

Dodge gear reducers: selecting a reducer in PTWizard

PTWizard was launched in an effort to provide customers a helpful tool in selection of Dodge Products based on application specifications.

This document provides instructions, through examples, on how to navigate the selection tools for reducers in PTWizard using the three methods provided on the website. The first option is for people familiar with Dodge products and can pick the reducer they need, and size it based on application specifications. The second option is for people who need to start from scratch, or aren't as familiar with Dodge reducers to determine what selection is best for them. Lastly, the third option allows you to enter existing part numbers for Dodge reducers and also create an assembly with the unit you selected.



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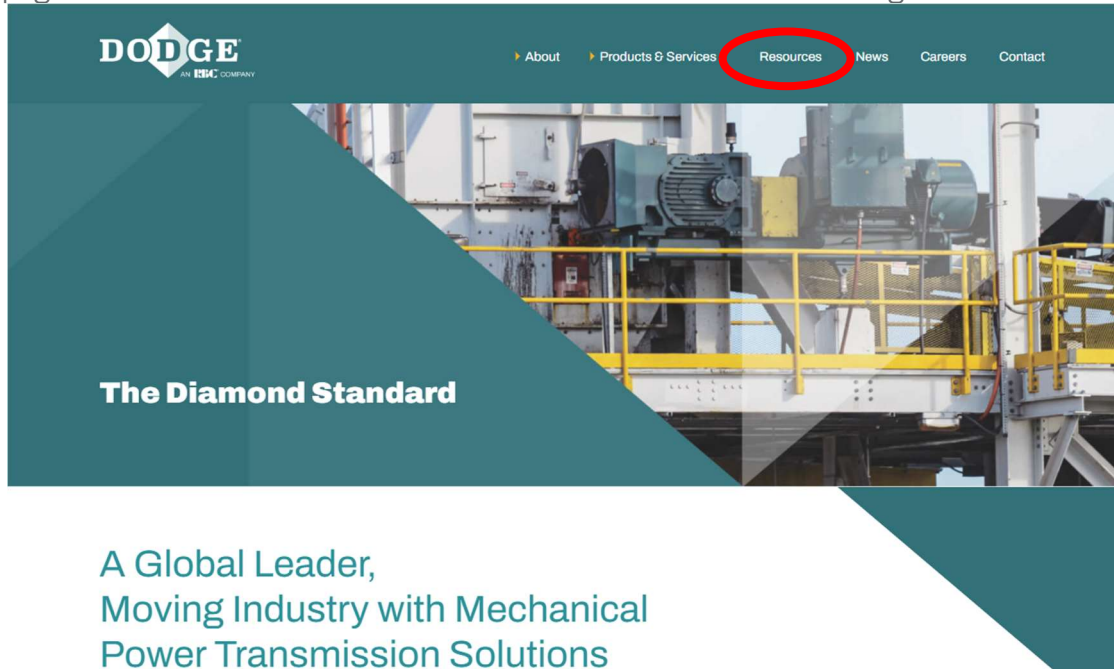
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A. Navigating PTWizard

1. Login/Sign Up

Dodge PTWizard can be accessed through <https://www.ptwizard.com/> or going to the Dodge home page and under the tab "Resources" and then "Start" underneath "Dodge PT Wizard".



CAD Drawings

Reference detailed drawings of our Dodge products for your layout and design needs.

[View](#)



Literature

Find manuals, whitepapers, catalogs, flyers and more.

[View](#)



Product Search

Find the specific Dodge product you're looking for.

- ▶ Access from US
- ▶ Access from Canada
- ▶ Access from Mexico
- ▶ Access Globally



Dodge Catalog

Browse our comprehensive catalog of all Dodge products, parts, and accessories.

- ▶ Access from US
- ▶ Access from Canada
- ▶ Access from Mexico
- ▶ Access Globally



PT Place

Find product information, see price and availability, and place and manage orders on Dodge's eCommerce platform.

[Start](#)



Dodge PT Wizard

Select the right Dodge components for your application.

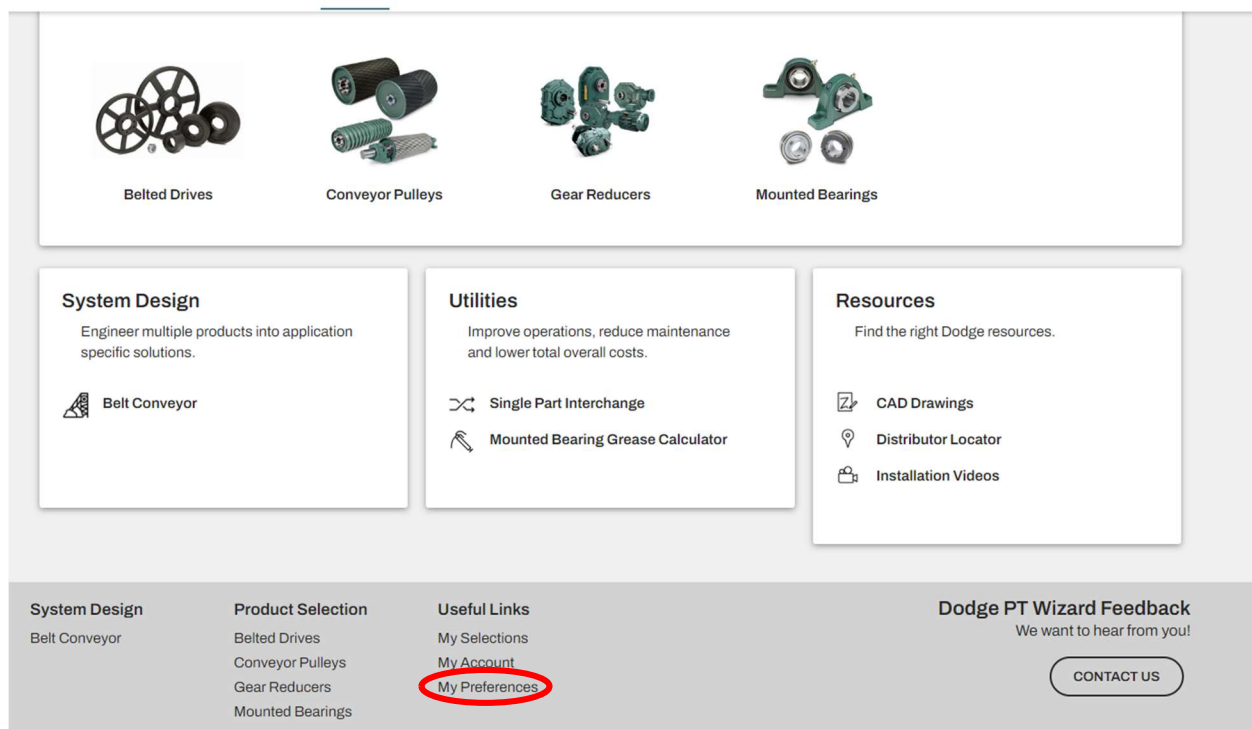
[Start](#)

Next you sign in, or if you are new to PTWizard, you can start a free account.

After you have signed up and your account is verified, you can begin using the selection tools from the site.

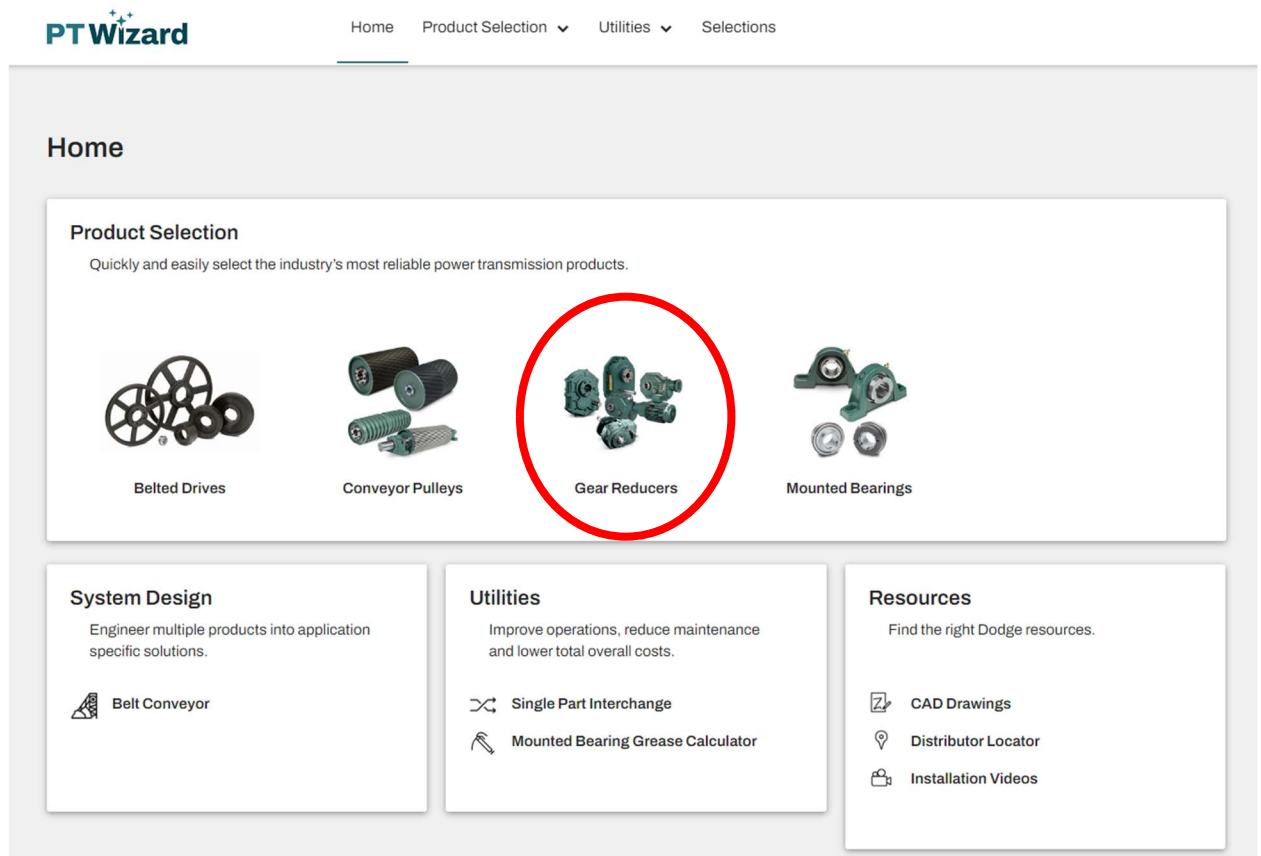
2. Setting Preferences

You can set preferences for future use with the "My Preferences" button below. This will take you to a screen where under "Common" you can select your measurement system, Imperial or Metric, and your temperature units, Fahrenheit or Celsius. Also you can set any specific preferences with belt drives to help with future selection. Currently there are no preferences that can be set for gear reducers.



3. Selecting Type of Dodge Product

From the main screen, you can select what specific Dodge product you are looking for. PTWizard has the selection of "Belted Drives", "Conveyor Pulleys", "Gear Reducers", and "Mounted Bearings". This document will focus on the "Gear Reducers" category. The Torque-Arm family of reducers (TXT, TAIL, SCXT, MTA) are what occupy the "Gear Reducers" section. Two examples will be used for the "Gear Reducers" section in this paper. Click on "Gear Reducers" to begin selecting a gearbox.



3. Guide Me to a Solution.

PTWizard has 3 options available after clicking the Gear Reducers button. "Pick a Dodge Reducer" is for people already familiar with Dodge products who knows what type of reducer will be needed for his or her application. "Guide Me to a Solution" starts the selection process from scratch and will select the type of reducer after the specifications have been entered. "Verify Existing Application" can take part numbers you already have and can verify them for selection. This first example will be done using the "Guide me to a Solution" section.

Reducer Selection

Welcome to the Dodge Reducer Selection tool. Where would you like to begin?

Pick a Dodge reducer
Are you familiar with Dodge? Start here!

BEGIN

Guide me to a solution
Need help finding a reducer? Use this path to start.

BEGIN

Verify existing application
Give us a part number and we will verify your selections.

BEGIN

Example 1)

A customer has given us the following specs for his application and needs a speed reducer. He needs a belt driven, shaft mounted reducer to fit the following specs.

Application: Conveyor Belt Drive

Motor HP and Speed: 60hp 1750 RPM, 3ph, 60Hz

Output Speed: 80 RPM

Class 2 Service Factor

Shaft Diameter: 4-7/16 in.

Backstop, Tie Rod Kit, Motor Mount, and Belt Guard needed.

1.) Connection Method

We start by selecting our connection method which based on the example is belt driven.

Reducer Selection

START OVER

1 Connection Method

Connection Method



BELTED



DIRECT DRIVE

NEXT →

Selection Summary

Connection Method
Belted

2.) Specifications

The specifications tab will ask you to specify if the customer will use a NEMA or IEC motor; as well as asking the frequency, horsepower, speed, and frame size of the motor. Based on our example we select 60 Hz, 60 HP, and 1800 RPM. The motor frame size will be automatically selected based on the specs. If a situation occurs where multiple frame sizes are available for the horsepower and motor speed you specified, that will need to be filled in as well.

Next we select our application type, which is shaft mount. Then, we select a service factor. You can either enter the service factor yourself; or under “Select Service Factor,” choose the AGMA Class needed for this application. Our example has a class 2, which makes the service factor 1.4.

Final specifications required are the application environment and output speed. You can select the ambient temperature and altitude for the application for a more quality selection. Also any thermal accessories needed for the reducer can be included by checking the appropriate boxes. Temperature and altitude were not specified in the application, so we will leave the specs in their default settings. Last is the output speed which can be entered manually or through the “Calculate based on belt conveyor requirements” window. We will type 80 RPM for our application.

The screenshot shows the '2 Specifications' tab in a software interface. The 'Connection Method' is 'Belted'. The 'Specifications' section includes: Motor Type (NEMA Motor), Power Frequency (60 Hz), Motor Power (60 hp), Motor Speed (1750 rpm), and Motor Frame Size (364T). The 'Application Type' section shows two options: 'SHAFT MOUNT' (selected) and 'SCREW CONVEYOR'. The 'Service Factor' is 1.4. The 'Thermal Accessory' section has checkboxes for 'Exclude cooling fan from results' (unchecked) and 'Exclude heat exchanger' (checked). The 'Application Ambient Temperature' is 95°F and below. The 'Application Altitude' is up to 5,000 ft. The 'Output Speed' is 80 rpm. A 'Selection Summary' box on the right lists the selected values. At the bottom, there are 'BACK' and 'NEXT' buttons, and a progress indicator showing the current step.

Connection Method	
Belted	
Specifications	
Motor Power	60 hp
Motor Speed	1750 rpm
Application Type	Shaft Mount
Service Factor	1.4
Output Speed	80 rpm

3.) Selection

You will select imperial or metric units for your reducer unit of measure. After that, PTWizard will provide you the Dodge options available dependent on the specs provided before. Here we have a choice between two size 7 Torque-Arm 2 reducers. One has a ratio of 15:1 and the other 9:1. If multiple size reducers appear, one way to narrow the search results is to select the bore size of the reducer above the choices to provide the sizes that can work with the customer's shaft requirements. In this example, we will select the TA7315H15 or Part Number: 907002 because of the higher service factor compared to the 9:1 option.

At this point we have begun selecting products and they will appear on the right hand side of the screen. A list of all the products will accumulate and the total list price will change based on what products are selected in the next sections.

[START OVER](#)

1
Connection Method
✓

2
Specifications
✓

3
Selection

Customer Number >> Select

Reducer Unit of Measure
☒ Imperial (US Customary)
☐ Metric

Reducer Bore Size 4.4375 (TAIL 7)

in
mm

Select Reducer

Reducer	Part Number	Service Factor	Ratio	Actual Belt Drive Ratio	Thermal Accessory	List Price (USD)
	907002 - TA7315H15	1.92	15	1.47	None	19,140.00
	907003 - TA7315H09	1.88	9	2.25	None	19,140.00

← BACK
NEXT →

Selection Summary

Product Family
Torque-Arm II (TAIL)



Connection Method
Belted

Specifications

Motor Power	60 hp
Motor Speed	1750 rpm
Application Type	Shaft Mount
Service Factor	1.4
Output Speed	80 rpm

Selection
Reducer Part Number 907002

	QTY	LIST PRICE
TAIL Reducer TA7315H15	1	19,140.00

TOTAL LIST PRICE
19,140.00 USD

4.) Accessories

Now we begin to select our accessories for our Torque-Arm reducer. The example application requires a Backstop, Tie Rod Kit, Motor Mount, and Belt Guard. We begin by selecting our bushing size, which is 4-7/16". You may have the option for the standard bushing kit, or the short shaft bushing kit. We check the boxes for a Tie Rod Kit and a Backstop. The magnifying glasses give you a small picture of what the accessory looks like.

8

1061 Holland Road, Simpsonville, SC 29681 USA | dodgeindustrial.com

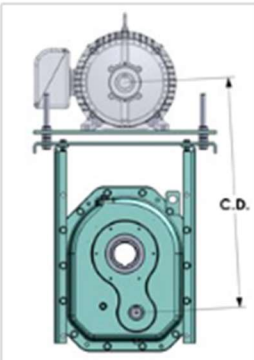
D

PTWizard gives you the option to select a Baldor motor for your assembly if your customer still needs a motor. The motor drop down will provide you all the Baldor options available based on the specs you provided earlier.

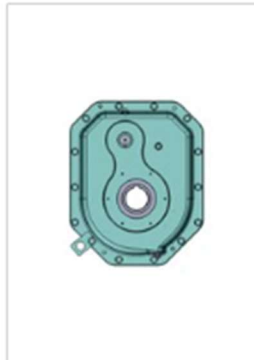
The motor mount drop down gives you a list of options for the mounting position of the reducer, as well as the mounting position with the motor mount kit. You can use the pictures to help with your selection. Our example did not specify mounting position so we will select Position B, with motor mount Height M2. The motor mount options will give you min, and max, center distances of the reducer and motor shafts.

Motor Mount ×

Please select the desired motor mount height



POSITION B *



POSITION D



POSITION C



POSITION A

Motor Mount Options (Position B)

Motor Mount Height	Min. Center Distance	Max. Center Distance
M1	33.7 in	37.7 in
M2 * Most common	39.7 in	43.7 in

OK
CANCEL

Next we choose the box assembly for a belt guard and then move on to sensors, breathers, bushing covers, and lubrication options. Our sensors monitor vibration and temperature in order to reduce downtime, improve reliability, and increase the safety of the gear reducer. The gateway allows for remote data collection, automatically uploading data into OPTIFY. Sensors are always recommended. We have the option to select a harsh duty breather, which also comes with a disclaimer and pictures. We won't select one for our example since it isn't a harsh environment. Next, you can select closed or open bushing covers, an immersion heater, a lube kit, and a sight gauge or sight tube. Again we won't select any of these since they aren't required. Now we have our reducer, bushing kit, tie rod, backstop, motor mount, and belt guard. We finally can move on to belt drive selection.

4
Accessories

Bushing

TA7315TB X 4-7/16 TAPER BUSH KIT

in

STANDARD bushing requires shaft key seat: 1 x 1/2 x 11.87 in

Tie Rod

☒ TA7315/8407RA TA ROD ASSEMBLY

Backstop

☒ 907102 - Backstop

Motor

>> Select

Select Motor

Motor Mount

Position B - M2 * Most common

Select Motor Mount

Do you want this package assembled?

☐ Yes ☒ No

If yes, assemble motor mount, motor, belt drive, and belt guard, if selected. All other accessories will be kitted and shipped with the assembled reducer.

Belt Guard

907101 - TA7315,8407 SAFETY BELT GUARD ASSY PO




OPTIFY Sensor


☒ SMART SENSOR


☒ GATEWAY

Adapter included with reducer.

Selection Summary

Product Family

Torque-Arm II (TAII)



Connection Method

Belted

Specifications

Motor Power

60 hp

Motor Speed

1750 rpm

Application Type

Shaft Mount

Service Factor

1.4

Output Speed

80 rpm

Selection

Reducer Part Number

907002

	QTY	LIST PRICE
TAII Reducer TA7315H15	1	19,140.00
Motor Mount TA7315/8407MM INCH...	1	2,361.00
Belt Guard TA7315,8407 BELT GU...	1	1,788.00
Smart Sensor DODGE SENSOR	1	593.00
Gateway GATEWAY 10: SIA X100...	1	1,710.50
Bushing TA7315TB X 4-7/16 TA...	1	1,300.00
Tie Rod TA7315/8407RA TA RO...	1	900.00
Backstop TA7315BS BACKSTOP...	1	3,914.00

TOTAL LIST PRICE

31,704.50 USD

5.) Drive

Now if you need to select a belt drive for the application, you start by selecting the type of bushing. The bushings provided can be for synchronous or V-Belt drives. We will select all the bushing options to see a wide range of choices that would best fit our application.

Type of Bushing

All | None


☒ TAPER LOCK


☒ QD


☒ FINISHED BORE


☒ SPLIT TAPERED


☒ H (LIGHT DUTY)

OK

Next, we can select the type of belt drive by checking the boxes of what we would consider in the customer's application. Again, we will select all the options in this example. Next you can specify the minimum number of belts, center distances range, and the service factor. We will select min. of 1 belt, and a min center distance of 39.7 inches, and a max of 43.7 inches to meet the motor mount requirements. Finally, you can select a service factor manually, or use "Select Service Factor" which provides a table of service factors based on application and hours in service. We will select 1.4 Service Factor again for both synchronous and V-Belt.

5 Drive

Type of Bushing

Taper Lock, QD, Finished Bore, Split Tapered, H (Light Du... [?](#)

Type of Drive

Synchronous All | None

☒ HT250
 ☒ HT500
 ☒ Dyna-Sync
 All | None

V-Belt All | None

Narrow All | None

☒ 3V, 3VX
 ☒ 5V, 5VX
 ☒ 8V, 8VX

Classical All | None

☒ A, AX
 ☒ B, BX
 ☒ C, CX
 ☒ D

Light Duty All | None

☒ 3L
 ☒ 4L
 ☒ 5L
 ☒ A, AX
 ☒ B, BX

Minimum Number of Belts

1

Center Distance

Min

39.7

in

mm

Max

43.7

in

The Center Distance range must fall between 39.7 and 43.7 to match the selected motor mount.

Synchronous Service Factor [?](#)

1.4

[Select Service Factor\(s\)](#)

V-Belt Service Factor [?](#)

1.4

[Select Service Factor\(s\)](#)

← BACK

NEXT →

PTWizd will now provide all the Dodge drive options available based on the specs provided. PTWizd will sort the options out to give you the best available selections on the first page. As we can see, PTWizd has given us the most economical options, within the 80 RPM output. We will select the 3B5V110-B and the 3B5V160-B sheaves with a 5V1250 belt to get us to at least 80RPM output.

Additional filters

Center Distance (in)
39.7 - 43.7

Reducer Output RPM
79 - 81

Service Factor
1.4 - 5.8

Belt Pull (lbs)
557 - 1032

Include Integral Key

Availability
Any

Warehouse
All

List Price (USD)	Driver	Driven	Belt	Reducer Output RPM	Center Distance	Belt Pull	Service Factor	Availability
V-Belt Drives (410)								
859.12	2B5V124-B SHEAVE	2B5V184-B SHEAVE	5VX1320 BELT	79	41.3	611	1.43	In Stock
942.40	3B5V110-B SHEAVE	3B5V160-B SHEAVE	5VX1320 BELT	81	39.8	688	1.85	In Stock
945.97	3B5V110-B SHEAVE	3B5V160-B SHEAVE	5VX1250 BELT	81	40.8	688	1.87	In Stock
948.88	3B5V110-B SHEAVE	3B5V160-B SHEAVE	5V1250 BELT	81	40.8	688	1.56	In Stock
978.72	2B5V136-B SHEAVE	2B5V200-B SHEAVE	5VX1400 BELT	80	43.1	557	1.58	In Stock
Synchronous Belt Drives (3)								
1,599.97	P44-14M-40-2517 HT250 SPKT	P64-14M-40-3020 HT250 SPKT	2800-14M-40 HT250 BELT	81	40.2	713	2.01	In Stock
1,801.40	P44-14M-55-2517 HT250 SPKT	P64-14M-55-3020 HT250 SPKT	2800-14M-55 HT250 BELT	81	40.2	713	2.77	In Stock
2,267.60	P44-14M-85-3020 HT250 SPKT	P64-14M-85-3535 HT250 SPKT	2800-14M-85 HT250 BELT	81	40.2	713	4.38	In Stock

BACK
NEXT

Selection Summary

Product Family

Torque-Arm II (TAII)



Connection Method

Belted

Specifications

Motor Power

60 hp

Motor Speed

1750 rpm

Application Type

Shaft Mount

Service Factor

1.4

Output Speed

80 rpm

Selection

Reducer Part Number

907002

	QTY	LIST PRICE
TAII Reducer TA7315H15	1	19,140.00
Motor Mount TA7315/8407MM INC...	1	2,361.00
Belt Guard TA7315,8407 BELT G...	1	1,786.00
Smart Sensor DODGE SENSOR	1	593.00
Gateway GATEWAY 10.SIA X1...	1	1,710.50
Bushing TA7315TB X 4-7/16 T...	1	1,300.00
Tie Rod TA7315/8407RA TA R...	1	900.00
Backstop TA7315BS BACKSTO...	1	3,914.00
Driver Sheave 3B5V110-B SHEAVE	1	247.00
Driver Bushing B X 2-3/8-KW BUSHI...	1	36.00
Driven Sheave 3B5V160-B SHEAVE	1	405.00
Driven Bushing B X 2-7/16-KW BUSHI...	1	36.00
Belt(s) 5V1250 BELT	3	224.88

TOTAL LIST PRICE

32,653.38 USD

6.) Summary

After we select a belt drive, we are taken to the "Summary" tab where we are given a full spec sheet of all of the assembly listed, as well as part numbers, weights, and prices of our assembly.

On the right hand side of the screen, we are given our full selection summary of all of the Dodge products the customer will buy. Each product has a quantity and list price, with the Total Price listed below.

At the bottom of the page we offer links to other resources where you can download any drawings or models needed for the customer. As well as a link to where you can download any catalogs, manuals, or brochures needed from the Dodge website.

Finally you can save your inquiry in case any future changes need to be made, and you don't want to start from scratch. The customer may follow up with specific accessories he made need, or a specific center distance for his belt drive. After you name your project, you can reload it at any time

to make changes that may be needed. Also, after you have saved your inquiry you can create a pdf for any possible hard copies you may need to print off.

Now we have made our first selection using the “Guide Me to a Solution” option. Now we will look at an example with “Pick a Dodge Reducer.”

C.) Pick a Dodge Reducer

This option is for people familiar with the Torque-Arm family of reducers and can make this selection at the beginning. Some specifics can be automatically filled now based on the type of Torque-Arm reducer you select.

Reducer Selection

Welcome to the Dodge Reducer Selection tool. Where would you like to begin?

Pick a Dodge reducer Are you familiar with Dodge? Start here!	Guide me to a solution Need help finding a reducer? Use this path to start.	Verify existing application Give us a part number and we will verify your selections.
BEGIN	BEGIN	BEGIN

Example 2)

A customer is looking for a Screw Conveyor Torque-Arm reducer with the following specs.

Application: Screw Conveyor
Motor Specs: 30hp, 1800 RPM, 60Hz, 3ph
Output Speed: 65 RPM
Class 2 Service Factor
Drive Shaft Diameter: 3 inches
Motor Mount and Belt Guard needed.

1.) Product Family

Here we begin by selecting the appropriate reducer for the customer’s application. In the product family page, our options are a TAll, TXT, or MTA, and the Screw Conveyor versions of these reducers. For this application we will select the SCXT (Screw Conveyor Torque-Arm).

Reducer Selection

START OVER

1 Product Family



Torque-Arm II (TAII)
 > 12 case sizes through 400 HP
 > Reducer ratio range of 5.1 to 40.1
 > Bore sizes up to 7 in
[View More Information](#)
 SELECT



Torque-Arm II - Screw Conveyor (TAII)
 > 8 case sizes through 75 HP
 > Reducer ratio range of 5.1 to 40.1
 > Drive shafts up to 3-7/16 in
[View More Information](#)
 SELECT



Torque-Arm (TXT)
 > 14 case sizes through 700 HP
 > Reducer ratio range of 5.1 to 25.1
 > Bore sizes up to 10 in
[View More Information](#)
 SELECT



Screw Conveyor Torque-Arm (SCXT)
 > 8 case sizes through 75 HP
 > Reducer ratio range of 5.1 to 25.1
 > Drive shafts up to 3-7/16 in
[View More Information](#)
 SELECT



Motorized Torque-Arm II (MTA)
 > 7 case sizes through 100 HP
 > Output speed range from 20 - 200 RPM
 > Bore sizes up to 4-7/16 in
[View More Information](#)
 SELECT



Motorized Torque-Arm II - Screw Conveyor
 > 7 case sizes through 100 HP
 > Output speed range from 20 - 200 RPM
 > Drive shafts up to 3-7/16 in
[View More Information](#)
 SELECT

NEXT

2.) Specifications

Now we enter the specs the same way we did previously. We select NEMA Motor, 60Hz, 30HP, 1800RPM, and 1.4 Service factor. Next, we enter an output speed of 65 RPM, and then move on to selection.

1 Product Family

2 Specifications

Motor Type: NEMA Motor

Power Frequency: ☒ 60 Hz ☐ 50 Hz

Motor Power: 30 hp

Motor Speed: 1750 rpm

Motor Frame Size: 286T

Service Factor: 1.4
[Select Service Factor](#)

Thermal Accessory: ☐ Exclude cooling fan from results ☒ Exclude heat exchanger

Application Ambient Temperature: 95°F and below °F °C

Application Altitude: up to 5,000 ft m

Output Speed: 65 rpm

BACK NEXT

Selection Summary

Product Family
Screw Conveyor Torque-Arm (SCXT)



Specifications

Motor Power	30 hp
Motor Speed	1750 rpm
Application Type	Screw Conveyor
Service Factor	1.4
Output Speed	65 rpm

3.) Selection

Now we are given our options based on the required specs. Here we have 4 options, 3 SCXT6s with 25:1, 15:1, and 9:1 ratios. You will notice we also have a TAIL Screw Conveyor option listed. PTWizard will show possible options available from other reducers in the Torque-Arm family if they can match the spec requirements and may be more beneficial than your original selection. In this case, the TA5215H25 option has a better service factor and is better priced than the SCXT6 option. We chose a TAIL in our previous example, so in this case we will select the SCXT625A or part number 356058 option.

3 Selection

! All available Torque Arm reducers are shown below. TAIL may be more cost effective.

Customer Number

>> Select

Drive Shaft Size

Unknown

in

Screw Diameter

Unknown

in

Select Reducer

Reducer	Part Number	Service Factor	Ratio	Actual Belt Drive Ratio	Thermal Accessory	List Price (USD)
	356058 - SCXT625A	1.48	25	1.07	None	11,720.00
	356057 - SCXT615A	1.48	15	1.76	None	11,720.00
	246480 - SCXT609A	1.48	9	2.93	None	11,720.00
	905001 - TA5215H25	1.58	25	1.08	None	9,160.00

← BACK

NEXT →

Just as before, we now see the selection summary on the right hand side of the screen begin to occupy with the Dodge products we select. After selection, the steps for accessories, and drive are the same as the previous example.

4.) Accessories

Now we select the accessories needed for the customer's application. The drive shaft drop down provides all available drive shaft diameters: along with their screw hole amounts, and materials options for the reducer you selected previously. We need a 3inch diameter drive shaft so we will select 3"-3 Hole-Steel. Next for CEMA Adapter, we check the box for 356055 – C6 Adapter Assy.

A screw conveyor drive requires a reducer, drive shaft, and CEMA adapter. Since the reducer doesn't come with an adapter and drive shaft, it is important to fill these accessories out in order to get a full screw conveyor assembly. The adjustable packing kit can also be checked if the customer has a harsh duty environment.

Again we can select a Baldor motor if necessary, and the motor mount position will need to be selected. We will select Position C; a note is at the bottom stating, "Position C is the most common orientation for screw conveyor applications." After that, we select our motor mount option, in this case we only have one available option.

Then you can select a harsh duty breather, taconite seal kit, lube kit, and or a sight gauge. These added accessories will begin to populate the selection summary as they are selected.

4 Accessories

Drive Shaft
3" - 3 Hole - Steel

CEMA Adapter
☒ 356055 - C6 ADAPTER ASSY

Adjustable Packing Kit
☐ 356306 - AC6/AC7 ADJUSTABLE PACKING KIT

Motor
>> Select
☒ Select Motor

Motor Mount
Position C - SCXT
☒ Select Motor Mount

Do you want this package assembled?
☐ Yes ☒ No

 If yes, assemble motor mount, motor, belt drive, and belt guard, if selected. All other accessories will be kitted and shipped with the assembled reducer.

Belt Guard
☒ 246476 - SCXT8D STD MTR MT BELT GRD ASSY

OPTIFY Sensor


☐ SMART SENSOR


☐ GATEWAY

Optional Harsh Duty Breather


☐ HYDRA-LOCK BREATHER


☐ XT ENCLOSED BREATHER

Aux Taconite Seal Kit
☐ 272726 - Auxiliary Taconite Seal Kit

Lubricant
☐ LUBEKITTTX6 - Lubricant

Selection Summary

Product Family
 Screw Conveyor Torque-Arm (SCXT)
 

Specifications

Motor Power	30 hp
Motor Speed	1750 rpm
Application Type	Screw Conveyor
Service Factor	1.4
Output Speed	65 rpm

Selection
 Reducer Part Number 356058

	QTY	LIST PRICE
SCXT Reducer SCXT625A	1	11,720.00
Motor Mount M620 SCXT MOTOR ...	1	1,635.00
Belt Guard SCXT8D STD MTR M...	1	1,440.00
Drive Shaft C6 X 3 3H DRIVE SHA...	1	3,714.00
CEMA Adapter C6 ADAPTER ASSY	1	832.00

TOTAL LIST PRICE
19,341.00 USD

5.) Drive

Finally we select a belt drive the same way we did in the first example. First you select the type of bushing, type of belt, minimum number of belts, center distance range, and service factors. We will select all the bushings and drive styles, and use a 1.4 service factor again like in example 1. Our motor mount has a min. center distance of 20.5" and a max. center distance of 24.5." Our options for V-Belt and Synchronous Belt Drives are tabulated. To achieve the 65 RPM output, we will select the 3B5V58-B and 3B5V62-B sheaves with a 5VX610 belt.

Center Distance (in)	Reducer Output RPM	Service Factor
20.5 - 24.5	64 - 66	1.4 - 5.7
Belt Pull (lbs)	Include Integral Key	Availability
356 - 673	☒	Any
Warehouse		
All		

List Price (USD)	Driver	Driven	Belt	Reducer Output RPM	Center Distance	Belt Pull	Service Factor	Availability
V-Belt Drives (1542)								
460.00	3B5V58-B SHEAVE	3B5V62-B SHEAVE	5VX610 BELT	66	20.6	636	1.44	Out Of Stock
461.20	3B5V58-B SHEAVE	3B5V62-B SHEAVE	5VX630 BELT	66	21.6	636	1.46	In Stock
463.50	3B5V56-B SHEAVE	3B5V60-B SHEAVE	5VX670 BELT	65	24.0	658	1.40	In Stock
464.25	3B5V56-B SHEAVE	3B5V60-B SHEAVE	5VX680 BELT	65	24.5	658	1.40	In Stock
466.06	3B5V58-B SHEAVE	3B5V62-B SHEAVE	5VX650 BELT	66	22.6	636	1.46	In Stock
Synchronous Belt Drives (8)								
909.80	8MX-63S-21-2012 HT500 SPKT	8MX-67S-21-2517 HT500 SPKT	1600-8MX-21 HT500 BELT	66	21.3	436	2.64	In Stock
917.04	8MX-63S-21-2012 HT500 SPKT	8MX-67S-21-2517 HT500 SPKT	1760-8MX-21 HT500 BELT	66	24.4	436	2.71	In Stock
962.24	8MX-75S-21-2517 HT500 SPKT	8MX-80S-21-2517 HT500 SPKT	1760-8MX-21 HT500 BELT	66	22.4	366	3.29	In Stock
963.14	8MX-75S-21-2517 HT500 SPKT	8MX-80S-21-2517 HT500 SPKT	1792-8MX-21 HT500 BELT	66	23.1	366	3.31	In Stock
1,055.12	8MX-63S-36-2517 HT500 SPKT	8MX-67S-36-2517 HT500 SPKT	1600-8MX-36 HT500 BELT	66	21.3	436	4.53	In Stock

Selection Summary

Product Family

Screw Conveyor Torque-Arm (SCXT)



Specifications

Motor Power 30 hp
Motor Speed 1750 rpm
Application Type Screw Conveyor
Service Factor 1.4
Output Speed 65 rpm

Selection

Reducer Part Number 356058

	QTY	LIST PRICE
SCXT Reducer SCXT625A	1	11,720.00
Motor Mount M820 SCXT MOTOR ...	1	1,835.00
Belt Guard SCXT6D STD MTR M...	1	1,440.00
Drive Shaft C8 X 3 3H DRIVE SH...	1	3,714.00
CEMA Adapter C8 ADAPTER ASSY	1	832.00
Driver Sheave 3B5V58-B SHEAVE	1	136.00
Driver Bushing B X 1-7/8-KW BUSHI...	1	36.00
Driven Sheave 3B5V62-B SHEAVE	1	144.00
Driven Bushing B X 2-3/16-KW BUSH...	1	36.00
Belt(s) 5VX610 BELT	3	108.00

TOTAL LIST PRICE

19,801.00 USD

6.) Summary

After we select a belt drive, we receive a summary with specs of the assembly we selected. All the parts that need to be ordered will appear on the right with the quantity needed and their respective

list prices. Again, you can save this inquiry for any future use or if the customer needs to change something in his setup and you can edit the selection by loading the saved inquiry.

D. Verify Existing Application

1. Verify Part Number

If you have a Torque Arm reducer part number already, you can select “Verify Existing Application.”

Reducer Selection

Welcome to the Dodge Reducer Selection tool. Where would you like to begin?

Pick a Dodge reducer	Guide me to a solution	Verify existing application
Are you familiar with Dodge? Start here!	Need help finding a reducer? Use this path to start	Give us a part number and we will verify your selections.
BEGIN	BEGIN	BEGIN

From here you can enter the part number and PTWizard will verify the part number and select the reducer that is assigned the respected part number.

Reducer Selection

START OVER

1 Verify Part Number ✓

Part Number / Description: 904000 TA4207H40 TA TAPER BUSH REDUCER ✕

NEXT →

2 Specifications

3 Selection

4 Accessories

5 Drive

6 Summary

Selection Summary

2. Selection and Summary

After you select the reducer, you can fill out the specifications fields to produce a complete assembly similar to the previous examples.

PTWizard provides a simplistic and linear step by step approach towards selecting a Dodge reducer. If you have any further questions about using PTWizard. There is a contact us button at the bottom of the webpage. You can submit comments or suggestions and can contact Dodge Engineering for technical questions using the phone numbers or email addresses provided under the comments box.

System Design Belt Conveyor	Product Selection Belted Drives Conveyor Pulleys Gear Reducers Mounted Bearings	Useful Links My Selections My Account My Preferences	Dodge PT Wizard Feedback We want to hear from you! CONTACT US
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Dodge PT Wizard Feedback ×

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Comments or Suggestions

Or contact us directly:
Dodge PT Wizard Support:
etools@dodgeindustrial.com

SEND