Machines for Magnet Wire

STRAUSS H4/5

Horizontal dual-line system wire enamelling machine

STRAUSS H4_5/4-2/14 D
STRAUSS H4_5/2-2/28 D

• Number of lines ☐ Number of ovens D = dies

DIMENSION RANGE

0.2–0.5 mm / awg 32–24 (STRAUSS H4)
0.3–0.8 mm / awg 28.5–20 (STRAUSS H5)

Efficient wire production at the push of a button.

TECHNICAL DATA

PRODUCTION DATA	
Speed range	0–1000 m/min. (Strauss H4) / 0–700 m/min. (Strauss H5)
Sizes of finished wire reels	max. 500 mm
Max. inlet diameter	1.2 mm (Strauss H4) / 2.4 mm (Strauss H5)

RATED POWER	for 4 lines*
Total rated power	191 kW (thermal and motive)

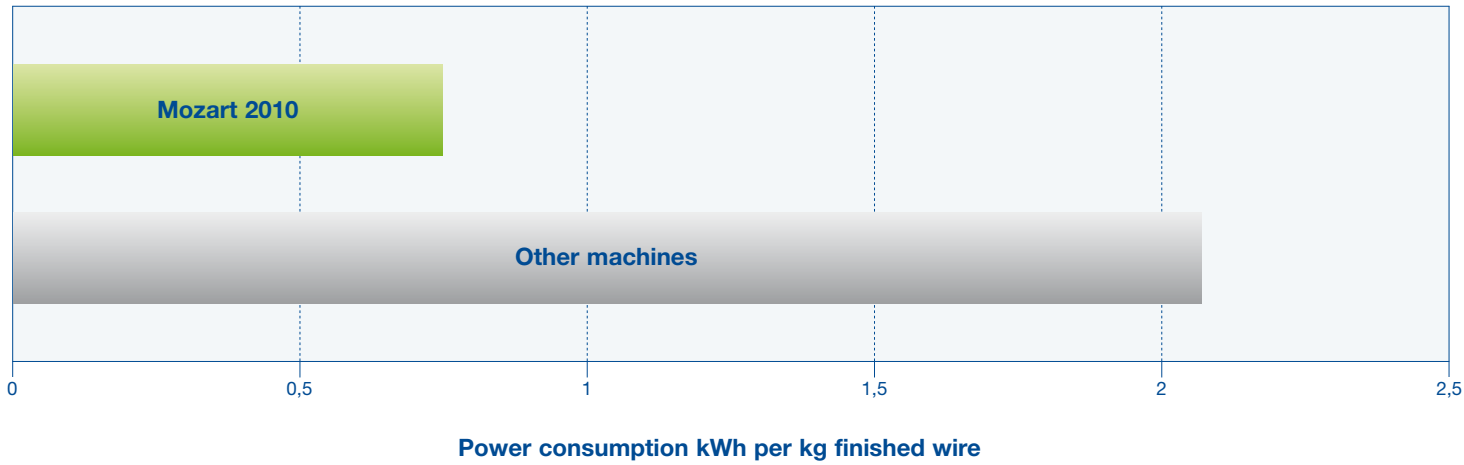
MECHANICAL	
Max. number of enamel passes	max. 14, 28 selfbond
Oven-length	8.6 m
Annealer-length	9.9 + 6.4 m
Machine width (2 lines)	1.7 m
Machine length (excl. spooler, pay-off, drawing mc)	20 m

* not valid for SB-machines

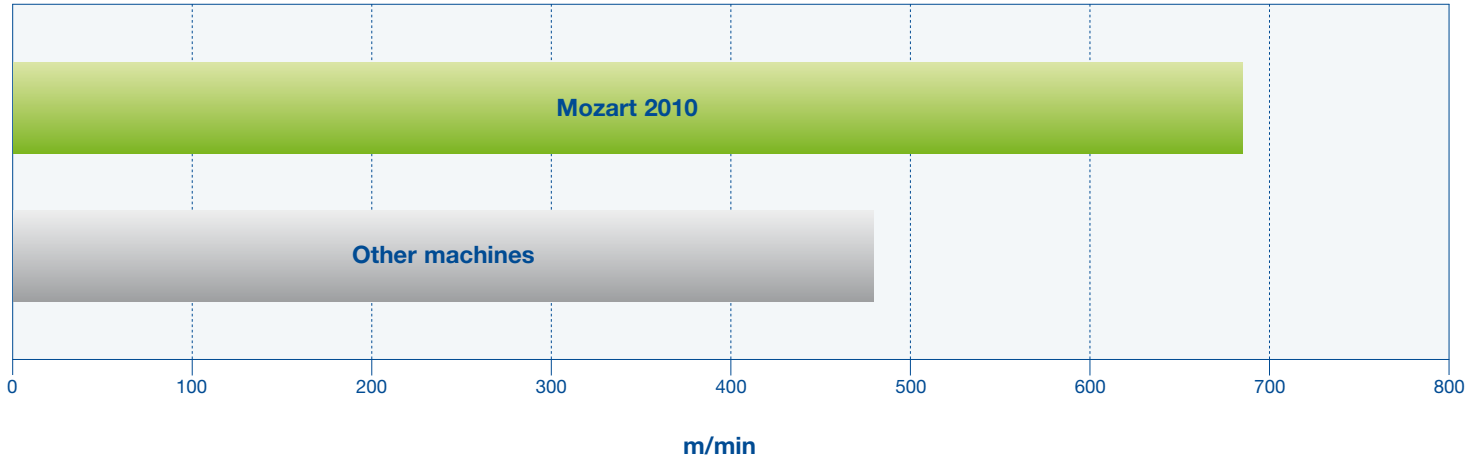
INNOVATIONS BY MAG

HOW TO MAKE MONEY WITH MAG MACHINES

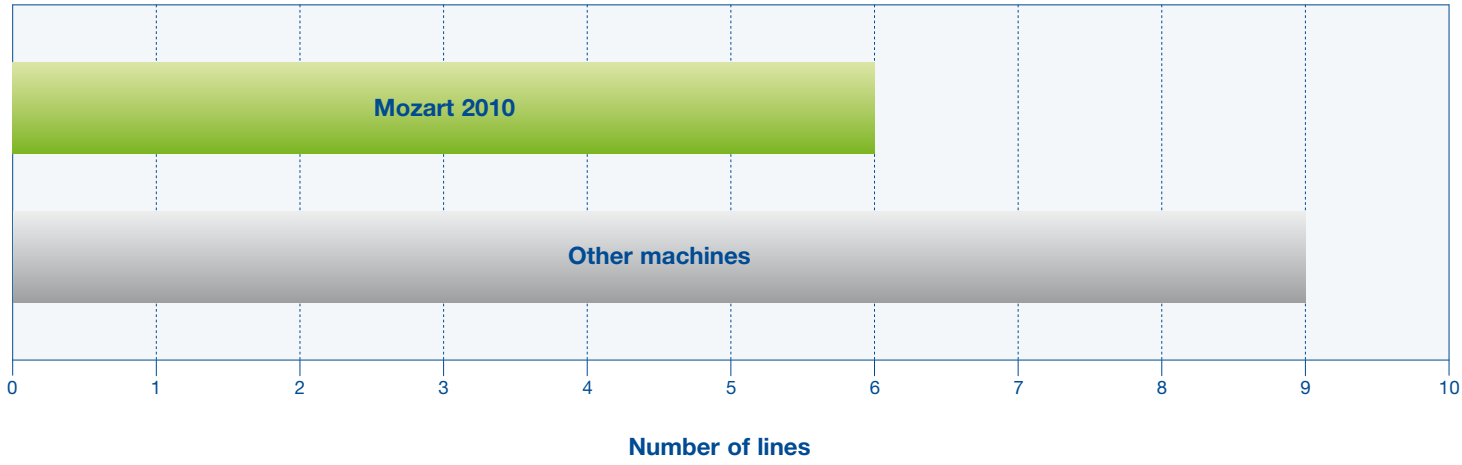
ENERGY CONSUMPTION



PRODUCTION SPEED



NUMBER OF LINES FOR THE SAME OUTPUT



RESULT

The investment and the operation costs for 6 lines Mozart are in any case lower than the investment and operation costs for 9 lines from other machines.

TURN COPPER INTO GOLD

MAG'S NEW PROFIT PLANT

It would be a physical sensation if copper could be turned into gold. This step – as yet unthinkable in laboratories – can now be achieved in a different way thanks to MAG enamelling machines. These impressive developments in the production process are summarised in the following formula of success: less energy input results in higher production speeds and output.

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Reports about the research results and developments of MAG on the one hand and the global increase in the demand for enamelled wire on the other, would suggest that it was high time to open another account to store away the profit reaped. Energy consumption of the machines has been improved, which makes sense in both ecological and economic terms. A Mozart machine of the newest generation consumes only one third of the energy needed by other machines to produce one kilo of enamelled wire. At the same time, production speed is nearly fifty percent higher.

A top machine of this kind of course comes at a price and when compared to the single-line machines of our competitors, the price may at first seem high, but a second glance reveals that MAG machines are much more efficient, with only 2/3 of the usual number of machines needed to achieve the same output as other machines.

MOBILITY, THE MEGATREND

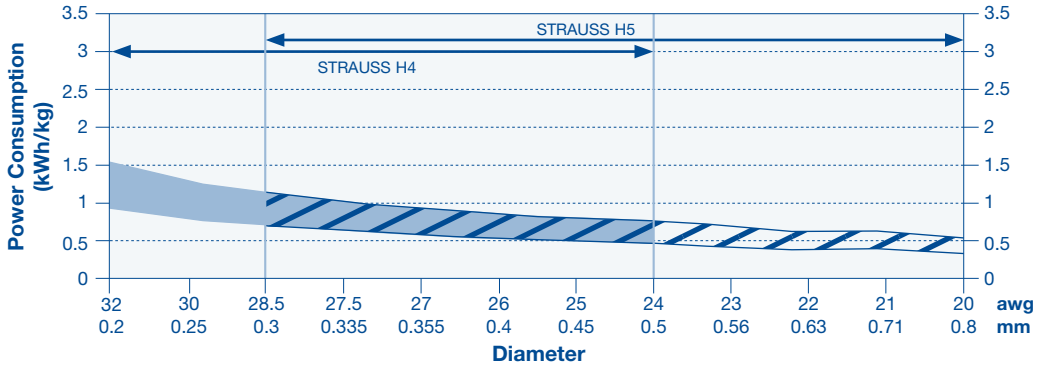
The trend towards mobility is unstoppable. The automotive industry is currently investing large sums of research money in the development of hybrid and electric cars. With the number of such vehicles growing, the demands on the power stations and electricity infrastructure are also set to increase substantially. A demand which will be increasingly covered by sustainable power generation.

The petrol of the future is not buried deep underground but will reach Earth in the form of sunrays. Solar power is increasingly being used to generate energy with ever more power stations being built and the demand for enamelled wire growing. The convenience and safety of the modern car is being continually improved. Who wants a car without central locking, CD player, electric sunroof, power steering, air conditioning or other conveniences? These requirements mean an increasing number of auxiliary motors in your typical passenger car – irrespective of the form of drive – and subsequently the demand for enamelled wire is also increasing.

STRAUSS H4/5

Horizontal single line wire enamelling machine

POWER CONSUMPTION*



* values valid for:
PEI G1, 38 % SC, 26 °C ambient temperature, depending on number of enamel tanks, wire inlet diameter, drawing die sequence, enamelling die sequence and number of lines.
Performance (VD) of the machine according MAG Machine-Performance table as well as based on the Tangent Delta Value of the enamel supplier of the used standard enamel.

The information given is correct to the best of our knowledge. It is offered in good faith but without guarantee in the legal sense.

H4 H5

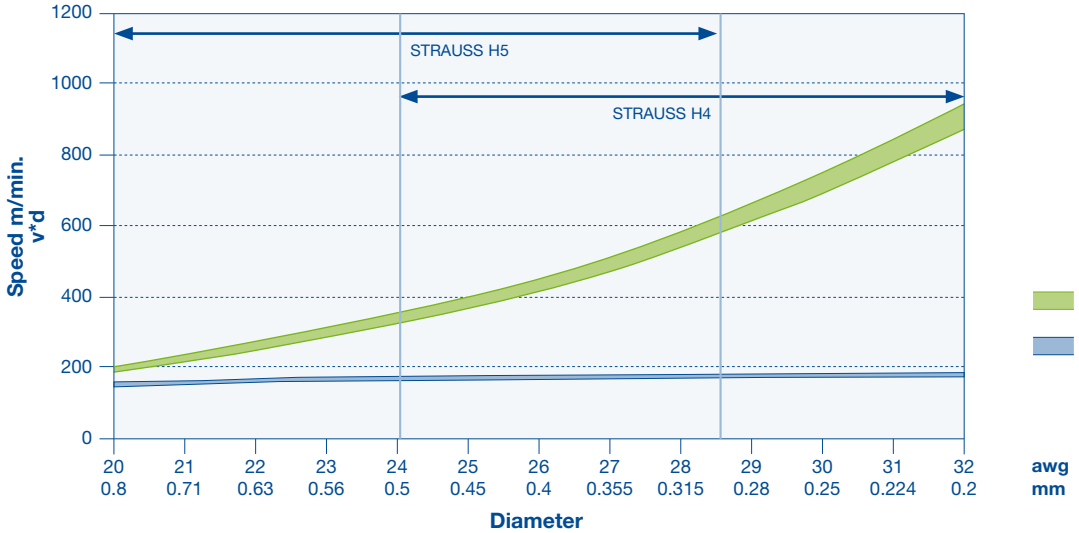
OUTPUT-TABLE H4

		4 lines	
(diameter)	(diameter)	(kg/24h)	(kg/24h)
mm	**awg**	**PU**	**PEI**
0.2	32	1,530	1,420
0.224	31	1,700	1,580
0.25	30	1,890	1,750
0.28	29	2,010	1,950
0.315	28	2,330	2,150
0.355	27	2,590	2,400
0.4	26	2,900	2,690
0.45	25	3,210	2,970
0.5	24	3,540	3,280

OUTPUT-TABLE H5

		4 lines	
(diameter)	(diameter)	(kg/24h)	(kg/24h)
mm	**awg**	**PU**	**PEI**
0.3	28.5	2,230	2,060
0.315	28	2,330	2,150
0.355	27	2,590	2,400
0.4	26	2,900	2,690
0.45	25	3,210	2,970
0.5	24	3,540	3,280
0.56	23	3,920	3,630
0.63	22	4,330	4,010
0.71	21	4,720	4,370
0.8	20	5,150	4,770

PERFORMANCE DATA*



* values for Grade 2 application are approx. 5 % lower
* values for Al Overcoat are approx. 5 % lower than PEI
* values for NY Overcoat are approx. 5 % lower than PU
* depend on suitable production materials and conditions
* final production quality apply to IEC/NEMA Standard

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