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1.1 Overview

The Seal Selection Tool is a web-based tool which provides an easy interface for finding seal(s) based on the requirements. The tool provides technical specifications for a seal for a given part number. This tool also helps find suitable Timken seal part numbers against competitor seals.

To select a seal using this application, choose one of the search criteria provided in the UI, i.e. Seal Specifications for each category (Oil Seal, VRing-Seal, O-Ring, Redi-Sleeve, Wear Sleeve, Oil Bath Seal, Oil Kit Seal, Felt Seal), Part number, Competitor Interchange. Pages relevant to the chosen search criteria will be presented to the user. Click the search button to view search results in a tabular format (Result Grid).

This tool also has options to further filter the Result Grid and refine it with subsequent selections from the options provided in the Result Grid.

The Result Grid provides an option to view (part number-based link label) complete specifications of a seal. Also, the drawings related to the particular seal can be accessed through the grid.
1.2 Where to Find the Seal Selection Tool

The Seal Selection Tool is available under the Engineering Tools section on www.timken.com or by clicking a link from a seal product page.

Steps to Access the Tool:


Fig 1: Timken URL

2. Click on “ENGINEERING TOOLS & VIDEOS” shown in Fig 2.

Fig 2: Timken Website
3. The Engineering Tools page lists buttons to open several engineering applications as in Fig 3, including the Seal Selection Tool. Click the “Seal Selection Tool” button to open this tool as a new page in the Timken website.

Fig 3: Engineering Tools Page
4. Opening the Seal Selection Tool displays the following page.

![Seal Selection Tool](image_url)

**Fig 4: Seal Selection Tool**
5. Opening the Seal Selection Tool from the product page.

Oil Seals

Oil seals are used wherever shafts rotate and bearings require lubrication. Available in inch and metric sizes, the Timken line of O-Ring Seal Kits have the coverage you need for the most popular applications.
1.3 How to Use the Seal Selection Tool

Summary: The Seal Selection Tool offers the following options to search/select a seal of your choice.

- Selection by Specifications
- Selection by Part Number
- Competitor Interchange

1.3.1 Selection by Specifications

Use the ‘Selection by Specifications’ option to search seals based on Seal Category and Seal Envelope Specifications.

![Fig 5: Selection by Specifications](image-url)
Choose the Seal Category from the dropdown list. Specify the Shaft Diameter, Housing Bore, Outside Diameter, Width, Material and Type. Please note that Seal Category and Shaft Diameter are mandatory fields while the rest are optional. Mandatory fields are indicated by the asterisk (*) symbol. You can specify the minimum and maximum values or just the minimum value for the shaft diameter.
After specifying the search constraints, click the Search button in the bottom right corner to perform the search. Search results are displayed in a table format within the Result Grid.

![Selection by Specifications - Search](image)

Fig 8: Selection by Specifications – Search
Fig 9: Selection by Specifications – Result Grid

**Additional Functions:**

Reset: Use the Reset button to clear the search constraints and Result Grid.


Fig 10: Selection by Specifications – Buttons
1.3.2 Selection by Part Number

Use this option to search specifications for a known Part Number. Search using wildcard is enabled for this option. Use the asterisk (*) symbol for the wild card search. Please note that a minimum of three characters is mandatory before applying the wildcard symbol.

Fig 11: Selection by Part Number

Fig 12: Selection by Part Number – Example
For example, if we need to find the part numbers that start from 400, then 400* has to be entered in the input box to display all the seals starting with 400 in the Result Grid.

Fig 13: Selection by Part Number – Example of Wild Card
1.3.3 Competitor Interchange

Competitor Interchange options allow users to find Timken equivalent part numbers against competitor part numbers.

Select the Brand type from dropdown list, enter a competitor part number and click the search button. The Result Grid listing the Timken equivalent part numbers for the entered competitor part number will be displayed on the page.

Fig 14: Competitor Interchange

Fig 15: Competitor Interchange – Example
**Fig 16: Competitor Interchange – Example for Wild Card**
1.3.4 The Result Grid

For all three search categories explained above, the results are displayed in a grid. A few user-friendly features are provided for the Result Grid. The part number column in the grid is a link. Clicking the part number column in each row opens a pop-up screen displaying more details about the selected seal part number.

Fig 17: Result Grid

Seal Description

Brand Name: Relion Oil Seal
Part Number: 10020612

<table>
<thead>
<tr>
<th>Description</th>
<th>Value (inch)</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part Description</td>
<td>Oil Seal</td>
<td></td>
</tr>
<tr>
<td>Design Unit</td>
<td>Deep Groove</td>
<td></td>
</tr>
<tr>
<td>Shaft Diameter</td>
<td>3.003</td>
<td>0.01</td>
</tr>
<tr>
<td>Housing Ambient</td>
<td>4.957</td>
<td></td>
</tr>
<tr>
<td>Outside Diameter</td>
<td>4.908</td>
<td></td>
</tr>
<tr>
<td>Width</td>
<td>6.178</td>
<td></td>
</tr>
<tr>
<td>Material</td>
<td>Multiaxial</td>
<td></td>
</tr>
<tr>
<td>Type</td>
<td>UB</td>
<td></td>
</tr>
<tr>
<td>Series</td>
<td>100000</td>
<td></td>
</tr>
<tr>
<td>Recoil</td>
<td>Pay</td>
<td></td>
</tr>
<tr>
<td>Installation Year</td>
<td>99289991</td>
<td></td>
</tr>
</tbody>
</table>

Fig 18: Part Number – Seal Description Pop-Up
Use the Print button to export and print the seal description in PDF format. Users are also provided an option to download the seal drawings. Use the Drawing No. column link in the individual row to download the 2D drawing for the selected seal.

Fig 19: Result Grid – Drawing Number

Fig 20: Result Grid – Drawing PDF
The Result Grid also provides options to further filter search results within the grid. Enter the filter criteria in the text box provided for the individual column (at the bottom of the grid) to apply additional filters for the Result Grid.

For example, in the Selection By specification, a search has been made with a minimum shaft diameter of 2.9 inches and maximum of 3.1 inches. The Result Grid is populated with multiple rows. In the grid, we can filter shaft diameter to populate only the seals with a shaft diameter of 3.0 inches by entering the value in the input box below the shaft diameter column.