Chuck Options for Torqo Models

When testing closure torque, a critical part of the process is the closure gripping. Many variables influence the optimal chuck choice, such as: cost, compatibility with the torque tester model, topload requirements (child resistant closures require topload), type of cap (pump dispenser cap vs standard vs child resistant cap), type of testing (measuring thread break only vs measuring the bridge break of a tamper evident band or testing the reverse ratchet torque of a child resistant closure).

Mesa Laboratories offers a number of different chuck and collet designs for both the Torqo and the SureTorqo models. Below is a list summarizing the different chuck options for the Torqo models and their recommended applications.

	EDM Chuck	Universal EDM Chuck	Yoke Chuck	Slide Chuck	Universal 4 Post Cap Gripper
	Hera Labs 33mm/ref				
Closure Types	Serrated, CR/CT, TEB	Serrated, Smooth surface, CR/ CT, TEB	Serrated, Smooth surface, CR/CT, TEB, ROPP, Crown, Tall, Pump	Serrated, Smooth Surface, CR/CT, TEB, ROPP, Crown	Serrated, Smooth surface, CR/CT, TEB, ROPP, Crown, Tall, Pump
Closure Dimensions	Single. Each cap diameter re- quires its own EDM chuck Diameter: <100mm Height: <50mm	Multiple. One chuck can accom- modate a range of diameters. Diameter: 26-32mm Height: <50mm Note: smaller diameter caps slide deeper inside the chuck.	Multiple. Jaws are replaceable Diameter: <100mm Height: <100mm	Multiple. Jaws are replaceable. Diameter: <40mm Height: <30mm	Multiple. One chuck can accom- modate a range of diameters. Diameter: 5-89mm
		Compatible with production variations (bulging cap syndrome)			
Serration Patterns	Single. Each serration pattern requires its own EDM Chuck	Multiple. One chuck can accom- modate various serration pat- terns for the same diameter cap	Multiple. Jaws are replaceable to accommodate various cap diameters and serration patterns.		Multiple. One chuck can accom- modate various serration patterns or smooth cap
Tests	Application, Release, Tamper Evident Band Bridge Break, Strip, Fatigue, Non-destructive				
Torque Tester Model	Torqo 1502, 1590, 1600				
Ideal Application	Single cap with single serration pattern.	Multiple caps with <6mm diam- eter and/or serration pattern variation.	Multiple caps with diameter and/or serration pattern variation. It can accommodate tall and odd shaped closures.	Multiple caps with diameter and/ or serration pattern variation.	Multiple caps with diameter and/ or serration pattern variation. It can accommodate tall and odd shaped closures.
Engagement	Slip-on type. Fast engagement.		Lever type. Medium engagement speed.		Lever type. Medium engagement speed.
Materials of Construction	Black and clear anodized aluminum, stainless steel		Black and clear anodized aluminum, acrylic, rubber		

Due to the high level of project and product-specific customizations, the compatibility of the chucks/grippers must be evaluated on a case-by-case basis. Please <u>contact</u> a Mesa representative for compatibility and pricing information.

Mesa Labs 12100 W. 6th Avenue Lakewood, CO 80228 USA



Tel: 303.987.8000 Fax: 303.987.8989 torque.mesalabs.com Rev. 13FEB2017