

Modern Repairing Machines for larger throughputs of drawing dies

A Jackpot to optimise economy in any modern wire/cable plant.

Nowadays the wire/cable industry is increasingly using higher speed multi-wire drawing machines, using lots of expensive PCD wire drawing dies in each line simultaneously, wearing them out relatively quickly so that, frequently, they have to queue for reconditioning at die workshops where skilled operators or suitable die reconditioning machines are often in short supply.

The growing number of costly PCD dies mounting up with a need to be reconditioned often causes considerable bottlenecks in existing die-workshops, as there are either simply not enough human experts or only insufficient equipment potential available, sometimes even both.

To solve this problem, EDER-Austria have therefore designed two intelligent but easy to operate high efficiency machines to handle both, the increasingly less available human expert skills in die tool maintenance and same time also offering the necessary machining potential and capacity to recondition continuously increasing lots of dies, waiting for repair and renewed use. Another highlight is that both of these conceptions do offer a very large die-size work-range from 0.05 up to even 9 mm Ø.

The first of these machines is the “**USP-TWIN**”. A powerful and versatile Ultrasonic machine with **two independent workstations**, which are suitable for profiling, de-ringing, enlarging and polishing of tapered die-profile portions in round ND/PCD wire drawing dies. Additionally, this advanced EDER-conception can be controlled by one single operator only, reconditioning two dies simultaneously, such practically doubling output.

Furthermore, the **USP-TWIN** is equipped with two integrated needle reshaping systems, swinging die-polishing turntables and intelligent work pressure setting devices, as well as with one timer for each workstation to limit work-cycles as required.

(show picture of the USP-TWIN machine)

After working of the tapered die-portions, it will be necessary to calibrate and polish the cylindrical bearing portion of the dies and with a high-speed wire type equipment of equal potential, thus avoiding a potentially upcoming bottleneck in the overall refurbishment of these worn out multi-wire drawing dies.

This second machine is model **HGM-21**, a solid column unit construction, with integrated worktables, switchboard and SIMATIC control device. Also featuring **two independent work-stations**, handled by one only operator and allowing to work all ND/PCD dies within the complete multi-wire die size range efficiently.

Each of these independent stations features an automatic work-cycle-stop, as well as an optical- and acoustic stop indicator, to assist and to release the die-shop personnel considerably.

(show picture of model HGM-21 pls.)

EDER Engineering-Austria, and with an experience of over 70 years in this field, certainly has been setting new standards for processing and reconditioning of larger quantities of ND/PCD multi-wire dies in modern workshops now.

Most of these advanced machines will also be shown at the EDER-stand during the forthcoming WIRE 2020 exhibition in Duesseldorf.

Enclosed : various pictures of the mentioned machines.(USP-TWIN+HGM-21)

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