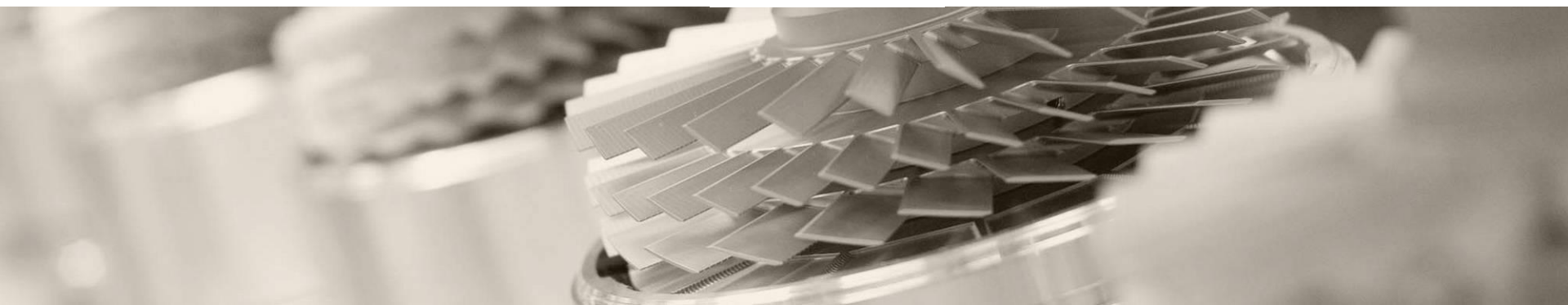


2015 真空计产品全新升级



- 利用最先进的技术，为客户提供更好的产品
- 解决现有产品在存在的一些问题，如果TTR不耐振动等
- 提高产品的“性价比”
- 让产品线更丰富（RS232接口， EtherCAT ， Loadlock 真空计.....）
- 增加销售额

新品能在技术，性能和接口上完全替代原来所有有产品，
在客户端实现“**无痕对接**”！

新品在原有产品名后加N代表New technology, 产品号后面加V02 。

举例：

原产品 TTR 91 产品号 230035

新品 TTR91**N** 产品号230035**V02**

Old THERMOVAC series:



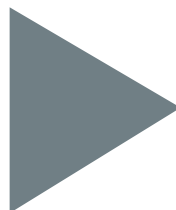
TTR91



TTR911



TTR911
Display



New THERMOVAC series:



TTR91 N

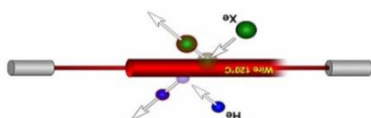


TTR911 N

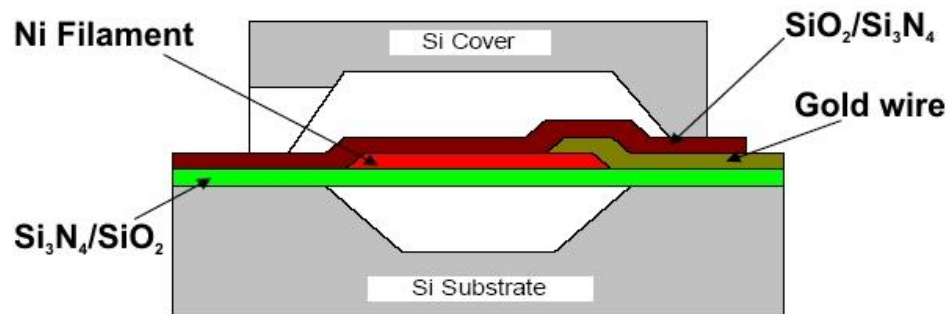


TTR911 N
Display

传统的灯丝技术



MEMS 技术（微电子机械系统）
Micro-Electro-Mechanical-System



3. MEMS Pirani Technology

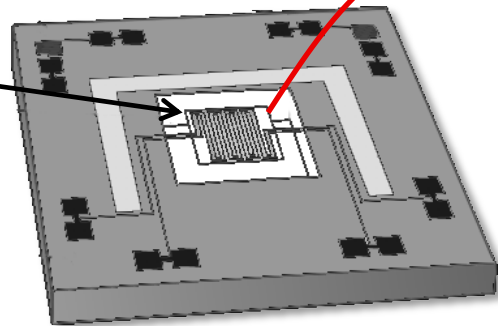
MEMS = Micro-Electro-Mechanical-System

集成测量系统（微电子机械系统）

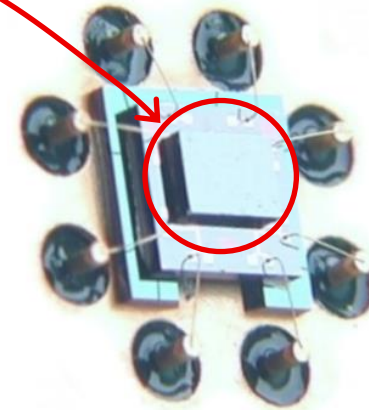
- 集成镍灯丝
 - 任意角度安装
 - 量程更宽，精度更高
 - 每个规管都经过单独的压力和温度补偿校准
 - 真空计的包装里面包括出厂检测报告



Nickel
Filament

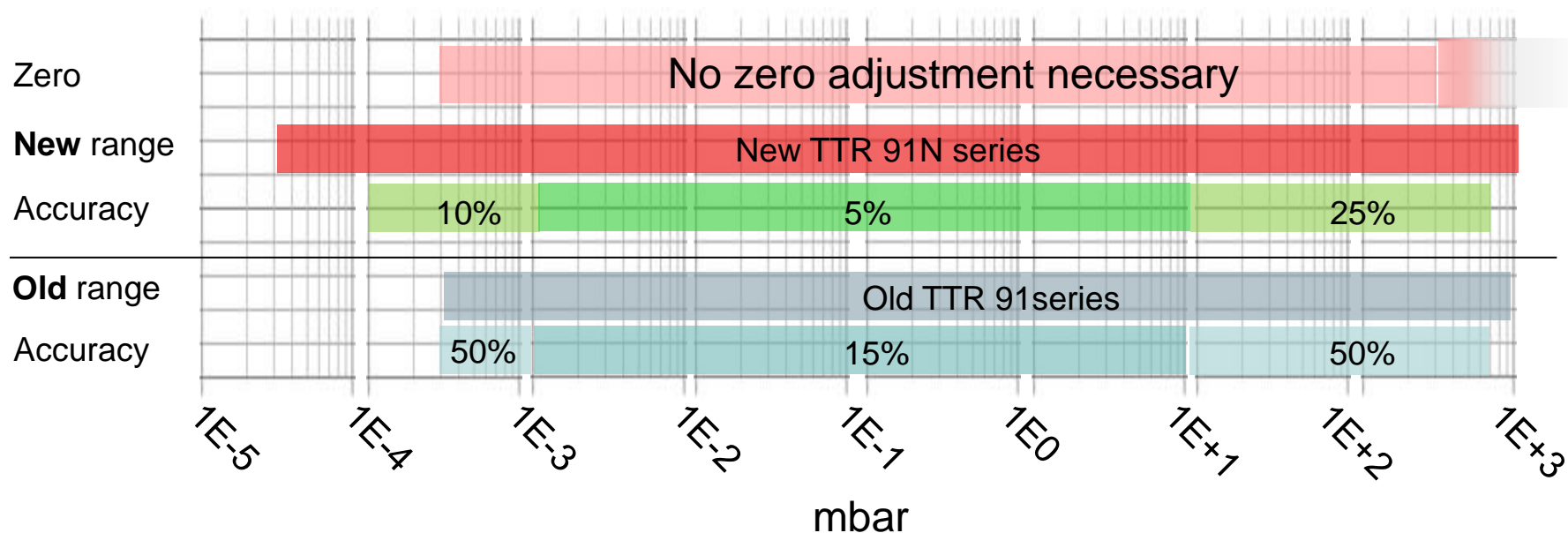


Sensing Cell



集成测量系统的优势

- 系统更稳定
 - 使用前无需零点调整
- 测量精度更高，量程更宽

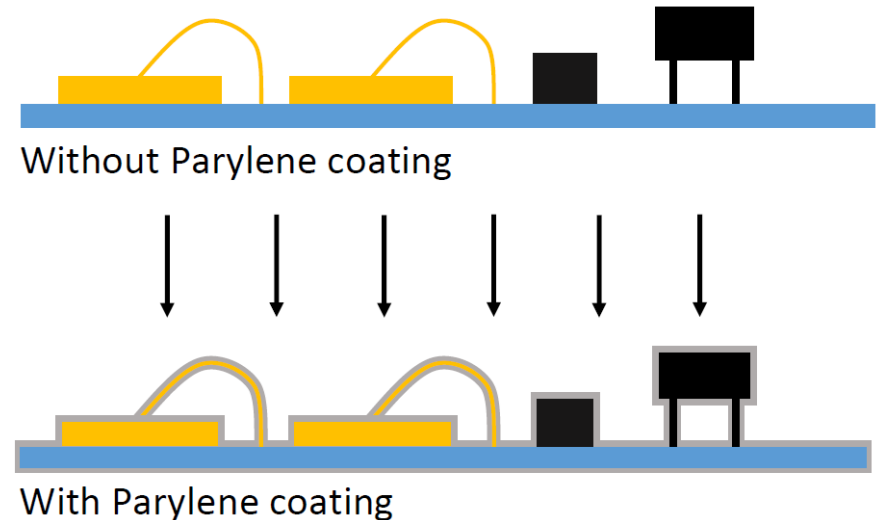


Parylene涂层是一种聚合物涂层，具有其他涂层难以比拟的性能优势。它能涂敷到各种形状的表面，包括尖锐的棱边，裂缝里和内表面。

优势:

- 非常薄 (1-30 microns)
- 绝缘性高
- 对水汽，溶剂，烟雾，腐蚀性气体有非常好的隔离效果
- 对人体无害
- 可用在室温下镀膜，对基材没有伤害
- 稳定性高

TTR 96NC 采用Parylene涂层技术!



TTR101

Old THERMOVAC TTR101 series:



TTR101



TTR101
Interfaces



TTR101
display



New THERMOVAC TTR101 N series:



TTR101 N

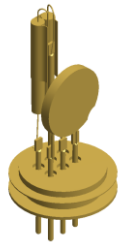


TTR101 N
Interfaces



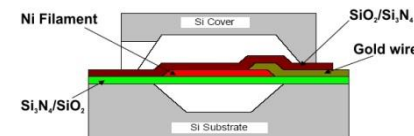
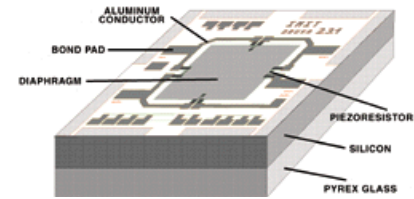
TTR101 N
display

传统的灯丝技术+电容薄膜

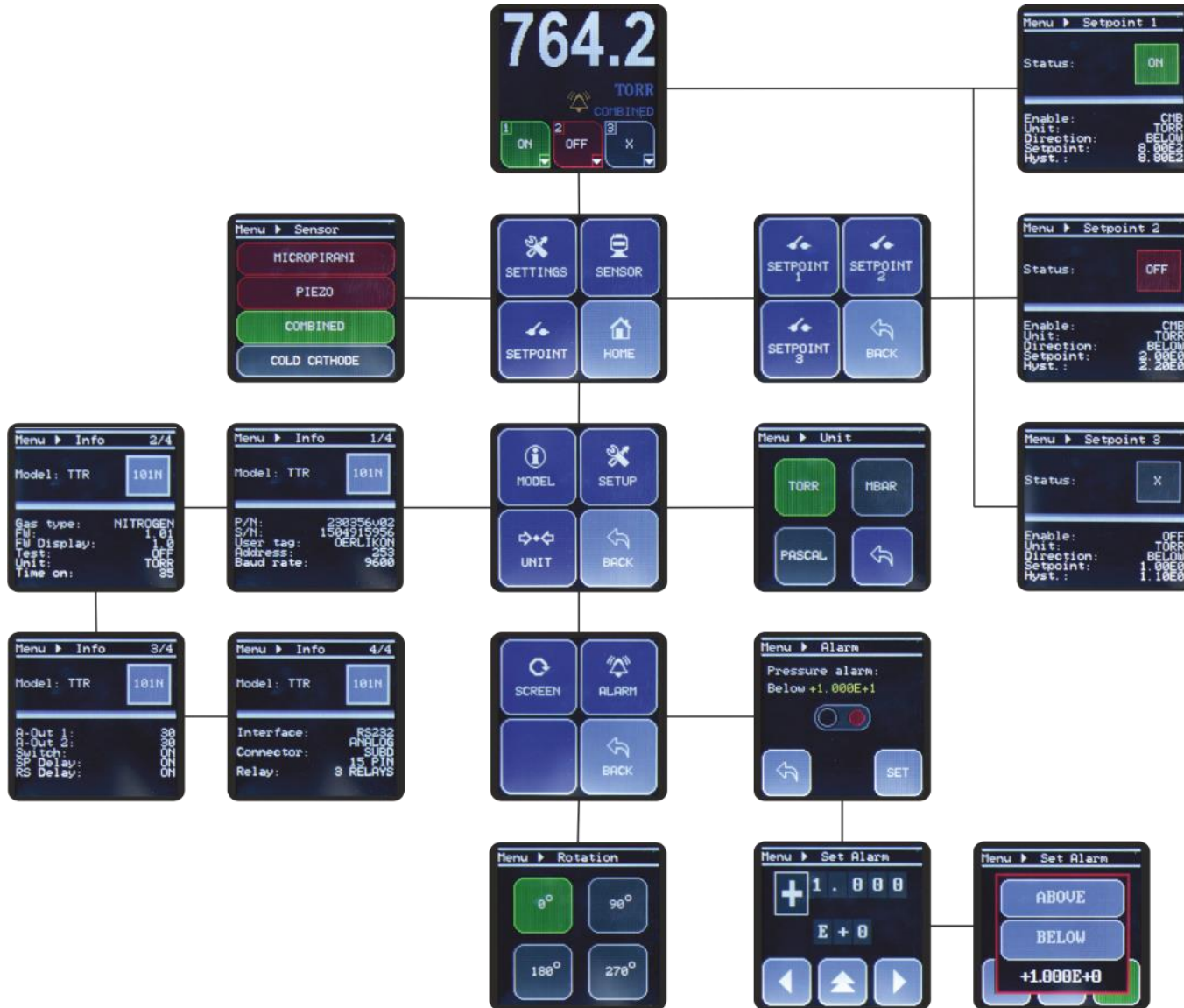


MEMS 技术

Micro-Electro-Mechanical-System



显示版带触摸屏显示器



Old CERAVAC series:



CTR100
series



CTR101
series



New CERAVAC series:



CTR100N
series



CTR101N
series

陶瓷膜片

采用Inconel® 技术

- 接触真空的材料仅有Inconel
- 膜片薄弹性好，可以测量小的压力变化
- 使用寿命长

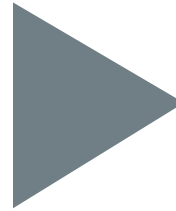
Old PENNINGVAC series:



PTR225



PTR90



New PENNINGVAC series:



PTR225 N



PTR90 N



PTR90 N
Display

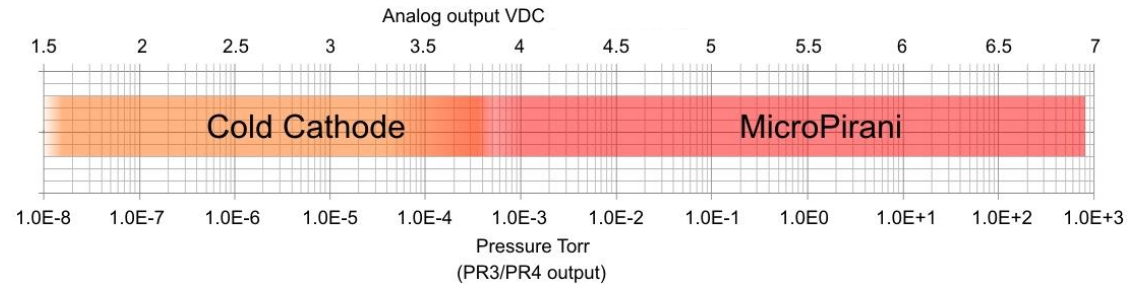
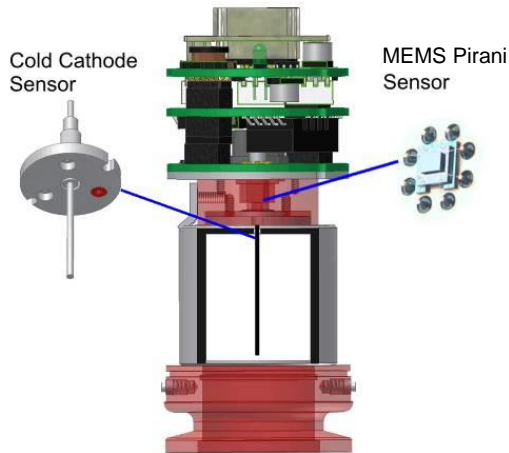
PTR225: 潘宁技术

PTR90: 传统反磁控管技术

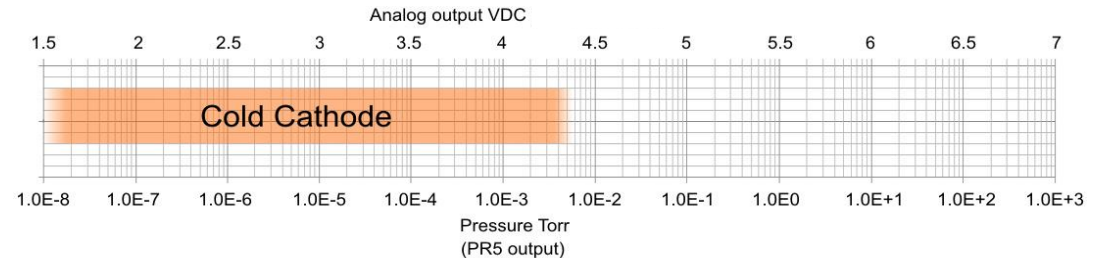
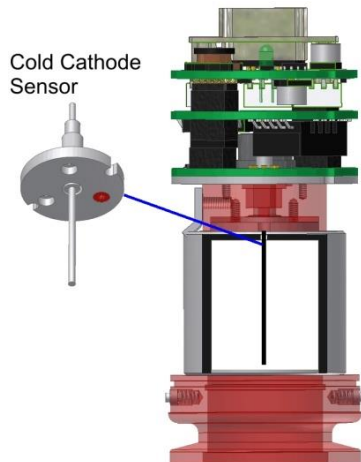
最新反磁控管技术

- 体积更小
- 磁场强度低
- 污染小

- PTR90N is equipped with a Cold Cathode and MEMS Pirani



- PTR225N is equipped with a Cold Cathode Sensor

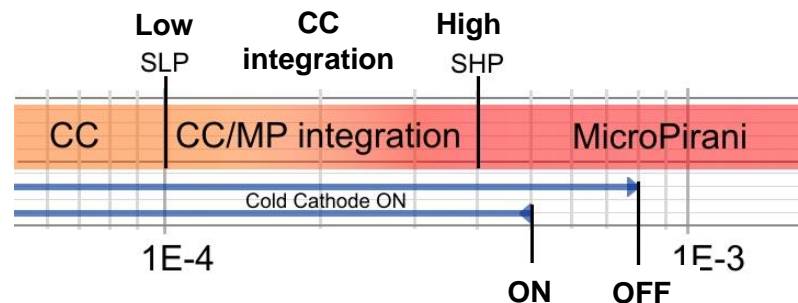


新PTR的优势1

- 冷阴极与/ MEMS Pirani 完美组合
- 皮拉尼在 1×10^{-4} Torr自动做零点调整
- 任意角度安装
- 新增带RS232的版本
- 磁场小，离子电流小，理论维护周期延长10倍
- 点燃压强低，污染可能性小

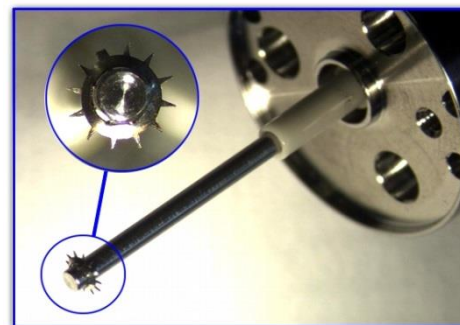
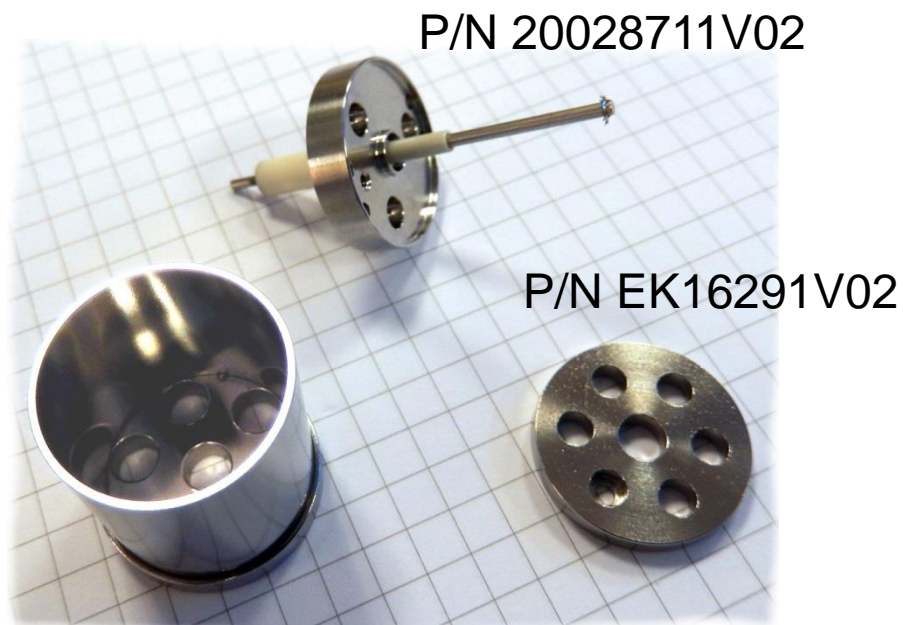
5E-4 Torr点燃

8E-4 Torr关闭



新PTR优势2

- 维护简单
- 电器端独立，所有维护都从法兰端完成
- 维护成本低

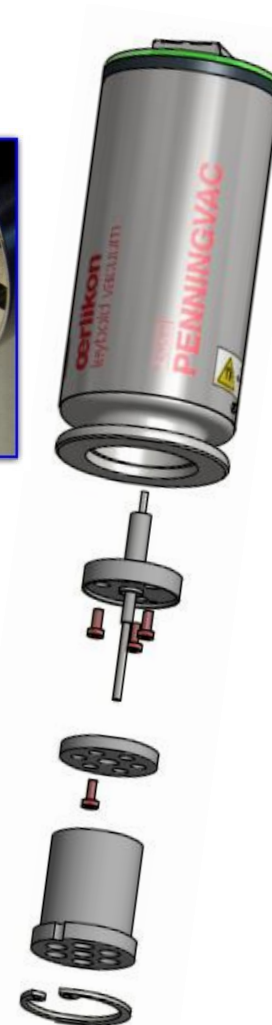


Anode module

Titanium screen

Front screen

Clip ring

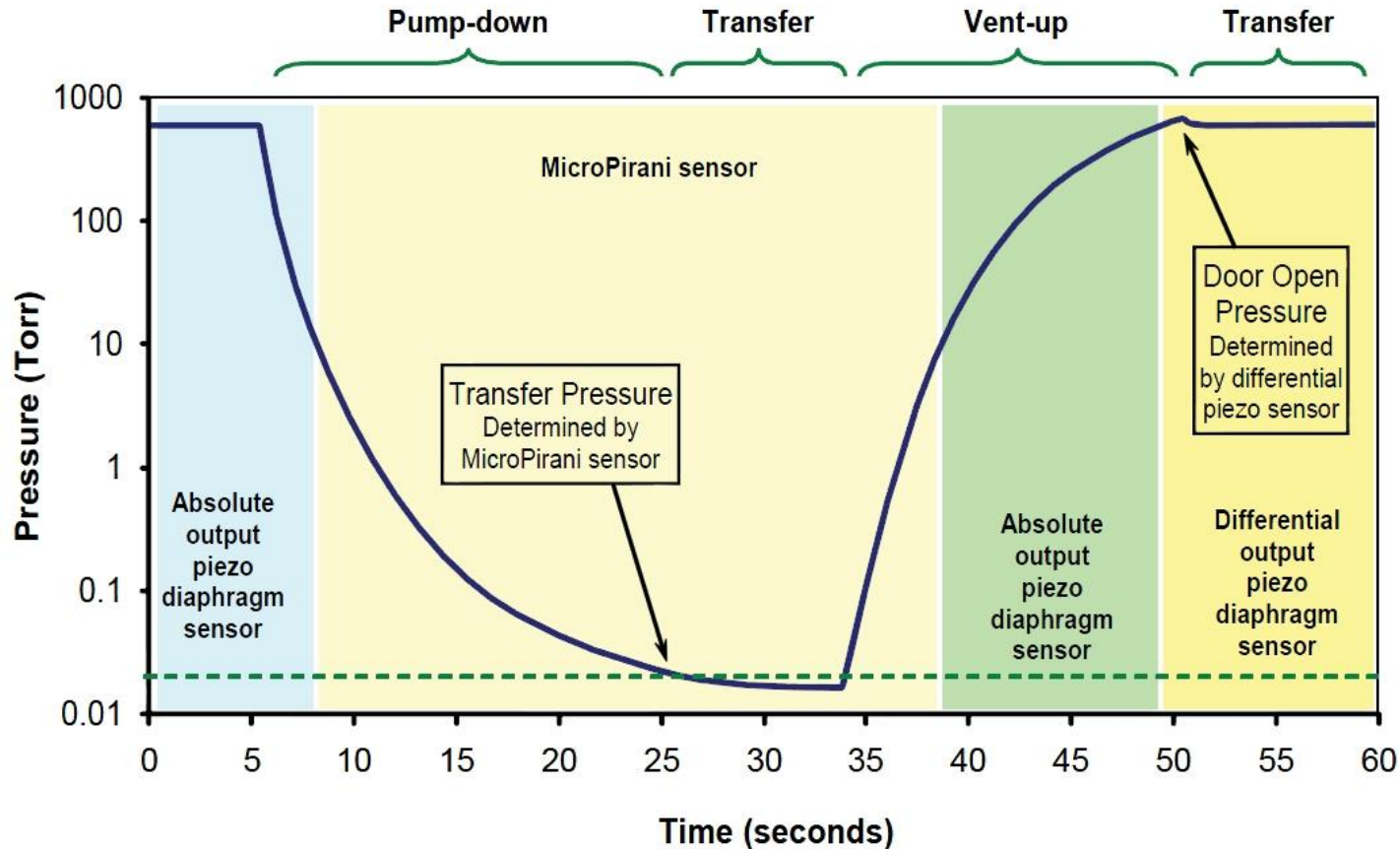


进样室专用规

TTR200N & PTR200N

- 快速准确破空
- 避免进样室污染

进样室工艺

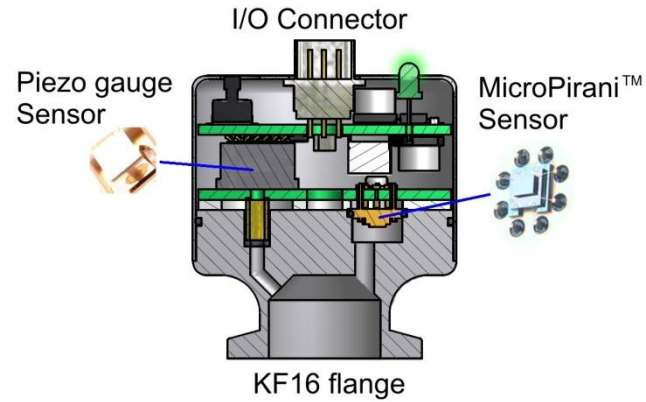


进样室专用规

TTR200N=TTR91+PS113

PTR200N=PTR90+PS113

且功能更强大



OEM规

- 1, 增加ANA OEM真空计销售
- 2, 争取更多的新OEM



OEM TTR 81 N (8 pcs.)
约=TTR91N

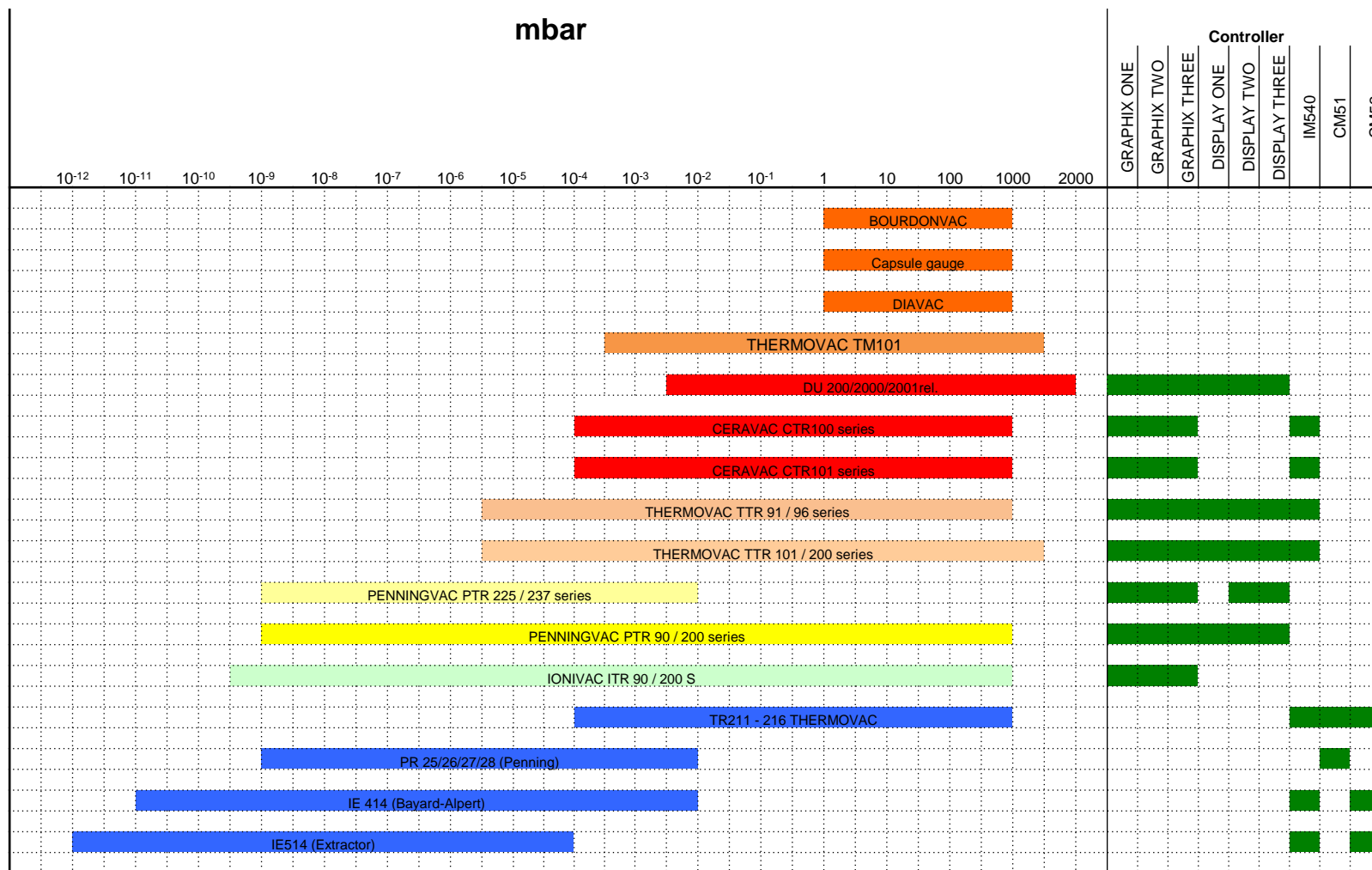
OEM PTR 81 N (8 pcs.)
约=PTR225

OEM PTR 82 N (8 pcs.)
约=PTR90



- 每个包装包括8个规管
- 单个规管的标识比普通规简单且没有顶部显示的LED环。

升级后的规管与现有控制器完全兼容



New GRAPHIX series



Old Center series



DISPLAY series



- Mechanical gauges
- Capacitive gauge
- Cold cathode gauge
- Pirani / hot cathode gauge
- Hand unit (Pirani/Piezo)
- Thermal conductive (Pirani)
- Pirani & cold cathode gauge
- Passive gauges

***1THERMOVAC:**
TTR90/91/96 N
TTR211/216 N
TTR911/916 N



IONIVAC
ITR90/200 series

***1THERMOVAC:**
TTR100/101 N



New GRAPHIX*2
series



Old Center
series



DISPLAY*1
series



PENNINGVAC
*1PTR90 N
PTR225 N

CERAVAC
CTR100N series
CTR101N series



***1Linear sensor**
DU sensor
DI sensor with
adapter



***2Active gauges from another brands:**
Pfeiffer, EDWARDS, Inficon, MKS,...



All CERAVAC transmitter are supported only by the GRAPHIX series

注意事项

- 1, **Profibus**接口的规管暂时不能提供（预计明年上半年）
- 2, 新增的带**RS232**接口规管，暂时不能和莱宝控制器连接使用

Thank you.

