

## Model FT Series Centrifugal Feeder

### FT-40-RD, FT-50-RD and FT-60-RD 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 FT-40-RD, FT-50-RD and FT-60-RD Centrifugal Feeders.

Use this manual for the FT-40-RD, FT-50-RD and FT-60-RD ANSI or Metric style Centrifugal Feeders, cold rolled steel or stainless steel, single or dual drive systems, manufactured after October, 1996.

Record your serial plate information here for future reference



**Model Number**

**Serial Number/Date**

First Edition, Publication Version, All Rights Reserved.  
Copyright 2012 by Shibuya Hoppmann Corporation.

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

**Headquarters**  
13129 Airpark Drive  
Suite 120  
Elkwood, VA 22718  
540.829.2564 t  
800.368.3582 t  
540.829.1726 f

**Sales**  
1445 Brookville Way  
Suite F  
Indianapolis, IN 46239  
317.322.0754 t  
800.368.3582 t  
317.322.0794 f

**Manufacturing**  
281 Dillard Road  
Madison Heights, VA  
24572  
434.929.4746 t  
800.543.0915 t  
434.929.4959 f

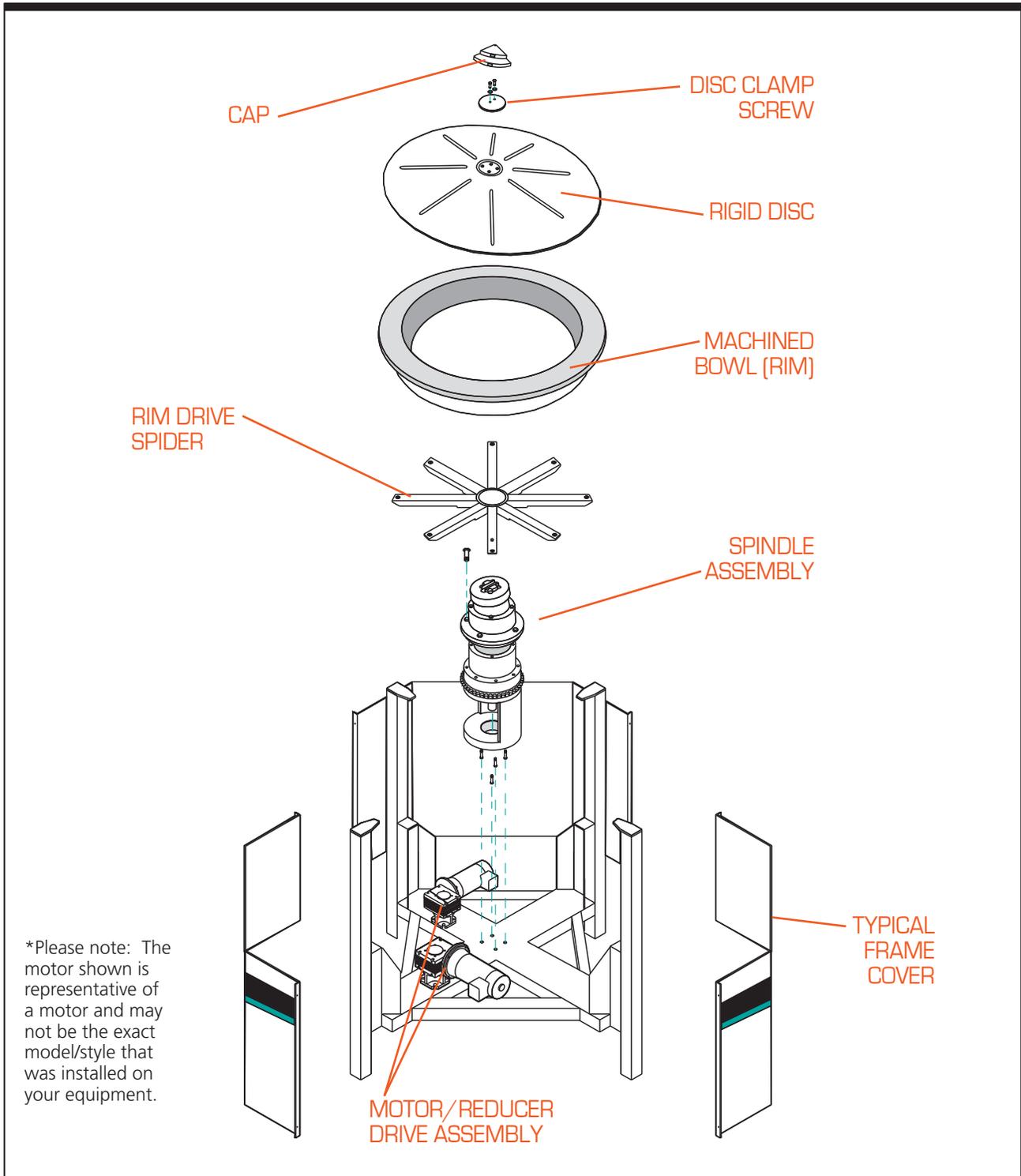


Figure 1-1. Typical FT-Series Dual Drive Feeder - Exploded View

---

# Feeder Description & Specifications

## 1

### Overview of the FT-40, FT-50 and FT-60-RD

Thank you for purchasing a Hoppmann Centrifugal Feeder. Hoppmann feeders are easy to use, easy to maintain and easily handles your product quietly and rapidly.

**Function** Each centrifugal feeder unscrambles, orients and feeds product. (Refer to Figure 1-1 for an exploded view of the FT-40/50/60-RD feeder). The delivery rate varies depending on product characteristics. The feeder easily interfaces with Shibuya Hoppmann's prefeeders, accumulating conveyors and assembly equipment. (See to Figure 1-2 for the FT-40-RD product specifications, Figure 1-3 for the FT-50-RD and Figure 1-4 for the FT-60-RD product specifications.)

**Operation** **Step 1—The Feeder Accepts Your Product.** Every feeder accepts product from a separate bulk supply hopper or prefeeder. Product drops randomly, a few at a time, onto a rigid disc.

- ➔ It is recommended that you carefully meter product into the bowl a few parts at a time, rather than emptying, in bulk, directly into the feeder bowl. Once the feeder has received parts, it should start delivering singulated parts almost immediately.

**Step 2—The Feeder Loads and Qualifies Your Product.** Product is metered into the bowl, dropping onto the rigid disc, and loaded onto the rim for singulation and qualification. The rim moves the product past mechanical, pneumatic and/or optical qualifiers. Improperly oriented product is rejected, and returned to the reservoir area of the bowl for recirculation.

**Step 3—The Feeder Delivers Your Product.** Next, product moves off the rim and out of the centrifugal feeders, in proper orientation, for delivery to downstream operations.

## Specifications of the FT-50-RD

**Standard Features** The FT-50-RD is standard with stainless steel exterior construction, an FDA approved ABS vacuum formed disc, and a Teflon® hard-coated anodized aluminium bowl.

**Optional Features** The FT-50-RD feeder can be easily integrated with polycarbonate covers (safety covers), washdown motor(s), a dual motor drive system, and a variety of controllers and operating systems.

**Specifications** Please refer to the tables below for FT-50-RD specifications:

Performance Specifications	ANSI	Metric
Maximum Bowl Linear Speed (@ Rim ID) <sup>1</sup>	400 feet/min	102 meters/min
Vertical Bowl Runout (Maximum)	0.020 "	0.500mm
Vertical Disc Runout (Maximum)	0.100 "	2.500mm
Electrical Specifications	DC	AC
Motor Size	1/2hp	1/2hp
Motor Frame Size	56C	56C
Supply Voltage	90 Volts	208-230/460 <sup>3</sup>
RPM	1750	1750
Power Usage	8 Amps	3 Amps

Table 1-3. FT-50-RD Performance Specifications and Electrical Specifications

<sup>3</sup> Maximum speed is not the operating speed. This is provided as a reference value only.

<sup>4</sup> 3 Phase, 60 Hertz supply voltage for AC motor.

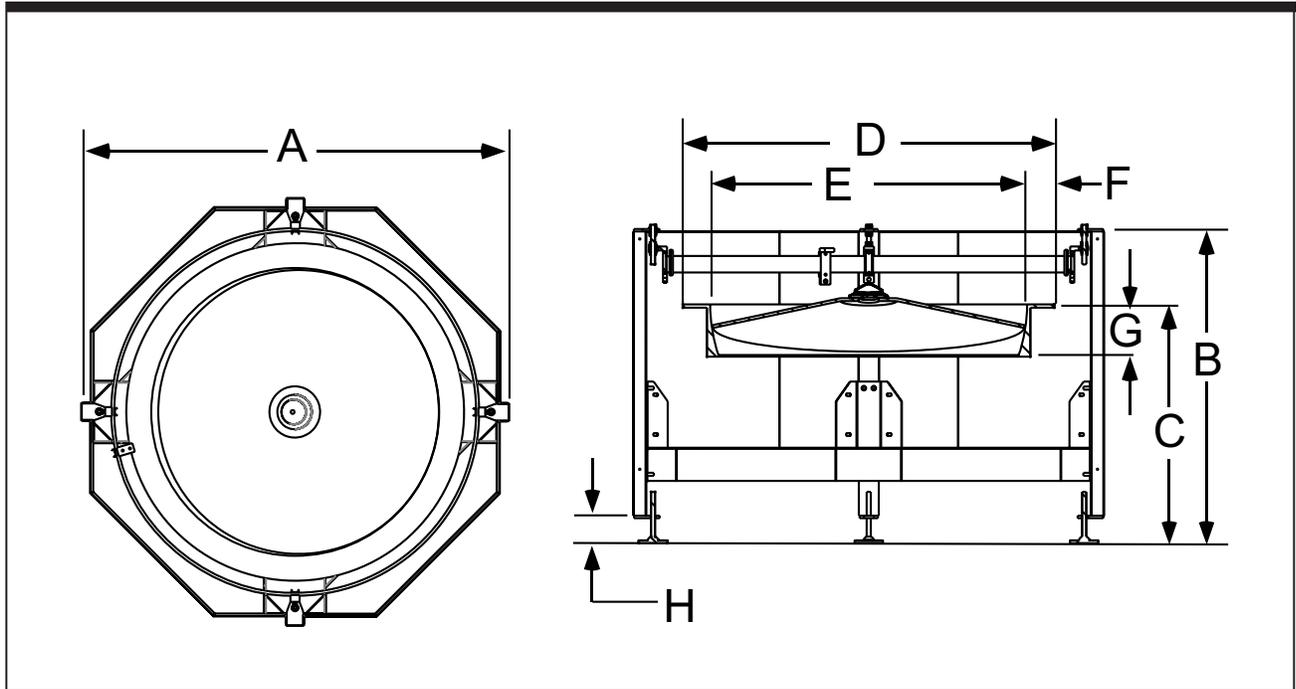


Figure 1-3. FT-50-RD Side and Top Views

Dimension Specifications		ANSI	Metric
A	Outer Wall Diameter	71"	1804mm
B	Overall Height	47" ± 1.5"	1194 ± 38mm
C	Discharge Height	36" ± 2"	914 ± 51mm
D	Bowl Outside Diameter	56"	1422mm
E	Bowl Inside Diameter	47.10"	1196mm
F	Rim Width	4.13"	105mm
G	Bowl Depth	7.10"	180mm
H	Level Foot Adjustment (Height)	5" ± 2.5"	127 ± 64mm
Disc Diameter		47.10"	1196mm
Disc-Bowl Gap		0.050"	1.27mm
Overall Weight (Untooled)		≈ 1050 lbs.	≈ 476 kg

Table 1-4. FT-50-RD Dimension Specifications

## Shibuya Hoppmann offers a wide selection of products:

- ➔ Hoppmann Centrifugal Feeders<sup>TM</sup>
- ➔ Prefeeders
- ➔ Continuous Motion Assembly
- ➔ Placement Systems
- ➔ Fillers and Cappers
- ➔ Conveyors
- ➔ Product Handling Equipment
- ➔ Aseptic Filling Systems
- ➔ Labelers
- ➔ Decontamination Equipment
- ➔ Intermittent Motion Assembly
- ➔ Integrated Product Lines

### Headquarters

13129 Airpark Drive  
Suite 120  
Elkwood, VA 22718  
540.829.2564 t  
800.368.3582 t  
540.829.1726 f

### Sales

1445 Brookville Way  
Suite F  
Indianapolis, IN 46239  
317.322.0754 t  
800.368.3582 t  
317.322.0794 f

### Manufacturing

281 Dillard Road  
Madison Heights, VA  
24572  
434.929.4746 t  
800.543.0915 t  
434.929.4959 f