

**VACUUMSCHMELZE** 是拥有处于世界领导地位的先进磁性材料和相关产品的制造商。

a leading global manufacturer of advanced magnetic materials and related products.

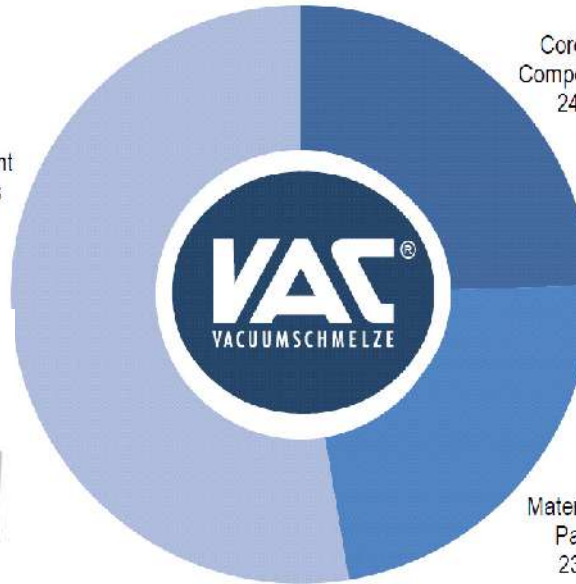
In 1914, the first vacuum melting furnace laid the foundation for today's **VACUUMSCHMELZE**. Then in 1923, melting alloys in a vacuum went into production on an industrial scale. This initial operation was located in Hanau, Germany and later grew into a company that operates on a worldwide basis: 1914 年, 第一个真空熔炼炉为今天的 **VACUUMSCHMELZE** 奠定了基础, 至 1923 年, 真空熔炼合金在工业产业中正式投产, 这种操作机制从德国哈淖慢慢发展至全世界公司操作的基本机制。

- With **4000** employees
- 拥有 4000 个员工
- In more than **50 countries**
- 超过 50 个国家
- With annual sales of about approx.

**490 million Euro**

- 年销售额约 4.9 亿欧元

Permanent Magnets  
53%



Cores & Components  
24%



Materials & Parts  
23%



## PARAMETERS

参数:

- Rotation speed : **2400 rpm**
- 转速: **2400 rpm**
- Throwing speed : **77 m/s**
- 投掷速度: **77m/s**
- Efficiency of the wheels : **45 %**
- 抛头效率: **45%**
- Abrasive flow : **215 kg/min**
- 磨粒流量: **215kg/min**
- Line speed : **2 - 3 m/min**
- 线速: **2-3m/min**

Working days per week : **5**

每周工作天数: **5**

Shifts per day : **1**

每天轮班

Operators : **1**

操作者: **1**

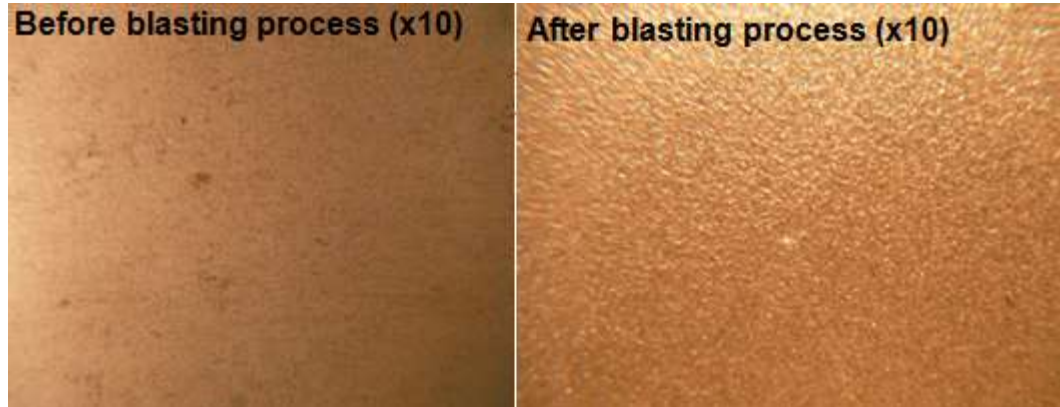
Blasting time in the period 抛丸时间 : **210 h/mon**

Production per unit of time 每单位时间生产率 :

**3900 m<sup>2</sup>/month**

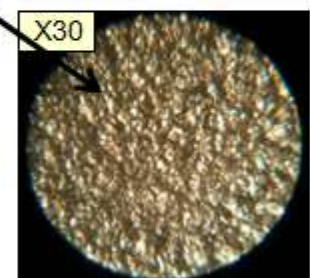
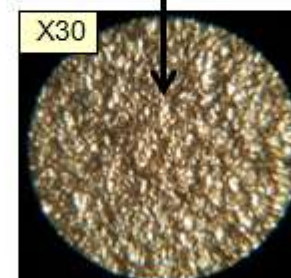
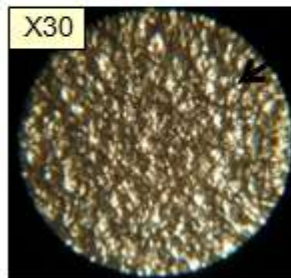
Abrasives consumption per year 每年磨料的消耗量 :

**50 t/year**



1	2	3
7,94	9,62	9,165
48,6	48,6	53,68
61,1	58,8	61,82

Ra  
Rz  
Rmax  
Pc





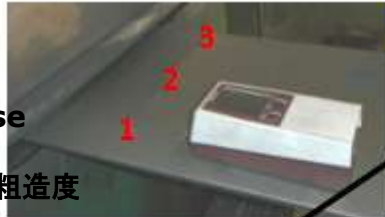
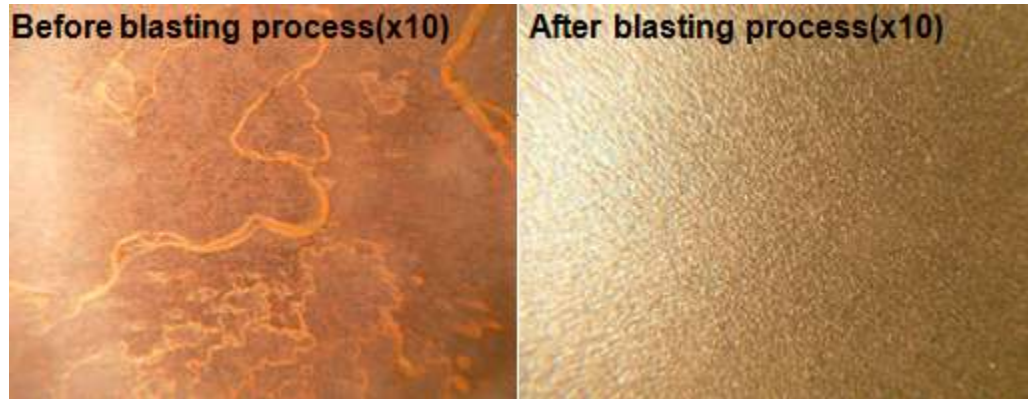
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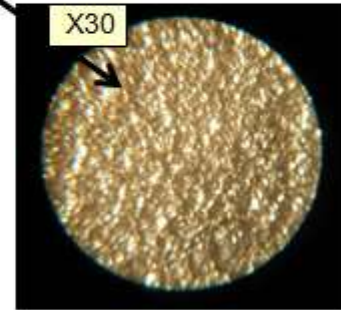
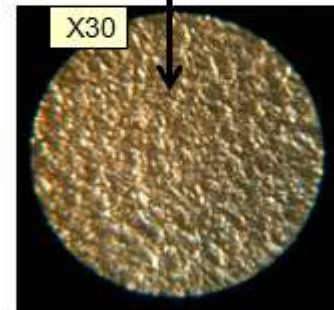
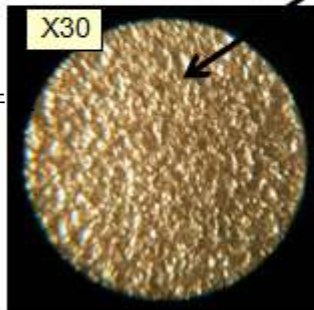
- Line speed 线速 : **2 to 8 m/min**

**We increased descaling efficiency and decrease the roughness with SM 140 vs S330 used before:**  
我们在 SM140 与 S330 使用前增强了除锈效率并减少了粗造度

- Lower process costs 减低工序成本
- Higher productivity (line speed up to 50%) 高生产 (线速上升至 50%)
- Improved surface appearance 改善表面状况
- Lower, regular and better-controlled roughness 减低、正常并更好的控制粗糙度



1	2	3	M	
7,03	5,66	5,37	6,019	Ra
32,1	33,8	32,88	32,923	Rz
39,8	40,4	41,74	40,674	Rmax





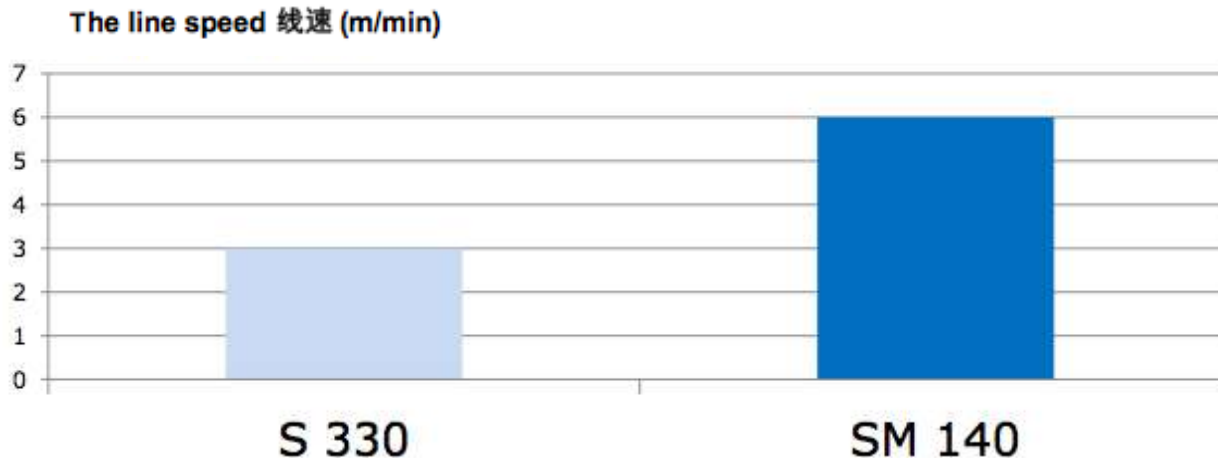
· **Line speed 线速 :**

- *Line speed with previous abrasive S 330 : 2 - 3 m/min max.*

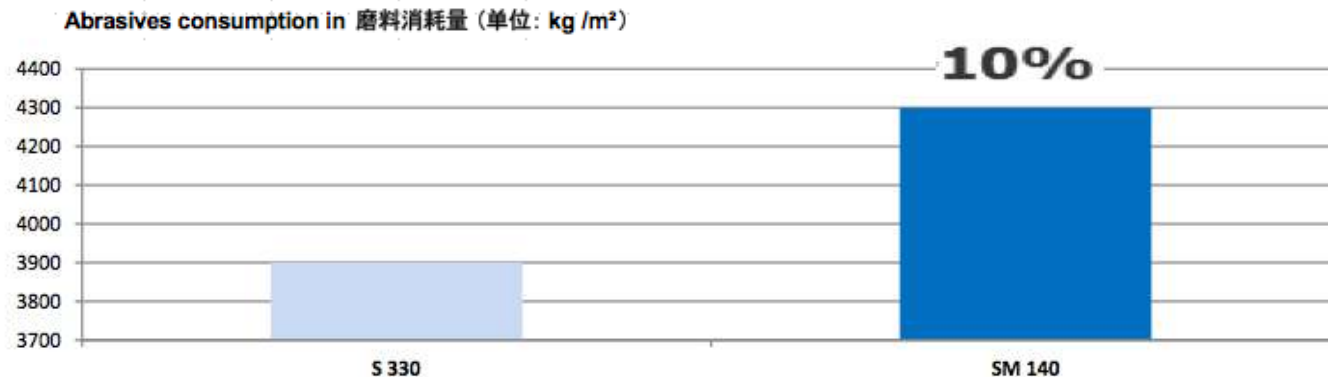
之前的 S330 的线速: 2 - 3 m/min max

- *Line speed **STAINIUM** 的线速 : 3 to 8 m/min*

使用 **STAINIUM** 的线速: 3 to 8 m/min



- **Highest productivity for same cleanliness level :**
- **对相同清洁度的最高生产率**
  - *With previous abrasive S330: 3900 m<sup>2</sup>/month (1,6t abrasive consumption)*  
之前的 S330 的最高生产率: 3900 m<sup>2</sup>/month (磨料消耗量 1.6 吨)
  - *With **STAINIUM** : 4300 m<sup>2</sup>/month (1,3t abrasives consumption for same period)*  
使用 **STAINIUM** 的生产率: 4300 m<sup>2</sup>/month (同周期的磨料消耗量为 1.3 吨)



· Lower abrasive consumption for same cleanliness level :

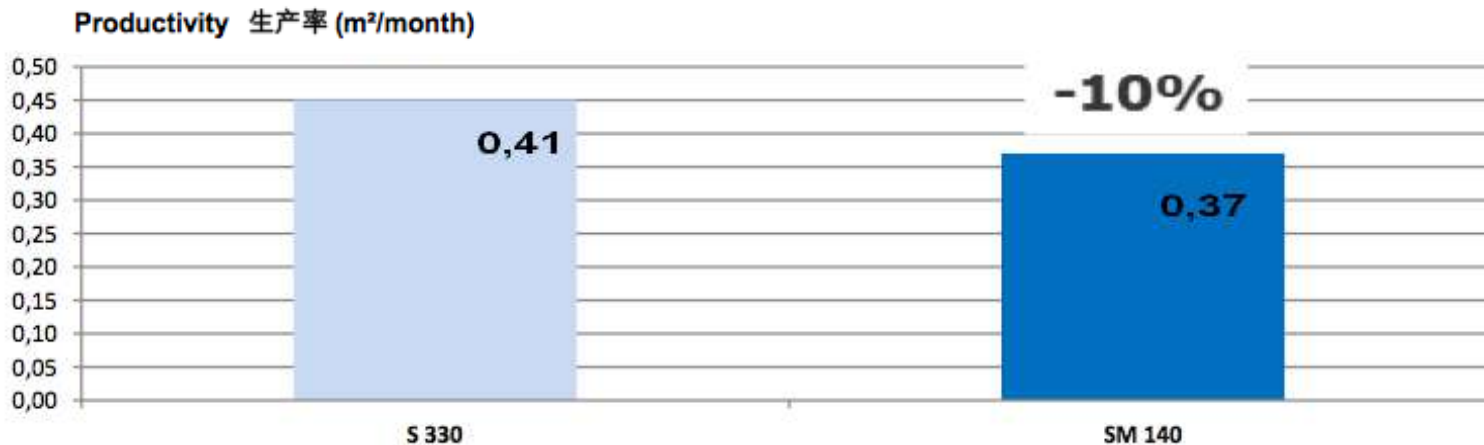
对相同清洁度的低磨料消耗量：

- With previous abrasive S330 : 0,41 kg/m<sup>2</sup>

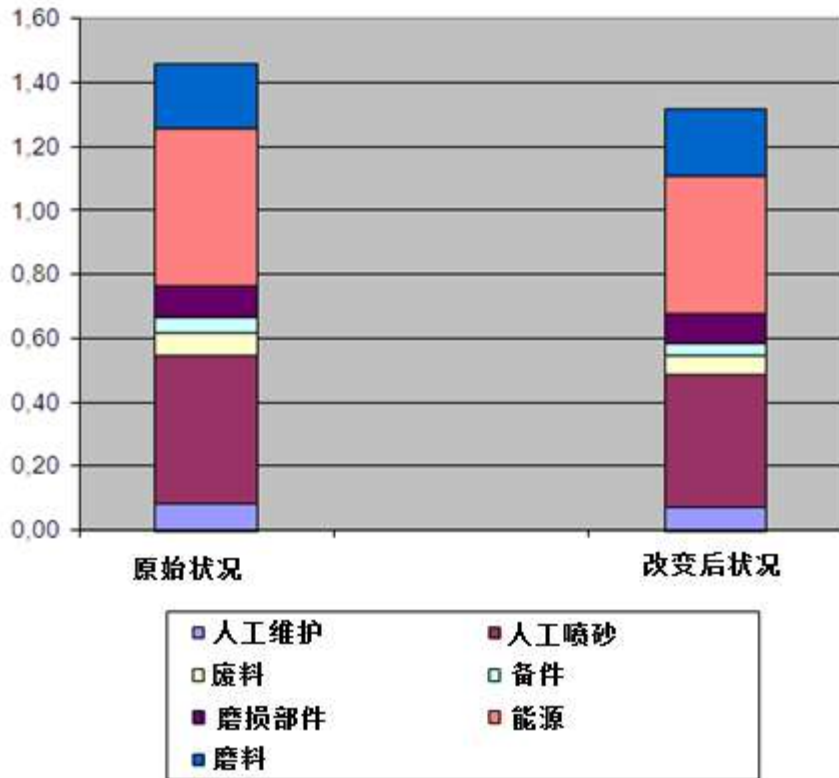
之前的 S330 的消耗量: 0,41 kg/m<sup>2</sup>

- With **STAINIUM** : 0,27-0,37 kg/m<sup>2</sup>

使用 **STAINIUM** 消耗量 :: 0,27-0,37 kg/m<sup>2</sup>



喷砂工艺成本



磨料工艺成本	原始状况	变更后状况
人工维护	0.09	0.08
人工喷砂	0.46	0.41
废料	0.07	0.06
备件	0.05	0.04
磨损部件	0.10	0.09
能源	0.49	0.43
磨料	0.20	0.21
<b>总计</b>	<b>1.47</b>	<b>1.32</b>
		<b>-10.20%</b>

This customer measured a considerable difference in terms of **EFFICIENCY – PRODUCTIVITY** and **CONSUMPTION** between **STAINIUM 140** and the abrasives they were using.

**Vacuumschmelze** 在使用磨料 **STAINIUM140** 时, 检测出效率方面(生产力和消耗量)有很大的差异。

- The customer achieved (+10% to +50%) Efficiency (in blasted m<sup>2</sup>/month), A highest productivity because we increased the line speed by 50%.

**Vacuumschmelze** 取得了达到了上升 **10% 至 50%** 的功效, 高生产力—因为我们增加了线速 **50%**

- The abrasives consumption decreased from 50 to 35t/year for same cleanliness level of Sa2 and same blasting time, by implementing **SM 140**.  
如使用 **SM140**, 在同一清洁度等级 **Sa2** 及相同抛丸时间的条件下, 磨料消耗量从每年 **50 吨** 降至 **35 吨**。

**For VACUUMSCHMELZE GmbH & Co. KG, STAINIUM is a REFERENCE and the SOLUTION for his special application.**

对 **VACUUMSCHMELZE** 股份有限公司, **STAINIUM** 在特殊应用程序是一个参考和解决方案。