

## SKROLLmaster thread roll die set-up assistance

Thread rolling-  
the unknown process!

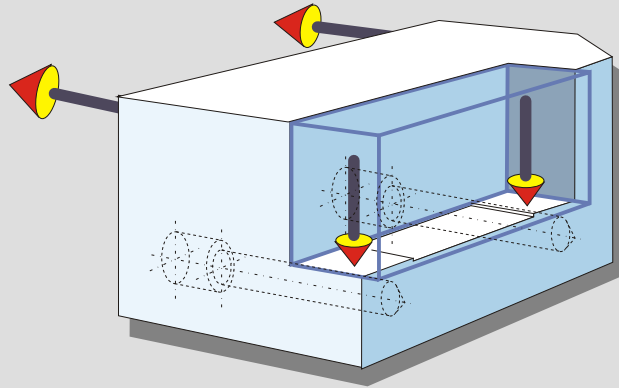
Most fastener producers know that setting up a thread roller correctly is largely dependent upon the care and experience of the individual setter. The new SKROLLmaster® system is the result of a three year study and is now available to provide objective assistance to every operator striving for perfect die alignment.

Roll thread dies can now be aligned faster and more precisely with a high degree of repeatability. Die alignment can even be verified while the machine is running at full speed - not just in jog mode.

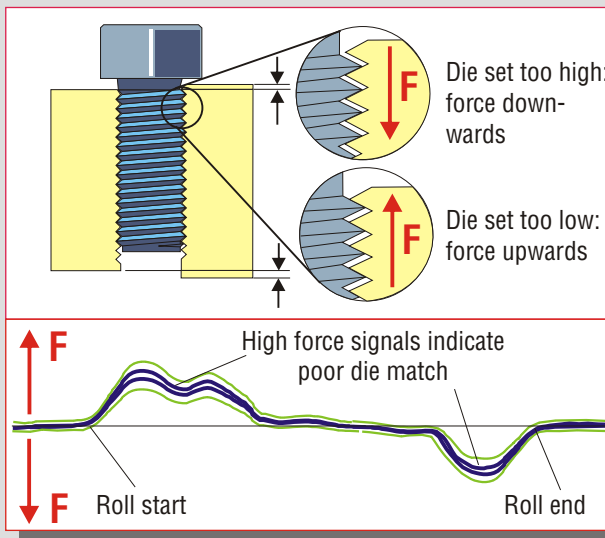
Minor deviations from optimal die alignment cause significant changes in the roll force curves. Die life can increase dramatically with the SKROLLmaster®-system!

SKROLLmaster® is available for the IMPAX/SK 4, IMPAX/SK 2, IMPAX/SK 100, and IMPAX/SK 7 models can also be retrofitted.

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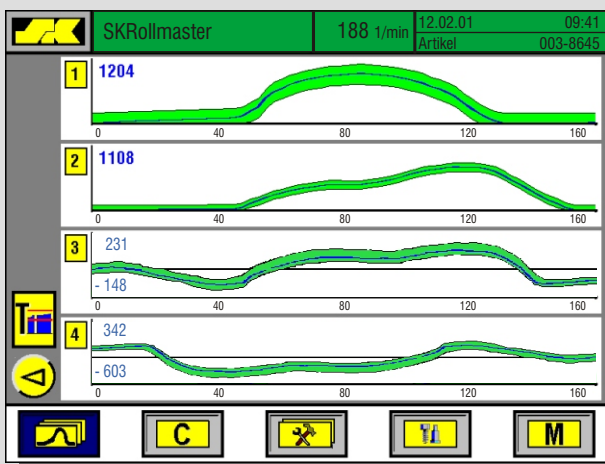


The SKROLLmaster® system senses horizontal and vertical rolling forces to obtain information on proper die alignment. Horizontal sensors are inside the die adjusting bolts and vertical sensors are underneath the fixed die.



Misaligned dies will cause significant axial (vertical) force signals as the die is pushed upwards or downwards.

When properly aligned, the vertical forces will be very small improving thread quality and die life.



The SKROLLmaster® system can visualize the force curves of all sensors on one screen (screen at left shows model SK 4/SK 7)

Good settings may be stored under the part number and recalled for repeat set-ups (available as an option on some models).

Check your die alignment by “freezing” current force curves.

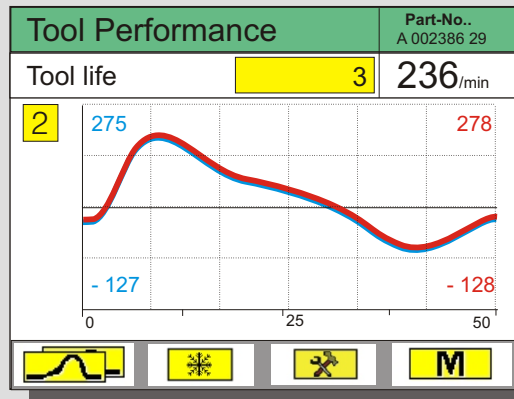
Setting up a thread rolling machine correctly often is a matter of trial and error:

Are the dies properly aligned such that both profiles meet smoothly? Does the part actually enter at match-point? Does the blank get damaged at entry due to too much pressure? Can we expect satisfactory die life?

SKROLLmaster® assists during set-up in 3 simple steps:

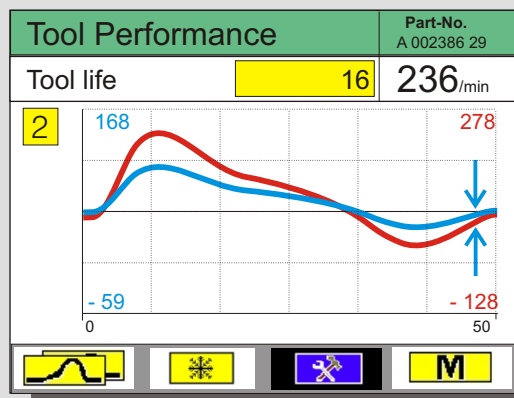
The SKROLLmaster® set-up assistant tells the operator if die match is proper, and if any alterations affect die match: At a simple touch of a button the operator “freezes” the current force curves on the screen. After changing die adjustment he immediately knows if the new force curves, compared to the stored previous setting, improved or became worse.

Incorrect adjustments are quickly identified, and so is die mismatch. Another key advantage is that die match is now checked while the machine is running at production speed as compared to the conventional check carried out in jog mode.



Step 1:  
Freeze the current status through a simple push on the SQ-button (red curve)

Step 2:  
Stop the machine and adjust your die settings (if needed)



Step 3:  
After restarting your machine, the screen will show the red (old) curves and the result of your set-up changes (blue curves). Arrows indicate the direction in which the curves have changed (a lower blue signal along with its associated blue numeric values as shown on the left could indicate an improved setting).



The SKROLLmaster® “freeze-function” is available for the IMPAX/SK 2 and 5 (above), the IMPAX/SK 100, the PC-based models IMPAX/SK 4 and IMPAX/SK 7, and the integrated version IMPAX/SK-bbx on new machines with PC-controls.