

# TECH NEWS & TIPS

Welcome to the  
Deschner Tech  
News & Tips  
Newsletter #6.

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We're getting the word out about the effectiveness of Kinecheks in controlling air cylinders, and are letting the industry know about our new advertising campaign.. **"Get your air cylinders under control now!"**



## Did you know that Deschner Kinecheks are ideal for use in controlling air cylinders?

Speed regulators installed on air powered systems have become essential to better control air powered devices. Deschner Kinechek units are used on thousands of high-end air powered devices worldwide.

Why does the Kinechek make air cylinders perform better? Because the Kinechek offers superior performance over ordinary control valves that typically use pressurized air.

Air by its nature is unstable, changing volume when under pressure, creating a "spring" effect, which makes it difficult to achieve precise control.

The Kinechek uses a hydraulic design and takes advantage of fluids' inherent stability and consistent volume tendencies. Hydraulic control is naturally better when precise speed control is needed.

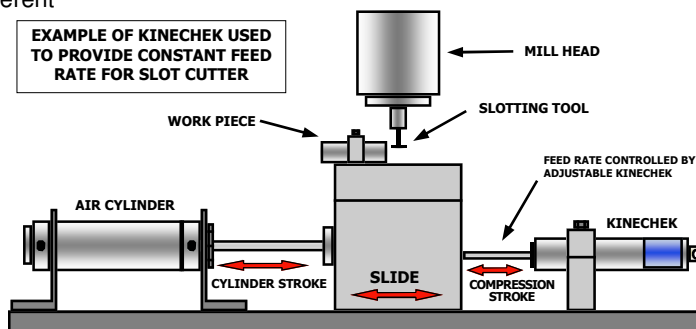
For the user of an air powered system, this translates into the most precise control possible.

This control is enhanced by the Kinechek's built-in, infinitely adjustable speed control knob.

The diagram below shows how the Kinechek can be used on a mill table application. Mills can be used in the manufacturing of hundreds of thousands of the same part.

A consistent feed rate is critical to uniform part production. As the air cylinder rod moves the slide, the Kinechek plunger rod compresses, giving the cutting tool a consistently smooth feed rate. When fully retracted the plunger rod will extend instantaneously as soon as the air pressure in the cylinder is released.

As our reputation in the industry has proven, Deschner Kinecheks will continue to operate with extraordinary precision over millions of cycles in this type of operation.



## Video talk: YouTube is a great place to find product demonstration videos from Deschner and our customers using Deschner products.

If a picture is worth a thousand words, then a video must be at least a million! [YouTube](#) has become an internet phenomenon by facilitating communication and information between people worldwide through video. You've seen all the crazy home videos and silly pet tricks, but what you may not know is that YouTube is a great source for business information.

Deschner has recently become part of this ever-growing community. It has helped us tremendously in aiding our customers with product applications and demonstrations. We presently have (2) videos posted on YouTube.

The [FIRST VIDEO](#) demonstrates how a combination of the Cushioneer and the Cushion-Start Kinechek control a slide on a mill table cutting a slot in a cylinder. <http://youtu.be/SSaDIKUvzw>

A [SECOND VIDEO](#) features the same application but provides close up detail of the controlled motion of the plunger rod when the slide strikes the Cushion-Start Kinechek and subsequent shock absorption provided by the Cushioneer. <http://youtu.be/R-fZrr-PORs>

We plan to post additional demonstration videos very soon including how a Skipchek tube drilling operation works and a video showing PeckChek deep hole drilling.

Some of our customers such as Blackalloy and AutoDrill have also posted videos of their products using Deschner components.

The [Blackalloy](#) drill head model 252 video features both 1 inch and 3 inch Deschner Slimline Kinechek speed controls. <http://youtu.be/ncxEHVf1c8>

A second [Blackalloy](#) video also shows the model 252 drill head. In this video a 1 inch stroke Kinechek assists in drilling a hole in thin metal aluminum extrusion. <http://youtu.be/SbCerFI3nOY>

Another customer, [AutoDrill](#), demonstrates their model 5100 drill, cutting a 2 inch hole through 3/4 inch steel plate. The Slimline model Kinechek is shown controlling the feed rate. <http://youtu.be/29oswoasnLQ>

These are just a sampling of the videos Deschner will have available on YouTube.

Visit our YouTube Channel at [DeschVid on YouTube](#)

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Barbara Turner - 30 Years at Deschner!

## Congratulations to our Production Controller Barbara Turner for 30 Years with Deschner!

Barbara started at Deschner April 7, 1981 to work in the inspection Department. She was a quick study, learning many facets of Deschner's business, practicing perfect attendance and was rewarded by being promoted to lead person in May 1985.

Later in 2005, due to position realignments and changes in the production area, management decided there was vital need for better control of shop scheduling and coordinating. Based on her knowledge of parts, the processes involved and the end product, Barbara was the logical selection to fill this role.

As Production Controller, Barbara is responsible for the control of material flow throughout the shop; it is up to her to smooth out the ups and downs of inventory yet at the same time prevent shortages. It's a fine balancing act but Barbara has managed to remain on the high-wire.

Barbara also has been instrumental in overseeing our integration to a new manufacturing system incorporating the initial data with inventory items.

Barbara's role doesn't stop there. According to Toby Ryan, "Barbara's efforts are a big reason Deschner is successful in meeting customer delivery schedule deadlines."

Barbara lives with her partner Art, has 4 children, 7 Grandchildren and 6 GREAT Grandchildren!

She enjoys volunteering at Elks Lodge functions and is an avid reader.

We value Barbara's contributions and for her hard work over the years. We look forward to many more.

Cheers Barb!

We owe our successful 50 years in business in large part to our dedicated staff. No one epitomizes a diligent work ethic and leadership qualities more than our Production Controller, Barbara Turner. We recognize Barbara's contributions and congratulate her on 30 years with Deschner.

### Proper Installation The YES's & NO's

FIG #1 - YES!

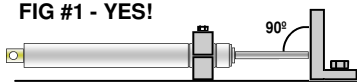


FIG #2 - NO!

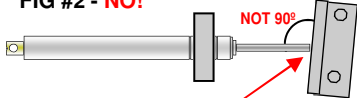
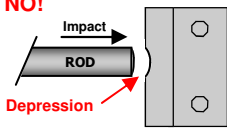


FIG #3 - NO!



For those new to Deschner products it is critical to set up your new unit for the best performance and maximum service life. If you are already using Deschner products, use these tips as a reminder.

First, one of the most important points to remember for all applications is to align your unit accurately with the direction of the load movement so the moving load contacts the plunger squarely at 90° during the entire stroke of the plunger. (See Figure #1)

Second, to protect your equipment, a solid safety stop should be installed to stop the moving load approximately 1/32" before plunger reaches bottom of its own stroke. This safety stop prevents the plunger rod from "bottoming out". Should the plunger rod bottom out under excessive

load, the plunger rod can bend, the piston can bulge, or the adjustment knob could be driven out the back of the unit.

Third, keep in mind that these types of products convert impact energy to heat. Temperatures in excess of 130°F can cause accelerated aging of the seals. Operating temperature should be held under 130°F if a seal life of millions of cycles is expected. Exhaust blast from an air cylinder, small fan or heat sink is ideal for keeping a Deschner product cool.

In our last Newsletter we discussed the importance of preventing the plunger rod from twisting. Twisting the plunger rod can compromise the diaphragm seal, resulting in fluid leakage, erratic plunger rod travel, or even completely halting the movement of the plunger rod.

The most common source of rod twisting is an improperly aligned striking surface. (See Figure #2) This will create "side loading" and cause the rod to rotate, twisting the diaphragm.

Another cause of twisting can also be attributed to a soft striking surface which will create a "cup-shaped" depression (See Figure #3), and cause a slight turn in the rod with each impact.

Get the most service life from your Deschner unit...

**A square secure mounting configuration is vital and cannot be over-stressed !**

Stay tuned for our next issue, when we cover tips for calibrating the infinite adjustment knob.

For more information email us at [support@deschner.com](mailto:support@deschner.com)



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## Tech Tips: How to set up your Deschner unit for maximum performance and product life



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