Shibuya Hoppmann

Model EP Series **Elevating Prefeeders**

ANSI/Metric Installation & Maintenance Manual

Refer all servicing to qualified personnel.

This manual is intended for use by qualified mechanics and electricians who install or service the Hoppmann EP Series Elevating Prefeeders.



Record your serial plate information here for future reference



Model Number

Serial Number/Date

First Edition, Revision 4, All Rights Reserved. Copyright 2015 by Shibuya Hoppmann Corporation.

Duplication of this manual, in whole or in part, requires prior written consent from Shibuya Hoppmann Corporation.

Headquarters 7849 Coppermine Dr. Manassas, VA

540.829.2564 t 800.368.3582 t 540.829.1726 f

1445 Brookville Way Suite F Indianapolis, IN 46239 24572 317.322.0754 t

800.368.3582 t 317.322.0794 f

Manufacturing 291 Dillard Road Madison Heights, VA 434.929.4746 t

800.543.0915 t

434.929.4959 f

Description & Specifications



The EP Series Elevating Prefeeder: Overview

Function

The EP Series Elevating Prefeeders are designed to load parts into a feeder or other equipment for singulation and/or orientation. The supply hopper capacity ranges from 4 cubic feet (EP-04) to 50 cubic foot (EP-50).

Parts are loaded into the hopper at floor level. The product is then gently raised out of the hopper by means of a cleated belt and metered into either the recipient feeder bowl or other equipment on demand of a bowl level sensor. Refer to Figure 1-1 for a diagram of the various parts of an elevating prefeeder.

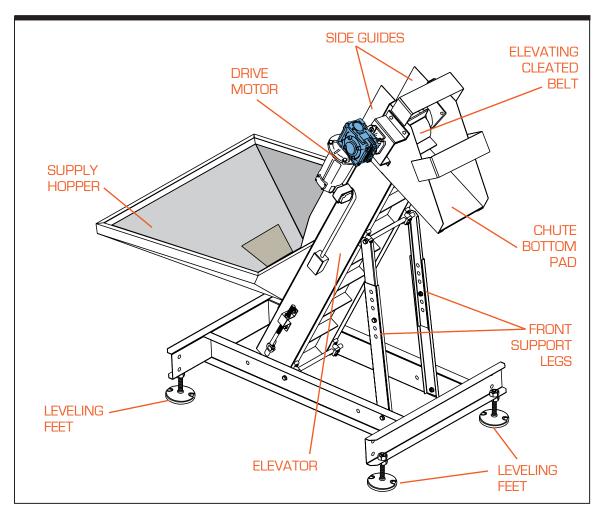


Figure 1-1. EP Series Typical Elevating Prefeeder - EP-08 Shown

EP-04/EP-06 Elevating Prefeeder Specifications

Standard Features

The stainless steel constructed EP-04 and EP-06 elevating prefeeders come standard with an FDA/USDA approved white 1-ply solid woven polyester fabric belt, with .156" thick white PVC coating and standard 1.50" tall cleats.

Optional Features

Elevator extension, hopper extensions, continuous welded hoppers, integrated safety covers, washdown motors, NEMA 1 encased controller, pneumatic hopper agitators and casters are optional equipment for the EP-04.

Specifications

Please refer to the tables below for EP-04/06 specifications:

Specifications	DC	AC
Motor Size	1/5hp	1/4hp
Motor Frame Size	56C	56C
Supply Voltage	90VDC	230/460 VAC
Average Belt Speed	35'/min.	10.67 meters/min.
Cleat Height (Nominal)	1.50"	38.10mm
Cleat Pitch	6.00"	152.40mm
EP-04 Hopper Capacity	4 ft ³	113 liters
EP-06 Hopper Capacity	6 ft ³	170 liters

Table 1-1. EP-04/06 Specifications

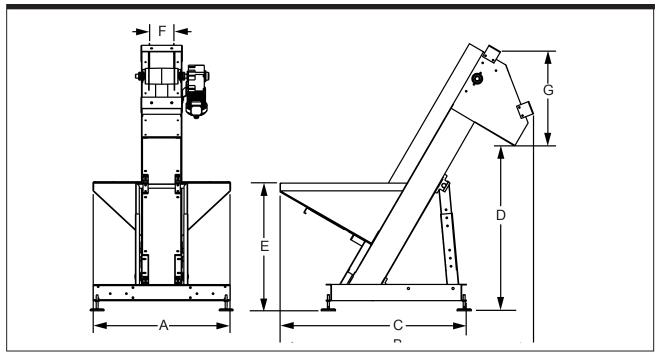


Figure 1-2. EP-04/06 Dimension Views

Dime	nsion Specifications	ANSI	Metric
А	Overall Width	34"	865mm
В	Overall Length	62"	1575mm
C	Lower Chassis Footprint	46"	1168mm
D	Dump Height (Adjustable)	42"	1067mm
Е	Hopper Load Height (EP-04)	31"	787mm
Е	Hopper Load Height (EP-06)	35"	889mm
F	Belt Width	6"	152mm
G	Discharge Chute Height	23.5"	597mm
Н	Level Foot Adjustment	2"	51mm
Overa	all Weight	250 lbs.	113.4 kg

Table 1-2. EP-04/06 Dimension Specifications

EP-08/EP-15/EP-25 Elevating Prefeeder Specifications

Standard Features

The stainless steel constructed EP-08/15/25 elevating prefeeders come standard with an FDA/USDA approved white 1-ply solid woven polyester fabric belt, with .156" thick white PVC coating and standard 2.00" tall cleats, hopper cleanout door and one piece formed hopper (8 cubic foot standard).

Optional Features

Elevator extensions, hopper extensions, continuous welded hoppers (for EP-15 and EP-25), integrated safety covers, washdown motors, NEMA 1 encased controller, pneumatic hopper agitators and casters are optional equipment.

Specifications

Please refer to the tables below for EP-08/15/25 specifications:

Specifications	DC	AC
Motor Size	1/4hp	186w
Motor Frame Size	56C	56C
Supply Voltage	90VDC	230/460VAC
Average Belt Speed	32'/min.	9.75 meters/min.
Cleat Height (Nominal)	2.00"	50.80mm
Cleat Pitch	6.00"	152.40mm
EP-08 Hopper Capacity	8 ft ³	227 liters
EP-15 Hopper Capacity	15 ft ³	425 liters
EP-25 Hopper Capacity	25 ft ³	708 liters

Table 1-3. EP-08/15/25 Specifications

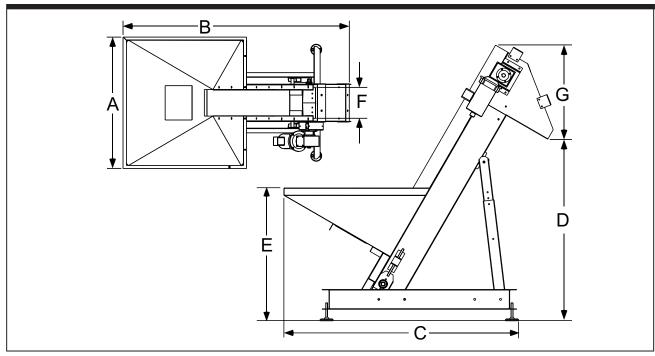


Figure 1-3. EP-08/15/25 Dimension Views

Dime	nsion Specifications	ANSI	Metric
Α	Overall Width	42"	1067mm
В	Overall Length	73"	1854mm
С	Lower Chassis Footprint	63.10"	1603mm
D	Dump Height (Adjustable)	42" - 53"	1067-1346mm
Е	Hopper Load Height (EP-08)	34"	864mm
Е	Hopper Load Height (EP-15)	42 "	1067mm
Е	Hopper Load Height (EP-25)	50"	1270mm
F	Belt Width	8"	203mm
G	Discharge Chute Height	25.5"	648mm
Overa	all Weight	720 lbs.	327kg

Table 1-4. EP-08/15/25 Dimension Specifications

EP-10/20/30 Elevating Prefeeder Specifications

Standard Features

The EP-10/20/30 elevating prefeeder is designed to handle a variety of medium-sized, mid-weight parts. Its 10 ft³ capacity hopper delivers product at an average belt speed of 32'/minute. The 12" wide cleated elevator belt has a nominal cleat height of 2.00" and a cleat pitch of 9.00" allowing for maximum product loading. A heavy duty variable speed motor helps to ensure proper product metering.

Optional Features

Elevator extensions, hopper extensions, integrated safety covers, washdown motors, NEMA 1 encased controller, pneumatic hopper agitators and casters are optional equipment.

Specifications

Please refer to the tables below for EP-10/20/30 specifications:

Specifications	DC	AC
Motor Size	1/4hp	186w
Motor Frame Size	56C	56C
Supply Voltage	90VDC	230/460VAC
Average Belt Speed	32'/min.	9.75 meters/min.
Cleat Height (Nominal)	2.00"	50.80mm
Cleat Pitch	9.00"	228.6mm
EP-10 Hopper Capacity	10 ft ³	283 liters
EP-20 Hopper Capacity	20 ft ³	566 liters
EP-30 Hopper Capacity	30 ft ³	850 liters

Table 1-5. EP-10/20/30 Specifications

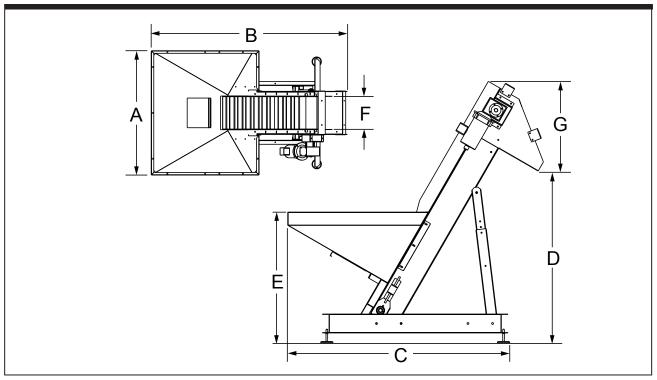


Figure 1-4. EP-10/20/30 Dimension Views

Dime	nsion Specifications	ANSI	Metric
Α	Overall Width	46.10"	1171mm
В	Overall Length	72.69"	1846mm
C	Lower Chassis Footprint	62.98"	1600mm
D	Dump Height (Adjustable)	48.90"	1242mm
Е	Hopper Load Height (EP-10)	37.24"	946mm
Е	Hopper Load Height (EP-20)	46.24"	1174mm
Е	Hopper Load Height (EP-30)	55.24"	1403mm
F	Belt Width	12"	305mm
G	Discharge Chute Height	25.5"	648mm
Overa	all Weight	740 lbs.	336kg

Table 1-6. EP-10/20/30 Dimension Specifications

EP-35/EP-50 Elevating Prefeeder Specifications

Standard Features The stainless steel constructed EP-35/50 elevating prefeeders come

standard with an FDA/USDA approved white 1-ply solid woven polyester fabric belt, with .156" thick white PVC coating and

standard 3.00" tall cleats, and hopper cleanout door.

Optional Features Elevator extensions, hopper extensions, continuous welded

hoppers, integrated safety covers, washdown motors, NEMA 1

encased controller, and casters are optional equipment.

Specifications Please refer to the tables below for EP-35/50 specifications:

Specifications	DC	AC
Motor Size	1/2hp	373w
Motor Frame Size	56C	56C
Supply Voltage	90VDC	230/460VAC
Average Belt Speed	23'/min.	7.01 meters/min.
Cleat Height (Nominal)	3.00"	76.2mm
Cleat Pitch	12.00"	304.80mm
EP-35 Hopper Capacity	35 ft ³	991 liters
EP-50 Hopper Capacity	50 ft ³	1416 liters

Table 1-7. EP-35/50 Specifications

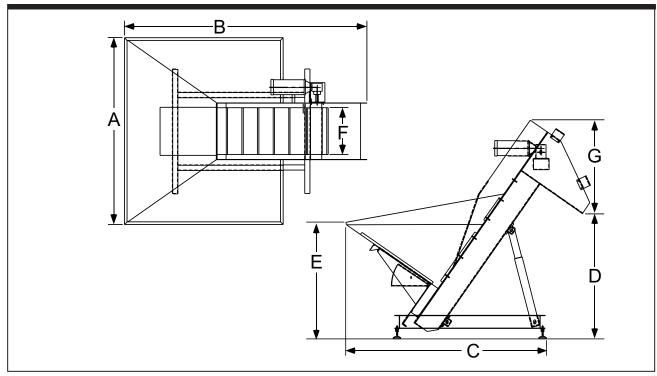


Figure 1-5. EP-35/50 Dimension Views Views

Dime	nsion Specifications	ANSI	Metric
Α	Overall Width	72"	1829mm
В	Overall Length	95"	2413mm
С	Lower Chassis Footprint	76.62"	1947mm
D	Dump Height (Adjustable)	45" - 58"	1143-1473mm
Е	Hopper Load Height (EP-35)	45"	1143mm
Е	Hopper Load Height (EP-50)	51"	1295mm
F	Belt Width	18"	457mm
G	Discharge Chute Height	25.5"	648mm
Overa	all Weight	1200 lbs.	544 kg

Table 1-8. EP-35/50 Dimension Specifications

EP Series Prefeeder Installation & Maintenance Manual

Notes