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English Content Inside

NEW PORTFOLIO

Gehring presents portfolio for electric motor stator production: p. 15

PRESETTING DEVICES

Kelch shows H3 range from Kenova of presetting devices: p. 30

GRINDING MACHINES

Tighter tolerances, better surfaces with new grinding concepts: p. 46

„GRÜNDERWETTBEWERB – DIGITALE INNOVATIONEN"

BMWi zeichnet innovative Start-ups aus

Die Preisträger des „Gründerwettbewerb – Digitale Innovationen" nach der Verleihung im Rahmen der EMO Hannover 2019.

Das Bundesministerium für Wirtschaft und Energie (BMWi) hat im Rahmen der EMO Hannover 2019 und in Kooperation mit dem Verein Deutscher Werkzeugmaschinenfabriken (VDW) sowie den VDI Nachrichten die Gewinner des „Gründerwettbewerb – Digitale Innovationen" bekannt gegeben.

Jährlich finden zwei Runden des Ideenwettbewerbs statt, in denen eine Jury von Experten aus Wissenschaft und Wirtschaft die jeweiligen Preisträger ermittelt. In dieser Runde des Wettbewerbs war die hohe Zahl von Einreichungen aus dem Bereich der Künstlichen Intelligenz (KI) unübersehbar. Insgesamt erstreckten sich die Ideen vom Energiemanagement bis hin zu Lösungen für die Modeindustrie.

Dotiert war der Preis mit insgesamt 300.000 Euro, die an 21 Start-ups verteilt wurden. Die Gewinner der sechs Hauptpreise erhielten je 32.000 Euro und 15 weitere Gründerteams konnten sich über ein Preisgeld von 7000 Euro freuen. Der zusätzlich vergebene Sonderpreis „Digitalisierung in der Produktion" war mit 10.000 Euro dotiert. Neben den Preisgeldern profitieren die ausgezeichneten Start-ups von individuellem Coaching sowie Mentoring durch das Expertennetzwerk des „Gründerwettbewerb – Digitale Innovationen". Aber auch die Start-ups, die nicht gewonnen haben, können von dem Wettbewerb profitieren, da alle Teilnehmer unter anderem eine schriftliche Einschätzung ihrer Idee erhalten.

Lesen Sie auf Seite 5 dieser Ausgabe Näheres zu den sechs Gewinnern der Hauptpreise und ihren Innovationen. *(bh)*

PRECISION TOOLS

Machining in Filigree Medical Technology

Everyone is happy if he has no need to get involved with medicine, says Arno Werkzeuge. But effective treatment needs the finest instruments, made possible only by the right tools.

Photo: Eberle

Photo: Arno Werkzeuge

Arno Werkzeuge equipped the medical technology manufacturer Eberle with the machine systems necessary for processing even these filigree shaver blades.

High positive indexable insert, recommended by the maker for top-quality surfaces. Chip removal is reportedly optimal.

Since the firm was founded in 1999, the medical technology manufacturer Eberle has used tools from Arno Werkzeuge for turning, parting off, drilling and milling.

These experts, based in Wurmberg and whose production is so bursting at the seams that they will soon have to relocate, use nine different SC milling tools from Arno as well as eight different SA parting-off variants, an AKB drilling system and eleven types of high positive ground indexable inserts.

Filigree internal life

"In particular, the high positive indexable inserts repeatedly impress us, for they produce very good surfaces with long service lifetimes," states Bernd Amann, technical manager at Eberle. Arno consultant Alexander Rentschler also explains why: "With these special high positive chip-form geometries in combination with high-performance cutting materials, one achieves the best machining results. Not least because less vibration occurs during turning."

Besides that, the polished surfaces are said to ensure optimum chip removal, while the ground external face guarantees the highest accuracy. Eberle has furthermore been able to observe that the surface quality becomes so high that follow-up process steps can in some cases be omitted, the maker says. This is also important for good germ-free characteristics when these products are later cleaned and sterilised.

For parting off, Eberle relies on SA modules from Arno Werkzeuge. Some of these have a plate inclined at 15°, used by Eberle for parting off thin-walled tubes, including in particular the so-called shaver blades for ENT interventions (large photo). These strong and narrow parting-off blades, supplied by Arno for groove depths between 10 and 70 mm and widths between 1.5 and 8 mm, is said to be ideal and process-secure in this task. And this is especially important for the medical technology manufacturer, because the product series, with piece numbers between 5 and 5000, are not very large. One batch contains a maximum of 500 pieces, we hear. Outliers here would be fatal. In the medical field, furthermore, ENT instruments are seen as something very special: after the guide tube has been manufactured, it is bent to an angle between 50 and 65°, and the drive inside the tube must of course bend with this "curve". Eberle therefore chooses small drive elements which transmit the rotation via face splines. Up to nine small bevel pinions are built into one instrument, we hear. Even a rinsing canal of only a few millimetres diameter is fitted into the instrument.

But only the tools from Arno enables this angled instrument to be the only one in the world to turn at 12,000 min^{-1} for a maximum of 30 min before this single-use instrument is disposed of.

Order in a small space

For tool management, Eberle uses the Store-Managerpro from Arno Werkzeuge. On a surface of only 1.5 m^2, its carousel system permits storage and management of tools in up to 2160 compartments.

At the moment, in fact, Eberle is still using it for only 600 to 700 tools, including not only gauges but also the keys for the vehicle fleet, as one worker said with a smile. *(pk)*

➔ **Arno Werkzeuge Karl-Heinz Arnold GmbH,** www.arno.de, Hall 4, Booth E60