**Supplier Training** 

**Nocturne Tool Version 2002** 



### **Training Agenda**

- Agilent Vision, Mission, Objectives
- Agilent SMI Overview
- Nocturne Process Map
- Benefits to Supplier/Agilent
- Key responsibilities
- Training, cost, and technical support
- Nocturne Demo

#### **Mission**

- Provide uniform, global SMI capabilities for Agilent and our suppliers
- Satisfy cost and ease of use requirements for Agilent and our suppliers
- Leverage the span and cost effectiveness of the internet on behalf of Agilent and our suppliers
- Support effective and broad adoption of the SMI tool and related processes by providing our suppliers the appropriate training and implementation support

#### Vision

The Agilent SMI Program will deploy tools and processes to:

- Establish SMI as a fundamental business practice between Agilent and our key suppliers including Contract manufacturers and 3rd Party Logistics Providers (CMs and 3PLs)
- Enable the implementation of a common SMI tool and process between Agilent and our key suppliers including CMs and 3PLs
- Empower our key suppliers and CMs and 3PLs to effectively manage inventories on behalf of Agilent at the lowest possible cost

Note: Key suppliers in the rest of this document include Contract Manufacturers and 3rd Party Logistics Providers (CMs and 3PLs)

### **Objectives**

- Provide relevant, accurate, "real time" information to our suppliers to "tighten" supply chain links
- Leverage Internet to allow for efficient data exchange with minimal effort
- Improve Buyer/Supplier collaboration through Supplier involvement with the use of a common tool.



#### **SMI Overview**

- Agilent inventory monitored by Supplier
  - Two hour updates of consumption, receipts, on-hand balance
  - Weekly forecast updates--ability to smooth production
- Supplier replenishes based on consumption
  - Upper and lower control limits and replenishment triggers enable Supplier to keep Agilent inventory "right sized"
  - ⇒ Begin with high volume/dollar parts
- Win-Win approach
  - ⇒ Information sharing between Agilent & Supplier allow for appropriate inventory investment for both



#### **Nocturne Overview**

- An internet based application, designed and supported by Healex Corporation, that is the Agilent worldwide solution for SMI
- A global supply chain management process that:
  - communicates inventory and replenishment information between buyers and suppliers
  - enables inventory and administrative efficiencies through collaborative information sharing
- A Statistical Material Flow Process to manage inventory service levels and trigger supplier replenishment
- A proactive information flow of inventory data that is "pushed" to the suppliers to enable "real time" maintenance of the contractually agreed upon service level
- A continuous learning mechanism that drives buyer/supplier collaboration and mutual understanding and management of the replenishment process

### **Key Features**

- A web-based system, viewable 24 x 7, that updates data between
   Agilent, suppliers and CMs every two hours and includes the following:
  - Min/Max levels
  - consumption and transaction data
  - on hand balances
- Provides the supplier the ability to:
  - ⇒ search and view, and aggregate consumption/ on hand balances of a single part number at an Agilent site or at a CM or 3PL
- Provides Agilent buyer the ability to:
  - search and view supplier inventory at stocking location or 3P
  - manage Min/Max and replenishment triggers
  - analyze real time supplier performance measures



### **Buyer Benefits**

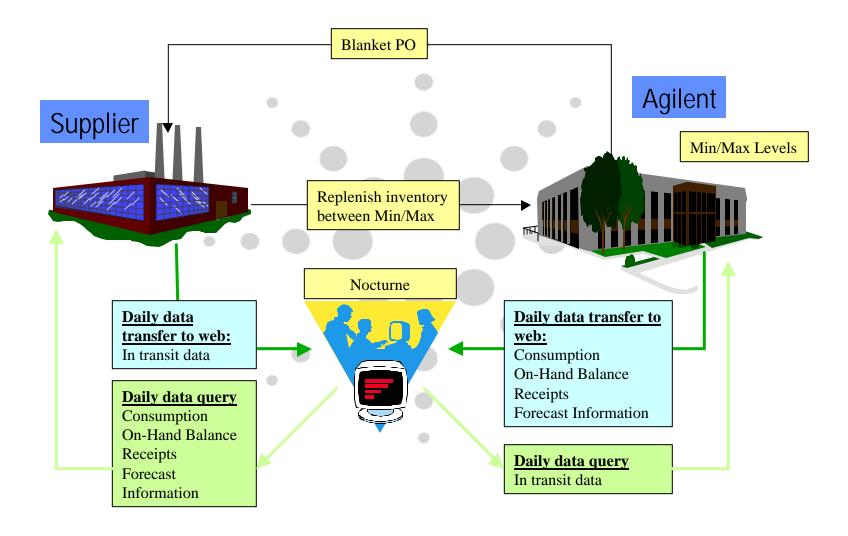
- Proactive supplier replenishment based on current data and managed through buyer determined Min/Max limits and replenishment triggers
- Opportunity for enhanced collaboration based on real time performance measurement
- Offer a "win-win" approach to supply base
- 24x7 availability of part data updated every two hours provides the opportunity to:
  - enhance assurance of supply
  - reduce inventory liability and accelerate inventory turns
  - focus on "problem" parts and supplier

### **Supplier Benefits**

- Opportunity to leverage a global Agilent program for all supplier locations
- Capability to view Agilent, 3PL and CM part data in a user friendly, web based format
  - 24 x7 view of part data updated every two hours
- Opportunity to "smooth" production, improve capacity management and enhance flexibility
- Ability to proactively replenish Agilent inventory
- Ability to reduce lead times and improve performance measurements
- Provides the basis for a strengthened world- wide partnership with Agilent



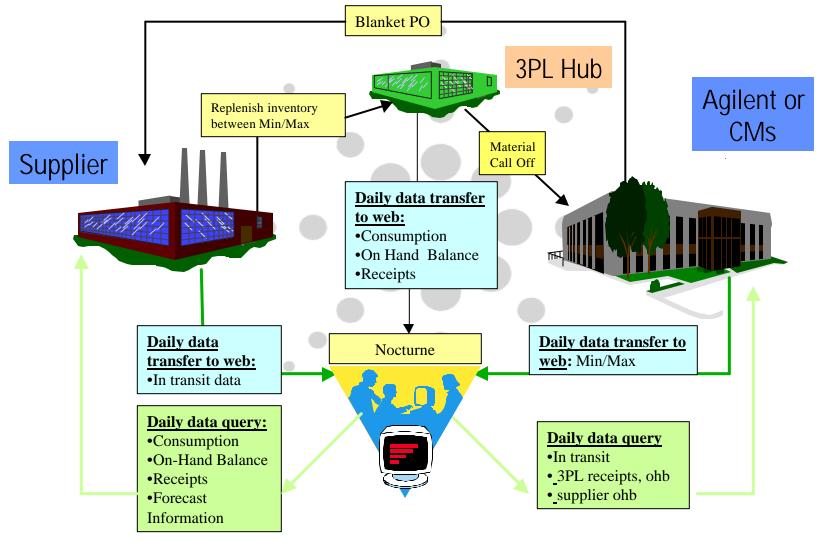
### **Basic SMI Business Process - without 3PL**





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#### Basic SMI Business Process - with 3PL



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#### **SMF Process**

#### Statistical Material Flow Process

- Nocturne is a statistical tool for monitoring material flow and it is based on statistical process control methodology that allows buyers to set upper and lower inventory limits
- Supplier responds to the data made visible by Nocturne and replenishes the inventory based on Agilent's service level requirements



#### **Nocturne Basics**

The following are the most common terminology used by the Nocturne tool:

- USL upper specification limit = Max this is the highest level of inventory the buyer wants on site
- LSL lower specification limit = Min this is the lowest amount of inventory the buyer wants on site
- Trigger A formula used to set off "alarms" if inventory levels are not staying with limits set by the buyer, based on mean usage or largest historical pull
- Net usage The number of parts "moved" the previous day, typically this is a negative number

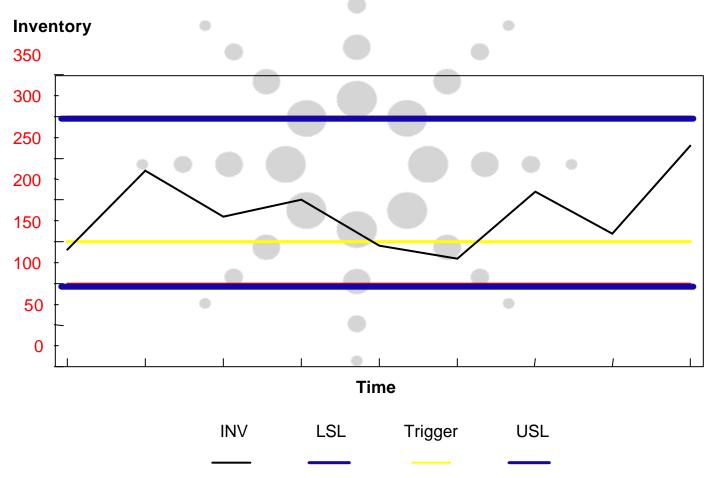
### **Part Status Definitions**

Status	Color	Definition	Example
Overage	Green	Ending Balance > USL	110>100
Green	Green	Trigger < Ending Balance < USL	13 < 80 < 100
Yellow	Yellow	LSL < Ending Balance < LSL + Trigger	50 < 55 < 63
White	White	LSL = Ending Balance	50 = 50
Red	Red	Ending Balance < LSL	40 < 50
Out of Control	N/A	Net Usage > 0	20 > 13
(OOC)	•		

Data for Example above: USL = 100 LSL = 50 Trigger = 13 Net Usage = -20

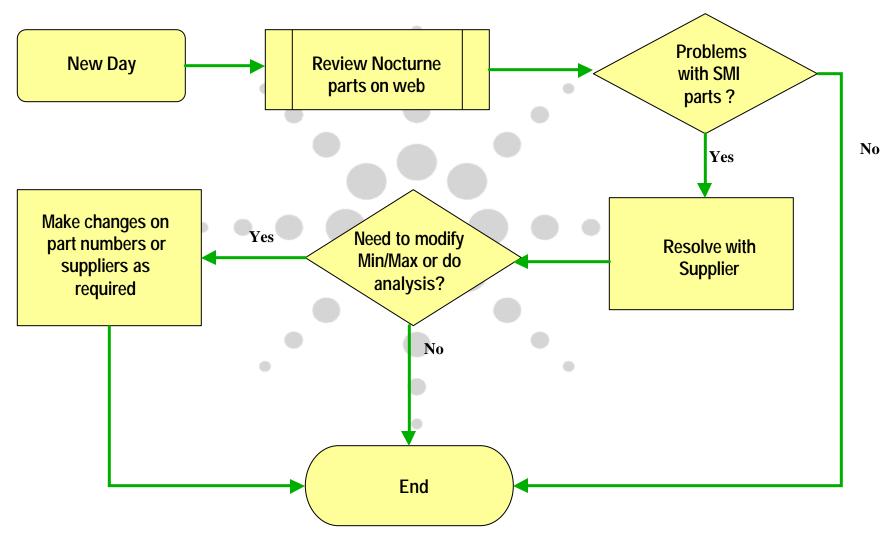
### SMF "Control Chart"

### **SMF Control Chart Example**



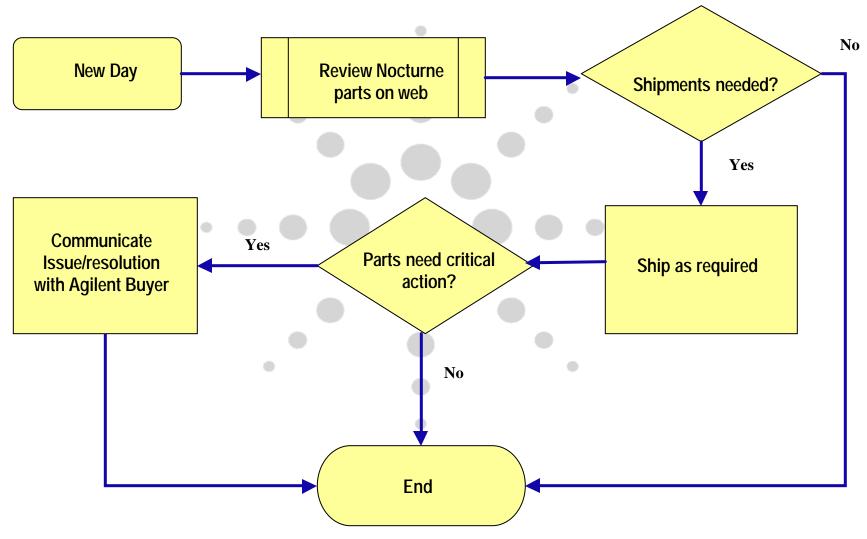


### **Buyer Typical Day**



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### **Supplier Typical Day**



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#### **Performance Metrics**

Daily Support Performance

Percentage of parts/supplier within LSL (Min) and USL (Max) range

Last 90 Days Support Performance

 Percentage of parts/supplier within LSL (Min) and USL (Max) range during the last 90 working days

Average Stock Level

 The percent of average inventory level of parts/supplier within LSL (Min) and USL (Max) range

Note: All measurements are for parts/suppliers on SMI greater than 60 days

#### **Performance Metrics**

Average Duration of Reds (days)

 Average time (days) that a parts/supplier is in red status before required service level is reached

Inventory Value (\$000.)

Daily ending inventory value by parts/supplier

Inventory Turns Per Year

Agilent methodology for determining inventory turns for parts/supplier

Note: All measurements are for parts/suppliers on SMI greater than 60 days



### **Training Cost and Tech Support**

- Agilent or Healex Systems (providers of Nocturne application) will provide training and support for the web-based application
- Agilent or Healex Systems will provide web based training for all supplier individuals who will use the program
- Agilent will pay for these services from Healex; there is no charge to Supplier
- If the Supplier has specific questions regarding the data provided contact the Agilent buyer; if there are functionality/application problems, contact your Site Lead

### **Nocturne System Requirements**

Nocturne 2002 version 2.02A will be designed for Internet Explorer version 5.0 or higher, or Netscape Communicator version 5.0 or higher. Earlier versions or other browsers will not be supported. Nocturne 2002 version 2.02A will require JAVA Virtual Machine (JVM), which complies with Java 1.1.4 or above specifications. This is the version that will be enabled with the Oracle go live and all sites and suppliers will migrate to this version as Agilent converts their systems.



#### Processes after Go Live-FAQ's

### When we go to Oracle, how does a buyer add a supplier?

When Oracle will include the supplier information in the supplier detail file and it will happen automatically.

### How does Healex know we have added a supplier?

- Nocturne will detect it in the supplier detail file and automatically post
- it. Healex admin support staff will take appropriate follow-up action.

### How does the supplier get notified?

Healex admin support staff will send an email to the supplier.



#### Processes after Go Live-FAQ's

### What is the timing to get passwords?

Healex will notify new users of their password within 48 hours of being added, and usually much less. As a rule, new users are now being emailed their passwords within a couple of hours of being added.

### How does a buyer know if a supplier has been added to Nocturne or not?

They will get an email from Nocturne admin support.

### What other email notifications are sent to buyers and suppliers?

Notification of min/max changes; notification of red or yellow inventory status- see next page for complete list



#### Processes after Go Live-FAQ's

What other email notifications are sent to buyers and suppliers?

List of the Email Notification sent with every data import:

- > 1. Parts below LSL Buyer, Supplier
- 2. Parts one day from zero Buyer, Supplier
- 3. Part above USL with a receipt Buyer
- 4. Part Limit Change Supplier
- > 5. Part Revision Change Supplier



#### Processes after Go Live-FAQ's

### What other email notifications are sent to buyers and suppliers?

List of the Email Notification sent twice daily:

- New parts added to Nocturne Buyer
- 2. Parts without associated transaction history Buyer
- > 3. Part data received without supplier Buyer
- 4. New suppliers added to Nocturne Buyer
- 5. Parts with negative in-transit balance Buyer, Supplier
- 6. Parts in-transit was adjusted by supplier Buyer



### **Keys To Success**

- Strong management support for SMI
- Commitment to a long term relationship and joint inventory objectives
- Ability to manage materials in a 3PL environment
- Strong system integration and synchronization

Capability to translate daily data into alterations to the build plan or logistics flow

- Preferred customer status for Agilent to ensure supplier resource or facility constraints do not impact deliveries
- Demonstrated metrics to monitor the performance of both suppliers and buyers

### **Nocturne Support Options**

Time	Admin Support	Tech Support	Emergency Support
0900 to 1800 EST, Monday to Friday	Call: 302.235.5750 or 888.637.9997 Email: adminsupport@healex.com	Call: 302.235.5750 or 888.637.9997 Email: techsupport@healex.com	Call: 302.235.5750 or 888.637.9997 Email: systemadmin@healex.com Page: 302.235.5750 ext 153 or 800.495.5608
1800 to 2400 EST, Monday to Thursday	NA	As of 5/15/02 or sooner  Call: 302.235.5750 or 888.637.9997  Email: techsupport@healex.com	Email: systemadmin@healex.com Page: 302.235.5750 ext 153 or 800.495.5608
Outside of the above hours	NA	NA	Email: systemadmin@healex.com Page: 302.235.5750 ext 153 or 800.495.5608







Take a test drive of the Nocturne Tool..

• Go to URL: <a href="https://nocturne.healex.com/noctdemo3">https://nocturne.healex.com/noctdemo3</a>

Login: suppdemo

Password: suppdemo456

Role: Supplier User



### **Demo Topics -1**

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- Log In Screen
- Viewing the Daily Report
  - Current Inventory Status
    - Part Inventory Information
    - Part History Graph and Grid
    - In-Transit
    - Transaction Detail
    - Demand Forecast

### Demo Topics -2

- Part Summary
- Performance Graphs
- Set up Menu
  - Change Buyer/Supplier info
  - Set up Buyer/Supplier
  - Add part to Supplier
  - Remove parts from a Supplier
- Reviewing / Changing Limits





### **Login Screen**



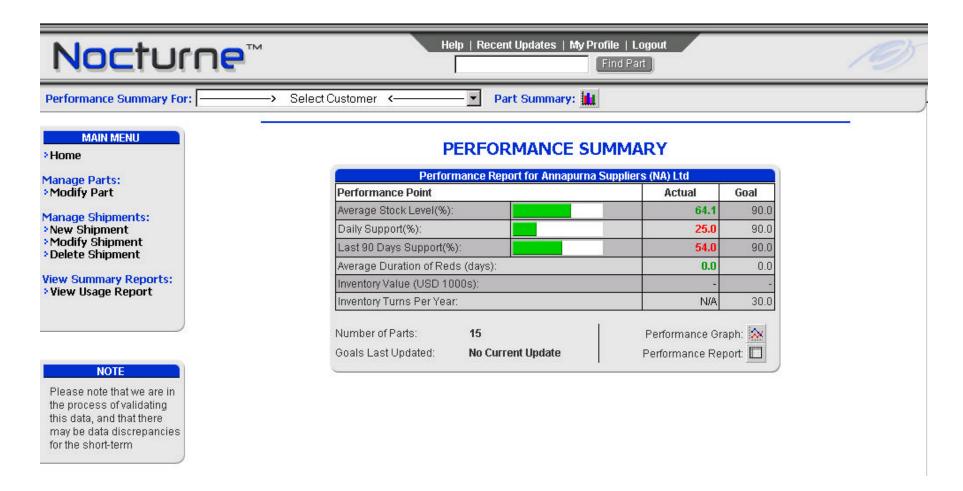
#### SYSTEM LOGIN



Have you forgotten your password, or would you like a trial password to test our system?

For password help or product inquiries, please contact Healex Systems Limited at 1-888-637-9997 or e-mail <a href="mailto:info@healex.com">info@healex.com</a>

### **Supplier Options Menu and Performance Summary**





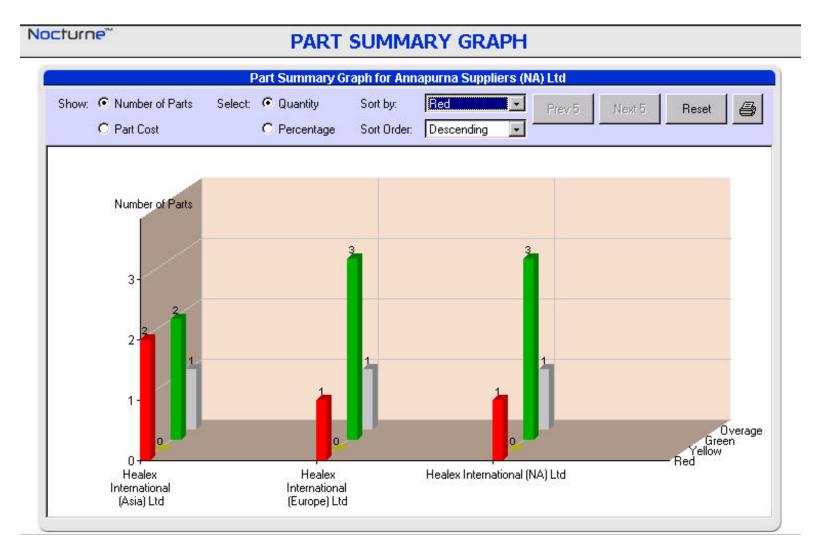
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### **Performance Report**

turne"		PERF	DRM/	ANCE	REP	ORT					
			Perforn	nance Rep	ort						
Name	Parts	Avg. Stock Level(%) Daily Support(%)		90 Days Support(%)		Inventory (USD 1000s)		Turns			
		Actual	Goal	Actual	Goal	Actual	Goal	Actual	Goal	Actual	Goa
Healex International (Asia) Ltd	5	64.1	N/A	25.0	N/A	54.0	N/A	84		N/A	N/A
Healex International (Europe) Ltd	5	64.1	N/A	25.0	N/A	54.0	N/A	85	i.	N/A	N/A
Healex International (NA) Ltd	5	64.1	90.0	25.0	90.0	54.0	90.0	18	18	N/A	30.0

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#### **Part Summary**





#### **Current Inventory Status**

Nocturne™	CURRENT INVENTORY STATUS										
Part Number 4		0.00	Note	Supplier P/N	Rev.#	Description	Co. Name				
550C		沙圃	%,∫	131313		Mainframe Core Memory (16KB)	Healex International (NA) Ltd				
V6WXT	<b>₩</b> □ <b>%</b> •	₽■	P	123		High Fructose Corn Syrup	Healex International (NA) Ltd				
82RH414	<b>₩</b> □ <b>%</b> •	中画	<u> </u>	2323232		Pen (Black)	Healex International (NA) Ltd				
XBY11	<b>₩</b> □ <b>№</b>	护画		12345678912345678912		Transistor	Healex International (NA) Ltd				
80286	₩ □ %	₽■	P	n234563		Mouse Pad	Healex International (NA) Ltd				



#### **Current Inventory Status**

Nocturne CURRENT INVENTORY STATUS												
	Healex Owned Inventory Supplier Owned Inventory											
Part Number 🚣	UM	Beg. Balance	Net Usage	Receipts	End. Balance	Beg. Balance	Net Usage	Receipts	End. Balance			
<u>6550C</u>	EA	923	-14	12	921	0	0	0	0			
6V6WXT	L	695	-1	0	694	0	0	0	0			
982RH414	10PK	661	-3	0	658	0	0	0	0			
AXBY11	EA	29700	-2700	0	27000	0	0	0	0			
C80286	EA	1769	-480	0	1289	0	0	0	0			

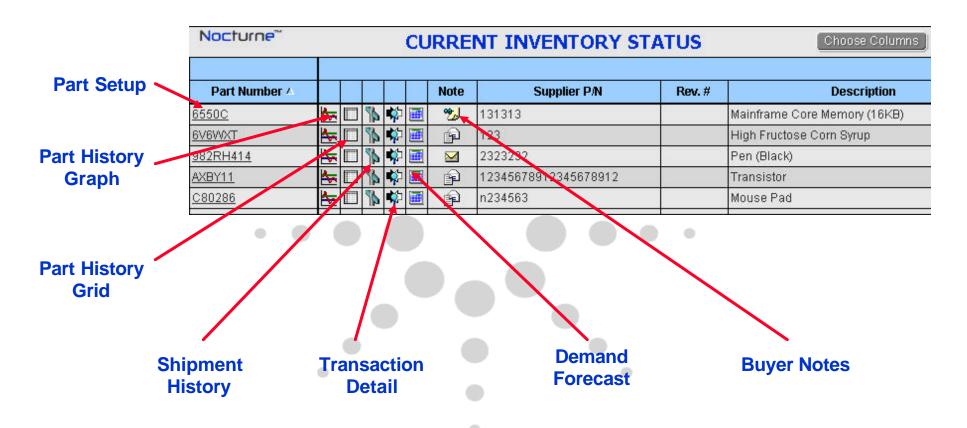


### **Current Inventory Status**

Nocturne™				Choose Columns				
Part Number △	Total End. Bal.	LSL	USL	Avg. End. Balance	Avg. Daily Use.	Gauge	Status	In Transit Bal.
6550C	921	175	275	592.88	6.17		000	460
<u>6V6WXT</u>	694	150	700	416.84	6.86		Green	498
982RH414	658	35	215	586.18	0.53		Overage	748
AXBY11	27000	17859	88990	33390,00	750.00		Green	1101
C80286	1289	1500	3500	2375.76	138.00		Red	71

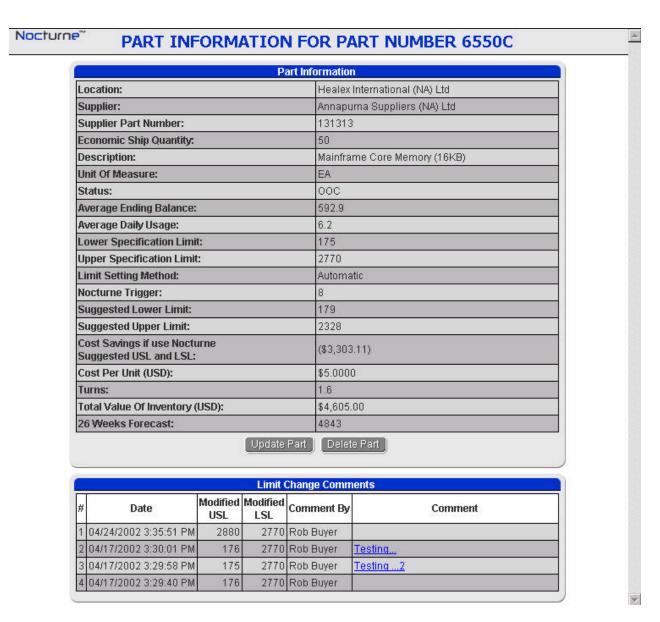


#### **Current Inventory Status**



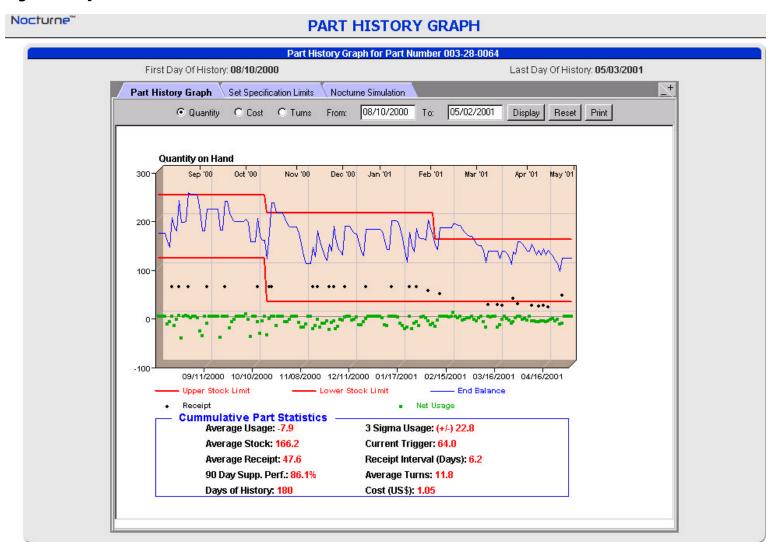


#### Part Setup





#### **Part History Graph**





### **Part History Grid**

Nocturne <sup>™</sup>		P	ART HIST	ORY REPO	ORT FOR PAR	RT 6550C		Ch	oose Columns	
			Agilent Owne	d Inventory		Supplier Owned Inventory				
Date /	UM	Beg. Balance	Net Usage	Receipts	End. Balance	Beg. Balance	Net Usage	Receipts	End. Balance	
03/25/1999 8:00:00 AM	EA	245	-78	42	209	0	0	0	_	
03/28/1999 8:00:00 AM	EA	209	-16	0	193	0	0	0		
03/29/1999 8:00:00 AM	EA	193	-5	13	201	0	0	0		
03/30/1999 8:00:00 AM	EA	201	-3	17	215	0	0	0		
03/31/1999 8:00:00 AM	EA	215	-30	16	201	0	0	0		
04/01/1999 8:00:00 AM	EA	201	-31	19	189	0	0	0		
04/04/1999 8:00:00 AM	EA	189	-4	18	203	0	0	0		
04/05/1999 8:00:00 AM	EA	203	-1	24	226	0	0	0		
04/06/1999 8:00:00 AM	EA	226	-5	13	234	0	0	0		
04/07/1999 8:00:00 AM	EA	234	-40	6	200	0	0	0		
04/08/1999 8:00:00 AM	EA	200	0	19	219	0	0	.0		
04/11/1999 8:00:00 AM	EA	219	-34	31	216	0	0	0		
04/12/1999 8:00:00 AM	EA	216	0	0	216	0	0	0		
04/13/1999 8:00:00 AM	EA	216	-8	14	222	0	0	0		
04/14/1999 8:00:00 AM	EA	222	-11	9	220	0	0	0		

0



### **Shipment (In Transit) History**

Nocturne~		I	N TRANS	IT TRAN	ISACTION	REPORT FOR	PART 6550C	Choose Columns
				3			)	
Date & Time /		Shipped	Adjusted	Deleted	Received	In Transit Bal.	Customer	
11/05/2000 4:00:00 PM	8	25				25	Healex International (NA) Ltd	No Carrier Inforr
1/09/2000 4:00:00 PM	8	500				525	Healex International (NA) Ltd	No Carrier Inforr
1/09/2000 4:00:00 PM	8	500				1025	Healex International (NA) Ltd	No Carrier Inforr
1/10/2000 3:42:14 AM				0		525	Healex International (NA) Ltd	No Carrier Inforr
1/13/2000 4:00:00 PM	8	150	j j			675	Healex International (NA) Ltd	No Carrier Inforr
1/13/2000 4:00:00 PM	8	150				825	Healex International (NA) Ltd	No Carrier Inforr
1/14/2000 1:39:15 AM				0		800	Healex International (NA) Ltd	No Carrier Inforr
1/26/2000 4:00:00 PM	8	500				1300	Healex International (NA) Ltd	No Carrier Inforr
1/26/2000 4:00:00 PM	8	10				810	Healex International (NA) Ltd	No Carrier Inforr
1/27/2000 1:35:58 AM	6 660		500			1800	Healex International (NA) Ltd	No Carrier Inforr
1/27/2000 1:36:50 AM				0		800	Healex International (NA) Ltd	No Carrier Inforr
1/27/2000 6:36:08 AM			490			1300	Healex International (NA) Ltd	No Carrier Inforr
1/27/2000 6:38:32 AM			i i	0		800	Healex International (NA) Ltd	No Carrier Inforr
1/29/2000 4:00:00 PM	8	50				850	Healex International (NA) Ltd	No Carrier Inforr
1/30/2000 3:05:55 AM			50			900	Healex International (NA) Ltd	No Carrier Inforr
1/30/2000 3:07:31 AM				0		800	Healex International (NA) Ltd	No Carrier Inforr
2/06/2000 4:00:00 PM	8	100				900	Healex International (NA) Ltd	No Carrier Inforr
2/07/2000 2:29:06 AM	1983		100			1000	Healex International (NA) Ltd	No Carrier Inforr

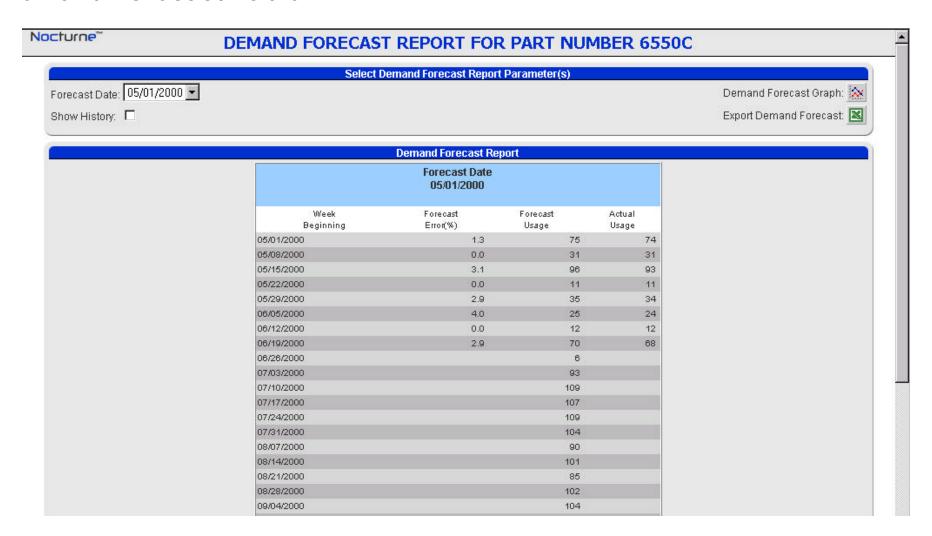


#### **Transaction Detail**

Nocturne~		TRANSACT	ON DETAIL REPORT I	FOR PART 6
Date & Time 🚣	Receiving ID	Shipping ID	Trans. Type	Quantity
12/30/2001 7:11:31 PM	100008	112239EZ	OT - Ownership Transfer	215
01/05/2002 6:10:11 PM	100009	112240EZ	CR - Consignment Receipt	350
01/10/2002 7:14:15 PM	100010	112241EZ	PR - PO Receipt	45
01/11/2002 4:00:01 PM	100001	123456EZ	CR - Consignment Receipt	300
01/13/2002 5:31:49 PM	100003	112234EZ	CS - Consumption Issue	25
01/15/2002 9:30:25 PM	100004	112235EZ	RS - Return to Supplier	15
01/17/2002 9:45:29 PM	100005	112236EZ	CR - Consignment Receipt	205
01/19/2002 12:50:34 AM	100006	112237EZ	CR - Consignment Receipt	2015
01/19/2002 3:34:40 PM	100007	112238EZ	CS - Consumption Issue	480
01/21/2002 7:45:34 PM	100002	112233EZ	PR - PO Receipt	250

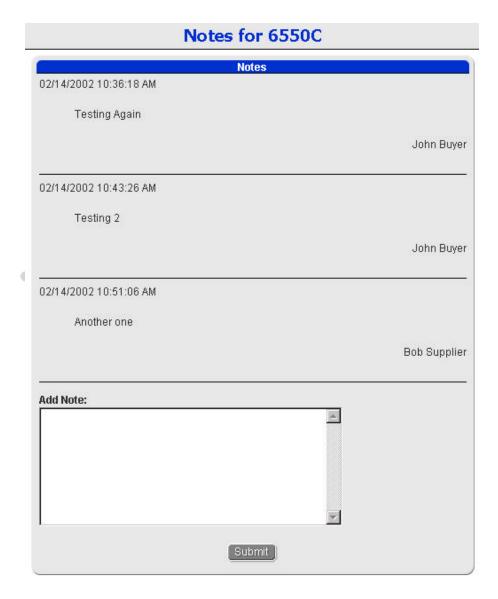


#### **Demand Forecast Table**





### **Buyer Notes**



#### **Daily Report Summary**

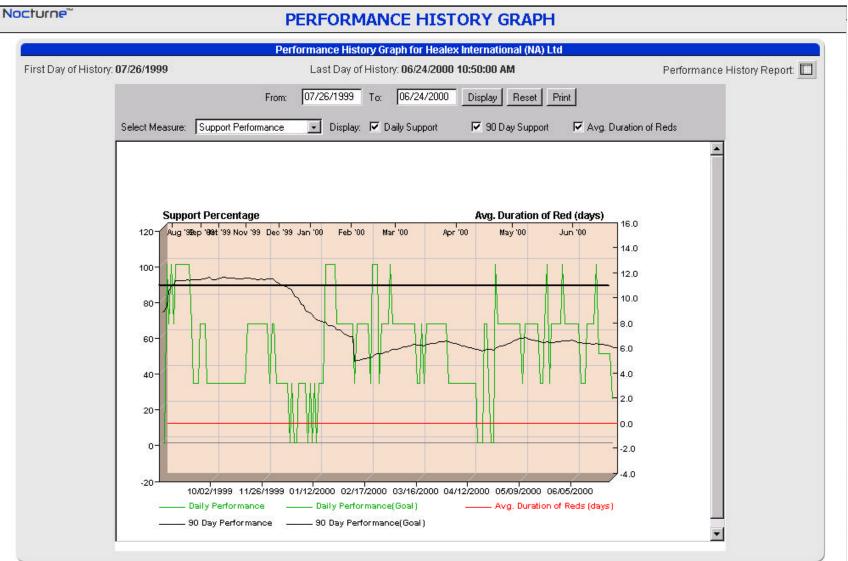
Rob Buyer » Annapurna Suppliers (Asia) Ltd

#### DAILY REPORT SUMMARY

Performance Point	Actual	Goal			
Average Stock Level(%):		91.7	90.0		
Daily Support(%):		100.0	95.0		
Last 90 Days Support(%):		99.3	97.0		
Average Duration of Reds (day	s):	0.0	0.0		
Inventory Value (USD 1000s):		N/A	20.0		
Inventory Turns Per Year:		N/A	15.0		
Number of Parts:	38	Current Inventory Sta	tus: 🔲		
Goals Last Updated:	05/09/2001 9:12:50 PM	Performance Graph: 🔯			
Part Data Last Processed:	In Transit Report: 🀪				
Supplier Data Last Processed:	Company De	etail: 👺			
Trans. Data Last Processed: Forecast Data Last Received:					



#### **Supplier Performance**





### **Part Status Summary**

Nocturne™

#### **SUMMARY REPORT**

	Net Usage Monthly Report for Annapurn	a Suppliers (NA) Ltd*								
4/2/2002 - 5/2/2002										
Part Number	Company Name	04/02/2002	05/02/2002							
8550C	Annapurna Suppliers (NA) Ltd	1986	2066							
6V6WXT	Annapurna Suppliers (NA) Ltd	1986	2066							
982RH414	Annapurna Suppliers (NA) Ltd	1986	2066							
AXBY11	Annapurna Suppliers (NA) Ltd	1986	2066							
C80286	Annapurna Suppliers (NA) Ltd	1986	2066							

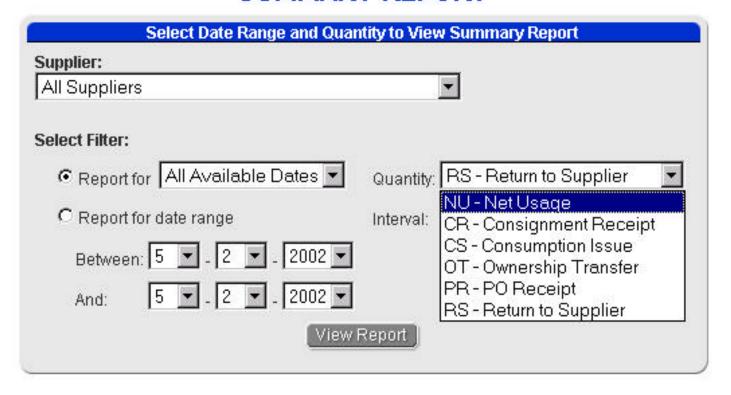
<sup>\*</sup>Please note that dates represent the beginning date for the time period.



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#### View Usage Report

#### SUMMARY REPORT





#### **Find Part**

#### **FIND PART**



Nocturne LIST OF PARTS FOR ANNAPURNA SUPPLIERS (NA) LTD									
					0				
Part Number 4			Г	Г	П	Rev.#	Description	Buyer Co.	
<u>112233</u>	Α,		4	<b>*</b>	▦			Healex International (NA) Ltd	
1123	4		1	<b>*</b>	<b>=</b>			Healex International (NA) Ltd	
<u>1124</u>	4		1	*	<b>=</b>		Y	Healex International (NA) Ltd	
33120-87411-T	4		de de	<b>I</b>	<b>=</b>		BOX, SEAM TAPE, LARGE	Healex International (NA) Ltd	
33250-87401-T	4		1	<b>*</b>	<b>i</b>		KNOB	Healex International (NA) Ltd	
34401-43711-T	4		4	<b>P</b>	▦		TURBO EXHAUSTER,115V,60HZ	Healex International (NA) Ltd	
34401-45012-T	4		1		<b>=</b>		KIT,STAND,TIP & TOOL,PS-80	Healex International (NA) Ltd	
6550C	4		4		<b>=</b>		Mainframe Core Memory (16KB)	Healex International (NA) Ltd	
<u>67899678</u>	4		1		<b>=</b>			Healex International (NA) Ltd	
6V6WXT	4		1	<b>V</b>	<b>=</b>		High Fructose Corn Syrup	Healex International (NA) Ltd	
982RH414	4		1	<b>*</b>	<b>=</b>		Pen (Black)	Healex International (NA) Ltd	
ABC #ABC	4		4	<b>P</b>	<b>=</b>			Healex International (NA) Ltd	
AXBY11	4		1	<b>*</b>	<b>=</b>		Transistor	Healex International (NA) Ltd	
C80286	4		4	<b>P</b>	▦		Mouse Pad	Healex International (NA) Ltd	
MM80-1111	4		4	<b>*</b>			СРИ	Healex International (NA) Ltd	
MM80-1112	4		4	*	<b>III</b>		Mother board	Healex International (NA) Ltd	



### **New Shipment**

#### **ADD SHIPMENT**

			Find Part to Add Shipment							
	Part Number (full or partial):  Customer:  Healex International (NA) Ltd									
	Find Part									
6 Pa	arts - Page [1]									
- 1										
	Select Carrier Used:		pping Information  Select Date S	out: To	E 100 10000					
		No Carrier Information		_	5/02/2002 🔽					
	Tracking Number:	(optiona	al) Days in Trans	iii: [						
			List of Parts							
#	Part Number	Description	Customer	Quantity	Additional Number (optional)					
1	□ 112233		Healex International (NA) Ltd							
2	□ 1123		Healex International (NA) Ltd							
3	□ 1124		Healex International (NA) Ltd							
15	5 □ MM80-1111	СРИ	Healex International (NA) Ltd							
16	MM80-1112	Mother board	Healex International (NA) Ltd							
			ubmit Cancel							

