

Components for which systems are available



09/2026 | September | 2026

► FEEDING IN THE LATEST

► FEEDING OF C BRACKET

► DUAL LINE FEEDING

Elscint Ahead

Feeding In The Latest . . .
Monish Shete

Visit Us At- www.elscintautomation.com

Welcome to the September edition of the Elscint Ahead Newsletter. In this edition, you can read about two recently delivered bowl feeders. The second is a double outlet bolt feeder with pneumatic singulation. while the first news item is of a high speed feeding of a critical component. As always, you can download the [pdf version](#) of this newsletter as also the back copies of the [Elscint Ahead Newsletter](#).

Feeding of C Bracket



The Challenge: A customer was experiencing persistent feeding problems with their existing bowl feeder, struggling to reliably orient and feed C-brackets measuring 10mm × 80mm with just 1.5 mm thickness — components with an asymmetric profile where one side is slightly longer than the other. Parts were jamming repeatedly, disrupting production flow and limiting throughput.

The Elscint Solution: We engineered and supplied a purpose-built vibratory bowl feeder with precision tooling specifically designed for this challenging component. The asymmetric geometry of the C-bracket demands exact orientation control — something only expert tooling design & a skilled bowl tooler can achieve.

The Results:

- ☒ 120 parts per minute — high-speed, consistent output
- ☒ Zero jamming — smooth, uninterrupted feeding
- ☒ Accurate orientation — every part correctly aligned, every time

Elscint Automation ☒ Immediate ROI — replacing a failing system with a proven, reliable solution

W-191 Bhosari MIDC

Pune 411 026, India Tel.: +91 8600122059

Email – sales@elscintautomation.com

Website – www.elscintautomation.com

Off-the-shelf bowl feeders often fall short when handling asymmetric or precision components. Elscint's engineering expertise ensures that tooling is custom-matched to the part geometry — no compromises, no jams, no downtime. [You can watch the video of the equipment.](#)

Dual-Lane Feeding for a Symmetrically Weighted Part

When a part's near-identical top and bottom weight distribution defies conventional bowl feeding logic, engineering precision makes all the difference.

01.The Challenge - Every parts-feeding project presents its own set of variables — but few are as deceptively tricky as a component with a near-symmetrical weight distribution across its top and bottom faces. When a customer approached us needing to feed two parallel production lines simultaneously, this was precisely the obstacle standing in the way.

Because the part's mass was distributed almost equally on both sides, the vibratory bowl feeder could not reliably distinguish and orient the component using conventional tooling alone. The risk: parts arriving at the assembly station in the wrong orientation, causing downstream defects or line stoppages.

02.Our Solution - A complete, integrated feeding and singulation system built around a two-stage mechanical orientation strategy — ensuring every single part arrives correctly oriented, at the right place, at the right place.

- Parts were bulk-loaded into the Model 250 vibratory bowl feeder, which conveyed and pre-oriented the components along the bowl track, preparing them for downstream handling across both production lines.

- Model LF I linear vibrator was positioned directly ahead of the bowl feeder, extending the conveying path and ensuring a steady, controlled flow of parts into the singulation zone without gaps or pile-ups.

- Lateral Separation - A purpose-built singulator using a pneumatic cylinder to push parts sideways, physically separating them from the stream one at a time and feeding them into two individual lanes with precision timing.

- Orientation Cylinder — Correct End First - A second cylinder then acted on each singulated part, pushing it into one of two dedicated tubes so that the smaller-diameter end enters the tube first — guaranteeing correct orientation at the

- Signal-Based Release - The complete assembly was governed by an integrated electrical control panel. Parts were held and released in response to a signal from the customer's own production equipment — ensuring the feeding system is fully synchronised with the line and never delivers parts prematurely.

04.Why This Approach Works

Rather than relying solely on the bowl feeder to resolve orientation — which is unreliable when top-bottom weight distribution is similar — our solution adds a dedicated mechanical stage after the bowl. This separates the two problems: the bowl handles bulk conveying and rough pre-orientation, while the singulator and cylinder assembly handle the precise, repeatable final orientation.

Feeding into tubes with the smaller-diameter end leading is a robust, fail-safe technique. The geometry of the tube itself enforces correct orientation; there is no ambiguity and no reliance on sensor feedback for the orientation step. This makes the system inherently reliable even in dusty or vibration-intensive production environments.

The signal-based release mechanism ensures the feeder is a responsive, integrated partner to the customer's assembly process — not an independent system running on its own schedule.

[You can have a look at the video of this equipment.](#)



Elscent Automation

W-191 Bhosari MIDC

Pune 411 026, India Tel.: +91-8600122059

Email – sales@elscentautomation.com

Website – www.elscentautomation.com