

WIDIA Supply Chain Services

Craig Engler - Michigan Applications
Engineer

Jay Evans Manager Global SCS

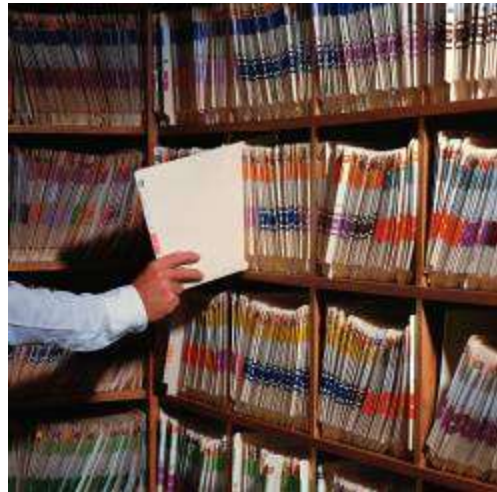


Widia– Supply Chain Services applies the best global supply chain practices coupled with the industry’s leading equipment and software solutions to:

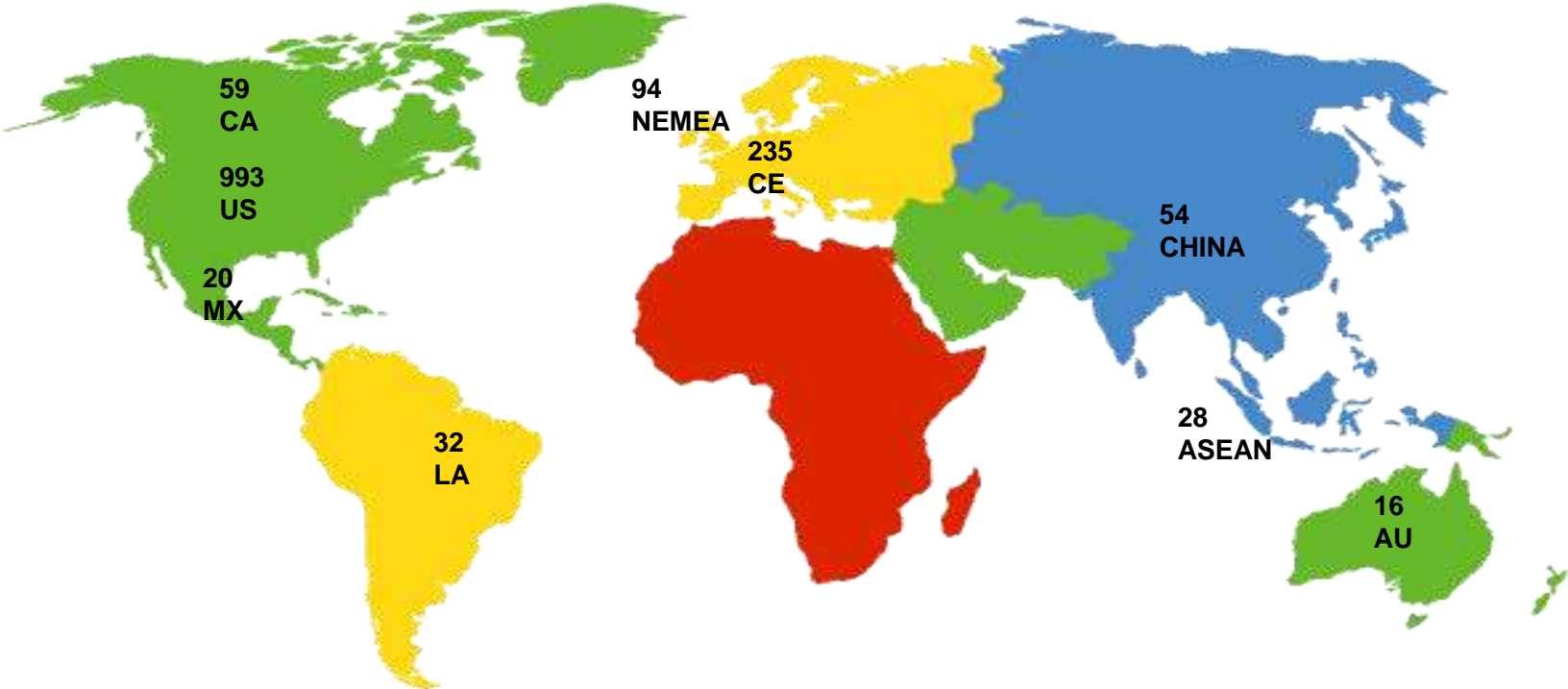
- **Manage tools and supplies**
- **Reduce supply related acquisition, possession, and usage costs**
- **Increase operational effectiveness**

3 Levels Of Operation

- 24 Hr Per Day, 7 Days a Week, 52 Weeks a Year, Totally Unmanned Secure Tool Stores
- Full Tool Management System Recording Each and Every Transaction by Job, Machine, User and Date
- Automatic Re-ordering System, Linkable Via E-Commerce to Your Suppliers



We have implemented customized supply chain service programs with major manufacturers globally.



- Easy to learn, & use dispensing system
- Issues only the quantity required
 - Restricts & Rations supply access
- Provides unattended security & availability of supplies 24/7
- Delivers a full audit trail of consumption & costs
- Manages the entire cutting tool life cycle including recycling
- Manages reconditioning
- Supports multiple units and multiple points of issue
- MS Access or SQL database for easy integration



Industry Leading Supply Chain Technology - Equipment - Software

Provide Analytical Reporting & Automated Tool Inventory Control

- Lower Tool Consumption 10% - 30%
- Cut On-Hand Inventory 30% - 75%
- Slash Administrative Costs 50% - 90%
- Reduce Machine Down Time 10% - 60%
- Trim Transaction Costs 30% - 60%
- Shorten Lead Times 10% - 80%



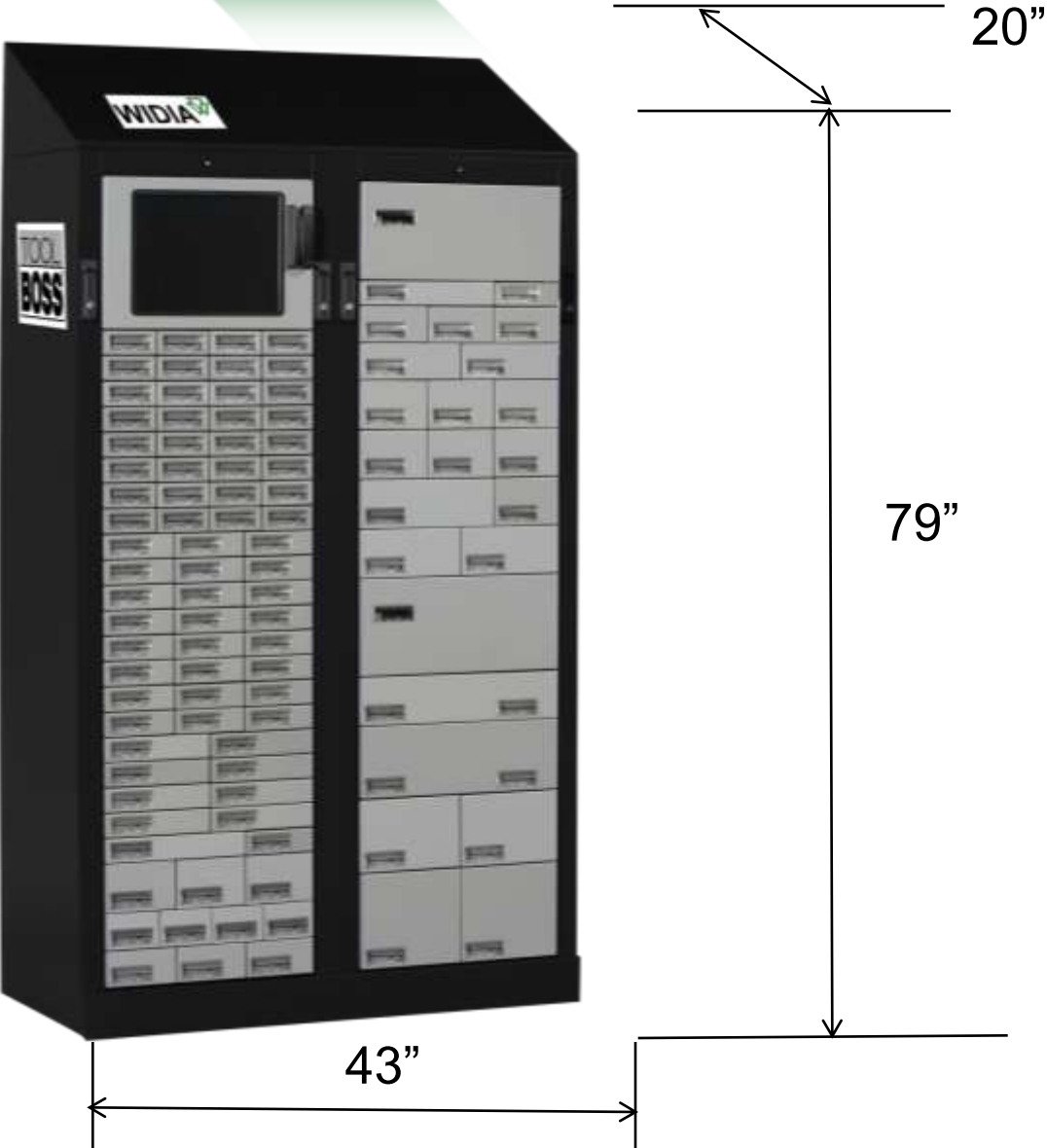
Up to 10 frames of drawers or 14 frames of lockers controlled by a single PC!



Automatic Ordering



Overall Dimensions



Std Drawers

Maximum Weight For 44 Lbs. / 20 Kilos

**Each Drawer Is 13.5" Deep And Can Be Divided
Into Up To 12 Compartments**

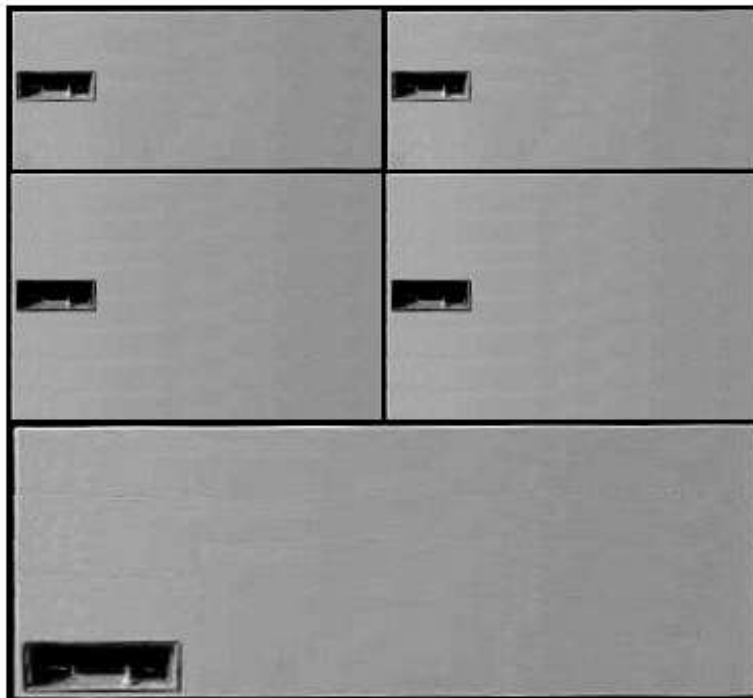


		Width	X	Height
TYPE	A	3.8"	X	.9"
TYPE	B	3.8"	X	2.7"
TYPE	C	6.5"	X	.9"
TYPE	D	6.5"	X	2.75"
TYPE	E	15.4"	X	.9"
TYPE	Z	2.2"	X	.9"

Large Drawers

MAXIMUM WEIGHT FOR F' G' & H' DRAWER 70 Lbs. / 30kilos

**Each Drawer Is 13.5" Deep And Can Be Divided
Into Up To 12 Compartments**



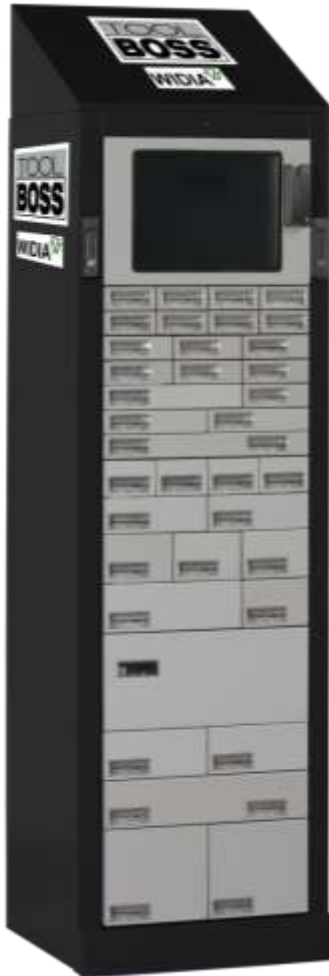
Width Height

TYPE F 15.4" X 2.8"

TYPE G 15.6" X 4.7"

TYPE H 15.6" X 6.9"

TYPE J 6.3" X 6.9"



- Capacity 40% increase
- As a standalone machine:
 - 26 levels
 - 104 locations (max.)
 - 1248 compartments (max.)
- As an add-on machine:
 - 28 levels
 - 113 locations (max.)
 - 1344 compartments (max.)
- Override now mounted on front



- Lower cost entry level machine
- Capacity
 - 120 locations (max)
 - 1440 compartments (max)
- Injection Molding Plastic Drawers
- 10 inch touch screen (net book)
- 38% reduction in price from standard
- Light Version of ToolBOSS™ Software
- 2 more drawers introduced in 6 months
- 12 each of 120 different tools for a total of 1440 tools can be vended from this small foot print.
- Not reconfigurable in the field

Lids In Drawers (L.I.D)



- Up to 324 secure locations
- Unique reconfigurability
- Can be used as a stand alone or addon





- Light Version of ToolBOSS™ Software
- Suitable for storing small to large sized items
- Can be used as a standalone or add-on
- Includes 7 drawers all are 28-1/4" wide x 28-1/2" deep
- 2 drawers @ 2" high,
- 2 drawers @ 3" high,
- 1 drawers @ 5" high,
- 2 drawers @ 7" high
- All drawers are full extension with 440 lb. weight capacity



- Up to 468 location
- Each Location is 11 inches deep that tapers to the back, By 3”H x 3” W.
- Ideal for tools that are returned for reuse
- Ideal for customers with only a few of the same Item to vend.



Each Locker Is Equivalent To A Double Bay Unit And Has An Internal Depth Of 19"



		Width		Height
TYPE	S1	15"	X	7.2"
TYPE	S2	11.2"	X	9.6"
TYPE	S3	11.2"	X	20.2"



- Same Functionality as the standard ToolBOSS™.
- Can be used as a standalone or add-on.
- Compact for single cell desk top use.
- Great for managing gauges

Input Options:

- Touch screen
- Proximity/RFID
- Magnetic stripe readers
- Fingerprint
- Bar code



Magnetic
Strip/Barcode Slot
Reader



Biometrics



Touch Screen



Proximity Reader



Barcode scanning



Welcome to ToolBoss

Kennametal Inc. - 2004

Please use I.D. card or type your access code using the light pen.

2.3.8 (2004-09-29) (#1) Password



1	2	3	4	5	6	7	8	9	0	Back	Clear
Q	W	E	R	T	Y	U	I	O	P	GO	
A	S	D	F	G	H	J	K	L	-		
Z	X	C	V	B	N	M	,	.	/		
▽	Space									Cancel	

- User swipes card, scans barcode card, places proximity or RFID card, uses finger print or, enters user and password, for ToolBoss access.



Predefined users options appear for selection. (We will select Withdraw)

Specify Job

Job

Job	Description
HEAD#6020	HEAD#6020
VALVE#1290	VALVE#1290
VALVE#4462	VALVE#4462

1 2 3 4 5 6 7 8 9 0 Back Clear

Q W E R T Y U I O P

A S D F G H J K L - **GO**

Z X C V B N M , . /

▼ Space Cancel

Users enter job and machine that the withdraw is for to account for costing and tracking.

Specify Item

Item

[NONE]	▲
BORING BARS	↑
DRILLS	↓
ENDMILLS	▼
FASTENERS	▼

1	2	3	4	5	6	7	8	9	0	Back	Clear
Q	W	E	R	T	Y	U	I	O	P	GO	
A	S	D	F	G	H	J	K	L	-		
Z	X	C	V	B	N	M	,	.	/		
▼	Space										

Users selects item group.

Withdraw - Quantity

Qty

1	
2	▲
3	
4	▲
5	
6	
7	▼
8	
9	▼
10	

User SHOP USER Alias
Job HEAD#6020
Machine LATHE#3344
Item CNGP432 KC730
IN432
1/2" IC 80 DEG DIAMOND 0.0312 RADIUS

Type New Issue Qty 1
Available 12



▲ Cancel GO

After the item is located and selected the user selects the quantity desired.

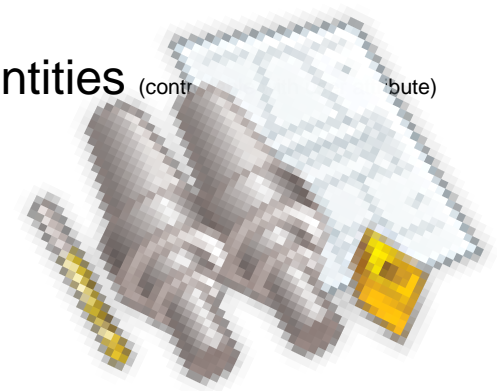


Once the quantity has been specified the ToolBOSS™ will illuminate a light on both the relative frame and drawer to indicate where the item is to be dispensed from.



The drawer will open only far enough to dispense the quantity specified or can be set to a predetermined limit/amount.

- Reduces set up times by having all components of a job, dispensed one at a time that makes a kit without having to hire a dedicated person kitting jobs
 - Greatly reduces hunting & gathering time
 - Dispenses preassembled & preset items &/or components to build a Kit
- Allows multiple items to be dispensed as a “Kit” in a single operation
 - Shortest transaction times with NO additional indirect labor!
 - Dispenses the Total OR Partial Kit (controllable with user attribute)
- Provides Kit Information
 - Kit/Job Number, Description, Extended Descriptions, Part Number and Image Files
- Permits on-the-fly changing of kit definition and issue quantities (controllable with user attribute)
- **Example:**
 - Kit Number **K2316T61**, FACE MILL - 50MM
 - **MF1077266** 50MM DIA 20 DEG LEAD FACE MILL, Qty: 1
 - **193160** COOLANT TUBE (DRY MACHINING)
 - **AL1077329** HSK63A SHELL MILL ADAPTER
 - **SPHX1205ZCSR** 1230809 KC725M
 - **410081** CLAMP STUD
 - **121612** CLAMP SCREW M6 X 12
- Withdrawing Kit **K2316T61** withdraws Items **MF1077266**, **193160**, **AL1077329**, **SPHX1205ZCSR**, **410081** and **121612** all in one simple step



- Provides real time data for analysis and actions, automatically
 - Real time data for pro active analysis and decisions
 - Automates the reporting cycles by scheduling and automatically sending specific data to only those who need it, when they need it
 - Delivers Specific Reports for Production, Maintenance, Purchasing, Receiving, Etc



- Delivers pre-configured reports
 - No time spent to build custom reports
- Intuitive Report Designer
 - Allows for unlimited reporting customization
 - Provides data field selections and priority ordering
 - Totals costing attributes with or without subtotals
 - Automatically filters data by criteria
 - Formats reports to (xls, pdf, txt, xml, csv, etc.)
 - Ability to save custom report and re-use report design as a template
 - Delivers reports automatically via E-mail, (SMTP or HTTP), and FTP transmission
- Accessible data by industry standard reporting packages (Crystal Reports etc)
- Dashboard at a glance technology



- **Issue tools and other metal cutting supplies**
- **Accepts returns for re-use or reconditioning**
- **Dispenses tools, does not drop them**
- **Accepts standard industry packages**
- **Offers cupboards, lockers and large drawers for MRO**
- **Manages the entire tool reconditioning cycle**
- **Forces use of reconditioned tools before new**
- **Requires little floor space**
- **Supports electronic ordering from multiple suppliers**
- **Enables secure, multi-vendor access**
- **Identifies users of dispensed items**
- **Reports on item consumption**
- **Limits access by machine, job, and user**
- **Rations quantities where required**
- **Provides comprehensive reporting**
- **Operates with shop floor networking**
- **Establishes 24-hour tool control**
- **Expandable from 1 to 10 frames**
- **Provides External Inventory Management**
- **Scalable for enterprise tool management**

- **Delivers fast, measurable results**
- **Establishes security & accountability without adding personnel**
- **Slashes administrative costs and expediting**
- **Eliminates downtime with assured tool availability**
- **Minimizes on-hand inventory**
- **Provides tools close to where they are used**
- **Slashes issue time from minutes to seconds**
- **Eliminates pilferage**
- **Enables single insert control**
- **No repackaging required**
- **Accommodates customization and reconfiguration**
- **Maintains audit trails**
- **Captures cost allocations**
- **Drives continuous improvement with tool use data**
- **Enables full tool utilization via life cycle management**
- **Vitalizes your enterprise tool management system**

Reduced Supply Costs

Oil equipment manufacturer:

- Reduced overall spend by 30%
- Slashed monthly glove usage by 200 pairs.

Pump manufacturer

- Three staff and 20 ToolBoss units function as 12 employees. (Redeployed to value add)
- Reduced excess inventory by \$650,000

Small parts manufacturer:

- Dispenses single inserts versus packages of inserts
- Reduced monthly spend by 30% (from \$24K to under \$16K)
- Implemented unattended tool crib.

Reduced Inventory

Aerospace manufacturer:

- Discovered that 40% of the items were not used in a one month period.
- Reduced inventory from \$750K to under \$130K on an annual \$2.2M spend.

Reduced Issue Time

Small parts manufacturer:

- Reduced issue time from 30 minutes to 18 seconds

Three aerospace subcontractors:

- Using dispensing unit as a satellite crib in locations greater than 100 yards from the tool crib



Engine Power Components

“The machining supervisor told me that he no longer sees his machinists walking about looking for tooling. They’re at their workstations either operating or setting up their machines.

Tool crib activity has changed from one shift of expediting tooling and two shifts of an open crib to one shift of pre-kitting tools and 24/7 controlled access of additional tooling via ToolBoss”

Tim Coates, Manufacturing Manager, *Engineered Power Components*, Grand Haven, MI

“Tool-use data reported by TOOLBOSS and KAMTS software drives our continuous improvement programs. “In the first year, we have made improvements that have reduced by 15% the tool cost per man hour KPI,” says England.

Tony England, Production Engineering Manager, *Sulzer Pumps, Ltd*, Leeds, UK

SULZER



“ToolBoss helped us get the whole shop floor involved in generating operating cost savings. With ToolBoss reports we were able to show our operators how their actions directly affect operating costs. They knew that our competition was reducing costs by eliminating jobs. The ToolBoss data helped them recognize that they could directly contribute to corporate goals to reduce costs, improve productivity and save jobs.”

Stephen Potter, Supervisor-Facilities Maintenance, Liftek,
Muskegon, MI

- **Shared Rewards**
 - We will baseline the prior 12 months sales with the customer. A growth value is calculated on the value of the equipment and services. We provide an agreement for the customer to convert competitor spend to Kennametal product in exchange for free use of ToolBOSS.
- **Direct purchase of equipment**
 - ToolBOSS equipment sold to all customers and distributors.
- **Lease of ToolBOSS**
 - We have Partnered with third party equipment leasing company to provide financing options.



Put Widia's Supply Chain Services to work for you!



THANK YOU