

OVER
75
YEARS

LEADING EDER DRAWING DIE RECONDITIONING MACHINES WORLDWIDE



EDER
Reliability
and Quality
available
at its best









Investing in EDER machines benefits the customer by offering:

- Reduced necessary stock of dies and as such less cost
- Considerably longer die service life and higher tons of drawn wire
- Easy to operate machines minimum of personnel required
- Accurate and flexible refurbishment at any time required
- Increased competitiveness, e.g. for "just-in-time orders"
- Full transparency over your diestock and refurbishment cost
- Complete in-house independence

This simply is the prime key for achieving optimal economy in any wire drawing– and cable plant.



Short Company Overview:

EDER Engineering Austria has 75 years' specialist experience and exports 90% of its output to the international wire and cable industry worldwide. The company is a **technological leader and global player** in the wire drawing die processing machine& technology sector (hardware & software).

Investing in EDER machines benefits the customer by:

- * accurate reconditioning, giving a 1st class die
- * longer die-life + higher wire tonnages drawn
- * durability with minimal maintenance cost
- * considerably lower operational cost
- * easy to understand and to operate equipment
- * reduction of manpower (by built-in automation)
- * the experience and after sale support of Eder

ONLY GOOD DIES DRAW GOOD WIRE





Meet us **2022** at:

Wire&Tube
in Duesseldorf / June

Wire SouthEastAsia in Bangkok / October



EDER ENGINEERING GMBH

Peter-Jordan-Str.12/3, 1190 Vienna, Austria

- +43/ 1/ 367 49 49-13
- +43/ 1/ 367 49 49 -49
- office@eder-eng.com
- http://www.eder-eng.com



In detail, the product range comprises:

Die- Tool processing machines

for the repair and/or production of these ultrahard precision tools (standard, semi-automatic and fully automatic conceptions)

Die Workshop Ancillary equipment

(cleaning- /measuring devices, microscopes etc.)

• EDDS-2

Innovative drawing die marking-, identification, administration equipment (available in standard-or fully automatic execution)

Technical Assistance

installation, training, diereconditioning know-how etc.

Die Tool working materials

(e.g. diamond powders, -pastes, suspensions, grinding pins)

Precision wire drawing die-tools

made from tungsten carbide, natural diamond and synth. PCD-diamond materials.

(Pioneers in first make of PCD for precision die-tools!)

Pioneer and Technology Leader for 75 Years

Dr. Kurt G. Eder President/CEO EDER Engineering GmbH Peter-Jordan-Str. 12/3 1190 Wien, Vienna www.eder-eng.com

EDER Engineering-Austria, founded in 1947, is proud to celebrate its 75th anniversary in 2022. Since its beginning, the company has been a pioneer and technology leader in supplying the international wire and cable industry with many new and outstanding products and technologies.

Siegfried Eder, then a key Technical Manager of a large wire and cable manufacturing plant located in Vienna, founded Eder Engineering in Vienna, Austria in January of 1947 (see Figure 1). Eder Engineering started with the production of tungsten carbide drawing die tools, later including natural diamond, and then became involved in the design and manufacture of die processing equipment.



Fig. 1 — Siegfried Eder founded Eder Engineering in Vienna, Austria in January of 1947.

Soon after the end of WW2, all these types of products were needed everywhere and considerable expansion in both the production scope and exports abroad took place, at first in neighboring countries such as Germany, Hungary, Yugoslavia, etc.

At that point in time the company's prevailing production scope was about 80% die tools, 15% machines and 5% technical assistance. The company then reached a pioneering position in the late 1960s, after the founder's son, **Dr. Kurt Eder**, (see **Figure 2**) managed to produce the first Compax/PCD drawing die-tools, and with a specifically designed new line of more powerful equipment.

Thereafter, **EDER-Austria** soon shifted its portfolio to mainly making advanced die-tool working machines and software. Today, EDER Engineering-Austria, with approximately 98% export quota, satisfies regular customers in more than

80 countries, offering semi and fully automatic concepts for the production and/or reconditioning of ultra-hard precision die tools made from tungsten carbide, natural diamond and synthetic PCD.



Fig. 2 — The founder's son, Dr. Kurt Eder, produced the first Compax/PCD drawing die-tools, and with a specifically designed new line of more powerful equipment.

The reconditioning of drawing dies on a regular basis is essential to the production of consistently high-quality wire. Today, tens of thousands of costly diamond/PCD die tools are in permanent use in wire drawing mills and cable plants, particularly in multi-wire drawing operations, and a high degree of these machines' automation is requested. And today, this automation plays a very important role in keeping die-repairing costs low, making all operations easily performed and limiting the intervention of human personnel (see **Figure 3**).



Fig. 3 — Automation plays a very important role in keeping die-repairing costs low, making all operations easily performed and limiting the intervention of human personnel.

Dr. Eder's insistence on innovation has kept the company at the forefront. The requirements of the wire and cable industry worldwide keep changing and it is crucial for EDER Engineering-Austria to reinvent the wheel all the time. And the next generation of the Eder family is already standing by (see **Figure 4**) to continue the success of the company's 75 years serving the international wire and cable industry at its best and mainly with technically advanced die-tool processing machines and equipment.



Fig. 4 — Dr. Eder with the next generation of the Eder family.

The initial goal of **EDER Engineering GmbH** has remained unchanged: fully satisfied customers. You can find additional information about the products and services offered by EDER Engineering at www.eder-eng.com

Company Profile: EDER Engineering-Austria is a globally acknowledged specialist and leader in advanced drawing die-tools, die processing technology and equip-ment as well as a "global player" in supplying the follow-ing products to the international wire and cable industry:

- Die-Tool processing machines for repair or production of these ultra-hard precision tools (standard, semi-automatic and fully automatic types).
- Die Workshop Ancillary equipment (e.g., inspection and measuring, die-cleaning devices, etc.).
- Technical Assistance (installation, training and know-how).
- Die-Tool working materials/consumbles (e.g., diamond powders, pastes, compounds, suspensions and grinding pins).
- Wire drawing die-tools made from tungsten carbide, www.asteslelignood and synthetic PCD.





LEADING EDER DRAWING DIE RECONDITIONING MACHINES WORLDWIDE











Leading drawing die-tool working solutions from EDER-Austria

Apart from the wire working machines in wire mills and cable plants, ultrahard precision wire drawing die-tools are the most essential cost factor and the major key to boost any plants' economy. In case of their early wear, both the quality of the drawnwire and the necessary profit are endangered. Now modern EDER die-tool refurbishment equipment and conceptions are available to keep both well balanced.

In today's highly competitive wire drawing industry and with the growing use of multi-wire drawing machines with up to 48 wires drawn on a single machine, ten of thousands PCD dies are in permanent and profitable use there, which former or later are subject to wear, asking for proper reconditioning for renewed use then.

Considering the high number and the remarkable value of such PCD dies in use, it clearly is worthwhile to save and repair such worn-out dies, by providing them with a new proper geometry and to enlarge and re-polishing them to their next bigger usable size, on suitable and easy to operate die-reconditioning machines, instead of permanently buying new dies, as this could quickly endanger the overalleconomy.

For refurbishing of PCD dies and in ever increasing quantities, due to the growing use of multi-wire drawing machines, a well equipped die-workshop is an absolute must, if drawing efficiency and economy is to be maintained at the highest possible level.

All conical die portions, such as entrance, drawing cone and exit are worked on suitably powered Ultrasonic machines, while the cylindrical bearing is sized and polished on high speed wire-type machines subsequently.

Particularly for refurbishing of the continuously growing quantity of PCD dies, a unique Ultrasonic machine, model "USP-TWIN", with two workstations has been developed, which can efficiently work all die-sizes in a range between 0.05 up to 8.0 mm dia. It can be operated by one only person, same time doubling output. See Figure 1.1

To size and polish the cylindrical bearing of a larger quantity of such PCD dies, an effici-

ent and versatile wire-type calibration machi-ne, model "HGM-21", is available, also offering two individually controlled workstations and a very large work-range of between 0.05 up to 10 mm dia. See: 1.2



Figure 1.1



Figure 1.2



Figure 1.3



Figure 1.4

Contrary to refurbishing ND and PCD dies, for which the a.m. dual technology is required, for reconditioning of Tungsten Carbide (TC) dies, one only high efficiency machine, model "ETC-1/HF" is sufficient to grind and polish round TC dies in a range of between 0.70 up to even 20 mm dia. and in record time. **See Figure 1.3**

To complete a modern die-workshop, various ancillary devices, such as a die ins-pection microscope, ultrasonic diecleaning tank units, measuring wire pulling provisions, elongation measuring devices etc. are requi-red also.

In addition to the aforementioned advanced die-tool working machines and devices, recently a globally unique "EDDS-2 system" for marking die-tools with an individual datamatrix code has been developed also, serving for an easy identification and administration of all important die-tool data at any time of use onwards. See Figure 1.4

EDER Engineering-Austria with over 70 years of experience and 98% rate of exportation is a worldwide acknowledged specialist and leader in the field of advanced drawing die-tools, die processing technology and equ-ipment.

The multiple advantages of a modern EDER die-workshop line, can prolong the service life of these costly tools considerably, often even maintaining their initial diameter and additionally offer:

-reduced necessary stock of die-tools and as such less cost

-accurate and flexible refurbishment at any time required

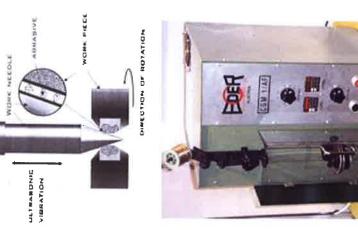
-increased competitiveness , e.g. for "just-in-time orders"

-full transparency over your die-stock and refurbishment cost. -complete in-house independence

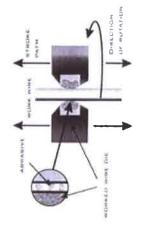
Dr.Kurt G. Eder Eder Engineering GmbH - 1190Vienna/ Austria, Peter-Jordan-Str.12/3

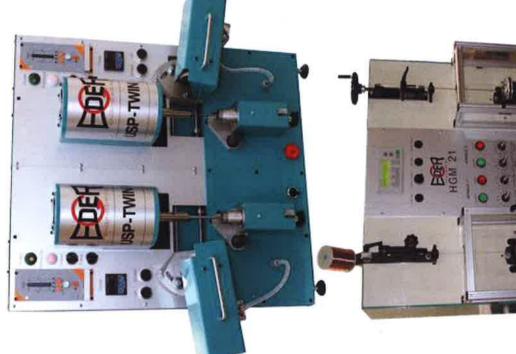
DIAMOND/ PCD DIE WORKING **MACHINES SURVEY**



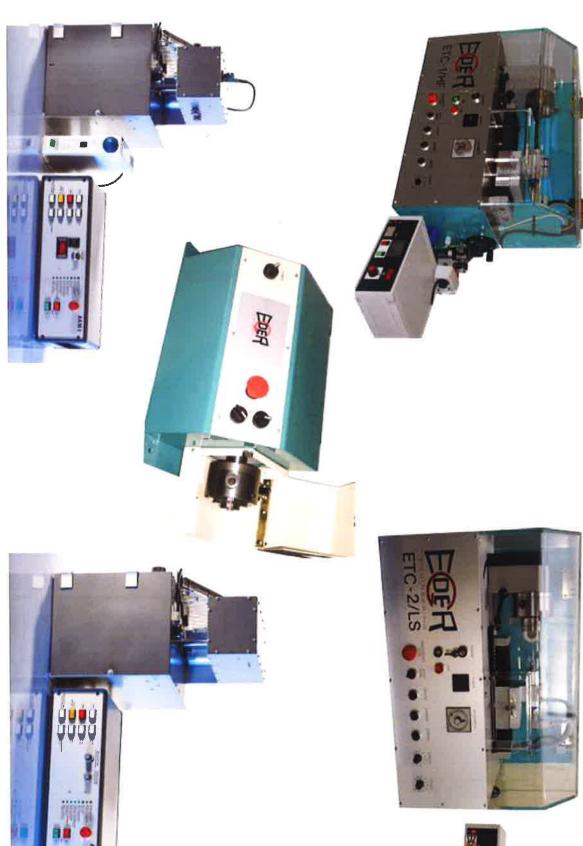








TUNGSTEN CARBIDE DIE WORKING MACHINES SURVEY







SUPPLY OF TECHNOLOGY, PRECISION DIE- TOOLS, EQUIPMENTS FOR THE INTERNATIONAL WIRE/ CABLE INDUSTRY











ADDED VALUE- EDER Machines

Available
from
the globally
technical
Leader

Most competitors need additional machines to reach the efficiency/ range of EDER units!

Some EDER machines are still in use 50 years after installation!

- Built with over 75 years of experience
- Leading state-of-the-art technology
- Highest possible efficiency
- Universal flexibility and unique application
- High degree of automation ensured
- · Easy to understand and operate
- Minimal human operator intervention
- Low maintenance requirements
- Hardly any spare parts required
- Uniquely long service life and high quality

Eder Engineering Gmbh/ Ltd.

Peter-Jordan-Str. 12/3 • A-1190 Wien/ Vienna • AUSTRIA/ OESTERREICH • Tel.:+43-1-367 49 49-13 • Fax.:+43-1-367 49 49-49, e-mail: office@eder-eng.com • http://www.eder-eng.com