

# UNIVERSAL SYRINGE FIXTURE

Standard CP131100 and Dose Accuracy CP132692

The Instron® Universal Syringe fixture is designed to evaluate many of the functional properties of both primary containers and safety syringe devices. The adjustable chuck design can accommodate a wide range of specimen diameters, including the most commonly found syringe volumes [1 ml - 50 ml]. The universal nature of the design addresses the pains related to testing a wide variety of syringes, by eliminating the need to source and keep track of a selection of inserts. To address the growing need for dose accuracy measurements of prefilled and safety syringes, the fixture can be fitted with an enclosed balance, that collects and sends mass data directly to Bluehill Universal.

### **FEATURES**

- Adjustable 4 jaw lathe chuck for device gripping
- Specially designed rubber coated jaw faces to prevent damage of the syringe
- Maximum syringe diameter 30 mm (1.18 in)
- Modular design to support additional syringe testing applications
- Optional integrated Mettler Toledo Balance with Enclosure

#### APPLICATION RANGE

- · Break Loose and Glide Force
- Dose Accuracy
- RNS Cap Removal
- Needle Penetration [With Modular Top Plate]
- Cartridge Testing per ISO 11608-3 [With Inserts and Probes]

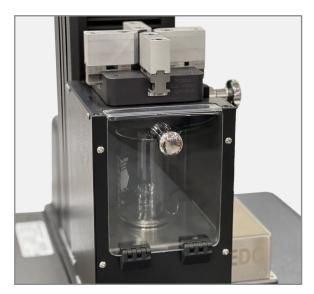
#### PRINCIPLE OF OPERATION

The fixture can be used with any Instron testing system and consists of two components:

- Upper Compression Platen
- Lower Syringe Holder



Standard CP131100



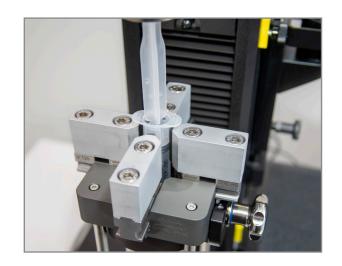
Dose Accuracy CP132692

The syringe is placed in the lower holder and the detachable knob is adjusted to tighten the chuck down on the specimen. An additional benefit of the chuck design is the ability of the fixture to self-center, reducing chances of variability in results. The test will utilize the compression platen to actuate the syringe, while the load cell and optional balance record all the test data. The test control and results are provided by Bluehill Universal. Initial forces, mean forces, maximum forces, and expelled volume can be calculated, reported, and stored in industry-standard formats for further examination.

Instron provides load verification and IQ/OQ services that can be incorporated to simplify your internal validation processes. Bluehill Traceability meets the regulatory guidelines found in FDA 21 CFR Part 11. Reports can be printed, emailed, or saved for future viewing.

## **SPECIFICATIONS**

		CP131100	CP132692
Version		Standard	Dose Accuracy
Maximum Load	kN N	2 2,000	0.5 500
Minimum Diameter	mm in	5 0.2	5 0.2
Maximum Diameter	mm in	30 1.18	30 1.18
Lower End Fitting		Type O	Base Mounted
Temperature Range		Ambient Only	Ambient Only



Scale Accuracy	Optimal Micrometer Accuracy	Electrical Requirements	Operating Temperature	
mg	μm		°C	°F
0.1	10	Single Phase, 47/63 Hz 120 or 220 VAC	+10 to 38	+50 to 100

