 / Rev.0 Source Seq: 10

Machine: F03-M01 | Rod Breakdown Machine Work Centre: |

**Speed: 4 m/min**

Setup: 30 min Scrap: 1%

WO-2026-000127-010-OP010-139

## PLANNED PRODUCTION

| Start | Finish | Input Qty | Output Qty | Speed | Setup | Duration | Semi-Finished Output |
|---|---|---|---|---|---|---|---|
| | | **679.373265 kg** | **1000 kg** | **4 m/min** | 30 min | 15 min | |

## TECHNICAL / ENGINEERING PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Material Type** | **copper** | | | | |
| **Construction** | | | | | |
| **Conductor Stranding Type** | | | | | |
| **Layer Diameters for Rolling** | | | | | |
| **Lay Direction** | **33** | | | | |
| **Diameter** | **33** | 5 | 333 | | |
| **Nominal Lay Length** | | | 33 | | |
| **Maximum Lay Length** | **3** | | 3 | | |
| **Theoretical Conductor Resistance** | **3** | | 3 | | |
| **Maximum Conductor Resistance** | **3** | 3 | | | |
| **Maximum Standard Resistance** | **3** | | 3 | | |
| **Material Weight (kg/km)** | **3** | | 3 | kg/km | |
| **Note** | | | | | |

## PRODUCTION PROCESS PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Inlet Diameter** | **333** | 33 | 33 | mm | |
| **Outlet Diameter** | **3** | 3 | | mm | |

| | | | | | |
|---|---|---|---|---|---|
| **Line Speed** | **3333** | 33 | 3 | m/min | |
| **Annealer Current** | **333** | 3 | 33 | A | |

## QUALITY / TEST PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Conductor Resistance** | **33** | 3 | 33 | ohm/km | |
| **Wire Diameter** | **333333** | 33333 | 3 | mm | |

## RAW MATERIALS / COMPONENTS - OP 10 ONLY

| Material Code | Material Name | BOM Qty | WO Required | Unit | Role | Scrap % | Notes |
|---|---|---|---|---|---|---|---|
| **BCL1 N-N000-0001-8000012Y** | Bare Copper \| IEC \| Round/Bunch \| IEC 60228 Class 1 \| NOT \| NOT \| 1 x 8 mm \| Lay NOT \| 50 mm2 | 1000 | **686.166998** | kg | | 1% | |

## OP 10 - OPERATOR / QC SIGN-OFF

| Operator / Sign | Actual Start / Stop | Actual Output / Scrap | QC / Supervisor / Sign |
|---|---|---|---|
| | | | |

**CHILD WORK ORDER - LEVEL 1** **PARENT WO-2026-000119 / OP 10 OP090 Cabling / Lay-up**

THIS SECTION CONTAINS THE COMPLETE FROZEN BOM / ROUTING / PARAMETERS / MATERIALS FOR THIS WORK ORDER.

# PRODUCTION WORK ORDER
# WO-2026-000128

**PRODUCT**

**S1001 01B5YLY070B5YYYA22 | Single |** H07RN-F | - | 0.5 | Bare bunched class 5 | YOK | P-EPR | YOK | 0,7 | B | YOK | Y | YOK | NO CLOUR | EN 50525-2-21

Qty: 2030 m Customer: |

WO Date/Time: 2026-10-04 15:01:22

**MAIN WO BARCODE**

WO-2026-000128-MAIN-000129

## WORK ORDER DETAILS

| | | | |
|---|---|---|---|
| **Selected BOM** | BOM-000008 / Rev.0 | **Status / Priority** | PLANNED / NORMAL |
| **WO Role / Level** | CHILD / L1 | **Parent WO** | WO-2026-000119 |
| **Parent Operation** | 10 \| OP090 Cabling / Lay-up | **Frozen Snapshot** | v1 |
| **Standard / Voltage** | | **Core / Section** | mm2 |
| **Factory** | | **Department** | |
| **Work Centre** | | **Responsible** | |
| **Order / Due** | 2026-10-04 | **Planned Start** | |
| **WO Created Date / Time** | 2026-10-04 15:01:22 | **PDF Generated Date / Time** | 2026-11-20 05:27:09 |

## WORK ORDER NOTES

Generated from parent WO-2026-000119 / OP 10 OP090

## THIS WORK ORDER - PRODUCT TREE / BOM SEQUENCE

| | |
|---|---|
| **1.** | **BOM-000008 / Rev.0** |

## THIS WORK ORDER - ROUTING / OPERATION SEQUENCE

| WO Seq | Source BOM | Operation | Machine | Work Centre |
|---|---|---|---|---|
| **10** | BOM-000008 / Rev.0 | **OP060 \| Insulation Extrusion** | F02-M04 \| XLPE Insulation Line | \| |

## OP 10 - OP060 | Insulation Extrusion

BOM: BOM-000008 / Rev.0 Source Seq: 10

Machine: F02-M04 | XLPE Insulation Line Work Centre: |

**Speed: 100 m/min**

Setup: 45 min Scrap: 5%

WO-2026-000128-010-OP060-140

## PLANNED PRODUCTION

| Start | Finish | Input Qty | Output Qty | Speed | Setup | Duration | Semi-Finished Output |
|---|---|---|---|---|---|---|---|
| | | **2030 m** | **1000 m** | **100 m/min** | 45 min | 23 min | |

## TECHNICAL / ENGINEERING PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Process Type** | | | | | |
| **Material Standard** | | | | | |
| **Color** | | | | | |
| **Color Masterbatch Ratio (%)** | | | | % | |
| **Color Masterbatch Type** | | | | | |
| **Catalyst Ratio (%)** | | | | % | |
| **Anti-Rodent Additive Ratio (%)** | | | | % | |
| **Anti-Termite Additive Ratio (%)** | | | | % | |
| **Flame-Retardant Additive Ratio (%)** | | | | % | |
| **Foaming Additive Ratio (%)** | | | | % | |
| **Nominal Wall Thickness (mm)** | | | | mm | |
| **Minimum Point Wall Thickness (mm)** | | | | mm | |
| **Nominal Diameter (mm)** | | | | mm | |
| **Minimum Diameter (mm)** | | | | mm | |
| **Maximum Diameter (mm)** | | | | mm | |
| **Manufacturing Wall Thickness (mm)** | | | | mm | |
| **Manufacturing Minimum Wall Thickness (mm)** | | | | mm | |

| | | | | | |
|---|---|---|---|---|---|
| **Manufacturing Maximum Wall Thickness (mm)** | | | | mm | |
| **Material Weight (kg/km)** | | | | kg/km | |
| **Manufacturing Nominal Diameter (mm)** | | | | mm | |
| **Manufacturing Minimum Diameter (mm)** | | | | mm | |
| **Manufacturing Maximum Diameter (mm)** | | | | mm | |
| **Insulation Input Diameter** | | | | | |
| **Maximum Point Wall Thickness (mm)** | | | | mm | |
| **Insulation Resistance (M?.km)** | | | | Mohm/km | |
| **Standard Minimum Diameter** | | | | | |
| **Standard Maximum Diameter** | | | | | |
| **Insulation Marking** | | | | | |
| **Note** | | | | | |
| **Tensile Strength / Elongation Values** | | | | | |

## PRODUCTION PROCESS PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Extruder Zone Temperatures** | | | | ?C | |
| **Head Temperature** | | | | ?C | |
| **Screw Speed** | | | | rpm | |
| **Line Speed** | | | | m/min | |

## QUALITY / TEST PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Minimum Thickness** | | | | mm | |
| **Spark Test Voltage** | | | | kV | |
| **Insulated Core OD** | | | | mm | |

## CHILD BOM / NEXT WORK ORDER(S) FROM THIS OPERATION

| Child Product | Child BOM | Qty/Output | WO Required | Generated Child WO | Relationship |
|---|---|---|---|---|---|
| **BCL5 U-S000-0027-0250A04Y \| Bare Copper \| IEC \| Round/Bunch \| IEC 60028 Class 5 \| Unilay concentric EU \| S Left \| 27 x 0.25 mm \| Lay 16D \| 1.5 mm2** | BOM-000006 / Rev.0 | 1000 kg | 2030 kg | **WO-2026-000129** | NEXT: WO-2026-000128 -> WO-2026-000129 |

## RAW MATERIALS / COMPONENTS - OP 10 ONLY

| Material Code | Material Name | BOM Qty | WO Required | Unit | Role | Scrap % | Notes |
|---|---|---|---|---|---|---|---|
| - | No material line stored for this operation. | | | | | | |

## OP 10 - OPERATOR / QC SIGN-OFF

| Operator / Sign | Actual Start / Stop | Actual Output / Scrap | QC / Supervisor / Sign |
|---|---|---|---|
| | | | |

**CHILD WORK ORDER - LEVEL 2** **PARENT WO-2026-000128 / OP 10 OP060 Insulation Extrusion**

THIS SECTION CONTAINS THE COMPLETE FROZEN BOM / ROUTING / PARAMETERS / MATERIALS FOR THIS WORK ORDER.

# PRODUCTION WORK ORDER
# WO-2026-000129

**PRODUCT**

**BCL5 U-S000-0027-0250A04Y | Bare Copper |**
IEC | Round/Bunch | IEC 60028 Class 5 |
Unilay concentric EU | S Left | 27 x 0.25
mm | Lay 16D | 1.5 mm2
Qty: 2030 kg Customer: |
WO Date/Time: 2026-10-04 15:01:22

**MAIN WO BARCODE**

WO-2026-000129-MAIN-000130

## WORK ORDER DETAILS

| | | | |
|---|---|---|---|
| **Selected BOM** | BOM-000006 / Rev.0 | **Status / Priority** | PLANNED / NORMAL |
| **WO Role / Level** | CHILD / L2 | **Parent WO** | WO-2026-000128 |
| **Parent Operation** | 10 \| OP060 Insulation Extrusion | **Frozen Snapshot** | v1 |
| **Standard / Voltage** | IEC | **Core / Section** | mm2 |
| **Factory** | | **Department** | |
| **Work Centre** | | **Responsible** | |
| **Order / Due** | 2026-10-04 | **Planned Start** | |
| **WO Created Date / Time** | 2026-10-04 15:01:22 | **PDF Generated Date / Time** | 2026-11-20 05:27:09 |

## WORK ORDER NOTES

Generated from parent WO-2026-000128 / OP 10 OP060

## THIS WORK ORDER - PRODUCT TREE / BOM SEQUENCE

| | |
|---|---|
| **1.** | **BOM-000006 / Rev.0** |

## THIS WORK ORDER - ROUTING / OPERATION SEQUENCE

| WO Seq | Source BOM | Operation | Machine | Work Centre |
|---|---|---|---|---|
| **10** | BOM-000006 / Rev.0 | **OP030 \| Bunching / Double Twist** | F03-M05 \| Cabling Machine | \| |

## OP 10 - OP030 | Bunching / Double Twist

BOM: BOM-000006 / Rev.0 Source Seq: 10
Machine: F03-M05 | Cabling Machine Work Centre: |

**Speed: 232323 m/min**
Setup: 3434324 min Scrap: 55555%

WO-2026-000129-010-OP030-141

## PLANNED PRODUCTION

| Start | Finish | Input Qty | Output Qty | Speed | Setup | Duration | Semi-Finished Output |
|---|---|---|---|---|---|---|---|
| | | **2030 kg** | **m** | **232323 m/min** | 3434324 min | 234324 min | |

## TECHNICAL / ENGINEERING PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Material Type** | **ADSAD** | | | | |
| **Construction** | **SADSAD** | | | | |
| **Conductor Stranding Type** | | | | | |
| **Layer Diameters for Rolling** | | | | | |
| **Lay Direction** | | | | | |
| **Diameter** | | | | | |
| **Nominal Lay Length** | | | | | |
| **Maximum Lay Length** | | | | | |
| **Theoretical Conductor Resistance** | | | | | |
| **Maximum Conductor Resistance** | | | | | |
| **Maximum Standard Resistance** | | | | | |
| **Material Weight (kg/km)** | | | | kg/km | |
| **Note** | **AD** | | | | |
| **Lay Type** | | | | | |
| **Minimum Lay Length** | | | | | |
| **Lay Ratio** | | | | | |
| **Minimum Diameter** | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| **Nominal Diameter** | | | | | |
| **Maximum Diameter** | | | | | |
| **Filler Cord Count** | | | | | |
| **Filler Cord Diameter** | | | | | |
| **Dummy Core Count** | | | | | |
| **Dummy Core Diameter** | | | | | |
| **Filler Cord Material** | | | | | |
| **Filler Cord Weight** | | | | | |
| **Yarn Material** | **DASD** | | | | |
| **Yarn Weight** | | | | | |
| **Color and Number Sequence** | | | | | |

## PRODUCTION PROCESS PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Bow / Rotor Speed** | | | | rpm | |
| **Line Speed** | | | | m/min | |

## QUALITY / TEST PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Conductor OD** | | | | mm | |

## CHILD BOM / NEXT WORK ORDER(S) FROM THIS OPERATION

| Child Product | Child BOM | Qty/Output | WO Required | Generated Child WO | Relationship |
|---|---|---|---|---|---|
| **BCL5 N-N000-0009-0250007Y \| Bare Copper \| IEC \| Round/Bunch \| IEC 60028 Class 5 \| NOT \| NOT \| 9 x 0.25 mm \| Lay NOT \| 6 mm2** | BOM-000005 / Rev.0 | 333.3333 kg | 676.666599 kg | **WO-2026-000130** | NEXT: WO-2026-000129 -> WO-2026-000130 |
| **BCL5 N-N000-0009-0250007Y \| Bare Copper \| IEC \| Round/Bunch \| IEC 60028 Class 5 \| NOT \| NOT \| 9 x 0.25 mm \| Lay NOT \| 6 mm2** | BOM-000005 / Rev.0 | 333.3333 kg | 676.666599 kg | **WO-2026-000132** | NEXT: WO-2026-000129 -> WO-2026-000132 |
| **BCL5 N-N000-0009-0250007Y \| Bare Copper \| IEC \| Round/Bunch \| IEC 60028 Class 5 \| NOT \| NOT \| 9 x 0.25 mm \| Lay NOT \| 6 mm2** | BOM-000005 / Rev.0 | 333.3333 kg | 676.666599 kg | **WO-2026-000134** | NEXT: WO-2026-000129 -> WO-2026-000134 |

## RAW MATERIALS / COMPONENTS - OP 10 ONLY

| Material Code | Material Name | BOM Qty | WO Required | Unit | Role | Scrap % | Notes |
|---|---|---|---|---|---|---|---|
| - | No material line stored for this operation. | | | | | | |

## OP 10 - OPERATOR / QC SIGN-OFF

| Operator / Sign | Actual Start / Stop | Actual Output / Scrap | QC / Supervisor / Sign |
|---|---|---|---|
| | | | |

**CHILD WORK ORDER - LEVEL 3** **PARENT WO-2026-000129 / OP 10 OP030 Bunching / Double Twist**

THIS SECTION CONTAINS THE COMPLETE FROZEN BOM / ROUTING / PARAMETERS / MATERIALS FOR THIS WORK ORDER.

# PRODUCTION WORK ORDER
# WO-2026-000130

**PRODUCT**

**BCL5 N-N000-0009-0250007Y | Bare Copper |**
IEC | Round/Bunch | IEC 60028 Class 5 |
NOT | NOT | 9 x 0.25 mm | Lay NOT | 6 mm2

Qty: 676.666599 kg Customer: |

WO Date/Time: 2026-10-04 15:01:22

**MAIN WO BARCODE**

WO-2026-000130-MAIN-000131

## WORK ORDER DETAILS

| | | | |
|---|---|---|---|
| **Selected BOM** | BOM-000005 / Rev.0 | **Status / Priority** | PLANNED / NORMAL |
| **WO Role / Level** | CHILD / L3 | **Parent WO** | WO-2026-000129 |
| **Parent Operation** | 10 \| OP030 Bunching / Double Twist | **Frozen Snapshot** | v1 |
| **Standard / Voltage** | IEC | **Core / Section** | mm2 |
| **Factory** | | **Department** | |
| **Work Centre** | | **Responsible** | |
| **Order / Due** | 2026-10-04 | **Planned Start** | |
| **WO Created Date / Time** | 2026-10-04 15:01:22 | **PDF Generated Date / Time** | 2026-11-20 05:27:09 |

## WORK ORDER NOTES

Generated from parent WO-2026-000129 / OP 10 OP030

## THIS WORK ORDER - PRODUCT TREE / BOM SEQUENCE

| | |
|---|---|
| **1.** | **BOM-000005 / Rev.0** |

## THIS WORK ORDER - ROUTING / OPERATION SEQUENCE

| WO Seq | Source BOM | Operation | Machine | Work Centre |
|---|---|---|---|---|
| **10** | BOM-000005 / Rev.0 | **OP020 \| Multiwire Drawing** | F03-M02 \| Fine Wire Drawing Machine | \| |

## OP 10 - OP020 | Multiwire Drawing

BOM: BOM-000005 / Rev.0 Source Seq: 10

Machine: F03-M02 | Fine Wire Drawing Machine Work Centre: |

**Speed: 33333 m/min**

Setup: 545 min Scrap: 1%

WO-2026-000130-010-OP020-142

## PLANNED PRODUCTION

| Start | Finish | Input Qty | Output Qty | Speed | Setup | Duration | Semi-Finished Output |
|---|---|---|---|---|---|---|---|
| | | **676.666599 kg** | **m** | **33333 m/min** | 545 min | 30 min | |

## TECHNICAL / ENGINEERING PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Material Type** | **ERSDF** | | | | |
| **Construction** | **DSF** | | | | |
| **Conductor Stranding Type** | | | | | |
| **Layer Diameters for Rolling** | **4534** | 4544 | | | |
| **Lay Direction** | | | | | |
| **Diameter** | | 4 | 44 | | |
| **Nominal Lay Length** | | | 44 | | |
| **Maximum Lay Length** | | | | | |
| **Theoretical Conductor Resistance** | | 44 | 6 | | |
| **Maximum Conductor Resistance** | | 4 | 4 | | |
| **Maximum Standard Resistance** | | | | | |
| **Material Weight (kg/km)** | **4** | 4 | 4 | kg/km | |
| **Note** | | | | | |

## PRODUCTION PROCESS PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Line Speed** | **12** | 8 | 15 | m/min | |

## QUALITY / TEST PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Wire Diameter** | **8768** | 6767 | 6767 | mm | |

## CHILD BOM / NEXT WORK ORDER(S) FROM THIS OPERATION

| Child Product | Child BOM | Qty/Output | WO Required | Generated Child WO | Relationship |
|---|---|---|---|---|---|
| **BCL1 N-N000-0001-1250005Y \| Bare Copper \| IEC \| Round/Bunch \| IEC 60228 Class 1 \| NOT \| NOT \| 1 x 1.25 mm \| Lay NOT \| 2.5 mm2** | BOM-000004 / Rev.0 | 1004 kg | 679.373265 kg | **WO-2026-000131** | NEXT: WO-2026-000130 -> WO-2026-000131 |

## RAW MATERIALS / COMPONENTS - OP 10 ONLY

| Material Code | Material Name | BOM Qty | WO Required | Unit | Role | Scrap % | Notes |
|---|---|---|---|---|---|---|---|
| - | No material line stored for this operation. | | | | | | |

## OP 10 - OPERATOR / QC SIGN-OFF

| Operator / Sign | Actual Start / Stop | Actual Output / Scrap | QC / Supervisor / Sign |
|---|---|---|---|
| | | | |

**CHILD WORK ORDER - LEVEL 4** **PARENT WO-2026-000130 / OP 10 OP020 Multiwire Drawing**

THIS SECTION CONTAINS THE COMPLETE FROZEN BOM / ROUTING / PARAMETERS / MATERIALS FOR THIS WORK ORDER.

# PRODUCTION WORK ORDER
# WO-2026-000131

**PRODUCT**

**BCL1 N-N000-0001-1250005Y | Bare Copper |** IEC | Round/Bunch | IEC 60228 Class 1 | NOT | NOT | 1 x 1.25 mm | Lay NOT | 2.5 mm2

Qty: 679.373265 kg Customer: |

WO Date/Time: 2026-10-04 15:01:22

**MAIN WO BARCODE**

WO-2026-000131-MAIN-000132

## WORK ORDER DETAILS

| | | | |
|---|---|---|---|
| **Selected BOM** | BOM-000004 / Rev.0 | **Status / Priority** | PLANNED / NORMAL |
| **WO Role / Level** | CHILD / L4 | **Parent WO** | WO-2026-000130 |
| **Parent Operation** | 10 \| OP020 Multiwire Drawing | **Frozen Snapshot** | v1 |
| **Standard / Voltage** | IEC | **Core / Section** | mm2 |
| **Factory** | | **Department** | |
| **Work Centre** | | **Responsible** | |
| **Order / Due** | 2026-10-04 | **Planned Start** | |
| **WO Created Date / Time** | 2026-10-04 15:01:22 | **PDF Generated Date / Time** | 2026-11-20 05:27:09 |

## WORK ORDER NOTES

Generated from parent WO-2026-000130 / OP 10 OP020

## THIS WORK ORDER - PRODUCT TREE / BOM SEQUENCE

| | |
|---|---|
| **1.** | **BOM-000004 / Rev.0** |

## THIS WORK ORDER - ROUTING / OPERATION SEQUENCE

| WO Seq | Source BOM | Operation | Machine | Work Centre |
|---|---|---|---|---|
| **10** | BOM-000004 / Rev.0 | **OP010 \| Rod Breakdown / Wire Drawing** | F03-M01 \| Rod Breakdown Machine | \| |

## OP 10 - OP010 | Rod Breakdown / Wire Drawing

BOM: BOM-000004 / Rev.0 Source Seq: 10

Machine: F03-M01 | Rod Breakdown Machine Work Centre: |

**Speed: 4 m/min**

Setup: 30 min Scrap: 1%

WO-2026-000131-010-OP010-143

## PLANNED PRODUCTION

| Start | Finish | Input Qty | Output Qty | Speed | Setup | Duration | Semi-Finished Output |
|---|---|---|---|---|---|---|---|
| | | **679.373265 kg** | **1000 kg** | **4 m/min** | 30 min | 15 min | |

## TECHNICAL / ENGINEERING PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Material Type** | **copper** | | | | |
| **Construction** | | | | | |
| **Conductor Stranding Type** | | | | | |
| **Layer Diameters for Rolling** | | | | | |
| **Lay Direction** | **33** | | | | |
| **Diameter** | **33** | 5 | 333 | | |
| **Nominal Lay Length** | | | 33 | | |
| **Maximum Lay Length** | **3** | | 3 | | |
| **Theoretical Conductor Resistance** | **3** | | 3 | | |
| **Maximum Conductor Resistance** | **3** | 3 | | | |
| **Maximum Standard Resistance** | **3** | | 3 | | |
| **Material Weight (kg/km)** | **3** | | 3 | kg/km | |
| **Note** | | | | | |

## PRODUCTION PROCESS PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Inlet Diameter** | **333** | 33 | 33 | mm | |
| **Outlet Diameter** | **3** | 3 | | mm | |

| | | | | | |
|---|---|---|---|---|---|
| **Line Speed** | **3333** | 33 | 3 | m/min | |
| **Annealer Current** | **333** | 3 | 33 | A | |

## QUALITY / TEST PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Conductor Resistance** | **33** | 3 | 33 | ohm/km | |
| **Wire Diameter** | **333333** | 33333 | 3 | mm | |

## RAW MATERIALS / COMPONENTS - OP 10 ONLY

| Material Code | Material Name | BOM Qty | WO Required | Unit | Role | Scrap % | Notes |
|---|---|---|---|---|---|---|---|
| **BCL1 N-N000-0001-8000012Y** | Bare Copper \| IEC \| Round/Bunch \| IEC 60228 Class 1 \| NOT \| NOT \| 1 x 8 mm \| Lay NOT \| 50 mm2 | 1000 | **686.166998** | kg | | 1% | |

## OP 10 - OPERATOR / QC SIGN-OFF

| Operator / Sign | Actual Start / Stop | Actual Output / Scrap | QC / Supervisor / Sign |
|---|---|---|---|
| | | | |

**CHILD WORK ORDER - LEVEL 3** **PARENT WO-2026-000129 / OP 10 OP030 Bunching / Double Twist**

THIS SECTION CONTAINS THE COMPLETE FROZEN BOM / ROUTING / PARAMETERS / MATERIALS FOR THIS WORK ORDER.

# PRODUCTION WORK ORDER
# WO-2026-000132

**PRODUCT**

**BCL5 N-N000-0009-0250007Y | Bare Copper |**
IEC | Round/Bunch | IEC 60028 Class 5 |
NOT | NOT | 9 x 0.25 mm | Lay NOT | 6 mm2

Qty: 676.666599 kg Customer: |

WO Date/Time: 2026-10-04 15:01:22

**MAIN WO BARCODE**

WO-2026-000132-MAIN-000133

## WORK ORDER DETAILS

| | | | |
|---|---|---|---|
| **Selected BOM** | BOM-000005 / Rev.0 | **Status / Priority** | PLANNED / NORMAL |
| **WO Role / Level** | CHILD / L3 | **Parent WO** | WO-2026-000129 |
| **Parent Operation** | 10 \| OP030 Bunching / Double Twist | **Frozen Snapshot** | v1 |
| **Standard / Voltage** | IEC | **Core / Section** | mm2 |
| **Factory** | | **Department** | |
| **Work Centre** | | **Responsible** | |
| **Order / Due** | 2026-10-04 | **Planned Start** | |
| **WO Created Date / Time** | 2026-10-04 15:01:22 | **PDF Generated Date / Time** | 2026-11-20 05:27:09 |

## WORK ORDER NOTES

Generated from parent WO-2026-000129 / OP 10 OP030

## THIS WORK ORDER - PRODUCT TREE / BOM SEQUENCE

| | |
|---|---|
| **1.** | **BOM-000005 / Rev.0** |

## THIS WORK ORDER - ROUTING / OPERATION SEQUENCE

| WO Seq | Source BOM | Operation | Machine | Work Centre |
|---|---|---|---|---|
| **10** | BOM-000005 / Rev.0 | **OP020 \| Multiwire Drawing** | F03-M02 \| Fine Wire Drawing Machine | \| |

## OP 10 - OP020 | Multiwire Drawing

BOM: BOM-000005 / Rev.0 Source Seq: 10

Machine: F03-M02 | Fine Wire Drawing Machine Work Centre: |

**Speed: 33333 m/min**

Setup: 545 min Scrap: 1%

WO-2026-000132-010-OP020-144

## PLANNED PRODUCTION

| Start | Finish | Input Qty | Output Qty | Speed | Setup | Duration | Semi-Finished Output |
|---|---|---|---|---|---|---|---|
| | | **676.666599 kg** | **m** | **33333 m/min** | 545 min | 30 min | |

## TECHNICAL / ENGINEERING PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Material Type** | **ERSDF** | | | | |
| **Construction** | **DSF** | | | | |
| **Conductor Stranding Type** | | | | | |
| **Layer Diameters for Rolling** | **4534** | 4544 | | | |
| **Lay Direction** | | | | | |
| **Diameter** | | 4 | 44 | | |
| **Nominal Lay Length** | | | 44 | | |
| **Maximum Lay Length** | | | | | |
| **Theoretical Conductor Resistance** | | 44 | 6 | | |
| **Maximum Conductor Resistance** | | 4 | 4 | | |
| **Maximum Standard Resistance** | | | | | |
| **Material Weight (kg/km)** | **4** | 4 | 4 | kg/km | |
| **Note** | | | | | |

## PRODUCTION PROCESS PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Line Speed** | **12** | 8 | 15 | m/min | |

## QUALITY / TEST PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Wire Diameter** | **8768** | 6767 | 6767 | mm | |

## CHILD BOM / NEXT WORK ORDER(S) FROM THIS OPERATION

| Child Product | Child BOM | Qty/Output | WO Required | Generated Child WO | Relationship |
|---|---|---|---|---|---|
| **BCL1 N-N000-0001-1250005Y \| Bare Copper \| IEC \| Round/Bunch \| IEC 60228 Class 1 \| NOT \| NOT \| 1 x 1.25 mm \| Lay NOT \| 2.5 mm2** | BOM-000004 / Rev.0 | 1004 kg | 679.373265 kg | **WO-2026-000133** | NEXT: WO-2026-000132 -> WO-2026-000133 |

## RAW MATERIALS / COMPONENTS - OP 10 ONLY

| Material Code | Material Name | BOM Qty | WO Required | Unit | Role | Scrap % | Notes |
|---|---|---|---|---|---|---|---|
| - | No material line stored for this operation. | | | | | | |

## OP 10 - OPERATOR / QC SIGN-OFF

| Operator / Sign | Actual Start / Stop | Actual Output / Scrap | QC / Supervisor / Sign |
|---|---|---|---|
| | | | |

**CHILD WORK ORDER - LEVEL 4** **PARENT WO-2026-000132 / OP 10 OP020 Multiwire Drawing**

THIS SECTION CONTAINS THE COMPLETE FROZEN BOM / ROUTING / PARAMETERS / MATERIALS FOR THIS WORK ORDER.

# PRODUCTION WORK ORDER
# WO-2026-000133

**PRODUCT**

**BCL1 N-N000-0001-1250005Y | Bare Copper |** IEC | Round/Bunch | IEC 60228 Class 1 | NOT | NOT | 1 x 1.25 mm | Lay NOT | 2.5 mm2

Qty: 679.373265 kg Customer: |

WO Date/Time: 2026-10-04 15:01:22

**MAIN WO BARCODE**

WO-2026-000133-MAIN-000134

## WORK ORDER DETAILS

| | | | |
|---|---|---|---|
| **Selected BOM** | BOM-000004 / Rev.0 | **Status / Priority** | PLANNED / NORMAL |
| **WO Role / Level** | CHILD / L4 | **Parent WO** | WO-2026-000132 |
| **Parent Operation** | 10 \| OP020 Multiwire Drawing | **Frozen Snapshot** | v1 |
| **Standard / Voltage** | IEC | **Core / Section** | mm2 |
| **Factory** | | **Department** | |
| **Work Centre** | | **Responsible** | |
| **Order / Due** | 2026-10-04 | **Planned Start** | |
| **WO Created Date / Time** | 2026-10-04 15:01:22 | **PDF Generated Date / Time** | 2026-11-20 05:27:09 |

## WORK ORDER NOTES

Generated from parent WO-2026-000132 / OP 10 OP020

## THIS WORK ORDER - PRODUCT TREE / BOM SEQUENCE

| | |
|---|---|
| **1.** | **BOM-000004 / Rev.0** |

## THIS WORK ORDER - ROUTING / OPERATION SEQUENCE

| WO Seq | Source BOM | Operation | Machine | Work Centre |
|---|---|---|---|---|
| **10** | BOM-000004 / Rev.0 | **OP010 \| Rod Breakdown / Wire Drawing** | F03-M01 \| Rod Breakdown Machine | \| |

## OP 10 - OP010 | Rod Breakdown / Wire Drawing

BOM: BOM-000004 / Rev.0 Source Seq: 10

Machine: F03-M01 | Rod Breakdown Machine Work Centre: |

**Speed: 4 m/min**

Setup: 30 min Scrap: 1%

WO-2026-000133-010-OP010-145

## PLANNED PRODUCTION

| Start | Finish | Input Qty | Output Qty | Speed | Setup | Duration | Semi-Finished Output |
|---|---|---|---|---|---|---|---|
| | | **679.373265 kg** | **1000 kg** | **4 m/min** | 30 min | 15 min | |

## TECHNICAL / ENGINEERING PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Material Type** | **copper** | | | | |
| **Construction** | | | | | |
| **Conductor Stranding Type** | | | | | |
| **Layer Diameters for Rolling** | | | | | |
| **Lay Direction** | **33** | | | | |
| **Diameter** | **33** | 5 | 333 | | |
| **Nominal Lay Length** | | | 33 | | |
| **Maximum Lay Length** | **3** | | 3 | | |
| **Theoretical Conductor Resistance** | **3** | | 3 | | |
| **Maximum Conductor Resistance** | **3** | 3 | | | |
| **Maximum Standard Resistance** | **3** | | 3 | | |
| **Material Weight (kg/km)** | **3** | | 3 | kg/km | |
| **Note** | | | | | |

## PRODUCTION PROCESS PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Inlet Diameter** | **333** | 33 | 33 | mm | |
| **Outlet Diameter** | **3** | 3 | | mm | |

| | | | | | |
|---|---|---|---|---|---|
| **Line Speed** | **3333** | 33 | 3 | m/min | |
| **Annealer Current** | **333** | 3 | 33 | A | |

## QUALITY / TEST PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Conductor Resistance** | **33** | 3 | 33 | ohm/km | |
| **Wire Diameter** | **333333** | 33333 | 3 | mm | |

## RAW MATERIALS / COMPONENTS - OP 10 ONLY

| Material Code | Material Name | BOM Qty | WO Required | Unit | Role | Scrap % | Notes |
|---|---|---|---|---|---|---|---|
| **BCL1 N-N000-0001-8000012Y** | Bare Copper \| IEC \| Round/Bunch \| IEC 60228 Class 1 \| NOT \| NOT \| 1 x 8 mm \| Lay NOT \| 50 mm2 | 1000 | **686.166998** | kg | | 1% | |

## OP 10 - OPERATOR / QC SIGN-OFF

| Operator / Sign | Actual Start / Stop | Actual Output / Scrap | QC / Supervisor / Sign |
|---|---|---|---|
| | | | |

**CHILD WORK ORDER - LEVEL 3** **PARENT WO-2026-000129 / OP 10 OP030 Bunching / Double Twist**

THIS SECTION CONTAINS THE COMPLETE FROZEN BOM / ROUTING / PARAMETERS / MATERIALS FOR THIS WORK ORDER.

# PRODUCTION WORK ORDER
# WO-2026-000134

**PRODUCT**

**BCL5 N-N000-0009-0250007Y | Bare Copper |**
IEC | Round/Bunch | IEC 60028 Class 5 |
NOT | NOT | 9 x 0.25 mm | Lay NOT | 6 mm2

Qty: 676.666599 kg Customer: |

WO Date/Time: 2026-10-04 15:01:22

**MAIN WO BARCODE**

WO-2026-000134-MAIN-000135

## WORK ORDER DETAILS

| | | | |
|---|---|---|---|
| **Selected BOM** | BOM-000005 / Rev.0 | **Status / Priority** | PLANNED / NORMAL |
| **WO Role / Level** | CHILD / L3 | **Parent WO** | WO-2026-000129 |
| **Parent Operation** | 10 \| OP030 Bunching / Double Twist | **Frozen Snapshot** | v1 |
| **Standard / Voltage** | IEC | **Core / Section** | mm2 |
| **Factory** | | **Department** | |
| **Work Centre** | | **Responsible** | |
| **Order / Due** | 2026-10-04 | **Planned Start** | |
| **WO Created Date / Time** | 2026-10-04 15:01:22 | **PDF Generated Date / Time** | 2026-11-20 05:27:09 |

## WORK ORDER NOTES

Generated from parent WO-2026-000129 / OP 10 OP030

## THIS WORK ORDER - PRODUCT TREE / BOM SEQUENCE

| | |
|---|---|
| **1.** | **BOM-000005 / Rev.0** |

## THIS WORK ORDER - ROUTING / OPERATION SEQUENCE

| WO Seq | Source BOM | Operation | Machine | Work Centre |
|---|---|---|---|---|
| **10** | BOM-000005 / Rev.0 | **OP020 \| Multiwire Drawing** | F03-M02 \| Fine Wire Drawing Machine | \| |

## OP 10 - OP020 | Multiwire Drawing

BOM: BOM-000005 / Rev.0 Source Seq: 10

Machine: F03-M02 | Fine Wire Drawing Machine Work Centre: |

**Speed: 33333 m/min**

Setup: 545 min Scrap: 1%

WO-2026-000134-010-OP020-146

## PLANNED PRODUCTION

| Start | Finish | Input Qty | Output Qty | Speed | Setup | Duration | Semi-Finished Output |
|---|---|---|---|---|---|---|---|
| | | **676.666599 kg** | **m** | **33333 m/min** | 545 min | 30 min | |

## TECHNICAL / ENGINEERING PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Material Type** | **ERSDF** | | | | |
| **Construction** | **DSF** | | | | |
| **Conductor Stranding Type** | | | | | |
| **Layer Diameters for Rolling** | **4534** | 4544 | | | |
| **Lay Direction** | | | | | |
| **Diameter** | | 4 | 44 | | |
| **Nominal Lay Length** | | | 44 | | |
| **Maximum Lay Length** | | | | | |
| **Theoretical Conductor Resistance** | | 44 | 6 | | |
| **Maximum Conductor Resistance** | | 4 | 4 | | |
| **Maximum Standard Resistance** | | | | | |
| **Material Weight (kg/km)** | **4** | 4 | 4 | kg/km | |
| **Note** | | | | | |

## PRODUCTION PROCESS PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Line Speed** | **12** | 8 | 15 | m/min | |

## QUALITY / TEST PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Wire Diameter** | **8768** | 6767 | 6767 | mm | |

## CHILD BOM / NEXT WORK ORDER(S) FROM THIS OPERATION

| Child Product | Child BOM | Qty/Output | WO Required | Generated Child WO | Relationship |
|---|---|---|---|---|---|
| **BCL1 N-N000-0001-1250005Y \| Bare Copper \| IEC \| Round/Bunch \| IEC 60228 Class 1 \| NOT \| NOT \| 1 x 1.25 mm \| Lay NOT \| 2.5 mm2** | BOM-000004 / Rev.0 | 1004 kg | 679.373265 kg | **WO-2026-000135** | NEXT: WO-2026-000134 -> WO-2026-000135 |

## RAW MATERIALS / COMPONENTS - OP 10 ONLY

| Material Code | Material Name | BOM Qty | WO Required | Unit | Role | Scrap % | Notes |
|---|---|---|---|---|---|---|---|
| - | No material line stored for this operation. | | | | | | |

## OP 10 - OPERATOR / QC SIGN-OFF

| Operator / Sign | Actual Start / Stop | Actual Output / Scrap | QC / Supervisor / Sign |
|---|---|---|---|
| | | | |

**CHILD WORK ORDER - LEVEL 4** **PARENT WO-2026-000134 / OP 10 OP020 Multiwire Drawing**

THIS SECTION CONTAINS THE COMPLETE FROZEN BOM / ROUTING / PARAMETERS / MATERIALS FOR THIS WORK ORDER.

# PRODUCTION WORK ORDER
# WO-2026-000135

**PRODUCT**

**BCL1 N-N000-0001-1250005Y | Bare Copper |** IEC | Round/Bunch | IEC 60228 Class 1 | NOT | NOT | 1 x 1.25 mm | Lay NOT | 2.5 mm2

Qty: 679.373265 kg Customer: |

WO Date/Time: 2026-10-04 15:01:22

**MAIN WO BARCODE**

WO-2026-000135-MAIN-000136

## WORK ORDER DETAILS

| | | | |
|---|---|---|---|
| **Selected BOM** | BOM-000004 / Rev.0 | **Status / Priority** | PLANNED / NORMAL |
| **WO Role / Level** | CHILD / L4 | **Parent WO** | WO-2026-000134 |
| **Parent Operation** | 10 \| OP020 Multiwire Drawing | **Frozen Snapshot** | v1 |
| **Standard / Voltage** | IEC | **Core / Section** | mm2 |
| **Factory** | | **Department** | |
| **Work Centre** | | **Responsible** | |
| **Order / Due** | 2026-10-04 | **Planned Start** | |
| **WO Created Date / Time** | 2026-10-04 15:01:22 | **PDF Generated Date / Time** | 2026-11-20 05:27:09 |

## WORK ORDER NOTES

Generated from parent WO-2026-000134 / OP 10 OP020

## THIS WORK ORDER - PRODUCT TREE / BOM SEQUENCE

| | |
|---|---|
| **1.** | **BOM-000004 / Rev.0** |

## THIS WORK ORDER - ROUTING / OPERATION SEQUENCE

| WO Seq | Source BOM | Operation | Machine | Work Centre |
|---|---|---|---|---|
| **10** | BOM-000004 / Rev.0 | **OP010 \| Rod Breakdown / Wire Drawing** | F03-M01 \| Rod Breakdown Machine | \| |

## OP 10 - OP010 | Rod Breakdown / Wire Drawing

BOM: BOM-000004 / Rev.0 Source Seq: 10

Machine: F03-M01 | Rod Breakdown Machine Work Centre: |

**Speed: 4 m/min**

Setup: 30 min Scrap: 1%

WO-2026-000135-010-OP010-147

## PLANNED PRODUCTION

| Start | Finish | Input Qty | Output Qty | Speed | Setup | Duration | Semi-Finished Output |
|---|---|---|---|---|---|---|---|
| | | **679.373265 kg** | **1000 kg** | **4 m/min** | 30 min | 15 min | |

## TECHNICAL / ENGINEERING PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Material Type** | **copper** | | | | |
| **Construction** | | | | | |
| **Conductor Stranding Type** | | | | | |
| **Layer Diameters for Rolling** | | | | | |
| **Lay Direction** | **33** | | | | |
| **Diameter** | **33** | 5 | 333 | | |
| **Nominal Lay Length** | | | 33 | | |
| **Maximum Lay Length** | **3** | | 3 | | |
| **Theoretical Conductor Resistance** | **3** | | 3 | | |
| **Maximum Conductor Resistance** | **3** | 3 | | | |
| **Maximum Standard Resistance** | **3** | | 3 | | |
| **Material Weight (kg/km)** | **3** | | 3 | kg/km | |
| **Note** | | | | | |

## PRODUCTION PROCESS PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Inlet Diameter** | **333** | 33 | 33 | mm | |
| **Outlet Diameter** | **3** | 3 | | mm | |

| | | | | | |
|---|---|---|---|---|---|
| **Line Speed** | **3333** | 33 | 3 | m/min | |
| **Annealer Current** | **333** | 3 | 33 | A | |

## QUALITY / TEST PARAMETERS

| Parameter | Required / Target | Min | Max | Unit | Remarks |
|---|---|---|---|---|---|
| **Conductor Resistance** | **33** | 3 | 33 | ohm/km | |
| **Wire Diameter** | **333333** | 33333 | 3 | mm | |

## RAW MATERIALS / COMPONENTS - OP 10 ONLY

| Material Code | Material Name | BOM Qty | WO Required | Unit | Role | Scrap % | Notes |
|---|---|---|---|---|---|---|---|
| **BCL1 N-N000-0001-8000012Y** | Bare Copper \| IEC \| Round/Bunch \| IEC 60228 Class 1 \| NOT \| NOT \| 1 x 8 mm \| Lay NOT \| 50 mm2 | 1000 | **686.166998** | kg | | 1% | |

## OP 10 - OPERATOR / QC SIGN-OFF

| Operator / Sign | Actual Start / Stop | Actual Output / Scrap | QC / Supervisor / Sign |
|---|---|---|---|
| | | | |