

Field Inspection Reports:

Review Stay-In-Place

Objective

Access to Stay-In-Place

Navigate through the windows in the Stay-In-Place sub-module

Overview

- This HiCAMS module is used to record results for the Stay-In-Place forms used on the bottom of a bridge deck.
- The Stay-In-Place Detail module handles one Material Type per Report with one corresponding Material.
- The Contract Number and Location information fields are required.
- A Gage Code table is used to determine the validity of the Metal Thickness.

Access for Review Stay-In-Place

Step 1:	Choose Field Inspection Reports from the Functions menu
	in HiCAMS.

F <u>u</u> nctions	Inquiries	<u>R</u> eferences	<u>A</u> dmin	<u>T</u> ools	<u>W</u> indow	<u>H</u> elp
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<u>р</u> он v	endor Syst	em				



Step 2: To access a NEW Stay-In-Place Report, select a valid Contract, Contra

Filter	Internet carl					
Contract	t: C104678 🛄			Materi	al Type: (All)	- Ratriava
Report Name	: Stay-In-Place		t Selection	_		<u>? ×</u>
Report ID		Filter Status:	(All)		Location: (All)	
Report Status	.: [(All)					
		Contract	Work Order	TIP Number	Description (nickname)	Contractor 🔺
	Report	C102994	8.1500605	U-2003AA	GRADING, DRAINAGE, PAVING, PVMT MARKING	ENGLISH CONSTRUCTION
Name	ID Contract	C103030	6.499004T	I-303G	GRADING, DRAINAGE, PAVING, SIGNING, PAVER	APAC-CAROLINA, INC., C
oncrete Pipe	2	C103144	8.T470402	I-304C	WIDENING, GRADING, DRAINAGE, PAVING, SIG	S. T. WOOTEN CORPORA
orrugated Metal	1 C104906	C103339	8.T491804	1-303E	WIDENING, GRADING, DRAINAGE, PAVING, SIGI	BLYTHE CONSTRUCTION
uardrail	3 C105136	C103340	8.1501201	U-2504	COMPUTERIZED TRAFFIC SIGNALS. VARIOUS L	WATSON ELECTRICAL CO
		C103357	8.T500310	I-304D	WIDENING, GRADING, DRAINAGE, PAVING, SIGI	BLYTHE CONSTRUCTION
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🐡 Review Fiel	d Inspec	tion Repor	ts							
Filter										
Contrac	ntract: Material Type: (All)								<u> </u>	ve
Report Name: [A]										
Report ID: Section: (All) V Inspection Date: 00/00/0000 10									,t	
								• <u>N</u> ew	1	
Report Name	Report ID	Contract	Material Type		Inspector	Inspection Date	Section	Inspection Result	Report Status	
Concrete Pipe	2		Pipe Culvert, Concrete		Dean, Leigh Ann	04/02/2001	2&3	Meets Specs	In Process	-
Corrugated Metal		C104906	Pipe Culvert, Metal		Frederick, Samuel	04/09/2001	7&9	Meets Specs	In Process	-
Guardrail	3	C105136			Horne, Kenneth	04/02/2001	2&3	Meets Specs	In Process	

Report Nam	e:	Stay-In-Place	-
Report II	<u>م</u>	Concrete Pipe	•
		Concrete Pipe Corrugated Metal Pipe	
Report Status:		Guardrail	
		Precast Concrete	
Report	Re	Stay-In-Place	
Name		Structural Steel	_
			_

Figure 3 - Selecting a Report Name for a NEW Stay-In-Place Report

Step 3: Click the **New** button and the General tab is displayed:

** Review Stay-In-Place		
Report Name: Stay-In-Plac	e Report ID:	Report Status: In Process
Contract: C105239	Contractor: BLYTHE CONSTRUCTION, INC.	Status:
Description: 1-85		Work Order: 8.U492304
General Results Report	History	
Material Type:		County: Guilford
Material:		
Line Item:		
Sample From:	Project Testing Category: Acceptance	
Accepted:		
Station:	+ Location:	
Search by Plant ID:	Section:	-
Producer:		
Fabricator:		<u></u>
Inspection Results		
Inspector:		
Inspection Date:	00/00/0000	
Comment:		9

Figure 4 - New Review Stay-In-Place Window

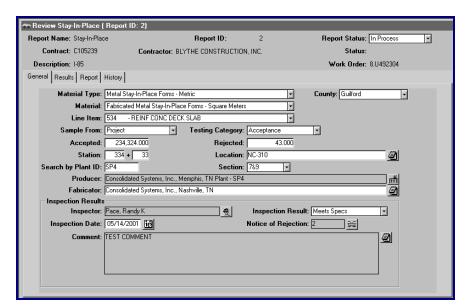
Step 4: To access an EXISTING Stay-In-Place Report, follow Step 1 above and Double-click the desired report from the list displayed. The **Details** button is also available to click, after highlighting the desired report.

Contract: Image: Material Type: Material Type: Material Type: Report Name: Inspected By:							
Report Name	Report ID Contract	Material Type	Inspector	Inspection Date	Section	Inspection Result	Report Status
Concrete Pipe	10	Pipe Culvert, Concrete	Jensen, Amy L	04/02/2001	6&8	Meets Specs	In Process
Concrete Pipe	6	Pipe Culvert, Concrete	Main, Robert W	05/01/2001	6&8	Meets Specs	In Process
Concrete Pipe	4	Pipe Culvert, Concrete	Garbee II, William I	05/01/2001	6&8	Meets Specs	In Process
Corrugated Metal	11 C104901	Pipe Culvert, Metal	Pace, Randy K	04/02/2001	7&9	Meets Specs	In Process
Guardrail	12		Pace, Randy K	04/02/2001	7&9	Meets Specs	In Process
Precast Concrete	13		Whittington, Todd	04/02/2001	6&8	Meets Specs	In Process
Precast Concrete	3 C105415		Schmidt, Sonia I	05/01/2001	6&8	Meets Specs	In Process
Precast Concrete	2 C104935		Main, Robert W	04/02/2001	11&12	Meets Specs	In Process
Precast Concrete	1 C105415		Main, Robert W	05/01/2001	6&8	Meets Specs	Void
Precast Concrete	5		Brantley, Billy	04/02/2001	5	Meets Specs	In Process
Stay-In-Place	14 C105261	Metal Stay-In-Place Forms	Main, Robert W	03/13/2001	5	Meets Specs	In Process
Structural Steel	9 C105422	Structural Steel	Alford, Tony B	03/13/2001		Meets Specs	In Process

Figure 5 - Access to an EXISTING Stay-In-Place Report

Note: To further aid in the retrieval of an EXISTING report, there are filtering functions available in HiCAMS. These filter functions are especially helpful when choosing from a very large listing of reports. See Field Inspection Reports: Overview - Retrieval Tips for all Field Inspection Reports for details using these functions.

Step 5: The **Stay-In-Place Report Details Window** is displayed as shown in the *example* below:





General Tab - Review Stay-In-Place Detail

The following is available to enter or select:

- Material Type
- County
- **Note:** The County is automatically defaulted according to the Contract number that is selected. If there is more than one county encompassed within the contract, the user must select the appropriate county.
- Material
- ◆ *Line Item* number/description
- **Note:** The Line Item is defaulted from the Contract, Material Type, and Material selections when only one exists. If multiple materials exists, the user must select.
- where the Sample is from. The default for Stay-In-Place is Project.
- Testing Category. The default for Stay-In-Place is Acceptance.

- Accepted and Rejected quantities
- Station
- Location
- Search by the Plant ID
- **Note:** Entering a Plant ID and pressing the Enter key will automatically insert a Producer into the field. The Search by Plant ID field acts as a filter for selecting a Producer by a specific Producer's ID number.
- Section
- Producer
- the Fabricator
- the Inspection Results data

All information is completed by using the various dropdown menus and data entry fields on the **General** tab:

🗇 Review Stay-In-Place	(Report ID: 6)			
Report Name: Stay-In-Pla	ce	Report ID:	6	Report Status: In Process 💌
Contract: C105261	Contractor: SM	ITH-ROWE, INC.		Status: Activated
Description: Rowan Co	untv Bridae			Work Order: 8.2632801
General Results Report	History			
Material Type:	Metal Stay-In-Place Forms - So	quare Meters	•	County: Rowan
Material:	Fabricated Metal Stay-In-Place	e Forms - Square Meter:		
Line Item:	80 SA3 - REINF CONC DECK	SLAB	•	
Sample From:	Project -	Testing Category:	Acceptance	
Accepted:		Rejected:	2.000	
Station:		Location:		
Search by Plant ID:		Section:		
-	S.I.P., Inc. Of Delaware, Wilmi		11012	
	Test Fabricator	rigion, de manitir sha		
Inspection Results	,			
	Pace, Randy K		Inspection Be	sult: Meets Specs
Inspection Date:		32_		
Comment:	Test Comment			2

Figure 7 - Stay-In-Place Details General Tab

Results Tab - Review Stay-In-Place Detail

The **Results Tab** Window is used to enter *From Stock* and *Accessory* information. The header information is defaulted from the selected Contract data.

- **Step 1:** To insert a new row for *From Stock* information entry, select the blank area in the top section of the window, and click the **Insert** button and a blank row will be inserted.
- **Step 2:** To delete a row, select the appropriate row and click the **Erase** button:

🗫 HiCAMS - [testconb												
File Edit Functions In		Re	ferences Adr	nin Tools W	/indow H	elp	_	_		_		
						- •						
				C 1991				_				
🖚 Review Stay In Pla	ce (R	epo	ort ID: 2)	_	_	_	-	-	_	-	_	
Report Name:				F	eport ID:	2			Report	Statu	s: In Process	-
Contract: C1053	09		Contra	ctor: BURLEI	GH CONST	r. co., inc.				Statu	s:	
Description: hogan	creek b	ridg	je						Worl	k Orde	ar: 8.2480801	
General Results Rep	ort His	ory	1									
From Stock:			'									1
Me			Avg. Zinc	Zinc	Des	scription					1	
Gage Thick			Reading	Coating		vs. Depth)	Leng	_	Width	l		
20 -	.041 .041		3.40 3.40	2.00	2 x 4 2 x 4		94 94		48 48			
20	.041		3.40	2.00	J2 X 4		34		48			
J												
Accessories:		_			1						-	
Gage Thick			Avg. Zinc Reading	Zinc Coating		Mark		Din	nension			
8	.161	• [5.50	3.00	LSUP		4 x 1.5	5				
8	.161	•	5.50	3.00	LSUP		4 x 1.5	5				

Figure 8 - Stay-In-Place Details Results Tab Window

Step 3: To select the **Gage**, click the *Gage* field and select from the drop-down list.

This list currently includes the numbers 8 through 22 inclusively. The Gage code is based on the material unit of measure. Each Gage number has a specific minimum, maximum, and tolerance range value based on the unit of measure.

To verify these gage ranges in HiCAMS, perform the following:

- 1 Select the **Admin ≡ Codes Tables** menu. A list of codes tables used in HiCAMS displays.
- 2 Scroll through the list and select "**FIR Gage**" from the list. The list of minimum/maximums for each gage

range is listed, along with the acceptable tolerance for each.

Step 4: To enter **Metal Thickness and Avg. Zinc Reading** values, enter the appropriate numeric value. See example below.

The minimum and maximum specification range on the Gage code table is used to determine the validity of the Metal Thickness entered for a Gage number. If the Metal Thickness is not within the valid range, an asterisk will appear next to the data. See example below.

General Result	sults Report History									
From Stock:										
Gage	Metal Thickness	Avg. Zinc Reading	Zinc Coating	Description (Pitch vs. Depth)	Length	Width				
11	3.210 ×	324.00	2300.40	6x8	2323	2323				

Figure 9 - Metal Thickness, Asterisk - Invalid Range

- **Step 5:** The **Zinc Coating** field is calculated as follows:
 - For English Contracts, the Zinc Coating (ounces per square foot) is calculated by dividing the Zinc Reading by 1.7. The coating must be 1.65 or greater to be considered within a valid range. If it does not meet this requirement, an asterisk will be displayed in the field.
 - For Metric Contracts, the Zinc Coating is calculated by taking the reading off the magna gage, multiply by 25.4 then multiply by 179.706. The coating must be 503.58 (grams per meters squared) or greater to be considered within a valid range. If it does not meet this requirement, an asterisk will be displayed in the field, (similar to Metal Thickness.)
- **Step 6:** To enter the **Pitch vs. Depth Description**, select the field and insert the *Pitch vs. Depth* numeric values.
- **Step 7:** To enter **Length and Width**, select each field and enter the dimensions.

General Results Report History									
From Stock:									
Gage	Metal Thickness	Avg. Zinc Reading	Zinc Coating	Description (Pitch vs. Depth)	Length	Width			
20 💌	.041	* 3.40	2.00	2 x 4	94	48			
20 🖃	.041	* 3.40	2.00	2 x 4	94	48			

Figure 10 - Stay-In-Place Details Results Tab Window -From Stock Area.

- **Step 8:** To insert a new row for entering *Accessories* information (lower portion of the window), first click the **Accessories** area, then click the **Insert** button, and a blank row will be inserted.
- **Step 9:** To delete an *Accessories* information row, select the appropriate row and click the **Erase** button:

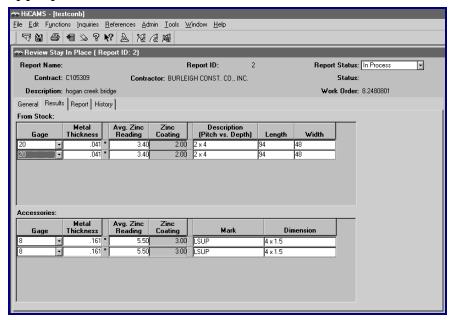


Figure 11 - Stay-In-Place Details Results Tab W	'indow -
Accessories Area.	

- **Step 10:** To select the **Gage**, click the *Gage* field and select from the drop-down list.
 - **Note:** This list currently includes the numbers 8 through 22 inclusively. The Gage code for a specific is based on the material unit of measure. Each Gage number will have a specific minimum, maximum, and tolerance range value based on the unit of measure.

Step 11: To enter **Metal Thickness** and **Avg. Zinc Reading** numeric values, select each field and enter the appropriate numeric value. See example screen below.

The minimum and maximum specification range on the Gage code table will be used to determine the validity of the Metal Thickness entered for a Gage number. If the Metal Thickness is not within the valid range, an asterisk will appear next to the data.



Figure 12 - Metal Thickness Invalid Range - Asterisk

- **Step 12:** The *Zinc Coating* field is calculated by HiCAMS as described:
 - For English Contracts, the Zinc Coating (ounces per square foot) is calculated by dividing the Zinc Reading by 1.7. The coating must be 1.65 or greater to be considered within a valid range. If it does not meet this requirement, an asterisk will be displayed in the field.
 - ◆ For Metric Contracts, the Zinc Coating is calculated by taking the reading off the magna gage, multiply by 25.4 then multiply by 7.1. The coating must be 503.58 (grams per meters squared) or greater to be considered within a valid range. If it does not meet this requirement, an asterisk will be displayed in the field, (similar to Metal Thickness.)
- **Step 13:** To enter **Mark** data, select the field and enter the data from the Contractor's specifications.

The Mark data cannot be captured as a predefined list due to the variety of data that is dependent upon the contractor specifications. The Mark field displays a description of the accessory.

Step 14: To enter **Dimension** information, select the field and enter the dimensions for the accessory.

Step 15: Save the record, click the **Save** button.

The saved record captures all data that has been entered and the fields become uneditable. The fields once again become editable for data entry when the Report's status is changed and the record is re-saved by an authorized user.

Report Status:	Authorized 💽
	Authorized
	In Process
	Unauthorized
	Void
Who	
νK	
17	

Figure 13 - Report Status Drop-Down menu

Note: Saving a record can be performed at any point. If the record save is interrupted at any point, it is usually as a result of incomplete data entry. There are various messages that the system may display based upon what is required to be entered in order to save the record. The following is one example:



Figure 14 - Typical Advisory Message, Required Information

To rectify the saving error, click the **OK** button, enter the required data mentioned in the message, and click the **Save** button.

Report Tab - Review Stay-In-Place Details

The Review Stay-In-Place Details report is under the **Report Tab** window.

Step 1: To view the entire report, use the scroll bars or use **Print Preview**:

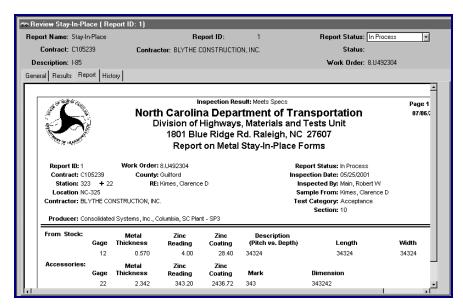


Figure 15 - Stay-In-Place Detail Report Tab Window

- **Note:** Each material from the Results Tab window will be displayed on the report.
- **Step 2:** To print the report, click the **Print** icon on the toolbar. HiCAMS will generate a printable version of the report. The Report on Stay-In-Place window will display:

Gage Thickness Reading Coating Offich vs. Depth) Length Width 20 1.020 100.58 714.12 305x114 2985 305				h Carolir ivision of I 1801 Blu	na Depa Highways Je Ridge I	sult: Meets Specs rtment of Tra s, Materials and Rd. Raleigh, NC Stay-In-Place F	Tests Unit 27607	Page 1 of 1 07/30/2001
From Stock: Metal Zinc. Zinc. Description (Pfkh vs. Depth) Length Width 20 1.020 100.58 714.12 305x114 2395 305 Accessories: Metal Zinc Zinc Zinc Netal 20 305 10 3.510 100.58 Costing Mark Dimension 10 10 3.510 95.76 679.390 L-2 32x32 12 12 2.770 101.35 719.59 L-3 51x76 14 2.010 9542 706.72 L-5 32x102 14	Contract: C11 Station: 3 Location 148 Contractor: RE	05289 + 41 IS at I 85 A CONST	County: RE:	Mecklenburg Brooks, Tawan NY		insp In Sa	ection Date: 07/18/2001 spected By: Thomas, Mari mple From: Brooks, Taw st Category: Acceptance	
Accessories: Metal Zinc Zinc Costing Mark Dimension 10 3.510 100.08 710.57 L-1 51x76 10 3.510 9576 679.90 L-2 32x32 12 2.770 101.35 719.59 L-3 51x76 14 2.010 95.90 676.95 L-4 32x51 20 2.010 99.82 706.72 L-5 32x102	11000001101	e quiner e	i bola i a o i i i i i i	ingenitiere i teate	01.1			
10 3.510 95.76 679.90 L-2 32:32 12 2.770 101.35 719.59 L-3 51x76 14 2.010 95.50 678.05 L-4 32:51 20 2.010 99.82 706.72 L-5 32:102	From Stock:		Thickness	Reading	Coating	(Pitch vs. Depth)	-	
12 2.770 101.35 719.59 L-3 51x76 14 2.010 95.50 678.05 L-4 32x51 20 2.010 99.82 708.72 L-5 32x102	From Stock: Accessories:	20	Thickness 1.020 Metal	Reading 100.58 Zinc	Coating 714.12 Zinc	(Pitch vs. Depth) 305x114	2985	
14 2.010 95.50 678.05 L-4 32x51 20 2.010 99.82 708.72 L-5 32x102		20 Gage	Thickness 1.020 Metal Thickness	Reading 100.58 Zinc Reading	Coating 714.12 Zinc Coating	(Pitch vs. Depth) 305x114 Mark	2985 Dimension	
20 2.010 99.82 708.72 L-5 32x102		20 Gage 10 10	Thickness 1.020 Metal Thickness 3.510 3.510	Reading 100.58 Zinc Reading 100.08 95.76	Coating 714.12 Zinc Coating 710.57 679.90	(Pitch vs. Depth) 305x114 Mark L-1	2985 Dimension 51×76 32×32	
		20 Gage 10 10 12	Thickness 1.020 Metal Thickness 3.510 3.510 2.770	Reading 100.58 Zinc Reading 100.08 95.76 101.35	Coating 714.12 Zinc Coating 710.57 679.90 719.59	(Pitch vs. Depth) 305x114 Mark L-1 L-2 L-3	2985 Dimension 51×76 32×32 51×76	
20 1.020 98.80 701.48 L-6 118x86		20 Gage 10 10 12 14	Thickness 1.020 Metal Thickness 3.510 3.510 2.770 2.010	Reading 100.58 Zinc Reading 100.08 95.76 101.35 95.50	Coating 714.12 Zinc Coating 710.57 679.90 719.59 678.05	(Pitch vs. Depth) 305x114 Mark L-1 L-2 L-2 L-3 L-4	2985 Dimension 51×76 32×32 51×76 32×51	
		20 Gage 10 10 12 14 20	Thickness 1.020 Metal Thickness 3.510 3.510 2.770 2.010 2.010	Reading 100.58 Zinc Reading 100.08 95.76 101.35 95.50 99.82	Coating 714.12 Zinc Coating 710.57 679.90 719.59 678.05 708.72	(Pitch vs. Depth) 305::114 Mark L-1 L-2 L-3 L-3 L-4 L-5	2985 Dimension 51×76 32×32 51×76 51×76 32×51 32×51 32×102	

Figure Figure 16 - Report on Stay-In_Place

Step 3: Click the print icon once again to print the report. The Print setup window will display. Click the **Print** button to print the report:

dre Print	? ×
Printer: Hicams_HP4MV.DOH-SYSTEM \\NDPS02	S.MIS.DO on
Copies: 1	<u>P</u> rint
Page Range	Print <u>S</u> etup
ି All	
C Current Page	
C Pages:	
Enter page numbers and/or page ranges separated by commas. For example: 1,3,5-12	
Print: All Pages in Range	
C Print to File	
✓ Collate Copies	
Orientation: Default	<u>C</u> ancel

History Tab - Review Stay-In-Place Details

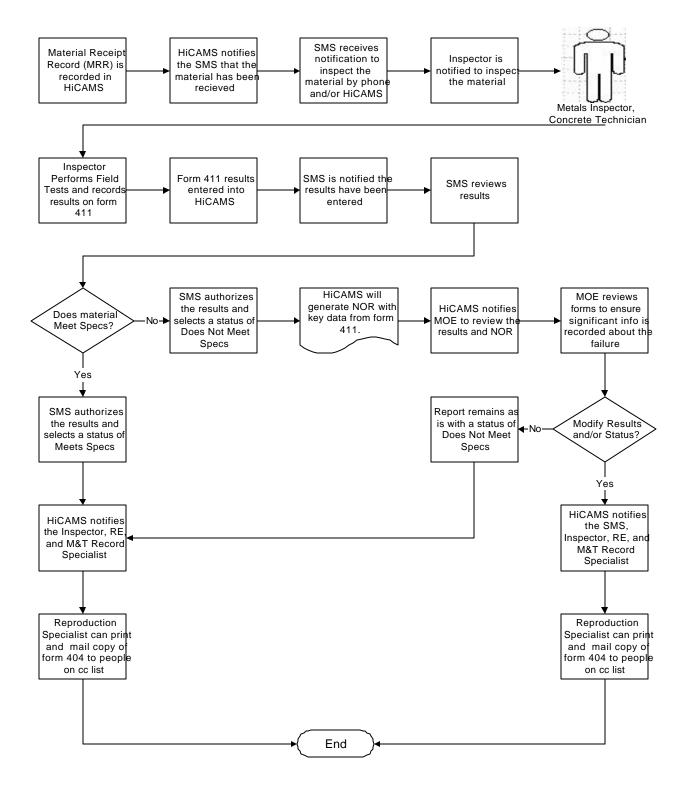
Actions that have been performed for an individual Stay-In-Place Details report are listed located under the **History Tab** window. The Tab includes the *Action, Action Date/Time, Status,* and *Who* performed the action. This area also contains historical comments that may have been entered during processing of Stay-In-Place Details.

Step 1: To view the individual comments for each action, click the Comment row:

Report Name: Stay-In-Place	Report ID:	1	Report Status: In Process	-
Contract: C105239	Contractor: BLYTHE CONSTRUCTION	, INC.	Status:	
Description: 1-85			Work Order: 8.U492304	
eneral Results Report History				
Action	Action Date	Status	Who	
Create Notice of Rejection	07/06/2001 10:01:13 AMIn Pro	cess	Pace, Randy K	
Create	07/06/2001 10:01:13 AMIn Pro		Pace, Randy K	
Comment	07/06/2001 9:54:15 AM In Pro	cess	Pace, Randy K	
Comment: TEST COMMENT				

Figure 17 - Stay-In-Place Details History Tab Window

STAY-IN-PLACE BRIDGE PROCESS FLOW



MOE - Materials Operation Engineer RE - Resident Engineer SCE - State Construction Engineer SMS - Section Material Specialist