



Presentation:
Presentation:

sparesfinder
materials data, mastered.

Cloud reigns over (SPIR) spread-sheets

20th Nov 2012
20th Nov 2012

Agenda

- ⚙️ Company introduction
- ⚙️ Market developments
 - ⚙️ Master Data Management - MDM
 - ⚙️ Cloud advantages
- ⚙️ SPIR process
 - ⚙️ Current situation and issues
 - ⚙️ Spearhead – a fully integrated solution:
 - ⚙️ MDM, Workflow, Visibility
- ⚙️ Q&A

sparesfinder

materials data, mastered.

for multi-site, asset intensive, companies



What we started doing

⚙️ “Industrial Napster”
enables perfect
inventory
management....

but...

- ⚙️ *the data wasn't good enough*
- ⚙️ *the market was barely ready*



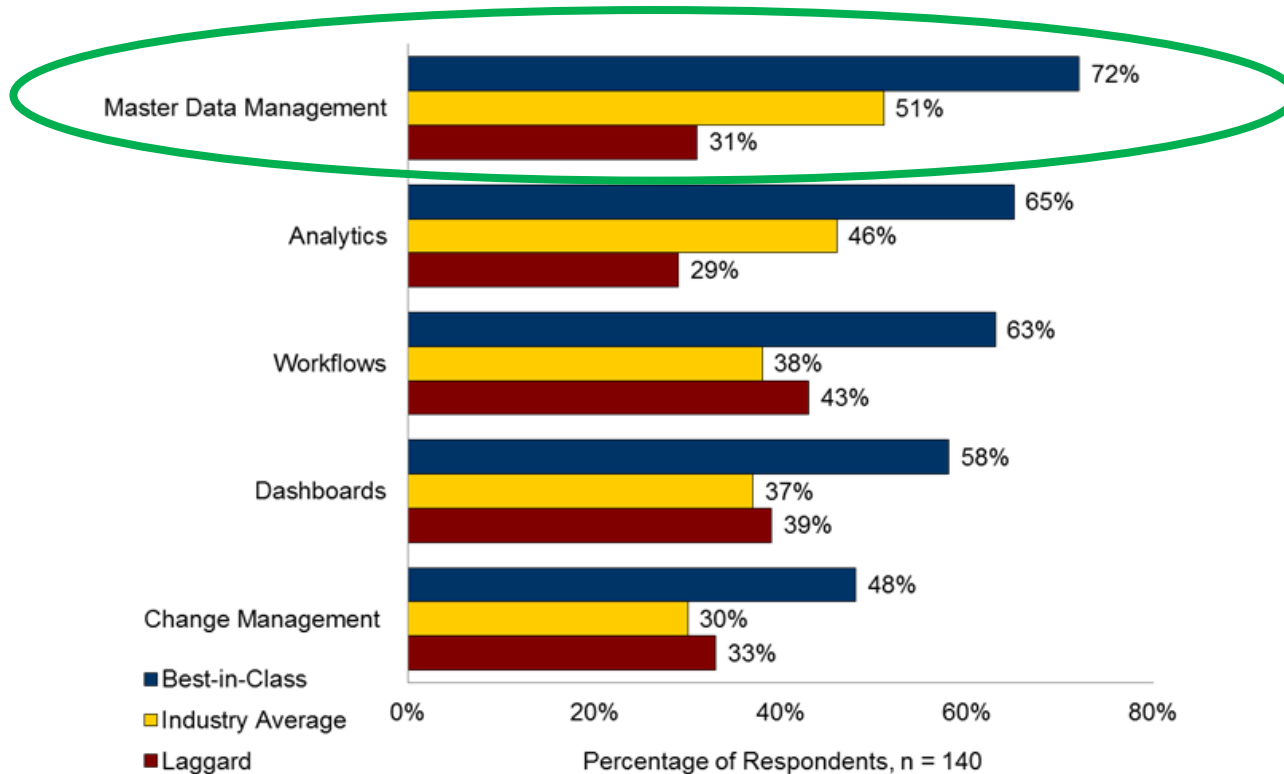
What we do now

⚙️ sparesFinder focuses on:

- ⚙️ Any Master Data process that relates to spares and materials
 - ⚙️ Material masters
 - ⚙️ Bills of materials / tags
 - ⚙️ Maintenance / failure modes
 - ⚙️ Tracking (e.g. rentals / OCTG repair)
- ⚙️ Supporting services to deliver a business solution
 - ⚙️ Data cleaning projects
 - ⚙️ Technical dictionary
 - ⚙️ ERP integration
- ⚙️ ASP / SaaS / Cloud Applications
 - ⚙️ “What is the advantage of this being hosted / pooled from the business process perspective? (i.e. not just cost)”

Recent survey of Asset Managers

Technology Enablers – Part 1



Why Materials Master Data?

❁ Poor descriptions have been tolerated for much too long, but:

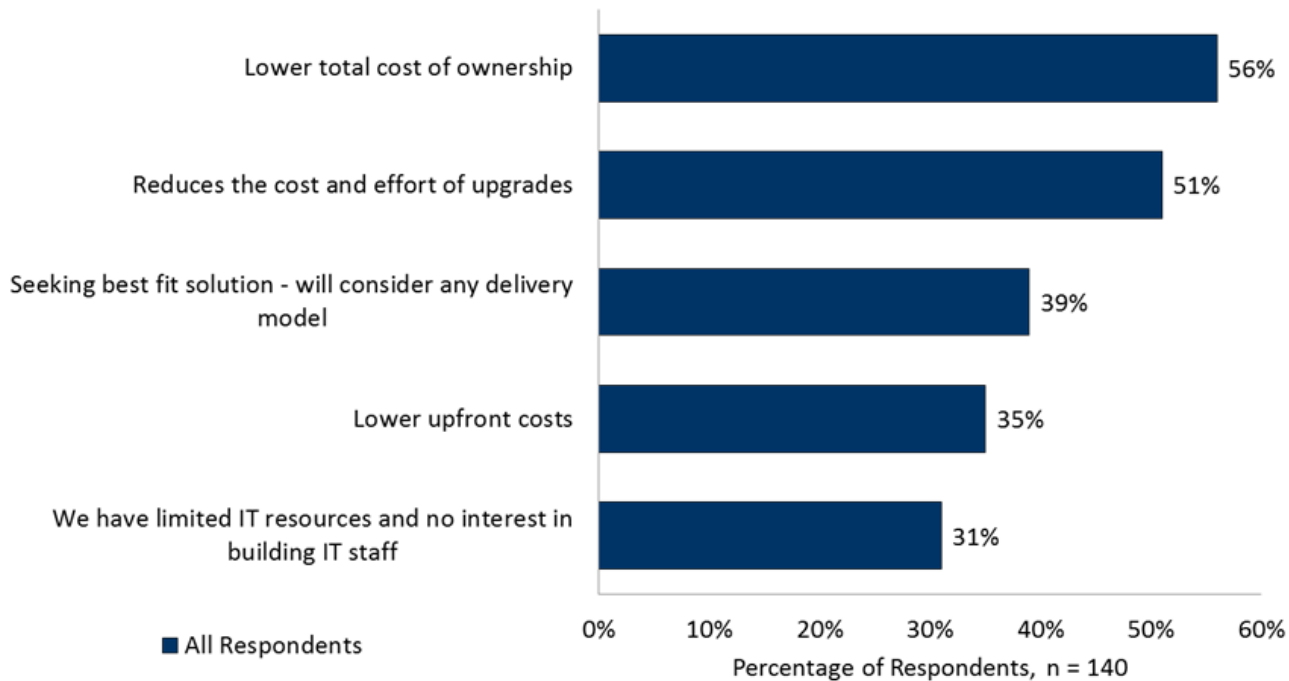
- ❁ Industry focus on safety and quality – can you afford to be liable for fitting the wrong part?
- ❁ ERP systems becoming increasingly consolidated but the value is significantly diminished if the foundation data poor



The clouds are gathering!

Aberdeen Group
A Harte-Hanks Company

What appeals to you to consider cloud?



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“First adopters will be in the asset management / maintenance space”

Cloud Advantages

⚙️ Single version of software

- ⚙️ “No bugs”

- ⚙️ Fast upgrade

⚙️ Shared IT infrastructure

- ⚙️ Security, patches, back-ups, etc all taken care of = **low hassle**

- ⚙️ BUT - exclusive databases / private cloud remain options

⚙️ Web based so accessible anywhere

- ⚙️ Perfect for collaboration!

⚙️ Rental / Subscription commercial

- ⚙️ No long lock in

- ⚙️ Keeps vendors focussed

What are SPIRs?

- ⚙️ Spares Parts Interchangeability Records
- ⚙️ List the spares associated with each system / equipment
- ⚙️ Provide recommendations of the quantity of spares that should be purchased to support construction and operations
- ⚙️ Collect various other data about the spares
- ⚙️ Responsibility of project teams

Example - SPIR #1 – another page



SPARE PARTS AND INTERCHANGEABILITY RECORD (SPIR FORM) PRICING PAGE									
PURCHASE ORDER NUMBER(S) OF BASE EQUIPMENT		JOB NUMBER		SUPPLIER		SUPPLIER REVISION			
		OWNER		SUPPLIER ADDRESS		0 1 2 3 4			
		LOCATION		SUPPLIER CONTACT NAME		EPC REVISION			
		EQUIPMENT TYPE		SUPPLIER PHONE NUMBER + COUNTRY CODE		EPC DATE			
				SUPPLIER EMAIL ADDRESS		EPC BY			
						EPC REVISION			
						EPC REVIAOPR			
						SUPPLIER'S REFERENCE			
NOTES									

SAMPLE

TOTAL NUMBER OF EQUIPPED PARTS	DETAILED LONG TEXT DESCRIPTION	CROSS-SECTION DRAWING NUMBER	DRAWING REFERENCE	ORIGINAL COMPONENT MANUFACTURER (OCM) PART NUMBER	ORIGINAL EQUIPMENT MANUFACTURER (DEM) PART NUMBER (IF DIFFERENT FROM OCM PART NUMBER)	NAME OF MANUFACTURER OF PART IDENTIFIED IN SECTION 5	MATERIAL	QUANTITY												27 PRICES IN SECTION 26 VALID UNTIL			28 PRICES IN SECTION 28 VALID UNTIL		
								RECOMMENDED BY SUPPLIER			RECOMMENDED BY EPC CONTRACTOR			APPROVED BY OWNER			UNIT OF MEASURE	LEAD TIME FOR DELIVERY OF PART IN WEEKS	SHELF LIFE OF PART	OWNER STOCK NUMBER	CURRENCY				
								14	15	16	17	18	19	20	21	22					USD	REVISED UNIT PRICING DUE TO EXPIRATION OF VALID DATE	TOTAL PRICE		
7	O-RING: 1-1/16 INCH ID, 1-1/4 INCH OD, 3/32 INCH WD, NITRILE-D052-1					FISHER	NITRILE-D052-1	1	1	1	1	1	1	1	1	1	EA	12	Indefinite		3.75		7.50		
2	BEARING-THRUST, SIZE 100, 657, CARBON STEEL	FORM 5081	5	10A2042X052		FISHER	NITRILE-D052-1	1	1	1	1	1	1	1	1	1	EA	12	2 Years		75.00		150.00		
3	RING-RADIAL SPRING SEAL, 6-23/32 IN X 7-3/32 IN X 3/16 IN, N10276/PTFE, GM	FORM 5081	15	10A2618X012		FISHER	CARBON STEEL	1	1	1	1	1	1	1	1	1	EA	12	2 Years		287.25		574.50		
1	RING-RADIAL SPRING SEAL, 5-3/32 IN X 5-15/32 IN X 3/16 IN, C276/PTFE25% CG							1	1	1	1	1	1	1	1	1	EA	12	2 Years		429.75		859.50		
2	RING SEAL, 7-3/8 IN X 8-7/8 IN X 1/4 IN, PTFE, SPR, RADIAL, N10276, G, M, SPR, RADIAL, N10276, G, M							1	1	1	1	1	1	1	1	1	EA	12	2 Years		438.00		876.00		
6	RING-RADIAL SPRING SEAL, 7-3/8 IN X 8-7/8 IN X 1/4 IN, C276/PTFE25% CG							1	1	1	1	1	1	1	1	1	EA	12	2 Years		264.00		528.00		
3	GASKET: 5.88 IN X 11 IN X 0.03 IN, GRAPHITESS 17F46, RING							2	2	4	2	2	4	2	4	4	EA	12	2 Years		37.50		562.50		
6	GASKET: 5.88 IN X 11 IN X 0.03 IN, GRAPHITESS 17F46, RING							1	1	2	1	1	2	1	2	2	EA	12	2 Years		51.08		153.23		
1	STEM, VALVE CONTROL, 1 INCH VALVE, 29/32 INCH DIA, 23-1/4 INCH LG, S31600 B GSP, PLUG							1	1	1	1	1	1	1	1	1	EA	12	2 Years		551.25		1,102.50		
15	O-RING-SLAM SHUT UPPER O-RING, NITRILE D052-2, MBR, DVC 6000, DVC							5	5	5	5	5	5	5	5	5	EA	12	Indefinite		21.60		129.60		
3	MOTOR: ELECTRIC AC, 2000 HP, 1800 RPM, 4000V, 60HZ, 3PH GASKET: 2 IN, 150 LB, RF, Spiral wound, 304 windros, Graphite filed							1	1	1	1	1	1	1	1	1	EA	30	5 Years		230,800.00		230,800.00		

QUANTITY RECOMMENDED BY SUPPLIER				QUANTITY RECOMMENDED BY EPC CONTRACTOR				QUANTITY APPROVED BY OWNER			
14	15	16	17	18	19	20	21	34	35	36	37
Capital	Pre-Commissioning	Commissioning & Start-Up	Operational / Two Year	Capital	Pre-Commissioning	Commissioning & Start-Up	Operational / Two Year	Capital	Pre-Commissioning	Commissioning & Start-Up	Operational / Two Year
	1	1	1		1	1	1			1	1
	1	1	1		1	1	1			1	1
	1	1	1		1	1	1			1	1
	1	1	1		1	1	1			1	1
	1	1	1		1	1	1			1	1
	1	1	1		1	1	1			1	1
	2	2	4		2	2	4			2	4
	1	1	2		1	1	2			1	2

Example - SPIR #3



RFQ Doc 006 - PROJECT: AKYEM - SPARE PARTS IDENTIFICATION

(A) Moment Project Representative Contact Details:										(B) Equipment Description: GAB Distribution Board			(C) Original Equipment Purchase Order Number: J1267-3208										Expected Return Date:											
(D) SPARE PART ITEM IDENTIFICATION REQUIREMENTS										(E) SPARE PART EQUIPMENT IDENTIFICATION REQUIREMENTS			(F) SPARE PARTS PURCHASING INFORMATION				(G) MANUFACTURER / SUPPLIER EXPECTED USAGE (x 4 Yrs)				(H) MEMPHIS INTERNAL USE - MAINTENANCE													
Line Number	Item Name	Item Attributes-1 (Max 40 characters)	Item Attributes-2 (Max 40 characters)	Item Attributes-3 (Max 40 characters)	Item Attributes-4 (Max 40 characters)	Item Attributes-5 (Max 40 characters)	Manufacturer's Item Name	Item Manufacturer	Manufacturer's Part Number	Hardware Material Class (if apply)	Part Number (MFR's Part Number)	Manufacturer (Manufacturer's Part Number)	Drawing Item No.	Qty per Element	Manufacturer's Part Number	Suggested Supplier Name	Unit of Issue	Price per UOI	Price Valid until Date	Currency	Leadtime in days	Expected usage Year 1	Expected usage Year 2	Expected usage Year 3	Expected usage Year 4	Supplier Name	Manufacturer's Part Number	Manufacturer's Part Number	Manufacturer's Part Number	Manufacturer's Part Number	Manufacturer's Part Number	Manufacturer's Part Number	Manufacturer's Part Number	
1	MOTOR.AC.ANY	FRAME (F) D14	OUTPUT POWER (P) 10	POLE (P) 4 POLE	VOLTAGE (V) 415 VOLT	PHASE (P) 3	TYPE	ELECTRIC MOTOR	TECO	415T4P6E				1			Each	566.00	Nov-10	AUD	30	0	1	0	1									
2	CIRCUIT BREAKER.ANY	VOLTAGE (V)	CURRENT (I) 40A	PHASE (P) 3	TYPE	FRAME	40A 1P RCD 20MA	HOELLER	FFM-40Z000-AU	NA				1			Each	10a	11															
3	CIRCUIT BREAKER.ANY	VOLTAGE (V)	CURRENT (I) 40A	PHASE (P) 4	TYPE	FRAME	40A 4P RCD 20MA	HOELLER	FFM-40A400-AU	NA				1			Each	10b	12															
4	CIRCUIT BREAKER.ANY	VOLTAGE (V)	CURRENT (I) 100A	PHASE (P) 1	TYPE	FRAME	100 1P WKA 0 CURVE RCOB	HOELLER	PK3H-100M0A00-A-AU	NA				1			Each	11																
5	CIRCUIT BREAKER.ANY	VOLTAGE (V)	CURRENT (I) 16A	PHASE (P) 1	TYPE	FRAME	16A 1P WKA 0 CURVE RCOB	HOELLER	PK3H-16M0A00-A-AU	NA				1			Each	12																
6	CIRCUIT BREAKER.ANY	VOLTAGE (V)	CURRENT (I) 200A	PHASE (P) 1	TYPE	FRAME	200 1P WKA 0 CURVE RCOB	HOELLER	PK3H-200M0A00-A-AU	NA				1			Each	13																
7	CIRCUIT BREAKER.ANY	VOLTAGE (V)	CURRENT (I) 32A	PHASE (P) 1	TYPE	FRAME	32A 1P WKA 0 CURVE RCOB	HOELLER	PK3H-32M0A00-A-AU	NA				1			Each	14																
8	CIRCUIT BREAKER.ANY	VOLTAGE (V)	CURRENT (I) 16A	PHASE (P) 1	TYPE	FRAME	16A 1P WKA HOB 0 CURVE	HOELLER	PK3H-16M0A00-A-AU	NA				1			Each	15																
9	CIRCUIT BREAKER.ANY	VOLTAGE (V)	CURRENT (I) 10A	PHASE (P) 1	TYPE	FRAME	10A 1P WKA HOB 0 CURVE	HOELLER	PK3H-10M0A00-A-AU	NA				1			Each	16																
10	CIRCUIT BREAKER.ANY	VOLTAGE (V)	CURRENT (I) 16A	PHASE (P) 1	TYPE	FRAME	16A 1P WKA HOB 0 CURVE	HOELLER	PK3H-16M0A00-A-AU	NA				1			Each	17																
11	CIRCUIT BREAKER.ANY	VOLTAGE (V)	CURRENT (I) 10A	PHASE (P) 1	TYPE	FRAME	10A 1P WKA HOB 0 CURVE	HOELLER	PK3H-10M0A00-A-AU	NA				1			Each	18																
12	CIRCUIT BREAKER.ANY	VOLTAGE (V)	CURRENT (I) 20A	PHASE (P) 1	TYPE	FRAME	20A 1P WKA HOB 0 CURVE	HOELLER	PK3H-20M0A00-A-AU	NA				1			Each	19																
13	CIRCUIT BREAKER.ANY	VOLTAGE (V)	CURRENT (I) 20A	PHASE (P) 2	TYPE	FRAME	20A 2P WKA HOB 0 CURVE	HOELLER	PK3H-20M0A00-A-AU	NA				1			Each	20																
14	CIRCUIT BREAKER.ANY	VOLTAGE (V)	CURRENT (I) 32A	PHASE (P) 3	TYPE	FRAME	32A 3P WKA HOB 0 CURVE	HOELLER	PK3H-32M0A00-A-AU	NA				1			Each	21																
15	CIRCUIT BREAKER.ANY	VOLTAGE (V)	CURRENT (I) 32A	PHASE (P) 1	TYPE	FRAME	32A 1P WKA HOB 0 CURVE	HOELLER	PK3H-32M0A00-A-AU	NA				1			Each	22																
16	CIRCUIT BREAKER.ANY	VOLTAGE (V)	CURRENT (I) 32A	PHASE (P) 1	TYPE	FRAME	32A 1P WKA HOB 0 CURVE	HOELLER	PK3H-32M0A00-A-AU	NA				1			Each	23																
17	CIRCUIT BREAKER.ANY	VOLTAGE (V)	CURRENT (I) 40A	PHASE (P) 1	TYPE	FRAME	40 1P WKA HOB 0 CURVE	HOELLER	PK3H-40M0A00-A-AU	NA				1			Each	24																
18	CIRCUIT BREAKER.ANY	VOLTAGE (V)	CURRENT (I) 40A	PHASE (P) 1	TYPE	FRAME	40 1P WKA HOB 0 CURVE	HOELLER	PK3H-40M0A00-A-AU	NA				1			Each	25																
19	CIRCUIT BREAKER.ANY	VOLTAGE (V)	CURRENT (I) 40A	PHASE (P) 3	TYPE	FRAME	40 3P WKA HOB 0 CURVE	HOELLER	PK3H-40M0A00-A-AU	NA				1			Each	26																
20	CIRCUIT BREAKER.ANY	VOLTAGE (V)	CURRENT (I) 16A	PHASE (P) 1	TYPE	FRAME	16 1P WKA HOB 0 CURVE	HOELLER	PK3H-16M0A00-A-AU	NA				1			Each	27																
21	CIRCUIT BREAKER.ANY	VOLTAGE (V)	CURRENT (I) 16A	PHASE (P) 1	TYPE	FRAME	16 1P WKA HOB 0 CURVE	HOELLER	PK3H-16M0A00-A-AU	NA				1			Each	28																
22	CIRCUIT BREAKER.ANY	VOLTAGE (V)	CURRENT (I) 16A	PHASE (P) 1	TYPE	FRAME	16 1P WKA HOB 0 CURVE	HOELLER	PK3H-16M0A00-A-AU	NA				1			Each	29																
23	CIRCUIT BREAKER.ANY	VOLTAGE (V)	CURRENT (I) 16A	PHASE (P) 1	TYPE	FRAME	16 1P WKA HOB 0 CURVE	HOELLER	PK3H-16M0A00-A-AU	NA				1			Each	30																

(C) Original Equipment Purchase Order Number: J1267-3208									
(F) SPARE PARTS PURCHASING INFORMATION					(G) MANUFACTURER / SUPPLIER EXPECTED USAGE (x 4 Yrs)				
Suggested Suppliers Name	Unit of Issue	Price per UOI	Price Valid until Date	Currency	Leadtime in days	Expected usage Year 1	Expected usage Year 2	Expected usage Year 3	Expected usage Year 4
TECO	Each	\$ 566.00	Nov-10	AUD	30	0	1	0	1
9	10a	10b	11	12	13	14	15	16	17

Just some of the issues

- ⚙️ No control over descriptions, data needs to be re-cleaned
- ⚙️ No ability to look across entire project, just a series of unlinked spread-sheets
- ⚙️ Accurate reporting of progress – a pipe dream!
- ⚙️ No link to current inventory or master catalogue
- ⚙️ Cumbersome process to load to operational ERP
- ⚙️ No simple record of changes and sources
- ⚙️ No workflow – spread-sheets emailed around controlled by version numbers
- ⚙️ Spares recommendations – no clear trail back to criticality, FMEA, maintenance or supply chain factors

So we built Spearhead

⚙️ Current process is largely spread-sheet driven..... which are unsuited to any complex process and inherently:

- ⚙️ Lack control and visibility
- ⚙️ Increase process cost and risk



⚙️ Some early electronic versions, but none that are integrated to operational master data / master catalogue

⚙️ Natural extension for sparesFinder to add functionality around what creates the demand for spares, namely the asset

Spearhead provides asset owners, EPCs and equipment suppliers with a collaborative solution to capture, verify and deliver all of the spares data required to get new plant and equipment operational.



Some of the challenges

⚙️ Many participants

- ⚙️ Asset owners
- ⚙️ EPC
- ⚙️ OEM / Suppliers
- ⚙️ Cataloguers

⚙️ Often pre-ERP

⚙️ Project managers are naturally focussed on risk and timing rather than on operational costs

⚙️ SPIR spread-sheet processes well established in current projects

Specific features

⚙ Search

- ⚙ Comprehensive search capability against existing catalogue
- ⚙ Multi user access including external vendors

⚙ Early data capture

- ⚙ Either load spread-sheets
- ⚙ Direct entry to software = process visibility

⚙ Governance of data

- ⚙ Compliance with descriptive standards
- ⚙ Workflow for key data (e.g. spares recommendations)

⚙ Reports / tracking

- ⚙ Tracking for procurement / delivery of spares to project schedule
- ⚙ Report by cost for a project against budget

⚙ Output

- ⚙ Generation of purchase demands to purchasing system
- ⚙ Automatic data load of catalogue and BOMs to ERP

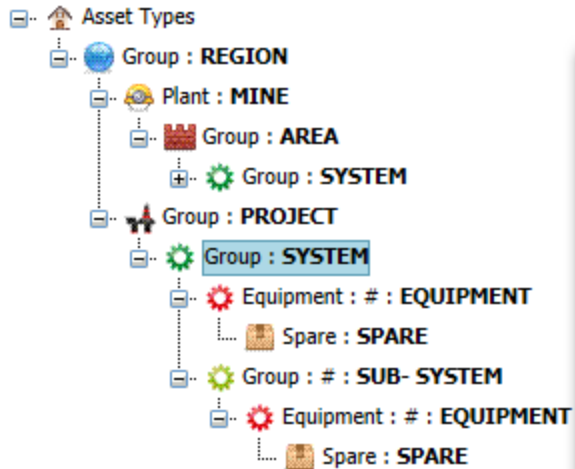
Set up Equipment Hierarchy



Assets > Admin > Asset Structure Admin

Asset Types

Expand until level



sF Masterpiece V3 - Add Edit Equipment Type -- Webpage Dialog

http://jaguar.sparesfinder.net/AddEditEquipmentType.aspx?PopUp=True&EquipmentType

Add Asset Type

Node Type:

Name:

Description:

Icon:

Reference No. Required:

Quantity Required:

Build MEL directly...



▼ Master Equipment List

Expand until level

Equipment Nodes

- NEWMONT MINING
 - AFRICA
 - AUSTRALIA
 - 6980 : BODDINGTON
 - EXTRACTION
 - TRANSPORTATION
 - 12 : MILL CONVEYOR
 - 78-12 : TRUCK
 - ENGINE
 - NORTH AMERICA
 - NEV: N
 - SOUTH AME

Context menu for NEV: N:

- Add
- Edit
- Delete

SECTION

78-12 : TRUCK



- NORTH AMERICA
- NEV: NEVADA
 - MEDICAL FACILITY
- SOUTH AMERICA

▼ Add Equipment

Equipment Type: SECTION

SECTION Name: MEDICAL FACILITY

SECTION Notes: This is where we treat any injuries

...or in bulk from Excel



	A	B	C	D
1	Parent Node Text (0-200)	Equipment Type Name	Equipment Node Name Text (0-200)	Equipment Reference Text (0-200)
2	TRANSPORTATION	EQUIPMENT	TRUCK	78-12
3	TRANSPORTATION	EQUIPMENT	TRUCK	78-14
4	TRANSPORTATION	EQUIPMENT	TRUCK	78-15

Live Master Equipment List Upload

File Format: English (United Kingdom)

Date Format: dd/MM/yyyy

Number Format: 1234.56

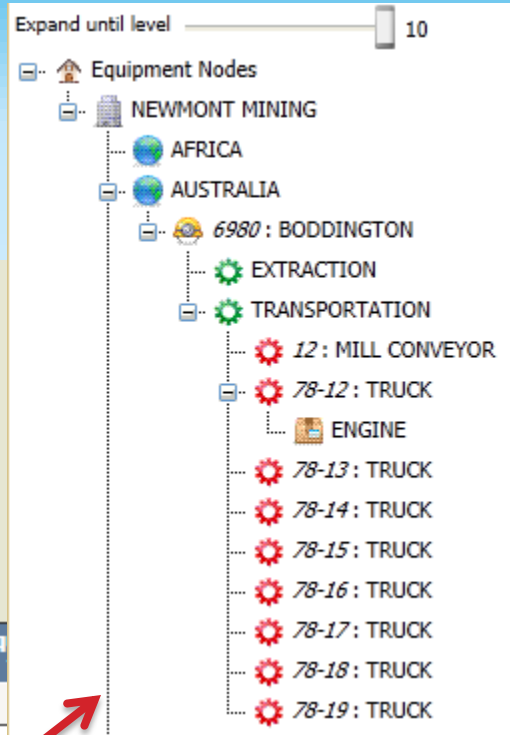
Copy data to clipboard and then Press "CTRL V"

Parent Node Text (0-200)	Equipment Type Name	Equipment Node Name Text (0-200)	Equipment Reference Text (0-200)
TRANSPORTATION	EQUIPMENT	TRUCK	78-13
TRANSPORTATION	EQUIPMENT	TRUCK	78-14
TRANSPORTATION	EQUIPMENT	TRUCK	78-15
TRANSPORTATION	EQUIPMENT	TRUCK	78-16
TRANSPORTATION	EQUIPMENT	TRUCK	78-17
TRANSPORTATION	EQUIPMENT	TRUCK	78-18
TRANSPORTATION	EQUIPMENT	TRUCK	78-19

1 of 1 (7)

Items with Error 0

Load Data
 Cancel Load



Rapid Search of MEL

Assets > Master Equipment List

My Searches

Search

Type: EQUIPMENT
Reference: JPG003
Name: PINIONSHAFT AND HOUSING ASSEMBLY
Noun Modifier:

Master Equipment List

- Assets
 - NEWMONT
 - NEVADA
 - 1641/5/50332 : PRIMARY GYRATORY CRUSHERS
 - AIR COOLED CHILLER
 - JPG0125 : CONDENSER FAN ASSEMBLY**
 - SPIDER ASSEMBLY
 - MAINSHAFT ASSEMBLY
 - ECCENTRIC ASSY
 - JPG004 : ECCENTRIC ASSEMBLY**
 - PINION SHAFT & HOUSING
 - JPG003 : PINIONSHAFT AND HOUSING ASSEMBLY**
 - LUBE ASSEMBLY
 - HYDRAULIC ASSEMBLY
 - BLOWER ASSEMBLY
 - HYDROSET ASSEMBLY
 - BOTTOM SHELL ASSEMBLY
 - DRIVE ASSEMBLY
 - JPG0106 : DIRECT DRIVE ASSEMBLY**
 - LINER ASSEMBLY
 - INSTRUMENTATION ASSEMBLY

Asset Information

Equipment Attributes

Authority Group	Equipment
Purchasing	●
Stock Coordinator	●

APPROVED

Contract Information

Contractor: **PETROFAC**

Criticality Type: Major

Consequences of equipment failure:

SAFETY	●	<input type="text" value="Minor"/>	Minor injury, no lost time
ENVIRONMENT	●	<input type="text" value="Major"/>	External environmental damage or non compliance
OPERATIONAL IMPACT	●	<input type="text" value="Moderate"/>	Working relationships degraded or need for significant management inp... ●
RELIABILITY & AVAILABILITY	●	<input type="text" value="Major"/>	1 week to 1 month for critical plant
COST	●	<input type="text" value="Major"/>	Major plant damage > \$1,000,000
SOCIAL IMPACT	●	<input type="text" value="Minor"/>	Reputation affected resulting in complaints

No Item Assigned

Link to existing items / add new

Item Selection

Manufacturer Filter: FISHER

Quick Item Select: 10a0 or [Go to full catalogue search](#)

sF Master Number: 15017	Manufacturer Name: FISHER	Part Number: 10A0811X012
Description: O-RING:FLUOROELASTOMER,10A0811X012,FISH^		
sF Master Number: 60951	Manufacturer Name: FISHER	Part Number: 10A0042X052
Description: O-RING:1-1/16x1-1/4in;NITRILE;DS52-1		

New Item Details

Manufacturer Name: FISHER

Manufacturer Part No: 10A0042X052

Base UOM: EACH

Item Description: O-RING: 1-1/16 INCH ID, 1-1/4 INCH OD, 3/32 INCH WD, NITRILE-DS52-1

New Item Details

Manufacturer Name: FISHER

Manufacturer Part No: 10A0042X052

Base UOM: EACH

Item Description: O-RING: 1-1/16 INCH ID, 1-1/4 INCH OD, 3/32 INCH WD, NITRILE-DS52-1

Noun Modifier: O-RING Only Extracted NMQs

INSIDE DIAMETER: 1-1/16 in

CROSS-SECTIONAL SIZE: 1-1/4 in

MATERIAL: NITRILE

MATERIAL GRADE: DS52-1

SHORE IRHD HARDNESS:

STANDARD:

REFERENCE STANDARD:

CONSTRUCTION:

Assess Equipment Criticality, link to Master Catalogue and BOM



Type: **Equipment** Reference: **12** Name: **MILL CONVEYOR** Noun Modifier: **CONVEYOR**

Master Equipment List

Expand until level

Equipment Nodes

- NEWMONT MINING
 - AFRICA
 - AUSTRALIA
 - 6980 : BODDINGTON
 - EXTRACTION
 - TRANSPORTATION
 - 12 : MILL CONVEYOR**
 - 78-12 : TRUCK
 - ENGINE
 - 78-13 : TRUCK
 - 78-14 : TRUCK
 - 78-15 : TRUCK
 - 78-16 : TRUCK
 - 78-17 : TRUCK
 - 78-18 : TRUCK
 - 78-19 : TRUCK
- NORTH AMERICA
 - NEV : NEVADA
 - MEDICAL FACILITY
- SOUTH AMERICA

Equipment Information UnApproved Assigned to: **David Stroud**

Criticality Type: BOSS INTERESTED

Consequences of equipment failure:

SAFETY	<input type="text" value="MARGINAL"/>	Minor Personnel injury, no public impact
PRODUCTION	<input type="text" value="BOSS INTERESTED"/>	Impact equivalent to total production downtime of greater than

Manufacturer: No Manufacturer P/N: sF: 1440512

Noun Modifier	CONVEYOR ANY
TYPE	SECTION
SIZE	600X400 MM
LENGTH	1500 MM
CONSTRUCTION	COMPLETELY MOUNTED WITH ROLLER BRACKETS AND CHAIN

Equipment Bills of Material

	Manufacturer	Part Number	Description	UOM	Quantity
➔	ASCO JOUCOMATIC	43701036	CYLINDER PNEUMATIC;TYPE: MAGNETIC DOUBLE ACTING;BO...	EA	1
➔	LEGRAND	073156	RECEPTACLE ELECTRICAL;TYPE: 3-PLUG 6-MODULE AUTOMA...	EA	1

Configure Equipment Attributes

My Actions Cleaning Dictionary Catalogue Reports

Equipments > Equipment Attributes

Equipment Type: SPARE Authority Group: EPC

ERP Attribute Name: [Empty]

	Data Level	Equipment Type	Authority Group
➔	Equipment	SPARE	EPC
➔	Equipment	EQUIPMENT	Owner
➔	Equipment	SPARE	Owner

1 of 1 (3)

		!	🔒	ERP Attribute Name	UOM	Entry Type
➔	✎	<input type="checkbox"/>	<input type="checkbox"/>	RECOMMENDED SPARES (BUILD)		Open Number (0-200)
➔	✎	<input type="checkbox"/>	<input type="checkbox"/>	RECOMMENDED SPARES (2-YEAR)		Open Number (0-200)

✎ ⬆ ⬇ Group

ERP Attribute Name: [Empty]

ERP Attribute Value: [Empty]

	!	🔒	ERP Attribute Name	UOM	Entry Type
➔	✎	<input checked="" type="checkbox"/>	<input type="checkbox"/>	CONTRACT TYPE	Closed Text (0-200)
➔	✎	<input type="checkbox"/>	<input type="checkbox"/>	CONTRACT REFERENCE	Open Text (0-200)
➔	✎	<input type="checkbox"/>	<input type="checkbox"/>	CONTRACT START DATE	Date (0-200)
➔	✎	<input type="checkbox"/>	<input type="checkbox"/>	CONTRACT END DATE	Date (0-200)

✎ ⬆ ⬇ Group

	ERP Attribute Value	Code	Count	
➔	FIXED PRICE		0	📌
➔	TIME & MATERIALS		0	📌

1 of 1 (2)

✎

Each SPIR has the correct data structure



Contract Information Contract Type: SPIR Contract Number: AB-1234 Contractor: PETROFAC

Select	Contract Type	Contract Number	Contractor	Description	Start Date	Finish Date	Responsible Engineer	Contract Supervisor
➔	SPIR	AB-1234	PETROFAC	Contract to provide SPIR for Gas Detectors	30/03/2012	30/05/2012	Bruce Bell	Davey Alvarez

Authority Group	Header
Finance	🔄

Contract Documents

Select	Type	View	Description
➔	Document	📅	Contract Information

Contract Tasks

Select	Task Name	Description	Authority Group	Number of Days	Completion Status
➔	SPIR RECEIVED	Receipt of SPIR by Contractor	Supplier	5	✓
➔	SPC REVIEWS SPIR	Review of recommendations	EPC	6	✓
➔	ACCEPT SPARES REPORT	Acceptance of spares recommendations	Owner	3	✓
➔	IK CO-ORDINATOR		TADM	5	✓
➔	DEVELOP SPARES STATUS			45	✗

Asset Reference	Asset Name	Assigned to	Approval Status	Manufacturer	Part Number	Description	Purchasing Contract Number	SPIR Contract Number
50-PT-14672	"P-PT, INSTRUMENT AIR PRESS"	Not Assigned	Unapproved					AB-1234
14-AT13028	AA GAS DETECT - CO CATALYST BLG	Not Assigned	Unapproved	INGERSOLL RAND	7149-0718	SEAL:ASSY;40inX1050mm		AB-1234
14-AT13029	AA GAS DETECT - CO CATALYST BLG	David Stroud	Unapproved					AB-1234
00-ACCU-M1	FREE STANDING OUTDOOR UNIT-MOSQUE	Not Assigned	Unapproved	ADM	12344555	PUMP CENTRIFUGAL		AB-1234
14-10-IAC	Methyl Acetate	Not Assigned	Unapproved					AB-1234
14-AT10001	TRANSMITTER - ANALYZER	Not Assigned	Unapproved	ALSTOM	SC32PH	HOLDER FUSE:ULTRASAFE;A2;120V;12A;IN-LINE	Purchase 1234	AB-1234
14-FT10003A	TRANSMITTER - CORIOLIS (FF)	Not Assigned	Unapproved					AB-1234

1 Go 1 of 1 (9) 10 Default

Add recommended spares per item..



Assets > Master Equipment List

My Searches: Return Fan

Search

Type: SPARE Name: FRONT BEARING Noun Modifier: BEARING

Asset Information Unapproved Assigned to: David Stroud

Criticality Type

Manufacturer: SKF D/N: 6004 ABS/C3 sF: 16773

Authority Group	Spares
EPC	<input type="checkbox"/>
Owner	<input type="checkbox"/>
Supplier	<input type="checkbox"/>

CAPITAL (EPC)	123	2	<input type="text"/>
PRE-COMMISSIONING (EPC)	123	2	<input type="text"/>
COMMISSIONING & START-UP (EPC)	123	4	<input type="text"/>
OPERATIONAL / TWO YEAR (EPC)	123	4	<input type="text"/>

Master Equipment List

- Assets
 - CHEMICALS CO
 - IAC: International Acetyl Company
 - IDC: International Diol Company
 - IGC: International Gases Company
 - IMC: International Methanol Company
 - IPC: International Polymers Company
 - IUC: International Utility Company
 - 00: IUC Area 00
 - 00-00-IUC: General 00
 - 00-ACCU-M1: Free Standing Outdoor Unit-Mosque
 - 00-ACCU-M2: Free Standing Outdoor Unit-Mosque
 - 00-ACCU-M3: Free Standing Outdoor Unit-Mosque
 - 00-ACCU-M4: Free Standing Outdoor Unit-Mosque
 - 00-AH1RF: "AH1 RETURN FAN, ADMIN BUILDING"
 - BRUSHES
 - O-RING -
 - RING
 - FRONT BEARING
 - REAR BEARING
 - 00-AH1SF: "AH1 Supply Fan, Admin Building"
 - 00-AH2RF: "AH2 Return Fan, Admin Building"
 - 00-AH2SF: "AH2 Supply Fan, Admin Building"

.. or in bulk



Assets > Review > Review Contracts

Contract Type	Contractor	Contract Number	Description	Contract Information	MEL	Bills of Material	Spare	Start Date	Finish Date	Responsible Engineer	Contract Supervisor	Finance-BASE EQUIPMENT PO (1)	Finance-JOB NUMBER (2)
SPIR	PETROFAC	AB-1234	Contract to provide SPIR for Gas Detectors					30/03/2012	30/05/2012	Bruce Bell	Davey Alvarez	00-AH1RF	J B 12-90
SPIR	PETROFAC	BC-4567	Fan SPIRS					01/04/2012	18/04/2012	Alister Coates	Matt Ludbrook	14-10-IAC	J B 12-90
Purchasing	PETROFAC	Purchase 1234						30/03/2012	30/03/2012	Davey Alvarez	David Stroud		
SPIR	PETROFAC	AM26088-SPIR						19/04/2012	25/04/2012	Bruce Bell	David Stroud		
SPIR	HYDRAMET PTY LTD	train123						26/06/2012	25/10/2012	Bruce Bell	Alessio Ferreri		
SPIR	HYDRAMET PTY LTD	BP1234						20/08/2012	31/08/2012	David Stroud	Ben Couzens		

Contract Number	Man Name	Man Part#	Calc. Short Desc.	Total Fitted	Supplier-CAPITAL (1)	EPC-CAPITAL	Owner-CAPITAL (5)	Supplier-PRE-COMMISSIONING
AB-1234	ABB	3B5E031150R1	PROCESSOR	7	5	3	8	8
AB-1234	BLUE SCOPE	1234332	ABSORBER SHOCK:1-1/2mm	0	4	3		5
AB-1234	INGERSOLL RAND	X1220-T53	SEAL OIL	0	5			4
AB-1234	INGERSOLL RAND	T1220T54	SEAL OIL	0				4
AB-1234	INGERSOLL RAND	2516316-30005	SEAL	0			3	4
AB-1234	INGERSOLL RAND	7149-0718	SEAL:ASSY;40inX1050mm	0				
AB-1234	INGERSOLL RAND	71490684	CHAIN	0				
AB-1234	INGERSOLL RAND	7.149-0692	BOLT	0				
AB-1234	METSO MINERALS	33100010959004	VALVE	2		6		

Set up contract workflow to manage risk

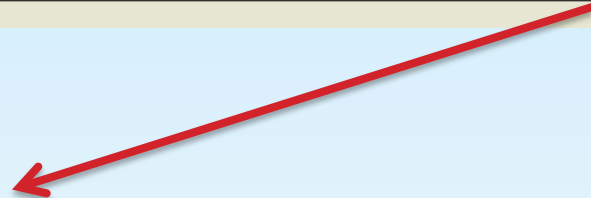
Assets > Admin > Contract Task List Admin

Contract Task List Name: Description: Contract Task:

Contract Task List	Description
REVIEW ASSET	Tasks required to complete initial review of asset

1 of 1 (1)

Contract Task	Description	Authority Group	Number of Days
ISSUE SPIR	Issue SPIR requirement to Supplier	OWNER	1
COMPLETE SPIR	Completion of SPIR form by Equipment Supplier	Supplier	25
SPIR RECEIVED	Receipt of SPIR from supplier	epc	1
EPC REVIEWS SPIR	Review of recommendations	epc	5
ACCEPT SPARES REPORT	Acceptance of spares recommendations	OWNER	10
PLACE ORDER	Place order for spares	epc	5



My Actions | Cleaning | Dictionary | Catalogue | Reports | Outputs | Source | ERP Admin | Assets | Admin

Assets > Grids > Contract Risk

Display Contract Tasks profile grid (paged), grouped by Contract Risk which Contains (Exact)

Contract Risk	Total Contracts	Purchase Order/ Contract received	Manage Spares Data	Develop Spares Report	Review Spares Report	Complete changes to spares report	Accept spares report	Make procurement decision	Develop final report	Log final report in Aconex	Decide procurement process	BHP Procurement	SAP Procurement	EPCM Procurement	Update spares data	Develop spares status	Hand over to BHP supply
Completed	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GREEN	11	0	0	0	0	1	1	1	0	1	1	0	0	0	2	2	2
RED	28	2	3	4	2	1	1	0	5	0	0	3	2	3	0	2	0
YELLOW	48	1	0	0	2	5	5	5	1	5	5	2	2	2	5	3	5

1 of 1 (4)

Totals	87	3	3	4	4	7	7	6	6	6	6	5	4	5	7	7	7
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Spares resource planning for maintenance

My Actions | Cleaning | Dictionary | Catalogue | Reports | Outputs | Source

Assets > Master Equipment List

Search

Type: EQUIPMENT Reference: C3210 Name: COMPRESSOR Noun Modifier: PREVENTER BLOWOUT

Master Equipment List | Asset Information | Accepted | Assigned to: David Stroud

Maintenance Resource Planning

- Maintenance Activities
 - Planned Maintenance
 - Operating Time
 - ON CONDITION
 - OIL SAMPLE FAILURE
 - CALENDAR
 - ANNUAL SERVICE**
 - Unplanned Maintenance(100%)
 - 100% : BEARING FAILURE
 - REPAIR AT EQUIPMENT

Resources for Annual Service

Maintenance Bills of Material Spare Plan : OWN STOCK AT SITE

	Manufacturer	Part Number	Description	UOM	Quantity
➔	PEERLESS	2610107-241	SCREW, CAP~HEAD: HEX~THREAD SIZE: 3/4in~THREADS: 1...	ST	4
➔	CLIF MOCK	22004006	HOSE, ASSEMBLY~LENGTH: 46in~CONNECTION SIZE: 1/4in...	ST	1
➔	INGERSOLL RAND	H54U-511	BEARING, NEEDLE~TYPE: BEVEL PINION~BORE TYPE: STRA...	ST	8

Maintenance Documents

Select	Type	View	Description
➔	Document		Inspection Guidelines

Manpower

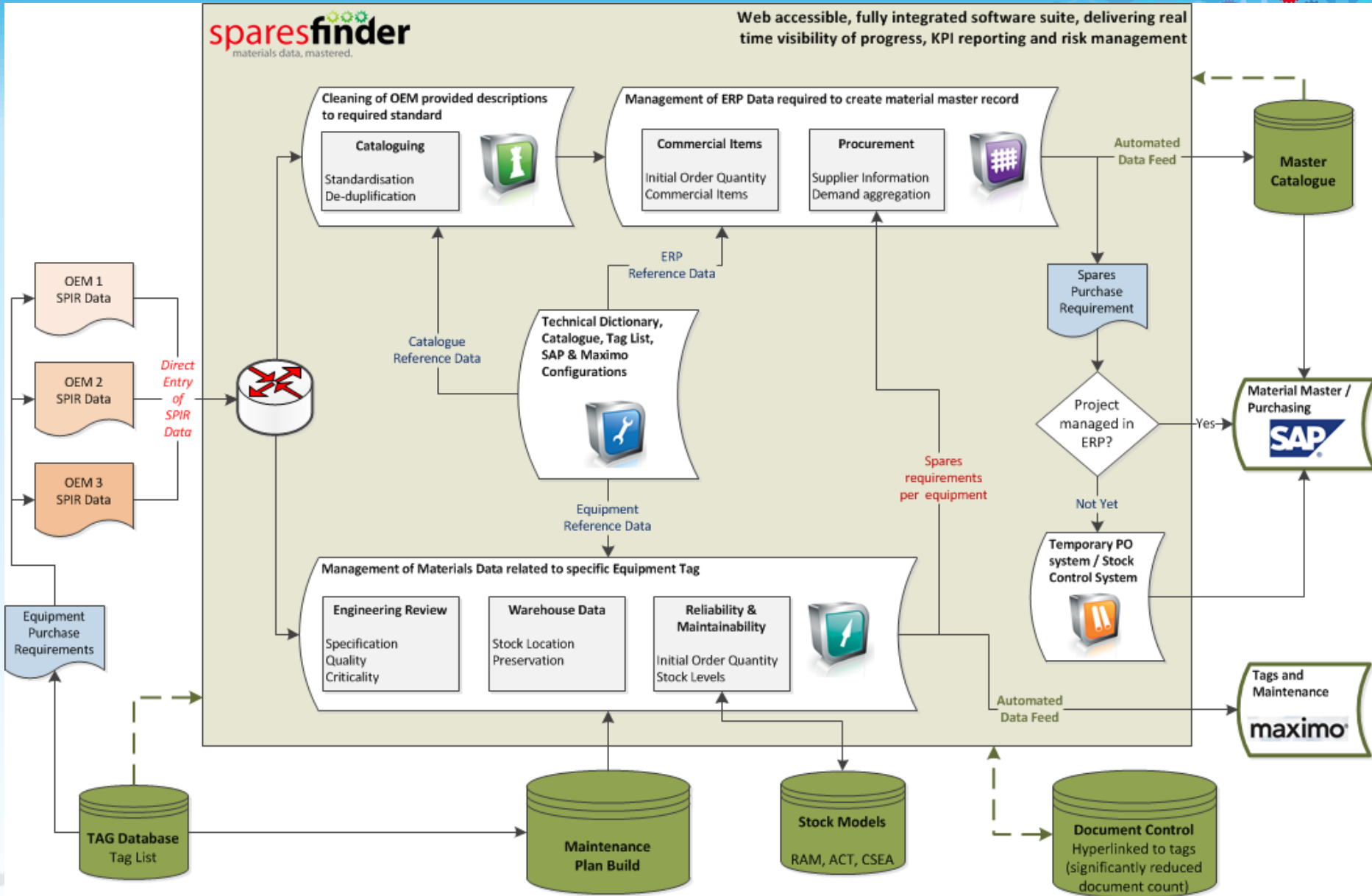
Type:

Time Required:

Task Description:

Select	Type	Task Description	Time Required	UOM
➔	Electrical Technician	Inspect all connections for wea	2	Hour(s)
➔	Electrical Technician	Earth Testing	4	Hour(s)
➔	Electrical Technician	Wiring Loom Inspection	1	Hour(s)
➔	Electrical Technician		0	

An fully integrated process



Key value to customers

- ⚙️ Visibility & Control over complex processes, *leading to...*
- ⚙️ Risk reduction *and...*
- ⚙️ Higher quality data, *enabling...*

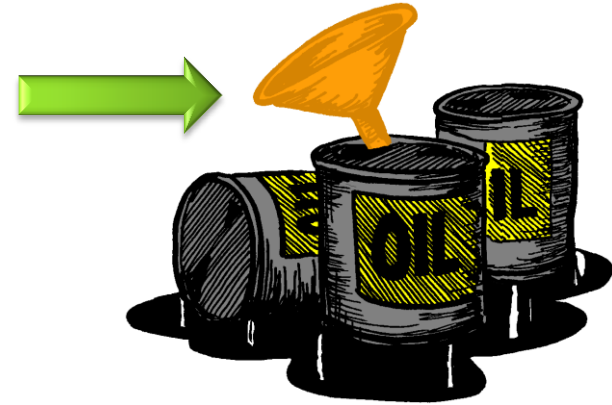
- ⚙️ People to make sound, intelligence based decisions!

- ⚙️ Why sparesFinder?
 - ⚙️ Fast – immediately available hosted software, to deliver business value and relieve pressure on the IT department
 - ⚙️ Focussed – 14 years of managing spares data projects and a mature, proven reference dictionary

Control the process..



.. and get the performance!



Fitting the Gartner curve

