

Project: Iron Bridge SMPEI Process Plant Construction – Dry Plant		FMG Document No: 662NSC2002-2000-IT-QA-0005		Document No: C292-QU-ITP-0005		Revision: 1		
Project No: C292		Contract No: 662NSC2002-0000-CO-CP-0002		Prepared By: P Thomson		Approved By: W. Bradshaw		
Scope: Conveyor Installation						Workpack / Area:		
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						CIVMEC	FMG	
1 Submission / Approval of Documentation								
1.1	Submit Conveyor Installation Inspection & Test Plan for FMG Approval	662NSC2002-2000-SW-CN-0002_4 100-ST-QA-0001	662NSC2002-2000-SW-CN-0002_4 Cl. 10.3 100-ST-QA-0001 Cl. 3.3	Approved ITP	QC / PE	H / R	H/R	
1.2	Ensure Manufacturer's Installation Instructions and Manuals Have Been Provided with Equipment	100-SP-ME-0002_0 IFC Drawings	100-SP-ME-0002_0 Cl. 2	Manufacturer's Installation Instructions	SS / PE	H / R	R	
1.3	Submit lift studies as per FMG Lifting Procedure for FMG Review & Approval	100-PR-SA-1036_5	100-PR-SA-1036_5 Cl. 3.4	Approved Lift Study	SS / PE	H / R	H*/R	Hold for critical lifts only
1.4	Submit Conveyor Belt Installation Procedure and Calculations for FMG Approval	100-SP-ME-0002_0	100-SP-ME-0002_0 Cl. 5.13	Approved Conveyor Belt Installation Procedure	SS / PE	H / R	H/R	
2 Calibration								
2.1	Ensure All Inspection, Measuring and Testing Equipment is Calibrated Including: <ul style="list-style-type: none"> • Coupling Laser Alignment Tool; • Machine Levels; • Thermocouples; • Dial Gauge Indicators; and • Torque Wrenches. 	100-SP-ME-0002_0	100-SP-ME-0002_0 Cl. 4	NATA Calibration Certificates	QC / PE	R	R	
3 Materials Receipt, Inspection, Storage & Preservation								
3.1	Inspect Supplied and Free-Issued Mechanical Components for the Following: <ul style="list-style-type: none"> • Equipment Identification & Nameplate; • Conformance to Specification and Drawings; • Materials Within their Specified Shelf Life (Splice Kits); • Damaged or Missing Components; and • Review Material Certification and Material Traceability Records. NOTE: Non-Conforming Materials Shall be Segregated, Quarantined and an OS&D Report Completed.	100-SP-ME-0002_0 Manufacturer's Recommendation	100-SP-ME-0002_0 Manufacturer's Recommendation	Delivery Dockets Material Certificates OS&D Report	SS / QC / PE	S / R	S	
3.2	Store and Preserve Equipment as Per Manufacturer's Recommendation	100-SP-ME-0002_0 Manufacturer's Recommendation	100-SP-ME-0002_0 Manufacturer's Recommendation	Preservation Register Signed ITP	SS / QC / PE	S/R	S/R	

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4	Acceptance of Conveyor Foundations							
4.1	Confirm Concrete Foundations Accepted	100-SP-CI-0101_1 Concrete Specification	<ul style="list-style-type: none"> Concrete Foundations at Correct Level, Alignment and Position; Concrete / Grout Curing Period Satisfied; and Required Concrete / Grout Strengths Have Been Achieved. 	As-Built Records Survey Reports	SS / PE	H/R	R	
5	Conveyor Structural Installation							
5.1	Install Conveyor Trusses and Low Level Modules	100-SP-ME-0002_0 IFC Drawings	<ul style="list-style-type: none"> Structure is as at Correct Level, Alignment and Position; Structural Connections Have Been Torqued and Verified; Survey; Vertical Position of Each End of Truss Measured at Truss Centreline; Vertical Alignment at Each End of Truss or LLM Measured from Side to Site; and Horizontal Position of Each End of Truss or LLM Measured at Centreline. 	FMG C1-ME-ITR-001 Conveyor FMG C1-ST-ITR-003 Bolt Tensioning C1-ST-ITR-012 Grouting Survey Reports Signed ITP	SS / PE	S / R	S/R	
5.2	Install Pulley Frames	100-SP-ME-0002_0 IFC Drawings	<ul style="list-style-type: none"> Vertical Position of Each Pulley Support Measured at Support Centreline; Vertical Misalignment of Each Pulley Support Measured from Side to Site; Horizontal Position of Each Pulley Support Measured at Centreline; and Horizontal Misalignment of Each Pulley Support Measured from Side to Side. 	FMG C1-ME-ITR-002 Pulley Frame Survey Reports Signed ITP	SS / PE	S / R	S/R	
5.3	Install Chutes and Impact Plates	100-SP-ME-0002_0 IFC Drawings	<ul style="list-style-type: none"> Horizontal Position of Chutes Centreline at Discharge Pulley Level; Horizontal alignment Between Chute Corners at Discharge Pulley Level; Horizontal Position of Chutes Centreline at Skirt Level; Horizontal alignment between Chute Corners at Skirt Level (Symmetrical to the Chute Centreline); Vertical Position of Any Point on Chute; Vertical Position of Any Point on Chute at the Skirt Support Level; and Back Wall Angle of Loading Boot. 	FMG C1-ME-ITR-0035 BIN & CHUTES Survey Reports Signed ITP	SS / PE	S / R	S/R	

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6 Pulley Installation								
6.1	Verify Pulley Sole Plate level and alignment prior to pulley installation	100-SP-ME-0001_2	100-SP-ME-0001_0 Sec 23 Table 2: General Tolerances Machined Components: +/-0.25mm	Signed ITP	SS	H / R	H / R	
6.2	Verify Pulleys are Installed In Accordance with Drawings, Manufacturer's Recommendations and to Specified Tolerances	100-SP-ME-0004_2 Manufacturer's Recommendations IFC Drawings	100-SP-ME-0004_2 Cl. 5.2 & Appendix 1 Table 3: Pulley Installation Tolerances Manufacturer's Recommendations IFC Drawings	FMG C1-ME-ITR-012 PULLEY Survey Report	SS	S / R	S / R	
6.3	Inspect Pulley Bearings for the Following: • Bearings Lubricated in Accordance with Manufacturer's Recommendations; • Floating Bearing End Clearances; • Fixed Bearing Side Orientated Correctly; and • Clearances Between Labyrinth and Housing.	100-SP-ME-0004_2 Manufacturer's Recommendations IFC Drawings	100-SP-ME-0004_2 Cl. 5.2 Manufacturer's Recommendations IFC Drawings	FMG C1-ME-ITR-012 PULLEY	SS	W	W	
6.4	Verify Pulley Lubrication Units and Associated Piping / Tubing is Installed in Accordance with Manufacturer's Installation Instructions	Manufacturer's Recommendations IFC Drawings	Manufacturer's Recommendations IFC Drawings	FMG C1-ME-ITR-059 LUBRICATION SYSTEM FMG C1-ME-ITR-068 LUBE OIL FIRST FILL	SS	S	S	
7 Idler Installation								
7.1	Check Idlers are Installed In Accordance with Conveyor Profile Data Sheets Verifying Correct Type and Position of Each Idler	100-SP-ME-0004_2 IFC Drawings	100-SP-ME-0004_2 Cl. 5.3 IFC Drawings	FMG C1-ME-ITR-111 IDLERS	SS	W	S	
7.2	Verify Idlers are Installed In Accordance Specified Tolerances as Follows: • Lateral Offset: Position the Centre Roller Using a Piano Wire Setup on the Theoretical Conveyor Centreline; • Height Variation: Position a Straight Edge Over Three Idler Centre Rollers Check Height Variations; • Squareness: Squareness to be Set Using the Rollover Pointer Method (Clocking); and • Transverse Level: The Transverse Level Measured Across the Stringers Using a Spirit Level and Checked by Reversing the Level.	100-SP-ME-0004_2 IFC Drawings	100-SP-ME-0004_2 Cl. 5.3 & Appendix 1 Table 4: Idler Installation Tolerances IFC Drawings	FMG C1-ME-ITR-111 IDLERS	SS	W	W	
8 Take-up Installation								
8.1	Verify Conveyor Take-up Rails are Installed in Accordance with Drawings and to Specified Tolerances	100-SP-ME-0004_2 IFC Drawings	100-SP-ME-0004_2 Cl. 5.4 Transverse level: ± 1mm Transverse level: ± 1mm IFC Drawings	Signed ITP Survey Report	SS	W / R	S / R	
8.2	Verify Conveyor Take-up Trolley, Take-up Wire Rope and Sheaves have been Installed in Accordance with Drawings and Specifications, and Counterweight Mass is Free to Move Through Full Range	100-SP-ME-0004_2	100-SP-ME-0004_2 Cl. 5.4.1	FMG C1-ME-ITR-132 VERTICAL GRAVITY TAKE-UP	SS	S/R	S/R	

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8.3	Verify Take-up Winch is Installed In Accordance with Drawings and Manufacturer's Recommendations	Manufacturer's Recommendations IFC Drawings	Manufacturer's Recommendations IFC Drawings	FMG C1-ME-ITR-003 TAKE-UP WINCH	SS	S/R	S/R	
9	Drive Installation							
9.1	Verify Drive Assembly is Installed in Accordance with Manufacturer's Installation Procedures and Drawings	100-SP-ME-0004_2 Manufacturer's Recommendations IFC Drawings	100-SP-ME-0004_2 Cl. 5.5 Manufacturer's Recommendations IFC Drawings	FMG C1-ME-ITR-011 DRIVE / GEARBOX/FAN & TORQUE ARM	SS	S/R	S/R	
9.2	Check Low Speed Coupling Alignment and Bolt Torquing is in Accordance with Manufacturer's Recommendations and Specifications	100-SP-ME-0004_2 Manufacturer's Recommendations	100-SP-ME-0004_2 Cl. 4, 5.5 Table 3: Shaft Alignment Tolerances Manufacturer's Recommendations IFC Drawings	FMG C1-ME-ITR-136 MECHANICAL COUPLING RIGID Laser alignmentReport	SS	W / R	W / R	
9.3	Verify High Speed Coupling Alignment is in Accordance with Manufacturer's Recommendations and Specifications	100-SP-ME-0004_2 Manufacturer's Recommendations	100-SP-ME-0004_2Cl. 4, 5.5 & Appendix 3 Table 3: Shaft Alignment Tolerances Manufacturer's Recommendations IFC Drawings	FMG C1-ME-ITR-136 MECHANICAL COUPLING RIGID Laser alignmentReport	SS	W / R	W / R	
9.4	Where applicable check and record Motor Soft foot	100-SP-ME-0004_2 Manufacturer's Recommendations	100-SP-ME-0004_2 Cl 5.5	Laser Alignment Report	SS	W / R	W / R	
9.5	Verify Conveyor Brakes have been Installed in Accordance with the Manufacturer's Recommendations Including Hydraulic Power Pack and Associated Components	100-SP-ME-0004_2 Manufacturer's Recommendations	100-SP-ME-0004_2 Cl. 5.6 Manufacturer's Recommendations	FMG C1-ME-ITR-103 HYDRAULIC DISC BRAKE & POWER PACK	SS	W / R	W / R	
9.6	Verify First Fills have Been Completed in Accordance With Manufacturer's Recommendations	Manufacturer's Recommendations	Manufacturer's Recommendations	FMG C1-ME-ITR-068 LUBE OIL FIRST FILL	SS	W / R	W / R	

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10	Conveyor Components Installation							
10.1	Verify Belt Scrapers are Installed in Accordance with Manufacturer's Installation Procedures. Position of Belt Scrapers to be Verified Against Conveyor Profile Data Sheet. Belt Scrapers are to be Left Clear of the Belt and Adjusted During Commissioning (By Others)	100-SP-ME-0004_2 Manufacturer's Recommendations IFC Drawings	100-SP-ME-0004_2 Cl. 5.7 Manufacturer's Recommendations IFC Drawings	FMG C1-ME-ITR-134 BELT SCRAPER	SS	W/R	W/R	
10.2	Verify Belt Ploughs are Installed in Accordance with Manufacturer's Installation Procedures and Checked for the Following: <ul style="list-style-type: none"> • Location of Belt Ploughs Verified Against Conveyor Profile Data Sheet; • Floating Plough Pivot Points are Parallel to the Belt; • Floating Plough Mechanisms are Moving Freely; • Return Idlers are Located Adjacent to Plough and Adjusted to Correct Height; and • Safety Chain is Connected and is Not of Excessive Length. 	100-SP-ME-0004_2 Manufacturer's Recommendations IFC Drawings	100-SP-ME-0004_2 Cl. 5.8 Manufacturer's Recommendations IFC Drawings	FMG C1-ME-ITR-116 BELT PLOUGH	SS	W/R	W/R	
10.3	Verify Belt Weigher is Installed Accordance with Manufacturer's Recommendations and Checked for the Following: <ul style="list-style-type: none"> • Location of Belt Weighers Verified Against Conveyor Profile Data Sheet; • Weigh Frame is Clear of Debris and Materials; • Frames are Correctly Aligned to Manufacturer's Specifications; • Weigh Quality Idlers Installed in Weigh Frames; and • Idler's Aligned in Accordance with Manufacturer's Specification or Mechanical Equipment Specification, Whichever is the Most Stringent. 	100-SP-ME-0004_2 Manufacturer's Recommendations IFC Drawings	100-SP-ME-0004_2 Cl. 5.11 Manufacturer's Recommendations IFC Drawings	FMG C1-ME-ITR-138 WEIGHTOMETER	SS	W/R	W/R	
10.4	Verify Metal Detector is Installed Accordance with Manufacturer's Recommendations and Checked for the Following: <ul style="list-style-type: none"> • Location of Metal Detector Verified Against Conveyor Profile Data Sheet; • Detector and Flag Drop Frames are Correctly Aligned to Manufacturer's Specifications; • Weigh Quality Idlers Installed in Weigh Frames; and • Idler's Aligned in Accordance with Manufacturer's Specification or Mechanical Equipment Specification, Whichever us the Most Stringent. 	100-SP-ME-0004_2 Manufacturer's Recommendations IFC Drawings	100-SP-ME-0004_2 Cl. 5.11 Manufacturer's Recommendations IFC Drawings	FMG C1-ME-ITR-119 TRAMP METAL DETECTOR	SS	W/R	W/R	
11	Release For Conveyor Belt Installation							
11.1	Verify All Required Pulley, Idler and Other Critical Components have been Installed and Aligned in Accordance with Drawings, Specifications and Manufacturer's Recommendations Prior to the Conveyor Belt Installation	100-SP-ME-0004_2 Manufacturer's Recommendations IFC Drawings	100-SP-ME-0004_2 Cl. 5.12 Manufacturer's Recommendations IFC Drawings	Applicable ITRs complete Signed ITP	SS / PE / QC	H / R	H / R	
12	Installation and Splice of Conveyor Belting							
12.1	Verify Conveyor Belt Installation Equipment and Area Setup in Accordance with Conveyor Belt Installation Procedure and Site HSE Requirements	100-SP-ME-0004_2 Approved Conveyor Belt Installation Procedure	100-SP-ME-0004_2 Cl. 5.12 Approved Conveyor Belt Installation Procedure	Belt Installation Subcontractor ITP	SS	S/R	S/R	
12.2	Verify Conveyor Belt is Installed in Accordance with Manufacturer's Recommendations and Conveyor Belt Installation Procedure	100-SP-ME-0004_2 Manufacturer's Recommendation Approved Conveyor Belt Installation Procedure	100-SP-ME-0004_2 Cl. 5.12 Manufacturer's Recommendation Approved Conveyor Belt Installation Procedure	Belt Installation Subcontractor ITP, Belt Splice Report FMG C1-ME-ITR-137 CONVEYOR BELT SPLICING	SS	S/R	S/R	

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13	Guarding							
13.1	Verify all Guarding Along the Length of the Conveyor has been Installed in Place, Secured, Signed Appropriately and Effectively Guarding the Equipment	100-SP-ME-0004_2 IFC Drawings	100-SP-ME-0004_2 Cl. 4 IFC Drawings	Field Inspection Records Signed ITP	SS	S/R	S/R	
14	Final Inspection							
14.1	Complete Final Inspection of Conveyor and Associated Equipment	100-SP-ME-0004_2 IFC Drawings	100-SP-ME-0004_2 IFC Drawings	Completed Field Inspection Records / ITRs Punchlist	SS / PE / QC	H/R	H/R	
15	Finalise Documentation							
15.1	Redline Drawings Verified for Relevant Equipment	662NSC2002-2000-SW-CN-0002_4 100-ST-QA-0002	662NSC2002-2000-SW-CN-0002_4 Cl. 10.2 100-ST-QA-0002 Sec 9.2	Redline Drawings	QC / PE	R	R	
15.2	Complete Construction Verification & Punchlisting	662NSC2002-2000-SW-CN-0002_4 100-ST-QA-0002	662NSC2002-2000-SW-CN-0002_4 Cl. 9.1 100-ST-QA-0002 Sec 6	Approved Construction Verification Records Signed-off Punchlist	QC / PE	H/R	H/R	

SIGNATURE IDENTIFICATION REGISTER				
NO	NAME	SIGNATURE	POSITION TITLE	ORGANISATION
1				
2				
3				
4				
5				
6				