

## Industrial Classification in Special Economic Zone at Duqm

Type of Industry	Light	Medium	Heavy
<b>Definition</b>	<p>A zone accommodating a range of light industrial, storage and warehouse land uses which do not create any appreciable nuisance or generate heavy traffic. Light Industry is also more consumer-oriented than business-oriented, since most products are aimed for end use rather than for other industrial uses. The activity and function of the Light Industry typically produce items that are higher in value per unit weight than that of Heavy or Medium Industry.</p>	<p>Industries that has the physical characteristics of requiring medium-sized infrastructure, with space customized for medium to large scale plants. It involves the processing of minerals or other material on a smaller scale than Heavy Industry, and producing smaller sized, rather than heavy products.</p>	<p>Heavy Industry is associated with a high capital cost (capital-intensive), high barriers to entry and low transportability. The term “heavy” refers to the fact that the items produced by “heavy industry” used to be products such as iron, coal, oil, ships, etc.</p> <p>produced by “heavy industry” used to be products such as iron, coal, oil, ships, etc.</p> <p>Heavy industry has the physical characteristics that require significant infrastructure, with space customized for large scale plants. It involves one or more characteristics such as large and heavy products; large and heavy equipment and facilities (such as heavy equipment, large machine tools, and huge buildings); or complex or numerous processes.</p>

<p><b>General Requirements and Energy consumption</b></p>	<p>The requirement for area, the usage of power and the supply and types of raw materials are lesser in Light Industry than in Medium and Heavy Industry.</p>	<p>Large equipment and facilities, (such as heavy equipment, large machine tools, and huge buildings), are still characteristic, but less than what is typical of Heavy Industry.</p>	<p>High consumption of energy due to the nature of used buildings, machines, and tools.</p>
<p><b>General Environmental Impact</b></p>	<p>Facilities associated with Light Industry have less of an environmental impact than those associated with Medium and Heavy Industry, hence, are more likely to be zoned closer to residential areas than Medium or Heavy Industries tend. Light Industries are mostly known to have temporary and localized environmental impacts.</p>	<p>Often less polluting than heavy industries. However, this is not always the case and hence it is important that each industry (even if classified as medium) be assessed on a case by case basis. Impacts from medium scale industries are usually limited to the project boundaries only and could range from temporary to permanent adverse impacts.</p>	<p>Depending on the type and scale of heavy industries, adverse environmental impacts from such land uses can frequently extend beyond the project boundaries. Because heavy industrial operations often cause environmental impacts related to noise, dust and heavy vehicle traffic and since they generally can be hazardous, they are required to be separated from other more subtle land uses such as residential and community uses.</p>
<p><b>Examples (including but not limited to)</b></p>	<p><b>WAREHOUSING</b></p> <ul style="list-style-type: none"> <li>• Truck storage</li> <li>• Warehousing</li> <li>• Construction storage yard</li> <li>• Electronic storage center</li> <li>• Vehicular storage and towing</li> </ul>	<p><b>MANUFACTURING USE</b></p> <ul style="list-style-type: none"> <li>• Food and Beverages</li> <li>• Base Metals (small to medium scale and specific uses)</li> <li>• Logistics</li> <li>• Transport Equipment</li> </ul>	<p><b>PERMITTED USES:</b></p> <ul style="list-style-type: none"> <li>• Chemical Production</li> <li>• Refined petroleum, coke production, nuclear</li> <li>• Paper and pulp production</li> </ul>

	<p><b>MANUFACTURING</b></p> <ul style="list-style-type: none"> <li>• Shoe manufacturing</li> <li>• Building materials sales</li> <li>• Cable and wire manufacturing</li> <li>• Electronic assembly</li> <li>• Glass cutting and glazing</li> <li>• Heavy equipment sales and rental</li> <li>• Jewelry manufacturing</li> <li>• Laundry facilities</li> <li>• Light machinery manufacturing</li> <li>• Machine shops</li> <li>• Medical and pharmaceutical laboratories</li> <li>• Metal stamping and extrusion</li> <li>• Optical goods manufacturing</li> <li>• Package manufacturing</li> <li>• Pottery and ceramic manufacturing</li> <li>• Printing and publishing</li> <li>• Scientific and precision instrument production</li> <li>• Sheet metal shops</li> <li>• Sign painting</li> <li>• Stone cutting and grinding</li> <li>• Tool and die shops</li> <li>• Woodworking and furniture manufacturing</li> </ul> <p><b>AGRIBUSINESS</b></p> <ul style="list-style-type: none"> <li>• Food processing</li> <li>• Trade of agricultural goods and farm inputs</li> <li>• Offices related to agribusiness</li> <li>• Wholesale and trade of processed food</li> </ul>	<ul style="list-style-type: none"> <li>• Minerals (small to medium scale and specific uses)</li> <li>• Chemicals (small to medium scale and specific uses)</li> <li>• Workshops/Showrooms</li> <li>• Motor Vehicles, Trailers, Parts</li> <li>• Other Transport Equipment</li> <li>• Electric Machinery</li> <li>• Machinery, Equipment, Appliances</li> <li>• Rubber and Plastic Products</li> <li>• Fabricated Metal Products</li> <li>• Printing and Publishing</li> </ul> <p><b>MANUFACTURING AND STORAGE USE</b></p> <ul style="list-style-type: none"> <li>• To transform materials into products.</li> </ul> <p><b>TRANSPORT AND STORAGE USE</b></p> <ul style="list-style-type: none"> <li>• Storage Warehouse, Storage Yard,</li> <li>• Bus Terminal, Truck Terminal or Courier</li> <li>• Depot, Weighing/Inspection Station and Workshops</li> <li>• Storage Warehouse</li> <li>• Storage Yard</li> <li>• Bus Terminal</li> <li>• Truck Terminal or Courier Depot</li> <li>• Weighing or Inspection Station</li> <li>• Workshops</li> </ul>	<ul style="list-style-type: none"> <li>• Mineral-based product production</li> <li>• Basic metals production</li> <li>• Brick, tile, terra-cotta, masonry manufacture</li> <li>• Cement products and ready mix concrete manufacturing</li> <li>• Iron or steel casting or fabrication. The fabrication process involves the cutting process, the bending process and the assembly of raw materials into the construction of machines and structures</li> <li>• Ship Building</li> </ul> <p>*Major extractive industry along with refinement of petroleum, coke, or nuclear uranium, or the production of primary minerals into steel.</p>
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	<p><b>LOGISTICS</b></p> <ul style="list-style-type: none"> <li>• Intermodal freight transport facilities</li> <li>• Offices related to industrial uses</li> <li>• Weigh stations</li> <li>• Accessory uses</li> </ul> <p><b>OTHER USES</b></p> <ul style="list-style-type: none"> <li>• Large Bakery Facility</li> <li>• Catering establishments</li> <li>• High technology office</li> <li>• Light equipment sales and rental</li> <li>• Offices related to light industrial uses</li> <li>• Recycling facilities</li> <li>• Research facilities</li> <li>• Accessory uses</li> </ul>	<p><b>SERVICE USE</b></p> <ul style="list-style-type: none"> <li>• Base Metals</li> <li>• Food and Beverages</li> <li>• Logistics</li> </ul> <p><b>OTHER USES</b></p> <ul style="list-style-type: none"> <li>• Showrooms</li> <li>• Ancillary Office</li> <li>• Cafeteria</li> <li>• Prayer Room</li> <li>• Meeting Room</li> </ul>	
<p><b>Important Additional Notes</b></p>	<p>All the above classifications and below examples are subject to further internal SEZAD review by concerned departments such as Urban Planning and Environment; and are always treated as case by case.</p> <p>The land allocation is also subsequently subject to various criteria as well as local and international benchmarking based on the specificity of the proposed industry.</p> <p>For instance the location of the industry into the light, medium and high industrial zone will in addition to the above classifications be subject to review and analysis of the below criteria to ensure proper allocation:</p> <ul style="list-style-type: none"> <li>- Nature of the industry</li> <li>- Required raw material</li> <li>- Activity and processes occurring within the site (equipment and machinery used)</li> <li>- Location / Traffic and Transportation Requirements /</li> <li>- Utility requirements (water, power, gas, industrial processed water, steam, etc.)</li> <li>- Means and frequency of transport used for the raw and processed material</li> </ul>		

- Smell generated and related mitigation measures
- Waste generated and related mitigation measures
- Air Emissions
- Noise Quality
- Marine discharge
- Land Contamination
- Storage Requirements
- Etc.

**Ultimately, all land allocation proposal are subject to SEZAD urban planning and environmental department review and assessment.**

## Light Industry

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### PERMITTED USES

#### PERMITTED USE



##### WAREHOUSING

- Truck storage
- Warehousing
- Construction storage yard
- Electronic storage center
- Vehicular storage and towing



##### AGRIBUSINESS

- Food processing
- Trade of agricultural goods and farm inputs
- Offices related to agribusiness
- Wholesale and trade of processed food



##### MANUFACTURING

- Shoe manufacturing
- Building materials sales
- Cable and wire manufacturing
- Electronic assembly
- Glass cutting and glazing
- Heavy equipment sales and rental
- Jewelry manufacturing
- Laundry facilities
- Light machinery manufacturing
- Machine shops
- Medical and pharmaceutical laboratories
- Metal stamping and extrusion
- Optical goods manufacturing
- Package manufacturing
- Pottery and ceramic manufacturing
- Printing and publishing
- Scientific and precision instrument production
- Sheet metal shops
- Sign painting
- Stone cutting and grinding
- Tool and die shops
- Woodworking and furniture manufacturing



##### LOGISTICS

- Intermodal freight transport facilities
- Offices related to industrial uses
- Weigh stations
- Accessory uses



##### OTHER

- Bakery
- Catering establishments
- High technology office
- Light equipment sales and rental
- Offices related to light industrial uses
- Recycling facilities
- Research facilities
- Accessory uses

### LIGHT INDUSTRY AREA

Industries and industrial activity is not only the major function, but also, the most prominent in the entire Light Industrial zone. However, other activities and functions such as warehouses, commercial uses, office buildings, retail and community facilities providing service to the entire district may also be located within the Light Industrial Zone. Hence, design guidelines will be provided for all components.

The main land uses within the area zoned as Light Industry:

- 1- Industries
- 2- Warehousing and logistics
- 3- Ancillary uses



## Medium Industry

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### PERMITTED USES

Permitted uses are functions and operations that are authorized and approved to be located on a plot within the Medium Industry Area and that are considered suitable within the context and correspond to the vision of the area.

The following uses are permitted in areas designated by land use as a medium industrial plot. All other uses are prohibited.

#### PERMITTED USE



##### MANUFACTURING USE

- Food and Beverages
- Base Metals
- Logistics
- Transport Equipment
- Minerals
- Chemicals
- Workshops/Showrooms
- Motor Vehicles, Trailers, Parts
- Other Transport Equipment
- Electric Machinery
- Machinery, Equipment, Appliances
- Rubber and Plastic Products
- Fabricated Metal Products
- Printing and Publishing



##### MANUFACTURING AND STORAGE USE

- To transform materials into products.



##### TRANSPORT AND STORAGE USE

- Storage Warehouse, Storage Yard,
- Bus Terminal, Truck Terminal or Courier
- Depot, Weighing/Inspection Station and Workshops
- Storage Warehouse
- Storage Yard
- Bus Terminal
- Truck Terminal or Courier Depot
- Weighing or Inspection Station
- Workshops



##### SERVICE USE

- Base Metals
- Food and Beverages
- Logistics



##### OTHER USES

- Showrooms
- Ancillary Office
- Cafeteria
- Prayer Room
- Meeting Room





## Heavy Industries

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### PERMITTED USES



Permitted uses are functions and operations that are authorized and approved to be located on a plot within the Heavy Industry Area and that are considered suitable within the context and correspond to the vision of the area.

The following uses are permitted in areas designated by land use as heavy industrial. All other uses are prohibited or subject to approval:

- Chemical Production
- Refined petroleum, coke production, nuclear
- Paper and pulp production
- Mineral-based product production
- Basic metals production
- Brick, tile, terra-cotta, masonry manufacture
- Cement products and ready mix concrete manufacturing
- Iron or steel casting or fabrication. The fabrication process involves the cutting process, the bending process and the assembly of raw materials into the construction of machines and structures
- Abattoirs and animal rendering plants

