Laminated cutter heads for electric hand planers

Introduction
Laminated cutter heads

Why

- The cutter head is the heart of your electric hand planer – we have invented a revolutionary design of this cutter head.

- The design consists of a laminated steel stack with one knife.

- This design is well proofed and has witnessed its effectiveness by more than 3.5 millions of pieces produced and in operation.

- The design can be adapted and further improved to your requirements in order to give you a competitive advantage of your electric hand planers.
Laminated cutter heads

Benefits of lamination

- Lamination is a cost effective way to produce a cutter head

- Body, shaft, bearing and belt pulley are joined together with a force-fitting assembly in one step and the cutter head is a one piece sub assembly

- Higher precision due to less deflection of the cutter head according to DIN EN 847-1

- Optically, the cutter head looks much more precise which is an important buying criteria for your customers

- Knife is fastened tighter due to centrifugal force fixation
Laminated cutter heads
Benefits of one knife (1/3)

- The wood chips are thicker which reduces dust and friction losses (see graph on the next slide)
- Cutting performance is increased by 30% and in battery driven hand planers, battery life time is increased up to 50%
- Noise is reduced to due the smoother cutting and lower power consumption
- Better cutting experience due to less tow and a smoother cutting (see graph on next slide)
- Faster exchange of knifes (one knife instead of two)
- Sometimes one gear stage can be saved due to the higher revolution speed
Laminated cutter heads

Benefits of one knife (2/3)

- The ideal feed of an electric hand planer is 4-6 meters per minute
- Below chart shows, that the required tow is much lower in a one knife design thus improving the cutting experience
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Benefits of one knife (3/3)

- Below chart shows, that the chips are thicker and the required cutting power is lower which results in less dust and less power resp. longer battery life time