



Trans-Quip Inc.'s Jacks Journal

June 2004

Announcing New 3-D Joyce Jack Drawings

Yes, they are finally here! In response to your requests, Joyce / Dayton Corp. has launched new downloadable 3-D drawings for its screw jack product lines. The project started in November 2003 when Joyce® selected SolidWorks® to create the new 3-D models for download via its website.

"Designers have come to expect 3D drawings that can be easily downloaded from vendor websites," commented Mike Harris, Product / Marketing Manager, Joyce / Dayton Corp. "Joyce/Dayton's new SolidWorks® interface fulfills this expectation and goes one step further by allowing real time design review. Once you are satisfied with the design, multiple download formats are offered including CATIA, CADKEY, AutoCAD, PRO E, and UNIGRAPHICS."

First to be launched are 3-D drawings for the Machine Screw Jack product line. 3-D Drawings of Joyce's other jack product lines will be added every few weeks until all jack types have been completed.

Where do I go to download my 3-D models?

To access the new drawings, please visit the following web address:

www.joycejacks.com

(click on the 3D drawing under the Jacks and Actuators section).

You will be required to register a login ID and password prior to downloading drawings free of charge. You may also be prompted to download and install the free Viewpoint Media Player if you do not already have it installed. Please note that this is a one-time only download.

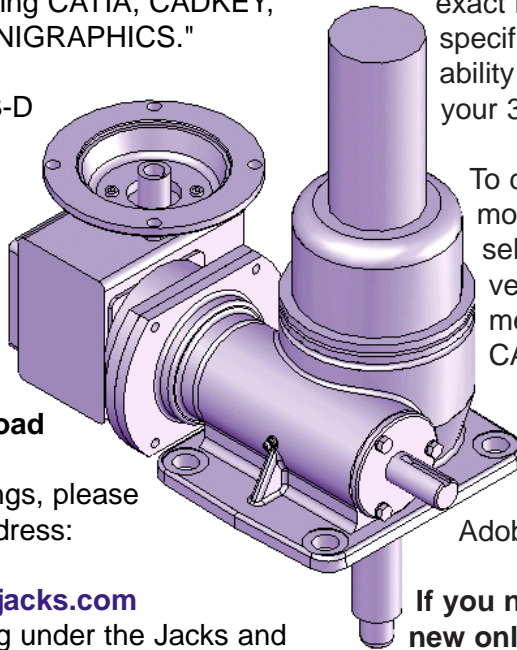
What can I do once I'm logged in?

Once you've logged in and selected the product group and specific jack model that you need, you will have the opportunity to select gear ratio, configuration, design, end conditions, double or single lead screws, input shaft options, bellows boot option, and travel distance. Once these variables have been selected, your 3-D online image will automatically update to reflect your exact requirements. At any time during the specification process, you will have the ability to rotate, zoom in and pan to review your 3-D model prior to downloading .

To download a 2-D drawing or a 3-D model, simply click on download and select your desired CAD format and version number from the drop down menus. There are over 25 types of CAD formats to choose from.

Also available from the model specification screen are links to download product datasheets in Adobe® PDF format.

If you need any assistance using this new online tool, Trans-Quip Inc. is here to help. Just give us a call at 1-800-559-8366.



Featured Application

Adjusting A Feeder / Straightener Machine for Dies of Various Sizes

Mecon Industries Limited uses Joyce brand machine screw jacks (WJT65.12.UP.T2) to support and adjust their custom built feeder / straightener machines. Although each of these feeder machines is unique, Joyce screw jacks are incorporated into every one produced. The feeder / straightener machine pictured above will



be used for sheet steel coil handling in the automotive industry.

Specifically, the screw jacks are used to raise and lower the machine to accommodate the heights of

various dies used in the processing of the sheet steel. In this case, four Joyce screw jacks have been integrated with a complete powertrain system that is powered via electric motor.

The key benefits of using this specific type of mechanical screw jack system are that it provides accurate and repeatable positioning, is much faster than manually adjusting the machine, and saves the end user money by alleviating the need for several handlers.

JACK SPECIFICATIONS:

Model: WJT65-12-UP-T2

Capacity: 5 ton

Ratio: 6:1

Rise: 12"

Screw Type: Machine

A special thanks to Mecon Industries Limited for allowing us to feature them in this case study!

Q & A

Q: What accessories are available for Joyce Jacks?

A: There are various accessories available for Joyce Jacks, the two most popular being protective bellows boots and anti-backlash devices.

Protective Bellows Boots

Bellows boots protect the screw from dust and dirt, help maintain proper lubrication, and guard against moisture and corrosive contaminants. They are usually fabricated of neoprene-nylon however, additional materials are available for applications involving temperatures below -40°F and above 500°F, highly corrosive atmospheres and other special conditions.

Anti-Backlash Devices

There are 3 types of anti-backlash devices available for Joyce Jacks:

The **Split Gear design** is best suited for light dynamic loads (1/3 of jack capacity or less) and full jack capacity in static conditions. Typically this design will reduce the screw endplay to .010 to .015 inches. Available in all upright and inverted translating and keyed for traveling nut machine screw jacks from 2 to 75 ton capacities plus some keyed models.

The **A90 design** is ideal for medium dynamic loads (1/2 to 3/4 jack capacity) and full jack capacity in static condition. Typically this design will reduce screw endplay to .008 to .012 inches. Available in upright translating machine screw jack models from 25 to 100 ton capacities.

The **A95 design** is capable of handling full jack capacities in dynamic as well as static conditions. Typically the A95 design will reduce screw endplay to .008 to .012 inches. Available in upright and inverted translating machine screw jack models from 2 to 150 ton capacities.



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