Career Bands, Career Levels, Functions and Disciplines

General Overview

This section provides job matching documentation used for this survey report.

- Career Band Summary Description for the Technical Support Career Band (T), and the Production/Manual Labor Career Band (W) Career Bands

  The Global Grade(s) aligned with each level also are noted. Global Grade differentiators are shaded since North America survey participants only match to Career Levels.

- Function and Discipline Listing

- Function and Discipline Definitions

NOTE: The job matching methodology presented here is for survey purposes only and is not a job evaluation process. Although this survey methodology is related to the Towers Watson Career Map and Global Grading methodologies, it may not align directly with specific client implementation of one of these leveling methodologies. Therefore it is critical to align your internal levels to the survey levels based on a careful review of the survey definitions to ensure proper job matching.

Career Map and the Global Grading System, when formally implemented, enable the alignment of reward and talent management programs across businesses. When used as internal leveling tools, these methodologies take into account the specific organizational context of a job and the detailed set of associated accountabilities and demands. The outcomes of these processes are highly organization-specific, while survey job descriptions and levels are by their nature generic. Therefore, organizations that use Career Map or the Global Grading System as their internal leveling tool are still required to match their jobs to this survey using the job matching process outlined in this Participant Guide.

An organization's internal Global Grade or Career Level may act as a starting point, but as the Career Levels and Global Grades contained in these surveys represent a typical or generic organization, there may be differences between the internal value a specific organization places on a job and where the job should be mapped for purposes of external comparison.
Career Band Summary Descriptions

Summary descriptions of the Career Bands contained in this Survey Report follow.

**Technical Support Career Band (T)**
- Performs specialized technical tasks required to support operations (e.g., IT development, research support, skilled trade)
- Requires vocational training or the equivalent experience, but typically does not require a university degree

**Production/Manual Labor Career Band (W)**
- Performs operational or manual tasks, primarily in manufacturing, supply chain or operational environments
- Typically performs unskilled or semi-skilled work
- Typically does not require training or experience
# Career Level General Profiles

## Technical Support Career Band (T)

### T4 Lead (aligns with Global Grades 9 and 10)
- Has advanced and specialized expertise, typically developed through a combination of job-related training and considerable on-the-job experience
- Completes assignments and facilitates the work activities of others; may coordinate work beyond own area
- Proposes improvements to processes
- Acts as a lead, coordinating the work of others but is not a supervisor
- Works autonomously within established procedures and practices

<table>
<thead>
<tr>
<th>Global Grade 10 Differentiators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leads one or more teams in the performance of a variety of tasks that are often complex</td>
</tr>
<tr>
<td>Spends a majority of working time performing the same work processes and activities as employees on team</td>
</tr>
<tr>
<td>Analyzes complex technical problems and delivers solutions where precedent may not exist</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Global Grade 9 Differentiators</th>
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</thead>
<tbody>
<tr>
<td>Leads a team in the performance of a variety of tasks that are often routine</td>
</tr>
<tr>
<td>Spends most of working time performing the same work activities as employees on team</td>
</tr>
<tr>
<td>Solves problems of a recurring nature</td>
</tr>
</tbody>
</table>

### T3 Senior (aligns with Global Grades 7 and 8)
- Has developed proficiency in a range of processes or procedures through job-related training and considerable on-the-job experience
- Completes a variety of atypical assignments
- Works within defined processes and procedures or methodologies and may help determine the appropriate approach for new assignments
- Works with a limited degree of supervision
- Acts as an informal resource for colleagues with less experience

<table>
<thead>
<tr>
<th>Global Grade 8 Differentiators</th>
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</thead>
<tbody>
<tr>
<td>Performs highly complex and varied tasks</td>
</tr>
<tr>
<td>Typically has specialized external certification</td>
</tr>
<tr>
<td>Guides and supports junior team members; may assist in their formal orientation and training</td>
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</tbody>
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<thead>
<tr>
<th>Global Grade 7 Differentiators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performs moderately complex and varied tasks</td>
</tr>
<tr>
<td>May have specialized external certification</td>
</tr>
<tr>
<td>Guides junior team members</td>
</tr>
</tbody>
</table>

### T2 Intermediate (aligns with Global Grade 6)
- Expands skills in own work area within an analytical/scientific method or operational process
- Applies experience and skills to complete assigned work within own area of expertise
- Works within standard operating procedures and/or scientific methods
- Works with a moderate degree of supervision

### T1 Entry (aligns with Global Grade 5)
- Has basic skills in an analytical or scientific method or operational process
- Works within clearly defined standard operating procedures and/or scientific methods and adheres to quality guidelines
- Works with close supervision

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Towers Watson Data Services
**Career Bands, Career Levels, Functions and Disciplines**

**Career Level General Profiles (continued)**

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**Production/Manual Labor Career Band (W)**

### W4 Lead (aligns with Global Grade 7)
- Has developed expertise, typically through a combination of job-related training and considerable on-the-job experience
- Typically acts as a lead, coordinating the work of others, but is not a supervisor
- Works autonomously within established procedures and practices
- Has developed a specialized level of skill to perform assigned tasks

### W3 Senior (aligns with Global Grade 6)
- Has developed proficiency through job-related training and considerable on-the-job experience
- Completes work with a limited degree of supervision
- Likely to act as an informal resource for colleagues with less experience

### W2 Intermediate (aligns with Global Grades 4 and 5)
- Has developed skills through formal training or considerable work experience
- Works within established procedures with a moderate degree of supervision

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#### Global Grade 5 Differentiators
- Performs the full range of established procedures, and will typically be considered skilled through on-the-job experience
- Resolves routine issues without supervisory approval

#### Global Grade 4 Differentiators
- Performs most established procedures and will typically be considered semi-skilled through on-the-job experience
- Resolves routine issues with senior staff or supervisory guidance and approval

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#### Global Grade 3 Differentiators
- Has limited prior relevant training or work experience
- Contributes directly to specific unskilled tasks or processes
- Has limited discretion to vary from established procedures

#### Global Grade 2 Differentiators
- Has no prior relevant training or work experience
- Contributes indirectly to specific unskilled tasks or processes
- Has no discretion to vary from established procedures

### W1 Entry (aligns with Global Grades 2 and 3)
- Entry-level job with little or no prior relevant experience
- Work is prescribed and completed with close supervision and little autonomy
- Duties are clearly defined and methods and tasks are described in detail

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**Towers Watson Data Services**
## Functions and Disciplines Listing

### AAS  Administrative Services
- **AAS000**  Administrative Services Generalist/Multidiscipline
- **AAS072**  Food and Beverage Service
- **AAS074**  Food Preparation
- **AAS085**  Data Control
- **AAS086**  Data Entry
- **AAS999**  Administrative Services - No Applicable Discipline

### AAT  Transportation Services and Administration
- **AAT000**  Transportation Services and Administration Generalist/Multidiscipline
- **AAT015**  Vehicle Maintenance
- **AAT999**  Transportation Services and Administration - No Applicable Discipline

### AHS  Environmental Health and Safety
- **AHS000**  Environmental Health and Safety Generalist/Multidiscipline
- **AHS010**  Environmental Science
- **AHS030**  Health and Safety
- **AHS040**  Industrial Hygiene
- **AHS050**  Safety
- **AHS070**  Workers Compensation Case Management
- **AHS090**  Medical Services - Nursing
- **AHS999**  Environmental Health and Safety - No Applicable Discipline

### AID  IT Development
- **AID000**  IT Development Generalist/Multidiscipline
- **AID010**  Application Development
- **AID015**  Internet/Web Application Development
- **AID020**  Business Systems Analysis
- **AID050**  Software Quality Assurance and Testing
- **AID090**  Network Planning and Implementation
- **AID100**  Enterprise Resource Planning (ERP)
- **AID999**  IT Development - No Applicable Discipline

### AIT  IT Administration
- **AIT000**  IT Administration Generalist/Multidiscipline
- **AIT010**  Computer Systems Administration
- **AIT015**  Website Administration
- **AIT020**  IT Help Desk Support
- **AIT025**  IT Onsite Support
- **AIT030**  Database Administration
- **AIT040**  Network Control/Administration
- **AIT060**  IS Disaster Recovery/Business Continuation
- **AIT070**  IS Security
- **AIT080**  IT Training/Documentation
- **AIT999**  IT Administration - No Applicable Discipline
Career Bands, Career Levels, Functions and Disciplines

Functions and Disciplines Listing (continued)

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<thead>
<tr>
<th>AMT</th>
<th>Technical Customer Support</th>
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<tbody>
<tr>
<td>AMT000</td>
<td>Technical Customer Support Generalist/Multidiscipline</td>
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<tr>
<td>AMT010</td>
<td>Technical Customer Support - Remote/Help Desk</td>
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<tr>
<td>AMT020</td>
<td>Technical Customer Support - Customer Site</td>
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<tr>
<td>AMT999</td>
<td>Technical Customer Support - No Applicable Discipline</td>
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<tr>
<th>AOM</th>
<th>Manufacturing/Operations</th>
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<tr>
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<td>Manufacturing/Operations Generalist/Multidiscipline</td>
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<tr>
<td>AOM010</td>
<td>Production Planning and Control</td>
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<tr>
<td>AOM015</td>
<td>Production/Process Equipment Operations</td>
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<tr>
<td>AOM020</td>
<td>Production Assembly</td>
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<tr>
<td>AOM999</td>
<td>Manufacturing/Operations - No Applicable Discipline</td>
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<th>ARR</th>
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<tbody>
<tr>
<td>ARR000</td>
<td>Product Development Support Generalist/Multidiscipline</td>
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<tr>
<td>ARR010</td>
<td>Product Development Support - Physical Science</td>
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<tr>
<td>ARR020</td>
<td>Product Development Support - Health Science</td>
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<tr>
<td>ARR030</td>
<td>Product Development Support - Life Science</td>
</tr>
<tr>
<td>ARR040</td>
<td>Product Development Support - Mathematics, Statistics and Computer Science</td>
</tr>
<tr>
<td>ARR060</td>
<td>Product Development Technical Writing</td>
</tr>
<tr>
<td>ARR070</td>
<td>Product Development Library/Knowledge Management</td>
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<tr>
<td>ARR999</td>
<td>Product Development Support - No Applicable Discipline</td>
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<tr>
<th>ASC</th>
<th>Supply Chain and Logistics</th>
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<tbody>
<tr>
<td>ASC000</td>
<td>Supply Chain and Logistics Generalist/Multidiscipline</td>
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<tr>
<td>ASC022</td>
<td>Forklift Operations</td>
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<td>ASC040</td>
<td>Warehousing</td>
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<td>ASC045</td>
<td>Fulfillment</td>
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<tr>
<td>ASC050</td>
<td>Transportation</td>
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<tr>
<td>ASC052</td>
<td>Transportation - Delivery Vehicle Operations Generalist/Multidiscipline</td>
</tr>
<tr>
<td>ASC053</td>
<td>Transportation - Light Delivery Vehicle Operations</td>
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<tr>
<td>ASC054</td>
<td>Transportation - Heavy Delivery Vehicle Operations</td>
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<tr>
<td>ASC055</td>
<td>Transportation - Tractor Trailer Delivery Vehicle Operations</td>
</tr>
<tr>
<td>ASC999</td>
<td>Supply Chain and Logistics - No Applicable Discipline</td>
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<table>
<thead>
<tr>
<th>AZT</th>
<th>Technical Specialty/Skilled Trade</th>
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<tbody>
<tr>
<td>AZT000</td>
<td>Technical Specialty/Skilled Trade Generalist/Multidiscipline</td>
</tr>
<tr>
<td>AZT010</td>
<td>Equipment Maintenance Technical Specialty</td>
</tr>
<tr>
<td>AZT015</td>
<td>Civil Engineering Technical Specialty</td>
</tr>
<tr>
<td>AZT020</td>
<td>Calibration Technical Specialty</td>
</tr>
<tr>
<td>AZT030</td>
<td>Product Test/Debug Technical Specialty</td>
</tr>
<tr>
<td>AZT040</td>
<td>Facilities Technical Specialty</td>
</tr>
<tr>
<td>AZT050</td>
<td>Process Technical Specialty</td>
</tr>
<tr>
<td>AZT060</td>
<td>Quality Control/Inspection Technical Specialty</td>
</tr>
<tr>
<td>AZT070</td>
<td>Test Equipment Technical Specialty</td>
</tr>
<tr>
<td>AZT080</td>
<td>CAD/CAE Drafting Technical Specialty</td>
</tr>
<tr>
<td>AZT085</td>
<td>Design and Drafting</td>
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</tbody>
</table>

Towers Watson Data Services
### Functions and Disciplines Listing (continued)

<table>
<thead>
<tr>
<th>AZT</th>
<th>Technical Specialty/Skilled Trade (continued)</th>
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<tbody>
<tr>
<td>AZT090</td>
<td>Production/Operations Laboratory Technical Specialty</td>
</tr>
<tr>
<td>AZT100</td>
<td>Biology Technical Specialty</td>
</tr>
<tr>
<td>AZT110</td>
<td>Chemistry Technical Specialty</td>
</tr>
<tr>
<td>AZT120</td>
<td>Stationary Engineering Technical Specialty</td>
</tr>
<tr>
<td>AZT130</td>
<td>Technical Documentation Control</td>
</tr>
<tr>
<td>AZT140</td>
<td>Skilled Trade Generalist/Multidiscipline</td>
</tr>
<tr>
<td>AZT150</td>
<td>Electrical Skilled Trade</td>
</tr>
<tr>
<td>AZT160</td>
<td>Welding Skilled Trade</td>
</tr>
<tr>
<td>AZT170</td>
<td>Mechanical Skilled Trade</td>
</tr>
<tr>
<td>AZT180</td>
<td>Machinery/Millwright Skilled Trade</td>
</tr>
<tr>
<td>AZT190</td>
<td>Finishing/Coating/Painting</td>
</tr>
<tr>
<td>AZT191</td>
<td>Carpentry</td>
</tr>
<tr>
<td>AZT192</td>
<td>Masonry</td>
</tr>
<tr>
<td>AZT999</td>
<td>Technical Specialty/Skilled Trade - No Applicable Discipline</td>
</tr>
</tbody>
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<thead>
<tr>
<th>AZU</th>
<th>Manual/Unskilled Labor</th>
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<tbody>
<tr>
<td>AZU000</td>
<td>Manual/Unskilled Labor Generalist/Multidiscipline</td>
</tr>
<tr>
<td>AZU010</td>
<td>Maintenance</td>
</tr>
<tr>
<td>AZU999</td>
<td>Manual/Unskilled Labor - No Applicable Discipline</td>
</tr>
</tbody>
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<tr>
<th>CUT</th>
<th>Technical Sales Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUT000</td>
<td>Technical Sales Support Generalist/Multidiscipline</td>
</tr>
<tr>
<td>CUT010</td>
<td>Presales Technical Support/Systems Engineering</td>
</tr>
<tr>
<td>CUT040</td>
<td>Technical/Product Training</td>
</tr>
<tr>
<td>CUT999</td>
<td>Technical Sales Support - No Applicable Discipline</td>
</tr>
</tbody>
</table>
# Career Bands, Career Levels, Functions and Disciplines

## Functions and Disciplines Definitions

<table>
<thead>
<tr>
<th>Function</th>
<th>Code</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Administrative Services</strong></td>
<td><strong>AAS</strong></td>
<td>Provides various office and location support activities. Identifies, enhances and follows specific processes and procedures to maximize the efficiencies of the business to which the support is being provided; ensures the correct functioning of facilities, office and/or business support services.</td>
</tr>
</tbody>
</table>

### Applicable Career Bands
- M (Supervisory/Management)
- P (Professional)
- T (Technical Support)
- U (Business Support)

### Discipline

<table>
<thead>
<tr>
<th>Discipline Code</th>
<th>Discipline Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAS000</td>
<td><strong>Administrative Services Generalist/Multidiscipline</strong></td>
<td>Supports general business operations by providing various administrative support activities as a generalist or in a combination of Disciplines in the Administrative Services Function</td>
</tr>
<tr>
<td>AAS072</td>
<td><strong>Food and Beverage Service</strong></td>
<td>Performs routine duties related to serving food and beverages as well as clearing dishes and cleaning. May operate dishwasher or assist with washing dishes, glassware, silverware, utensils, pots, pans, etc.</td>
</tr>
<tr>
<td>AAS074</td>
<td><strong>Food Preparation</strong></td>
<td>Reviews menus and work or customer orders to determine type and quantities of food to be prepared. Prepares, seasons and cooks food. Carves portions of meat, fish or fowl for individual servings. May plan menus and estimate required food quantities, labor and overhead costs. May coordinate food storage and maintenance of kitchen and storage facilities.</td>
</tr>
<tr>
<td>AAS085</td>
<td><strong>Data Control</strong></td>
<td>Reviews source documents for data input. Checks accuracy and relevance of input and output data by visual examination, correcting codes and batching for computer processing. Verifies output against control totals, reviews format and accuracy of printouts, and distributes information to appropriate departments.</td>
</tr>
<tr>
<td>AAS086</td>
<td><strong>Data Entry</strong></td>
<td>Operates a data entry device to key and/or verify a variety of standard and/or complex coded or uncoded business and statistical source data into a computer.</td>
</tr>
<tr>
<td>AAS999</td>
<td><strong>Administrative Services - No Applicable Discipline</strong></td>
<td>Responsibilities are within the Administrative Services Function but are not described in other Discipline summaries.</td>
</tr>
</tbody>
</table>

Towers Watson Data Services
Career Bands, Career Levels, Functions and Disciplines

Functions and Disciplines Definitions (continued)

<table>
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<tr>
<th>Function</th>
<th>Code</th>
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<tbody>
<tr>
<td><strong>Transportation Services and Administration</strong></td>
<td>AAT</td>
</tr>
</tbody>
</table>

Provides and administers passenger transportation and vehicle services, such as vehicle fleet management, chauffeur services, aircraft management and operations.

**Applicable Career Bands**

- M (Supervisory/Management)
- T (Technical Support)
- U (Business Support)

**Discipline**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAT000</td>
<td>Transportation Services and Administration Generalist/Multidiscipline</td>
<td>Supports general business operations by providing various transportation and related support activities as a generalist or in a combination of Disciplines in the Transportation Services and Administration Function</td>
</tr>
<tr>
<td>AAT015</td>
<td>Vehicle Maintenance</td>
<td>Performs preventive maintenance on automobiles and light trucks through vehicle washing and cleaning, oil changes, greasing, and inspection of hoses, belts, fluids and wiring. Performs automobile and light truck repairs by disassembling and overhauling engines, transmissions, clutches, rear ends and other assemblies. Replaces worn or broken parts, aligns wheels, adjusts brakes, tightens bearings, tunes engines, and performs minor body work. Performs all work in accordance with established safety procedures and holds appropriate certification as may be required by law. Estimates time and material costs on vehicle repairs, and requisitions new parts and equipment.</td>
</tr>
<tr>
<td>AAT999</td>
<td>Transportation Services and Administration - No Applicable Discipline</td>
<td>Responsibilities are within the Transportation Services and Administration Function but are not described in other Discipline summaries</td>
</tr>
</tbody>
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Functions and Disciplines Definitions (continued)

<table>
<thead>
<tr>
<th>Function</th>
<th>Code</th>
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<tbody>
<tr>
<td><strong>Environmental Health and Safety</strong></td>
<td>AHS</td>
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</tbody>
</table>

Designs, develops, implements and oversees the organization's environmental health and safety programs and procedures to safeguard employees and surrounding communities and to ensure that all facilities are in compliance with regulations.

**Applicable Career Bands**

- M (Supervisory/Management)
- P (Professional)
- T (Technical Support)

**Discipline**

**AHS000 Environmental Health and Safety Generalist/Multidiscipline**
- Designs, develops, implements and oversees the organization's environmental, health and safety programs and procedures to safeguard employees and surrounding communities and to ensure that all facilities are in compliance with regulations
- Responsibilities are within the Environmental Health and Safety Function as a generalist or in a combination of Disciplines

**AHS010 Environmental Science**
- Develops and implements programs to ensure that environment regulatory obligations are fulfilled in a cost-effective manner, and that environmental risks are effectively managed
- Analyzes and maintains detailed records of pollutant concentrations in air, water, plant and soil samples
- Assists field locations in pollution prevention and waste minimization programs through periodic monitoring and technical guidance
- Conducts research on the degradation of pollutants in the environment, including streams, sediments and groundwater
- Maintains detailed records and prepares related reports and studies for submission to regulatory agencies

**AHS030 Health and Safety**
- Conducts studies and investigations to ensure compliance with government safety and health laws, standards and regulations, and industrial hygiene
- Investigates accidents and promotes safety-conscious work performance and training programs
- Provides safety performance measures
- Determines root cause analyses

**AHS040 Industrial Hygiene**
- Inspects facilities and premises and prescribes corrective measures to reduce the risks of disease and other job-related ailments
- Investigates and prepares reports on job-related injuries and fatalities, and determines measures to avoid any recurrence
- Audits facilities to ensure compliance with environmental regulations and promotes maintenance of a clean and sanitary working environment
- Conducts employee training in environmental compliance and the handling of hazardous materials
- Provides direction on how to contain spills and clean spill sites to avoid civil or criminal penalties

**AHS050 Safety**
- Conducts safety audits of buildings, facilities, tools and equipment
- Determines safety training requirements and provides employees with safety training applicable to their work processes
- Investigates accidents to determine the root cause, circumstances, and contributing factors
- Develops recommendations and follow-up to prevent accident recurrence
- Maintains comprehensive knowledge of government safety regulations
Functions and Disciplines Definitions (continued)

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<th>Function</th>
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<tbody>
<tr>
<td>Environmental Health and Safety (continued)</td>
<td>AHS</td>
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</tbody>
</table>

**Discipline**

**AHS070 Workers Compensation Case Management**
- Directs and coordinates appropriate, timely and cost-effective delivery of health care related to disability, urgent and emergency care, work limitations, transitional return to work plans, accommodations and part-time work for workers compensation and nonworkers compensation illness and injury
- Determines service needs, selects and evaluates the services of appropriate network providers, and makes recommendations for retention or removal from the network
- Identifies and coordinates the process of cases requiring physician-level review and implements recommendations
- Identifies cases involving high-frequency and high-risk injuries/illnesses and performs ongoing evaluation and treatment plans
- Determines essential job functions and identifies and implements necessary limitations, accommodations and part-time work for high-frequency/high-risk cases to reduce the length of disability

**AHS090 Medical Services - Nursing**
- Provides professional nursing care for the comfort and well-being of employees, and assists physicians during examinations and treatments
- Administers prescribed medications and changes dressings
- Prepares and maintains patient clinical records
- Develops preventive health care programs
- May maintain established inventory levels for medicines, supplies and equipment

**AHS999 Environmental Health and Safety - No Applicable Discipline**
- Responsibilities are within the Environmental Health and Safety Function but are not described in other Discipline summaries
Functions and Disciplines Definitions (continued)

Function          | Code | Description
IT Development    | AID  |

Designs, develops, modifies, adapts and implements short- and long-term solutions to information technology (IT) needs through new and existing applications, systems architecture, network systems and applications infrastructure. Reviews system requirements and business processes; codes, tests, debugs and implements software solutions.

Applicable Career Bands
M (Supervisory/Management)       P (Professional)       T (Technical Support)

Discipline

AID000 IT Development Generalist/Multidiscipline
- Designs, develops, modifies, adapts and implements short- and long-term solutions to information technology (IT) needs through new and existing applications, systems architecture, network systems and applications infrastructure
- Reviews system requirements and business processes; codes, tests, debugs and implements software solutions
- Responsibilities are within the IT Development Function as a generalist or in a combination of Disciplines

AID010 Application Development
- Provides application software development services or technical support typically in a defined project
- Develops program logic for new applications or analyzes and modifies logic in existing applications
- Codes, tests, debugs, documents, implements and maintains software applications
- Analyzes requirements, and maintains, tests and integrates application components
- Ensures that system improvements are successfully implemented

AID015 Internet/Web Application Development
- Designs and develops primarily Internet/web pages and applications such as e-commerce and content-driven websites
- Codes, tests, debugs, documents and implements web applications using a variety of languages and platforms such as HTML, Java, PHP, JSP, Python, AJAX, JavaScript, ASP, CGI, Perl, XML
- Develops proof-of-concepts and prototypes of easy to navigate user interfaces (UI) that consist of web pages with graphics, icons and color schemes that are visually appealing
- Ensures that applications are compatible across multiple computing platforms and browsers
- May require familiarity with streaming media concepts and techniques, including digital video and audio compression standards such as MP3, WAV and MPEG

AID020 Business Systems Analysis
- Acts as a liaison between the IT development group and business units for the development and implementation of new systems and enhancement of existing systems
- Evaluates new applications and identifies systems requirements
- Evaluates new IT developments and evolving business requirements, and recommends appropriate systems alternatives and/or enhancements to current systems
- Prepares communications and makes presentations on system enhancements and/or alternatives

AID050 Software Quality Assurance and Testing
- Conducts a wide range of quality control tests and analyses to ensure that software meets or exceeds specified standards and end-user requirements
- Drafts, revises and approves test plans and scripts to ensure alignment with standards and IT strategy
- Creates test data files with valid and invalid records to thoroughly test program logic and verify system flow
- Coordinates with users to plan user acceptance testing, alpha and beta testing
- Ensures that system tests are successfully completed and documented and all problems are resolved

Towers Watson Data Services
## Functions and Disciplines Definitions (continued)

<table>
<thead>
<tr>
<th>Function</th>
<th>Code</th>
<th>Discipline</th>
<th>Description</th>
</tr>
</thead>
</table>
| IT Development (continued)      |      | Network Planning and Implementation             | - Researches networking requirements; prepares detailed architectural and installation plans  
                                   |      |                                                 | - Conducts internal studies of network performance and traffic analysis  
                                   |      |                                                 | - Researches problems, conducts cable and equipment installations, and evaluates new technologies  |
| AID090                          | AID  | Enterprise Resource Planning (ERP)              | - Configures, implements, maintains and upgrades Enterprise Resource Planning (ERP) application modules (e.g., Human Resources, Finance, Supply Chain Management)  
                                   |      |                                                 | - Analyzes user requirements to determine ERP system configuration and customization  
                                   |      |                                                 | - Provides ongoing ERP system support  
                                   |      |                                                 | - May participate in defining requirements and selecting software vendors  |
| AID999                          |      | IT Development - No Applicable Discipline        | - Responsibilities are within the IT Development Function but are not described in other Discipline summaries  |
### Career Bands, Career Levels, Functions and Disciplines

#### Functions and Disciplines Definitions (continued)

<table>
<thead>
<tr>
<th>Function</th>
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<tbody>
<tr>
<td>IT Administration</td>
<td>AIT</td>
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</table>

Manages the Information Technology (IT) infrastructure within an organization, including the physical network (e.g., WAN/LAN, servers, terminals) as well as server applications and software (e.g., PeopleSoft, Oracle). Configures, installs, maintains and upgrades server applications and hardware.

**Applicable Career Bands**

- M (Supervisory/Management)
- P (Professional)
- T (Technical Support)

**Discipline**

**AIT000**

**IT Administration Generalist/Multidiscipline**

- Manages the IT infrastructure within an organization, including the physical network (e.g., WAN/LAN, servers, terminals) as well as server applications and software (e.g., PeopleSoft, Oracle)
- Responsibilities are within the IT Administration Function as a generalist or in a combination of Disciplines

**AIT010**

**Computer Systems Administration**

- Configures, installs, maintains and upgrades computer systems hardware and software
- Administers and maintains security of operating systems
- Restores files or systems by designing, writing and implementing backup procedures
- Provides operational support for the organization's information systems and peripheral equipment, such as application servers, database servers, web servers, desktops, printers and storage devices
- Performs recovery procedures, scheduling and backups, and monitors batch processes

**AIT015**

**Website Administration**

- Plans and manages web systems hardware and operating system server software, including web server setup and implementation
- Maintains and monitors website functionality (e.g., links, calculators, news feeds) and website security
- Conducts performance monitoring, capacity planning, workload modeling, and predictive analyses to identify and resolve potential issues (e.g., performance, security breaches)
- Collaborates with internal and/or external resources (i.e., content owners, editors, web developers) to maintain current information and tools on the organization's website(s)
- Troubleshoots network problems and security issues

**AIT020**

**IT Help Desk Support**

- Provides technical support to the organization's internal users of computer applications and hardware (e.g., PCs, servers, mainframes)
- Answers questions regarding system procedures, online transactions, systems status and downtime procedures, and is typically located within a call center
- Collaborates with network services, software systems engineering and/or application development in order to restore service and/or identify problems
- Maintains a troubleshooting tracking log ensuring timely resolution of problems

**AIT025**

**IT Onsite Support**

- Provides onsite technical support to the organization's internal users of computer applications and hardware (e.g., PCs, servers, mainframes)
- Collaborates with network services, software systems engineering and/or application development in order to restore service and/or identify problems
- Typically resolves issues referred by help desk support
Functions and Disciplines Definitions (continued)

<table>
<thead>
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<th>Function</th>
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<tbody>
<tr>
<td>IT Administration (continued)</td>
<td>AIT</td>
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</tbody>
</table>

### AIT030 Database Administration
- Manages database utilities, monitors the relationships between the database users and applications, and maintains the organization's databases across multiple platforms and computing environments
- Applies understanding of relational database concepts and query languages in order to design required summary or aggregation tables to support analyses
- Collaborates with technology/infrastructure staff to identify data relationships and functional requirements; analyzes and resolves issues related to information flow and content
- Maintains database support tools, database tables and dictionaries, recovery and backup procedures
- Performs data modeling studies and develops detailed data models; maintains data model and entity relationship diagrams

### AIT040 Network Control/Administration
- Provides technical expertise in the management of a public and/or private network; tests and analyzes network facilities, including network control software, routers, switches, lines, modems, adapters and servers
- Installs, supports and/or maintains local (LAN) and/or wide area networks (WAN); evaluates and recommends networking product and software upgrades
- Performs technical analyses of software, hardware and transmission facilities using various diagnostic tools in support of efficient network operations
- Monitors data traffic and controls network resource performance to ensure high-quality transmission
- Identifies, diagnoses and resolves technical problems related to network failure/integrity and usage of PC hardware and software

### AIT060 IS Disaster Recovery/Business Continuation
- Develops and tests plans to ensure the continuity of critical business functions and minimize information loss in the event of a disaster (e.g., fire, flood, hurricane, earthquake)
- Sets up hot sites so that backup systems can be brought up and running quickly
- Institutes loss-reduction mechanisms to lessen exposure to disaster risks, such as sprinkler systems, insurance policies and evacuation procedures
- In the event of disaster, assesses damage to computer hardware, vital records, etc., to determine what should be salvaged, restored or replaced

### AIT070 IS Security
- Evaluates, tests, recommends, develops, coordinates, monitors, and maintains information security policies, procedures and systems, including hardware, firmware and software
- Ensures that IS security architecture/designs, plans, controls, processes, standards, policies and procedures are aligned with IS standards and overall IS security
- Identifies security risks and exposures, determines the causes of security violations and suggests procedures to halt future incidents
- Investigates and resolves security incidents and recommends enhancements to improve security
- Develops techniques and procedures for conducting IS security risk assessments and compliance audits, the evaluation and testing of hardware, firmware and software for possible impact on system security, and the investigation and resolution of security incidents
### Functions and Disciplines Definitions (continued)

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<th>Description</th>
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<tbody>
<tr>
<td>IT Administration</td>
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<td>AIT</td>
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<tr>
<td>AIT080</td>
<td></td>
<td>IT Training/Documentation</td>
<td>• Develops, coordinates and conducts IT training, educational and orientation programs for users</td>
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<tr>
<td></td>
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<td></td>
<td>• Develops and maintains documentation of information technology systems and applications and</td>
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<td>coordinates incorporation of documentation within applications (e.g., online help)</td>
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<td></td>
<td></td>
<td></td>
<td>• Develops, implements and/or approves training and documentation policies, standards and procedures</td>
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<td></td>
<td></td>
<td></td>
<td>• Maintains records and prepares documentation of training programs, scheduling, employee attendance, and training program effectiveness</td>
</tr>
<tr>
<td>AIT999</td>
<td></td>
<td>IT Administration - No Applicable Discipline</td>
<td>• Responsibilities are within the IT Administration Function but are not described in other Discipline summaries</td>
</tr>
</tbody>
</table>
Functions and Disciplines Definitions (continued)

Technical Customer Support

Provides post-sale technical support services to customers, including installation, troubleshooting, problem resolution and maintenance. Responds to customer questions regarding operation and malfunctions. Advises customers on preventative maintenance and configuration adjustments to improve product performance and customer satisfaction.

Applicable Career Bands
M (Supervisory/Management)  P (Professional)  T (Technical Support)

Discipline

AMT000 Technical Customer Support Generalist/Multidiscipline
- Provides post-sale technical support services to customers, including installation, troubleshooting, problem resolution and maintenance of products and services
- Responsibilities are within the Technical Customer Support Function as a generalist or in a combination of Disciplines

AMT010 Technical Customer Support - Remote/Help Desk
- Delivers remote (e.g., telephone, online) post-sale troubleshooting and diagnostic support services to ensure that all products and services function properly
- Resolves technical support inquiries directly or indirectly through onsite and/or remote first-level support representatives

AMT020 Technical Customer Support - Customer Site
- Delivers post-sale services at customer sites including installation, maintenance and repair of organization and third-party products and services to ensure that all function properly
- Ensures customer satisfaction by advising customers on preventative maintenance and configurations that may favorably impact performance

AMT999 Technical Customer Support - No Applicable Discipline
- Responsibilities are within the Technical Customer Support Function but are not described in other Discipline summaries
Manufacturing/Operations

Manages manufacturing and/or production operations including assembly, machinery, processing and/or packaging. Sets production schedules based on product introduction, equipment efficiency, materials supply, staffing resources, and volume required to meet demand and to ensure maximum production quantity and quality.

Applicable Career Bands

Discipline
AOM000 Manufacturing/Operations Generalist/Multidiscipline
- Manufactures sufficient quantities of quality products at or below budgeted production costs in order to meet marketplace demand
- Sets up equipment operation feed, speed and temperature
- Follows established procedures for operating various conventional and/or CNC (computerized numerical control) manufacturing equipment for tasks such as cutting, punching, forming, drilling, tapping, turning, milling, and stamping to fabricate, form or shape manufactured parts, tools or parts assemblies from raw materials
- Selects and measures raw materials and parts to specifications to prepare for production processing
- Resolves issues related to the organization’s production, machinery, processing and/or packaging operations
- Responsibilities are within Manufacturing/Operations Function as a generalist or in a combination of Disciplines

AOM010 Production Planning and Control
- Plans and prepares manufacturing production schedules and departmental workflows to establish sequence and lead time of each production operation to meet shipping dates according to sales forecasts or customer orders
- Expedites operations that delay schedules and alters schedules to meet unforeseen conditions; includes estimating
- Analyzes plant capacity and production requisition data to determine manufacturing processes and required resources; prepares production reports

AOM015 Production/Process Equipment Operations
- Sets up and operates automatic or semiautomatic machines and related equipment in a continuous production/processing operation
- Monitors meters, gauges, valves, flow ratios, temperatures, pressures, and related controls and guidelines to ensure adherence to production/processing specifications
- Reports any malfunctions or abnormalities and makes minor adjustments and repairs to equipment
- Performs all work in accordance with established safety procedures

AOM020 Production Assembly
- Assembles mechanical units, fabricated parts/components and/or electrical/electronic systems to make subassemblies, assemblies or complete units using hand tools, power tools, jigs, fixtures and miscellaneous equipment
- Fits, aligns, calibrates and adjusts parts and mechanisms to meet tolerances and product operating requirements; repairing units or products that have failed to meet requirements

AOM999 Manufacturing/Operations - No Applicable Discipline
- Responsibilities are within the Manufacturing/Operations Function but are not described in other Discipline summaries
## Functions and Disciplines Definitions (continued)

<table>
<thead>
<tr>
<th>Function</th>
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<tbody>
<tr>
<td>Product Development Support</td>
<td>ARR</td>
</tr>
</tbody>
</table>

Provides technical support to discovery and development of new product ideas or strategic product extensions. Participates in analytical, experimental, investigative and other fact-finding work in support of product development scientists and engineers. Collects and classifies new product ideas. Captures specifications for product requirements and functionality.

### Applicable Career Bands
- M (Supervisory/Management)
- P (Professional)
- T (Technical Support)

### Discipline

**ARR000**
**Product Development Support Generalist/Multidiscipline**
- Provides technical support to discovery and development of new product ideas or strategic product extensions
- Collects and classifies new product ideas or strategic product extensions to support evaluation of their potential to address customer needs and to achieve goals in revenue growth and market share
- Captures specifications for product requirements and functionality
- Supports the development of design briefs for new product ideas, including specifications, sketches and/or models to present a clear, focused concept for strategic consideration
- Responsibilities are within the Product Development Support Function as a generalist or in a combination of Disciplines

**ARR010**
**Product Development Support - Physical Science**
- Participates in analytical, experimental, investigative and other technical fact-finding work in support of scientists and/or engineers engaged in product development in the fields of chemistry, earth sciences, physics or metallurgy

**ARR020**
**Product Development Support - Health Science**
- Participates in analytical, experimental, investigative and other technical fact-finding work in support of scientists, physicians and/or engineers engaged in product development in the fields of medicine, nuclear medicine, dentistry, osteopathy or veterinary medicine

**ARR030**
**Product Development Support - Life Science**
- Participates in analytical, experimental, investigative and other technical fact-finding work in support of scientists, physicians and/or engineers engaged in product development in the fields of biology, biotechnology, physiology, pharmacology, neurosciences, microbiology, agriculture, food, genomics, bioinformatics, bacteriology or stem cell research

**ARR040**
**Product Development Support - Mathematics, Statistics and Computer Science**
- Participates in analytical, experimental, investigative and other technical fact-finding work in support of scientists and/or engineers engaged in product development in the fields of mathematics, statistics and computer science

**ARR060**
**Product Development Technical Writing**
- Develops clear written materials to support product development activities such as operations, maintenance or repair manuals, tutorials, specifications and help systems
- Interviews technical staff to collect product information and specifications
- Collects and organizes technical information and product images, and coordinates layout for publication
- Adheres to established terminology, style and editorial quality standards

**ARR070**
**Product Development Library/Knowledge Management**
- Organizes and maintains the product development research library
- Catalogs documents, papers and written materials as well as electronic materials
- Implements new or improved storage and retrieval systems
- Responds to various information requests from product development staff

**ARR999**
**Product Development Support - No Applicable Discipline**
- Responsibilities are within the Product Development Support Function but are not summarized in other Discipline summaries
Career Bands, Career Levels, Functions and Disciplines

Functions and Disciplines Definitions (continued)

<table>
<thead>
<tr>
<th>Function</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Supply Chain and Logistics</td>
<td>ASC</td>
<td>Performs supply chain and logistics functions, which may include, but are not limited to, material procurement, production planning, inventory control, outsourcing, vendor selection, and distribution. Creates integrated processes among internal functions such as operations, purchasing and logistics, and outside suppliers. Focuses resources on continuous improvement of the movement of materials through various production processes, and establishes key performance metrics and benchmarks relating to supply chain planning/forecasting to measure actual performance against goals on a regular basis. Promotes alignment by understanding and communicating customer needs and requirements throughout the organization.</td>
</tr>
</tbody>
</table>

**Applicable Career Bands**
- M (Supervisory/Management)
- P (Professional)
- T (Technical Support)
- U (Business Support)
- W (Production/Manual Labor)

**Discipline**

**ASC000**
Supply Chain and Logistics Generalist/Multidiscipline
- Performs supply chain and logistics functions, such as material procurement, production planning, inventory control, outsourcing, vendor selection and distribution
- Creates integrated processes among internal functions (e.g., operations, purchasing and logistics) and outside suppliers
- Responsibilities are within the Supply Chain and Logistics Function as a generalist or in a combination of Disciplines

**ASC022**
Forklift Operations
- Transports merchandise using a forklift truck or reach truck to designated locations within the warehouse, which may include loading, unloading and order picking

**ASC040**
Warehousing
- Administers and operates the organization’s warehouses, including processing, packaging and storage of supplies, materials and equipment
- Accounts for all materials and supplies in the stores facilities; audits goods received into warehouse
- Oversees receipt, storage and shipment of materials, and related reporting in accordance with established procedures
- Prepares and coordinates schedules for shipping and receiving materials to control the flow of goods and regulate warehouse space
- Ensures the effectiveness of operating procedures, space utilization, and maintenance and protection of facilities and equipment

**ASC045**
Fulfillment
- Fulfills orders, including order entry, administration, and shipping
- Processes orders and oversees related activities of third-party vendors to ensure orders flow effectively through systems and processes in accordance with the organization’s customer service standards
- Develops capacity plans to support build-to-stock and/or build-to-order environments
- Ensures adequate inventory levels are maintained to maximize customer satisfaction and minimize cost
- Prepares and maintains volume and demand planning analyses and supply and production schedules based on internal and external information to establish and effectively manage an order backlog

**ASC050**
Transportation
- Analyzes transportation and distribution systems and procedures to ensure the efficient and economical delivery of the organization’s products
- Reviews proposals and makes recommendations for modifications in rates and transportation regulations
- Evaluates freight classifications, tariff rates, and operating efficiency to ensure the proper delivery of products
- Plans and coordinates fleet operations including acquisition, scheduling, maintenance service and repair, and disposal of trucks, and hires common carriers (third-party transportation companies) as appropriate
## Functions and Disciplines Definitions (continued)

<table>
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</thead>
<tbody>
<tr>
<td>ASC052</td>
<td></td>
<td>Transportation - Delivery Vehicle Operations Generalist/Multidiscipline</td>
<td>Operates trucks, vans or similar vehicles to pick up and deliver products, supplies and equipment to and from organization, supplier and customer sites. Actions may involve complex pickups and deliveries, e.g., night deliveries, international travel, transport of dangerous and hazardous products.</td>
</tr>
<tr>
<td>ASC053</td>
<td></td>
<td>Transportation - Light Delivery Vehicle Operations</td>
<td>Operates light trucks, vans or similar vehicles to pick up and deliver products, supplies and equipment to and from organization, supplier and customer sites. Actions may involve complex pickups and deliveries, e.g., night deliveries, international travel, transport of dangerous and hazardous products.</td>
</tr>
<tr>
<td>ASC054</td>
<td></td>
<td>Transportation - Heavy Delivery Vehicle Operations</td>
<td>Operates heavy trucks or similar vehicles to pick up and deliver products, supplies and equipment to and from organization, supplier and customer sites. Actions may involve complex pickups and deliveries, e.g., night deliveries, international travel, transport of dangerous and hazardous products.</td>
</tr>
<tr>
<td>ASC055</td>
<td></td>
<td>Transportation - Tractor Trailer Delivery Vehicle Operations</td>
<td>Operates tractor trailer trucks to pick up and deliver products, supplies and equipment to and from organization, supplier and customer sites. Actions may involve complex pickups and deliveries, e.g., night deliveries, international travel, transport of dangerous and hazardous products.</td>
</tr>
<tr>
<td>ASC999</td>
<td></td>
<td>Supply Chain and Logistics - No Applicable Discipline</td>
<td>Responsibilities are within the Supply Chain and Logistics Function but are not described in other Discipline summaries.</td>
</tr>
</tbody>
</table>
Functions and Disciplines Definitions (continued)

Function
Technical Specialty/Skilled Trade
AZT

Provides technical support to engineers and scientists in areas such as production, operations, maintenance, safety, testing, process improvement or product development. Uses schematics, diagrams, written and verbal descriptions or defined plans to perform testing and troubleshooting on electronic or mechanical components, equipment or systems. Gathers, maintains, formats, compiles, and manipulates technical data using established formulae and procedures, and performs detailed mathematical calculations.

Applicable Career Bands

Discipline

AZT000  Technical Specialty/Skilled Trade Generalist/Multidiscipline
- Provides technical support to engineers and scientists on a variety of technical tasks
- Develops and recommends procedures and methods, and prepares technical reports and documentation
- Performs technical evaluations of events to determine root cause; recommends corrective action
- Responsibilities are within the Technical Specialty/Skilled Trade Function as a generalist or in a combination of Disciplines

AZT010  Equipment Maintenance Technical Specialty
- Performs preventative maintenance and repairs on equipment and systems (e.g., mechanical, electrical)
- Evaluates and recommends equipment improvements to improve availability, capability and yield
- Performs equipment failure analyses (including preventative and unscheduled maintenance)
- Troubleshoots and diagnoses equipment problems
- Prepares technical reports to document equipment modifications and equipment maintenance procedures

AZT015  Civil Engineering Technical Specialty
- Supports engineers in the planning, design, and supervision of the construction of structures and facilities such as bridges, railroads, roads, airports, harbors, dams, irrigation projects, pipelines and tunnels
- Monitors and inspects completed and in-progress construction work and may performs tests to ensure quality standards are met
- Compiles and analyzes traffic patterns, hydrologic and meteorologic information and other engineering data
- Prepares detailed site layouts and specifications
- Reviews and analyzes design drawings for feasibility, performance, safety and durability

AZT020  Calibration Technical Specialty
- Performs precise calibrations and preventative and corrective maintenance on measuring and test equipment, instruments, tools, gauges and fixtures
- Sets up test equipment and conducts tests on performance and reliability of mechanical, structural, or electromechanical equipment
- Develops calibration operating procedures and documentation for all instruments
- Selects and procures instrument spare parts to minimize machine downtime
- Coordinates calibration with outside contractors for equipment that cannot be maintained internally

AZT030  Product Test/Debug Technical Specialty
- Debugs and troubleshoots failed electronic components, assemblies and systems using test equipment and schematics
- Monitors component failures and initiates supplier notification if defect rates exceed acceptable levels
- Identifies and resolves issues that adversely affect test yields
- Collaborates with engineering and manufacturing teams to establish production test plans and processes
- Compiles and maintains test-related documentation including test plans, procedures, results and reports
Functions and Disciplines Definitions (continued)

### AZT040 Facilities Technical Specialty
- Operates, monitors and maintains utilities including HVAC (heating, ventilation and air conditioning) setup, maintenance and balancing, WFI (water for injection), purified water and process equipment
- Maintains, troubleshoots and repairs facilities mechanical components and electrical equipment and systems in accordance with SOPs (standard operating procedures), internal requirements, manufacturer's specifications and safety policies
- Develops, maintains and secures a spare parts inventory of basic maintenance hand and power tools
- Recommends purchase of maintenance tools, equipment and supplies as required to streamline processes and increase efficiency
- Assists engineers in developing methods and procedures to control or improve facilities processes

### AZT050 Process Technical Specialty
- Provides technical support to engineers to achieve improvements in cycle-time, yield, unit cost, quality, safety and compliance of production and operations processes
- Monitors instruments and equipment and collects operating data including calibration, inspection, testing, and repair activities to assist in making on-line adjustments to instruments, equipment or products
- Analyzes and resolves malfunctions and deviations of instruments and control systems to identify and resolve problems
- Conducts analyses and prepares reports using metrics from salvage tracking, trending, reporting and root cause analyses
- Maintains process designs to optimize process and facility use while conforming to standard operating procedures (SOPs) and good manufacturing practices (GMPs)

### AZT060 Quality Control/Inspection Technical Specialty
- Provides technical support to the quality and quality engineering (QE) functions
- Conducts nondestructive examination (NDE) and quality control (QC) inspections on products, materials, components, parts, etc., at various stages of the production process to ensure compliance with established quality and reliability standards
- Captures and analyzes statistical data from processes to either confirm compliance with established standards or identify deviations from standards
- Recommends new or enhanced methods, procedures and standards

### AZT070 Test Equipment Technical Specialty
- Plans, lays out, assembles, modifies, validates, and maintains test equipment and related structural assemblies by reading and interpreting blueprints, engineering drawings, and sketches
- Assists engineers in operating test equipment to obtain performance data on parts and assemblies under varying operating conditions
- Collects, compiles and summarizes test data, and reviews results with engineering to resolve problems such as product or equipment issues, malfunctions and incomplete test data
- Diagnoses test equipment malfunctions, and services and repairs equipment as required

### AZT080 CAD/CAE Drafting Technical Specialty
- Prepares and maintains detailed design drawings, schematics or specifications typically using Computer Aided Design (CAD) software
- Works closely with design originators (e.g., engineers, designers) to resolve design details or discrepancies, or to prepare drawings of unusual, complex, or original designs, which require a high degree of precision using CAD (Computer Aided Drafting) or CAE (Computer Aided Engineering) equipment
- Creates, modifies and controls detailed two- and three-dimensional parts and assembly drawings from engineers' and technicians' sketches, plans, written and verbal instructions
- Develops and maintains drafting standards and procedures
- Evaluates and recommends purchase of CAD/CAE-related computer hardware and software
## Functions and Disciplines Definitions (continued)

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<th>Function</th>
<th>Code</th>
<th>Technical Specialty/Skilled Trade</th>
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<tr>
<td>AZT085</td>
<td>Design and Drafting</td>
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<tr>
<td>AZT090</td>
<td>Production/Operations Laboratory Technical Specialty</td>
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<tr>
<td>AZT100</td>
<td>Biology Technical Specialty</td>
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<tr>
<td>AZT110</td>
<td>Chemistry Technical Specialty</td>
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<tr>
<td>AZT120</td>
<td>Stationary Engineering Technical Specialty</td>
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</tbody>
</table>

### AZT085 Design and Drafting
- Prepares drawings for civil engineering projects such as bridges, highways, waterfront facilities, sanitary and drainage systems, traffic systems, tunnels, mass transit systems, airports, commercial and industrial buildings, dams and reservoirs
- Prepares drawings or schematics of electronic power distribution systems involving electronic circuitry
- Prepares drawings for heating, ventilating and air conditioning systems, piping systems, refrigeration systems and equipment machinery, engines and mechanical apparatus
- Prepares maps, cross-sections, logs, graphs and charts used in resource exploration operations

### AZT090 Production/Operations Laboratory Technical Specialty
- Assists engineers and scientists with a variety of laboratory tasks
- Performs chemical and/or physical analyses or scientific tests using both routine and special techniques in compliance with all safety and infection control standards
- Collects, analyzes and processes laboratory samples
- Records results of tests, organizes data, performs basic computations, and prepares reports and analyses using standard procedures and guidelines
- Installs, operates, maintains and repairs laboratory test equipment, apparatus, systems, and supplies

### AZT100 Biology Technical Specialty
- Assists biologists with a variety of laboratory tasks in studying living organisms and infectious agents related to product development or quality control of production processes or products
- Analyzes organic substances such as blood, food, and drugs

### AZT110 Chemistry Technical Specialty
- Assists chemists and chemical engineers conduct chemical and physical laboratory tests using instrumental techniques in making qualitative and quantitative analyses of solids, liquids, and gaseous materials related to product development or quality control of production processes or products
- Performs quantitative and qualitative analyses in organic, inorganic, physical, analytical chemistry, photochemistry or electrochemistry to determine the chemical and physical properties of materials, liquids and gases

### AZT120 Stationary Engineering Technical Specialty
- Operates, monitors, adjusts, maintains and repairs stationary engines and mechanical equipment and systems used in production and operations under the overall guidance of stationary engineers
- Ensures that equipment such as generators, motors, turbines, boilers and complex fire safety systems in buildings and plants operate safely, economically, and within established limits by monitoring meters, gauges, and computerized controls either on site or from a central location
- Performs repairs ranging from a complete overhaul to replacing defective valves, gaskets, or bearings
- Records relevant events and facts concerning the operation and maintenance of equipment
- Conducts routine maintenance to maintain or improve operating efficiency, such as lubricating moving parts, replacing filters or removing soot and corrosion from boilers and adding chemicals to boiler water to prevent corrosion and harmful deposits

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Towers Watson Data Services
### Functions and Disciplines Definitions (continued)

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<tbody>
<tr>
<td>Technical Specialty/Skilled Trade (continued)</td>
<td>AZT</td>
</tr>
</tbody>
</table>

#### Discipline

**AZT130 Technical Documentation Control**
- Compiles and maintains technical documentation such as blueprints, drawings, change orders, and specifications
- Examines documents to verify completeness and accuracy of data, and resolves discrepancies with document originators
- Maintains computerized document control records management system and/or hardcopy documents to ensure compliance with all applicable and required standards including GMP (good manufacturing practice) and QSR (quality system regulation) requirements
- Develops and maintains procedures and standards for maintaining documents and change control of documents, including document development, approval, production, distribution and amendment
- Plans, directs and manages document and content management life cycles, and may work with either structured or unstructured metadata

**AZT140 Skilled Trade Generalist/Multidiscipline**
- Performs installations, preventive maintenance, and repairs on buildings, mechanical equipment and utility systems using one or more trade skills (e.g., electrical, mechanical, plumbing, carpentry)
- Prepares and maintains records of completed maintenance repair work
- Maintains current knowledge of all applicable procedures and safety measures

**AZT150 Electrical Skilled Trade**
- Repairs, installs, replaces and tests electrical circuits, equipment and appliances, using hand tools and testing instruments, to supply electrical power for lighting, equipment, and machine operations

**AZT160 Welding Skilled Trade**
- Welds all types of commonly used metals and alloys of various sizes, shapes, and thicknesses, including dissimilar metals such as copper to steel
- Operates various hand-welding, flame-cutting, hand-soldering, or brazing equipment to weld or join metal components or to fill holes, indentations, or seams of fabricated metal products
- May set up, operate, and/or tend to robots that weld, braze, solder, or heat treat metal products, components, or assemblies

**AZT170 Mechanical Skilled Trade**
- Repairs and maintains machinery and mechanical equipment, such as motors, pumps, conveyors, belts, fans, air conditioners, etc.
- Examines mechanical equipment to diagnose malfunctions
- Adjusts, cleans and lubricates parts of mechanical devices as necessary
- Requisitions replacement parts and equipment
- Oversees contractors at supervisory/management level

**AZT180 Machinery/Millwright Skilled Trade**
- Installs, modifies, moves, troubleshoots, repairs and dismantles machinery and equipment according to requisition documentation, layout plans, blueprints, or other drawings
- Prepares installation site by constructing foundations, and aligns and fastens machinery to the foundation using hoists, dollies, rollers, trucks, tools, squares, rules, and micrometers
- Performs operational tests on newly installed, modified, repaired and moved machinery and equipment to ensure that it meets technical specifications
- Fabricates metal parts for prototype equipment based on drawings
- Programs PLCs (programmable logic controllers)

**AZT190 Finishing/Coating/Painting**
- Paints, varnishes, stains, enamels, lacquers and redecorates walls, woodwork and fixtures
- Mixes paint and matches colors; uses brushes, sprayers or rollers to apply paint or other coatings
- Removes old finishes using a scraper, chemical compounds or a blowtorch
- Fills nail holes, joints, and cracks in walls with plaster or other filler
## Functions and Disciplines Definitions (continued)

<table>
<thead>
<tr>
<th>Function</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Technical Specialty/Skilled Trade (continued)</strong></td>
<td>AZT</td>
</tr>
</tbody>
</table>

#### Discipline

**AZT191 Carpentry**
- Performs the carpentry duties necessary to construct and maintain building woodwork such as bins, counters, shelves, benches, stairs, doors and windows
- Works from drawings or verbal instructions and uses a variety of carpentry hand and power tools
- Repairs high-grade articles of furniture such as cabinets, chairs, store fixtures and office equipment
- May operate hand saw, mortiser, drill press, wood lathe and related woodworking equipment

**AZT192 Masonry**
- Performs the masonry work necessary to construct and maintain building and grounds, such as walls and floors, furnace and boiler settings, stairs and sidewalks
- Applies and repairs plaster, concrete, bricks, pavers and stones
- May operate mixer, sander, concrete lathe and related masonry equipment

**AZT999 Technical Specialty/Skilled Trade - No Applicable Discipline**
- Responsibilities are within the Technical Specialty/Skilled Trade Function but are not described in other Discipline summaries
### Functions and Disciplines Definitions (continued)

#### Manual/Unskilled Labor

Performs a variety of general manual labor tasks (e.g., sweeping and cleaning floors and work areas, picking up papers and refuse from grounds, assisting in the handling of heavy materials, making minor repairs, mowing lawns, shoveling snow, cleaning, dusting, washing windows, moving and polishing furniture and equipment). Follows specific processes and procedures to maintain the buildings, facilities and grounds.

**Applicable Career Bands**
- M (Supervisory/Management)  
- W (Production/Manual Labor)

#### Discipline

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>AZU000</td>
<td>Manual/Unskilled Labor Generalist/Multidiscipline</td>
</tr>
<tr>
<td></td>
<td>● Performs a variety of general manual labor tasks, (e.g., lifting and moving materials, loading and unloading vehicles, digging and refilling holes)</td>
</tr>
<tr>
<td>AZU010</td>
<td>Maintenance</td>
</tr>
<tr>
<td></td>
<td>● Performs miscellaneous manual labor activities (e.g., sweeping and cleaning floors and work areas, picking up papers and refuse from grounds, assisting in the handling of heavy materials, making minor repairs, mowing lawns, and shoveling snow)</td>
</tr>
<tr>
<td></td>
<td>● Performs janitorial activities, such as cleaning, dusting, washing windows, moving and polishing furniture and equipment</td>
</tr>
<tr>
<td>AZU999</td>
<td>Manual/Unskilled Labor - No Applicable Discipline</td>
</tr>
<tr>
<td></td>
<td>● Responsibilities are within the Manual/Unskilled Labor Function but are not described in other Discipline summaries</td>
</tr>
</tbody>
</table>
Career Bands, Career Levels, Functions and Disciplines

Functions and Disciplines Definitions (continued)

<table>
<thead>
<tr>
<th>Function</th>
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<tbody>
<tr>
<td>Technical Sales Support</td>
<td>CUT</td>
</tr>
</tbody>
</table>

Provides technical knowledge, advice and support to sales representatives, resellers and customers during the sales process to resolve requests regarding product/service technical issues and to maximize the benefits derived from the organization's products and/or services.

Applicable Career Bands
M (Supervisory/Management)  P (Professional)  T (Technical Support)

Discipline

CUT000  Technical Sales Support Generalist/Multidiscipline
- Provides technical expertise to sales representatives, resellers and customers during the sales process
- Performs technical sales support at customer sites, or on a multiple-site basis
- Resolves technical product/service issues
- Assists customers during the sales process to maximize the benefits derived from the organization's products and/or services
- Responsibilities are within the Technical Sales Support Function as a generalist or in a combination of Disciplines

CUT010  Presales Technical Support/Systems Engineering
- Provides presales technical expertise to the sales team and customers during the sales process
- Provides technical input into bid proposals, projects and technical documents within the sales process, and identifies additional sales opportunities with existing customers
- Installs and demonstrates the organization's products at customer sites
- Collaborates with sales teams to develop and recommend products and services to meet customers' requirements
- Maintains up-to-date and comprehensive knowledge of the organization's and competitors' products and/or services

CUT040  Technical/Product Training
- Develops, implements and/or delivers technical training as it relates to the organization's products
- Works with product development teams to update training materials and ensure accuracy and effectiveness of courseware and supporting materials to align with new product releases
- May provide training to internal staff, e.g., customer services, engineers, sales staff, etc.

CUT999  Technical Sales Support - No Applicable Discipline
- Responsibilities are within the Technical Sales Support Function but are not described in other Discipline summaries