

Solumina Material Out Time Tracking (MOTT)



Cold Chain Integrity for Composites and Sensitive Materials in Aerospace & Defense

In aerospace and defense manufacturing, maintaining the integrity of freezer-dependent materials like composites is essential. These materials degrade when left unrefrigerated too long, threatening product quality, compliance, and yield.

Solumina Material Out Time Tracking (MOTT) is purpose-built to monitor the in-and-out freezer lifecycle of such materials. Integrated with Solumina MES, MOTT ensures accurate tracking of “out time,” helping technicians comply with strict usage windows while minimizing material waste and scrap.

Why Solumina MOTT?

Solumina MOTT empowers manufacturers to:

- Track freezer-dependent material usage across partial rolls and cut pieces
- Prevent over-exposure with real-time decrementing and validation
- Reduce scrap and optimize material usage through precise lifecycle monitoring
- Ensure compliance with material standards for layup, curing, and inspection
- Seamlessly integrate cold chain tracking into MES workflows and dispatching

Freezer Status	Material Number	Material Description	Rev	Freezer Tag No	Freezer Shelf/Location	Roll ID	Roll Qty	Cumulative Out Time:At Last M...	Remaining Time:At Last Move L...	Max Out of Freezer Time	Suppliers
OUT OF FREEZER	03_A1		A1	03_FTAG_A1		ROLL_0000189	100	100	0	100	
IN FREEZER	TS_PART	TS_PART	A100	A3		ROLL_0000170	200	200	800	1000	
IN FREEZER	ST_PART		N/A	AFTAG_9		ROLL_0000158	900	90	-90	0	
IN FREEZER	0000000022	01-51216_3_SGR	C21	FTAG00000094	SHEL1	ROLL_0000097	24	12	0	12	001
IN FREEZER	TS_PART	TS_PART	1	FTAG00000098		ROLL_0000101	10	34	-24	10	001
IN FREEZER	TS_PART	TS_PART	1	FTAG00000099	10	ROLL_0000102	5	10	0	10	SUPPLIER_011
IN FREEZER	TS_PART	TS_PART	1	FTAG00000100	A10	ROLL_0000103	10	10	0	10	SUPPLIER_011
IN FREEZER	TS_PART	TS_PART	1	FTAG00000101	10	ROLL_0000104	5	10	0	10	SUPPLIER_011
OUT OF FREEZER	-07621	SCREW BURV/FIL.099-48.67L303	M	FTAG00000102	ABD	ROLL_0000105	2	12	388	400	
OUT OF FREEZER	TS_PART	TS_PART	1	FTAG00000105		ROLL_0000108	10	1000	-900	100	SUPPLIER_011
IN FREEZER	TS_PART	TS_PART	1	FTAG00000106	AHMEBAD	ROLL_0000109	10	10	0	10	
IN FREEZER	TS_PART	TS_PART	1	FTAG00000107	A101	ROLL_0000110	10	10	0	10	001
IN FREEZER	TS_PART	TS_PART	1	FTAG00000108	A10	ROLL_0000111	10	10	0	10	SUPPLIER_011
IN FREEZER	TS_PART	TS_PART	1	FTAG00000109		ROLL_0000112	10	10	0	10	SUPPLIER_011
IN FREEZER	TS_PART	TS_PART	1	FTAG00000110	Ahmedabad	ROLL_0000113	10	10	0	10	001
OUT OF FREEZER	-07621	SCREW BURV/FIL.099-48.67L303	M	FTAG00000111	ABD	ROLL_0000114	3	100	400	500	
IN FREEZER	-07621	SCREW BURV/FIL.099-48.67L303	M	FTAG00000112	ABD	ROLL_0000115	2	1420	-920	500	
IN FREEZER	CHEM_07_07		1	FTAG00000113		ROLL_0000116	77	5	-5	0	
OUT OF FREEZER	OFT_1		A	FTAG00000114		ROLL_0000117	0	1	233	234	
OUT OF FREEZER	TS_PART	TS_PART	A100	FTAG00000115		ROLL_0000118	500	200	11	211	001
IN FREEZER	TS_PART	TS_PART	A100	FTAG00000117	ABD	ROLL_0000120	100	100	0	100	SUPPLIER_011
IN FREEZER	TS_PART2		1	FTAG00000118	abd	ROLL_0000121	100	100	0	100	
IN FREEZER	0000000022	01-51216_3_SGR	C1	FTAG00000119		ROLL_0000122	1000	100	0	100	
IN FREEZER	0000000022	01-51216_3_SGR	1	FTAG00000120		ROLL_0000123	100	100	0	100	
OUT OF FREEZER	00-03-IPART1		1	FTAG00000122		ROLL_0000125	1000	100	0	100	
IN FREEZER	00-03-IPART1		1	FTAG00000124		ROLL_0000127	100	1	0	1	
IN FREEZER	TS_PART	TS_PART	A100	FTAG00000126		ROLL_0000131	90	103	-102	1	SUPPLIER_011
IN FREEZER	00-03-IPART1		1	FTAG00000130		ROLL_0000138	1	1	0	1	
IN FREEZER	TS_PART	TS_PART	1	FTAG00000131	A103	ROLL_0000139	50	103	-103	0	SUPPLIER_011
OUT OF FREEZER	OFT_1		A	FTAG00000134		ROLL_0000142	100	10	990	1000	
IN FREEZER	TS_01	TS_TEST	1	FTAG00000135		ROLL_0000143	100	678	-576	102	
OUT OF FREEZER	TS_PART	TS_PART	A100	FTAG00000136		ROLL_0000144	20	124	-24	100	SUPPLIER_011
IN FREEZER	111	AWDAUTO_GEN_RTRH@25A[F...	N/A	FTAG00000138	ABD	ROLL_0000147	10	100	-100	0	

The Freezer Material View shows the location, status, and remaining out time of all tracked materials

Key Features

- **Precise Out Time Tracking:** Automatically decrement allowable out time across multiple freezer cycles. Track both full rolls and partial pieces, ensuring usage never exceeds defined thresholds.
- **Freezer Out Time Inventory Management:** Receive out time tracked materials into the system and track physical location and in/out times across freezer, staging, and layup areas.
- **Configurable Usage Limits:** Define material-specific out time standards (e.g., 100 or 200 hours) with support for thresholds and validation logic.
- **Solumina Work Order Integration:** Track usage directly within the work order lifecycle – from planning to technician execution – ensuring traceability of when and how materials were used.
- **Dispatch-Based Technician Interface:** Technicians can manage material events (e.g., thaw, cut, use, cure) from an intuitive web-based dispatch interface, purpose-built for freezer material handling.
- **Role-Based Access & Compliance:** Manage who can receive, consume, and log material events using Solumina’s native user roles – preserving accuracy and accountability on the shop floor.

[Learn More](#)

Solumina MOTT is available as a module within the Solumina Manufacturing Operations Platform.
Contact your iBase-t representative to learn more or request a demo.

About iBase-t

iBase-t is the global leader in cloud software for the aerospace and defense industry. Committed to innovation, customer success, and product excellence, iBase-t ensures digital continuity across manufacturing, quality, and maintenance, repair, and overhaul (MRO) operations on a global scale. iBase-t’s Solumina Manufacturing Operations Platform is a cloud-native solution that establishes a digital ecosystem to drive innovation and improve operational performance for the most critically complex manufacturers. iBase-t customers include Lockheed Martin, Northrop Grumman, GE Aerospace, Rolls Royce, Pratt & Whitney, and Textron.

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