



DEFENSE STANDARDIZATION PROGRAM



WEAPON SYSTEM IMPACT TOOL

Standardization and the Coherent View

In September of 2001, the Defense Standardization Program Office (DSPO) indicated that "In today's Standardization business process, a difficult manual search is required to determine the effect of standardization documents on major weapon systems (i.e., to determine which standardization documents apply to which weapon systems and their components)." At that time, there was no easy-to-use, automated system to provide this correlation between standardization documents and weapon systems that key players in the standardization community and program offices require. The DSPO further emphasized that the maintenance and support of fielded weapon systems requires regular and sustained interaction between original equipment manufacturers (OEMs), DoD program management offices, engineering support activities (ESAs), logistical inventory control points (ICPs), and standardization offices. A significant number of these interactions coalesce around various types of requirements documents (i.e., OEM and subcontractor unique specifications, drawings, part numbers, and DSP specifications). DSP specifications comprise a significant portion of all specifications used to describe weapon system repair parts.

Supplier Data	Procurement History Information
Unstructured NSN Data	Structured NSN Data

Fig. 1 Coherent View® Data Sources

In 2003, the DSPO developed the Weapon System Impact Tool (WSIT). WSIT is driven by the Coherent View database. Coherent View data is extracted from structured and unstructured data in different Government legacy systems. The extraction of product attributes is guided by a knowledge base that enables the system to make common sense inferences about part attributes. DOD users can access the WSIT directly from the ASSIST database. Other users need special permission from the Defense Standardization Program Office (see below).

The Coherent View includes specification and platform information as well as technical attributes about parts and suppliers. This data is used in sustainment

engineering and alternate sourcing efforts at the Defense Supply Center Richmond to answer questions such as:

- "If we change a specification, how many NSN's on what Weapon Systems will be impacted?"
- "What parts on an F-15 are made of titanium? How many of these are manufactured from castings?"
- "What parts require the use of a specific Boeing manufacturing specification? When is that specification mentioned in FLIS, in CTDF, and in JEDMICs?"
- "What commercial parts from a given manufacturer map to NSNs?"

For additional information on WSIT please contact Mr. Ronald Zabielski at the Defense Standardization Program Office. (703) 767-6877 e-mail ronald.zabielski@dla.mil

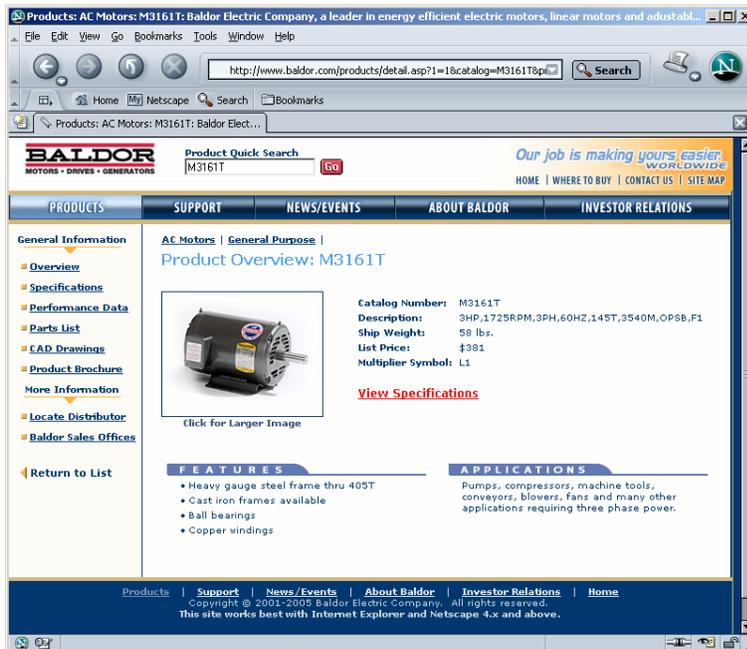


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Enhancement of Part Information from Commercial Sources

Item interchangeability and substitutability decisions depend on having good information on item characteristics. Often, Federal data sources lack sufficient information to support these decisions. Take for example NSN 6105011958225. From the information in the Federal Logistics Information System (FLIS) we find that this NSN has unapproved item name "MOTOR" and is not fully described in technical characteristics. In fact, no characteristics are available for the item. The FLIS sourcing information indicates that this item is supplied by CAGE 05472, Baldor Electric Co., and the Baldor part number is M3161T. Figure 1 shows the following information available at Baldor's Website.



Coherent View information for this item is limited by the lack of legacy data in the Federal system. The only information added to the above FLIS data is that QAP 001 applies to this part. This comes from the Contractor Technical Data File (CTDF) option-e record for this NSN. However, Coherent View technology can be applied to the information available from the Baldor Website and structure the properties of this motor based on Material Requirement Code (MRC) values for the approved item name, "MOTOR, ALTERNATING CURRENT". Results of this structuring are shown in Figure 2.

Figure 1 - Baldor Electric Co. Website

Property	MRC	Value
Bearing Type	BYDT	ANNULAR BALL
Current Rating in Amps	CWGL	8.7
Current Type	ACDC	AC
Enclosure Type	ANPZ	OPEN
Frequency in Hertz	FREQ	60
Phase	FAAZ	THREE
Power Rating	CNXS	3 Horsepower
Rotor Speed Rating in RPM	CWFX	1725
Temp Rating	CWDY	105 degrees Celsius
Voltage Rating in Volts	AKRE	208 Volts, 230 Volts, 460 Volts
NEMA Frame Size	*	145T
Service Factor	*	1.15

* commercial property not specified by MRC

Figure 2 – Extracted MRC Properties from Baldor Website

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