



EVIDENCE PACK

Auditor-friendly proof bundle

SAMPLE | DEMO

Evidence Pack ID	Job ID	Customer / PO	Delivery Window
EP-2026-0217-01 2026-02-17	EAS-2026-0217 SO-260217	Hudson Valley Cranial Care (DEMO) PO-44721	Rapid (3–5 business days) Ship: 2026-02-17

Facility: 20 Corporate Park, Hopewell Junction, NY • Prepared by: QA (SM) • PHI: none included

Evidence Tier: **Evidence+**

Expanded CTQs, finish-class confirmation, revision/lot linkage, and enhanced photo set.

Sample document — IDs, measurements, and results are illustrative. No patient identifiers are included.

1 Order Summary

Field	Detail
Part Number / Description	CP-20018 Cranial Orthotic Helmet, Rev A
Quantity	10 pcs
Material	PA11 (HP Multi Jet Fusion)
Finish Stack	S1 Blast Class B → Dye: Dove Grey → Vapor Smooth: Comfort (satin)
Evidence Tier	Evidence+
Delivery Lane	Rapid (3–5 business days)
Promised Ship Date	2026-02-17
Ship Method	UPS Ground Tracking: 1Z999AA10123456784 (demo)

Sample part for demonstration purposes only. All values are illustrative.

2 Acceptance Criteria

This order is accepted when all of the following conditions are met:

✓	All CTQs in Section 4 meet specification (PASS).
✓	No structural defects, sharp edges, or delamination under standard inspection lighting.
✓	Finish class matches order specification: Comfort (satin vapor smooth).
✓	Labeling and traceability present (Job ID on each part + pack-out checklist complete).
✓	Evidence Pack complete per Evidence+ tier requirements.

Disposition	ACCEPTED — Released for shipment
Released By	QA (SM) 2026-02-17 14:32 EST

3 Traceability

Full chain-of-custody and process traceability for this lot. All IDs are linked to the master Job Record and retained per EAS retention policy.

3.1 Build Information

Printer	HP Jet Fusion 5600 (HP5600-01)
Build Unit	BU-5600-03811
Build Start	2026-02-14 18:10 EST
Build End	2026-02-15 06:20 EST
Build Duration	12 hrs 10 min
Packing Efficiency	8.4% (10 helmets + 2 witness coupons)

3.2 Material Lot

Material	PA11 (Nylon 11)
Powder Lot	PA11-L26-0210A
Refresh Ratio	60% recycled / 40% virgin
Supplier TDS Reference	HP 3D High Reusability PA 11 (TDS rev 2024-09)

3.3 Finishing Process IDs

Process Step	Step ID	Equipment	Operator
Depowder + Blast	S1-BB-02	AM Solutions S1	JR
Dye (Dove Grey)	DYE-GRY-0126	Dye Bath Station 1	JR
Vapor Smooth	VX-COMFORT-07	AMT PostPro SF2X	SM
QA + Evidence	QA-0217-01	QA Station	SM
Pack-out	PKG-0217-01	Pack Bench	SM

3.4 Chain of Custody

Parts maintained single custody throughout production:

Process Step	Timestamp (EST)	Location
Print	02-14 18:10 → 02-15 06:20	Print Room
Cool-down	02-15 06:20 → 02-15 10:00	Print Room
Depowder + S1 Blast	02-15 10:15 → 02-15 12:30	Dirty Zone
Transition Buffer	02-15 12:30 → 02-15 12:45	No-Cross Zone
Dye (Dove Grey)	02-15 13:00 → 02-15 14:30	Clean Zone
Vapor Smooth (SF2X)	02-15 15:00 → 02-15 17:00	Clean Zone
QA + Evidence Pack	02-17 09:00 → 02-17 11:30	QA Station
Pack-out + Ship	02-17 13:00 → 02-17 14:45	Outbound

Lot ID: EAS-2026-0217_LOT_01 | Timestamps retained by Job ID in EAS job record system.

4 CTQ Results

Critical-to-Quality characteristics measured per the acceptance criteria defined at order intake. All CTQs passed.

CTQ	Spec	Method	Sample	Result	P/F	Notes
Inner width @ trimline	121.0 ±0.5 mm	Calipers	n = 5	120.6 – 121.3 mm	PASS	—
Closure pocket width	38.0 ±0.3 mm	Calipers	n = 5	37.9 – 38.1 mm	PASS	—
Edge radius (contact)	R ≥ 1.0 mm	Radius gage	100%	Meets	PASS	—
Wall thickness (min)	≥ 2.5 mm	Calipers	n = 5	2.6 – 2.8 mm	PASS	—
Finish class	Comfort (satin)	Visual	100%	Meets	PASS	—
Dye uniformity	No bare spots	Visual (D50)	100%	Meets	PASS	—

CTQ Summary	6 / 6 CTQs PASS — No deviations, no waivers.
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Measurement instruments are maintained and calibrated per EAS QA procedures. Calibration records available upon request.

5 Finishing Recipe & Provenance

Finishing parameters documented for repeatability on reorders. Finish class and recipe are linked to the Job ID for exact reproduction.

5.1 Depowder + Blast (AM Solutions S1)

Blast Class	Class B (standard production finish)
Media Type	Glass bead, 100–200 µm
Cycle Duration	12 min automated + 3 min manual touchup
Step ID	S1-BB-02

5.2 Dye Process

Color	Dove Grey
Dye Lot	DYE-GRY-0126
Bath Temperature	95°C ± 2°C
Immersion Time	8 min
Bath Lifecycle	Run 14 of 30 (within lifecycle window)
Step ID	DYE-GRY-0126

5.3 Vapor Smoothing (AMT PostPro SF2X)

Smoothing Class	Comfort (satin finish)
Cycle ID	VX-COMFORT-07
Cycle Duration	45 min (exposure) + 90 min (stabilization)
Solvent System	PostPro Chemical (proprietary, AMT-supplied)
Step ID	VX-COMFORT-07

Finishing recipes are controlled documents. Any change to blast class, dye recipe, or smoothing cycle parameters triggers a change record and may affect acceptance criteria.

6 Vapor Smooth Verification

Witness coupon printed in the same build and processed through the identical finishing stack. Surface metrics measured before and after vapor smoothing to verify process efficacy.

6.1 Witness Coupon Surface Metrics

Metric	Before Smoothing	After Smoothing	Improvement
Ra (µm)	14.2	3.6	74.6% reduction
Rz (µm)	68.4	18.9	72.4% reduction
60° Gloss (GU)	4.8	17.5	264.6% increase

Coupon ID	WC-0217-01 (flat + curved surface)
Measurement Instrument	Stylus profilometer (cal. date: 2026-01-15)
Gloss Meter	60° gloss meter per ASTM D523 (cal. date: 2026-01-15)

6.2 Age Stability Observation (Optional)

Observation Date	Day 7 post-finishing (2026-02-22)
Result	No visible color shift or surface haze observed on witness coupon.
Ambient Conditions	72°F / 45% RH (QA station sensor)
Lighting	D50 5000K, high CRI

7 Photo Evidence

Standard 6-shot photo set captured under D50-compliant inspection lighting (5000K, high CRI). All photos indexed to Job ID and retained in the Evidence Library.

#	Shot	Description	Filename
1	Lot Overview	Full lot displayed on neutral background. All 10 helmets visible with consistent spacing. Job ID label in frame.	EAS-2026-0217_LOT_01.jpg
2	ID Card / Traveler	Printed traveler card showing part number (CP-20018), material (PA11), finish stack, build ID, and lot quantity. EAS branding visible.	EAS-2026-0217_ID_01.jpg
3	Front Angle	Representative helmet, front-facing, showing Dove Grey dye uniformity and overall shape conformance. Scale reference in frame.	EAS-2026-0217_ANGLE_FRONT_01.jpg
4	Rear Angle	Same helmet, rear view, showing closure pocket geometry, edge quality, and dye coverage continuity. No bare spots or dye pooling.	EAS-2026-0217_ANGLE_REAR_01.jpg
5	CTQ Measurement	Caliper measurement of inner width at trimline. Digital display reading visible (141.00 mm demo). Measurement location marked.	EAS-2026-0217_CTQ_01.jpg
6	Pack-out	Final packed shipment showing protective separation, CoC placement, Evidence Pack insert, and Job ID label on outer carton.	EAS-2026-0217_PACK_01.jpg

7.1 Finish Proof Micro-Video (Optional)

Format	15–30 sec clip: dye check → SF2X chamber → 360° spin
Overlay Data	Job ID • Build ID • Dye Lot • Cycle ID
Access	QR code on traveler links to private, unlisted video (retained with Job ID)

8 Certificate of Conformance



Empire Additive Solutions

CERTIFICATE OF CONFORMANCE

CoC Number	COC-2026-0217-01
Job ID	EAS-2026-0217 SO-260217
Customer	Hudson Valley Cranial Care (DEMO)
PO Number	PO-44721
Part Number / Rev	CP-20018 Cranial Orthotic Helmet, Rev A
Quantity Shipped	10 pcs
Material	PA11 (HP Multi Jet Fusion) Lot: PA11-L26-0210A
Finish	S1 Blast Class B → Dye: Dove Grey → Vapor Smooth: Comfort

Empire Additive Solutions certifies that the parts described above were manufactured and inspected in accordance with the acceptance criteria, CTQs, and finish class specified for this order. All CTQs passed. Evidence Pack documentation (EP-2026-0217-01) is attached and retained per EAS retention policy.

QA Authorized Signature

Date

This certificate is issued by Empire Additive Solutions, 20 Corporate Park, Hopewell Junction, NY.

9 Shipment Contents

The following items are included in this shipment:

✓	Item	Quantity / Format	Status
✓	Cranial Orthotic Helmets (CP-20018, Rev A)	10 pcs	Included
✓	Certificate of Conformance (CoC)	1 copy	Included
✓	Evidence Pack (this document, PDF export)	1 copy	Included
✓	Photo Set (6 images, indexed to Job ID)	Digital	Included
✓	Lot label + traceability card (Job ID)	1 per carton	Included
✓	Finish Proof Micro-Video (QR access)	QR on traveler	Included

10 Document Retention & Access

Retention Period	Evidence Pack (PDF + photos) retained ≥ 10 years
Retrieval Method	Retrievable by Job ID, Customer, SKU, or Revision
Record Integrity	Digital records stored with version control. Physical copies available on request.
Reorder Support	All finishing recipes, CTQs, and build parameters linked to Job ID for exact reorder reproduction.

11 Nonconformance Reporting

If any item does not meet acceptance criteria upon receipt, please report within 10 business days. Reference the Job ID (EAS-2026-0217) and Evidence Pack ID (EP-2026-0217-01) when contacting EAS.

NCR Contact	quality@empireadditive.com (demo)
Reporting Window	10 business days from receipt
Required Information	Job ID, Evidence Pack ID, description of nonconformance, photos if applicable



20 Corporate Park, Hopewell Junction, NY
 [Name] • [Email] • [Phone] • [Website]

Reliability is the product.