FLANGE ASSEMBLY DEMONSTRATION UNIT—LIGHTWEIGHT MODEL (FADU-L)

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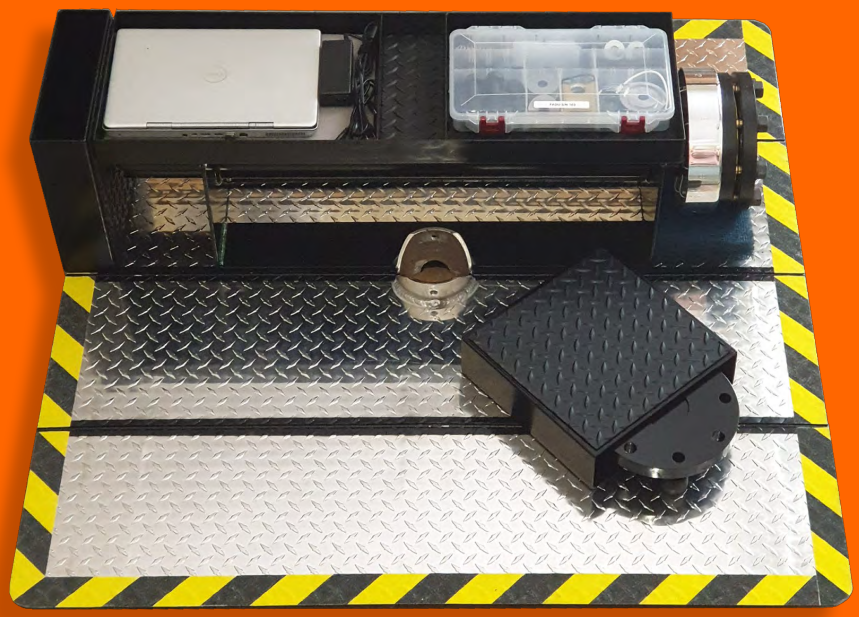


*Laptop computer shown available as an option

Possessing all the same features and functionality of our original heavy-duty model (FADU-HD), the all-aluminum FADU-L is 40% lighter, is designed to be even easier to transport, and includes an integrated storage tray and additional storage compartments. This makes it ideal for trade-shows and instructor-led demonstrations.

Unlike other training mock-ups, the simplified JJENCO FADU design is based upon more than 20 years of teaching key bolted joint assembly techniques to diverse groups of process plant engineers, mechanics, and support organization personnel around the world. Simple to set up and easy to operate, we not only know the key technical principles that determine effective bolted joint assembly for pressure-boundary joints, we also understand what it takes to be able to successfully convey that information to students in a decisive manner. The JJENCO FADU is designed to do just that!

Each FADU comes with two 'plug-n-play' interchangeable modules; a Gasket Compression Module (GCM), and a Torque-Preload Module (TPM). The GCM is used to demonstrate the effects that different gaskets, assembly techniques, and assembly procedures can have on gasketed joint assembly. The TPM is used to demonstrate the effects that a variety of factors (fastener type or condition, lubricant selection, lubricant application, use of washers, etc) can have on gasketed joint assembly. During instructor demonstrations and 'hands-on' training, students can easily discover for themselves the importance that correct assembly techniques, adequate gasket compression, the effect of creep relaxation, and many other factors have on gasket performance, as well as numerous factors affecting the torque-preload relationship that would otherwise be impossible to prove. Ad-hoc experiments can be devised by instructors and students to answer questions concerning specific plant applications. Performance comparisons of gaskets, fastener lubricants, and other materials are also easily accomplished using the FADU.

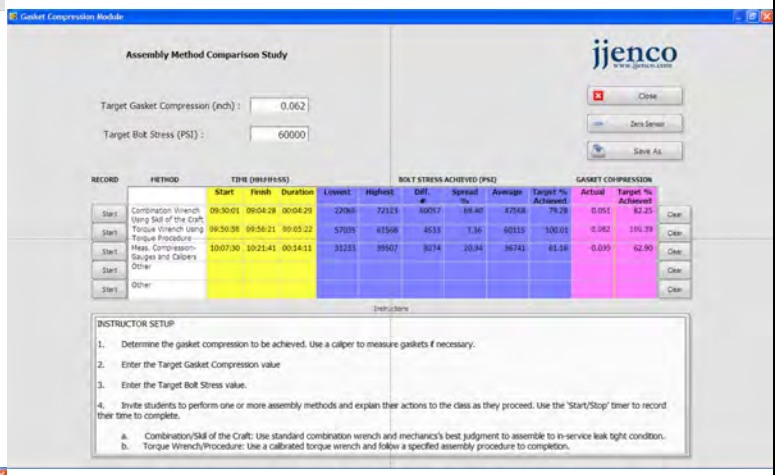
The FADU houses a sophisticated data acquisition system that easily connects to your computer (not supplied) via a single universal serial bus (USB) connection. The custom user interface software automatically collects and displays a variety of important data on bolt preload stress, gasket compression, and torque-preload relationships. The real-time data display features several individual displays and screen layouts to enable complex data to be displayed to students in an easily understandable format. Instructors will find that the software automatically performs various comparison calculations for them to assure accuracy and maintain the pace of training without requiring them to stop and perform calculations manually.

In addition, the FADU can log collected data at a user-determined rate to a delimited file for importation into another program, such as Microsoft Excel, for further analysis or chart development. Logged data from student performance can also serve Training Departments as part of the student's permanent training record. This software-based approach provides significant flexibility to meet a variety of user requirements through future upgrades. An LCD projector can be easily added to support demonstrations in large classroom settings.

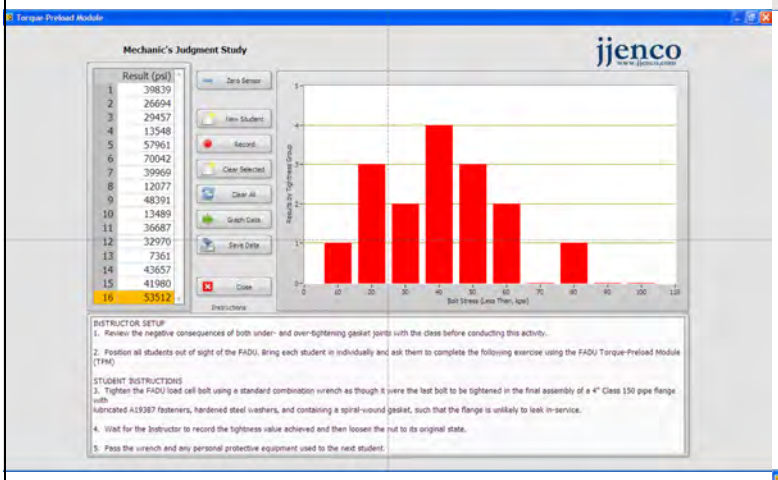
JJENCO, Inc. | 10130 Mallard Creek Road | Suite 300 | Charlotte | North Carolina | 28262 | USA | +1.704.944.5568 | fadu@jjenco.com

FADU v2013 User Interface Software Screenshots

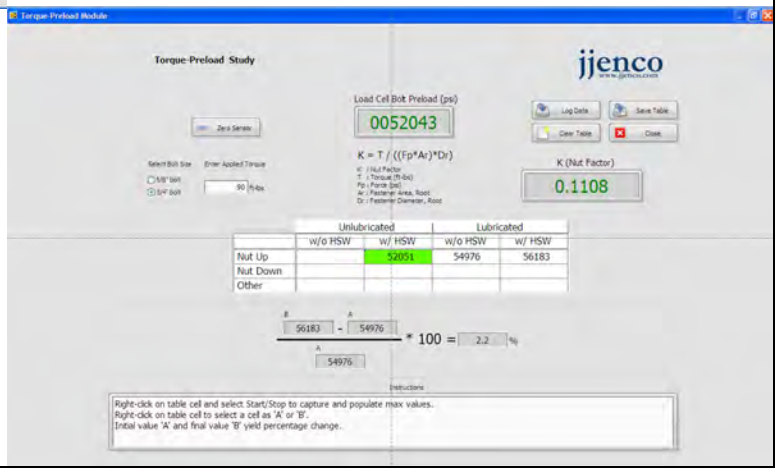
Gasket Compression Study
(Main Screen)



Assembly Method Comparison Study



Mechanic's Judgment Study



Torque-Preload Study