

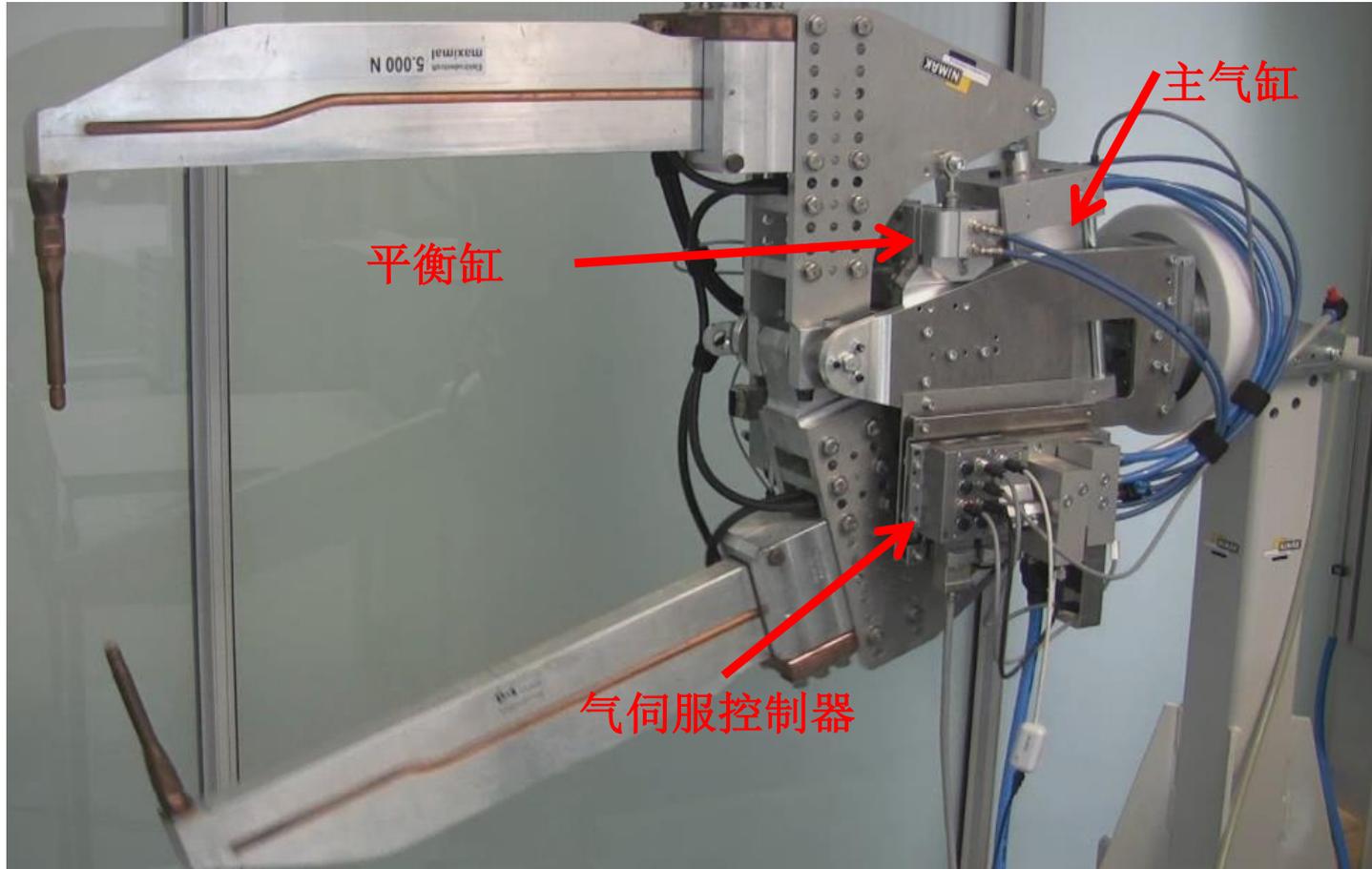


FESTO

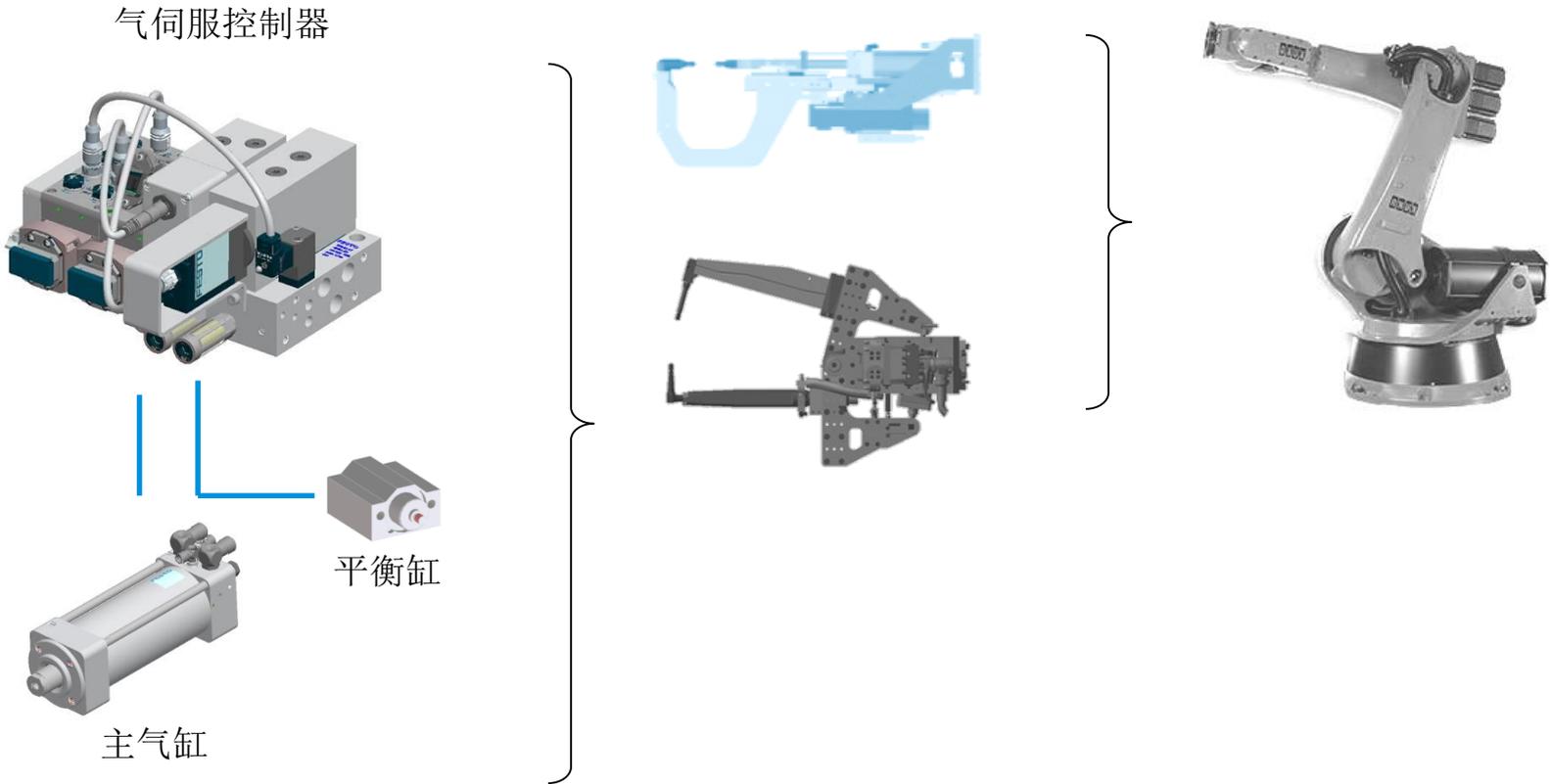
Festo VW 1Gen MQB 系统构成与气路原理

Shaping the Future of Automation

系统构成

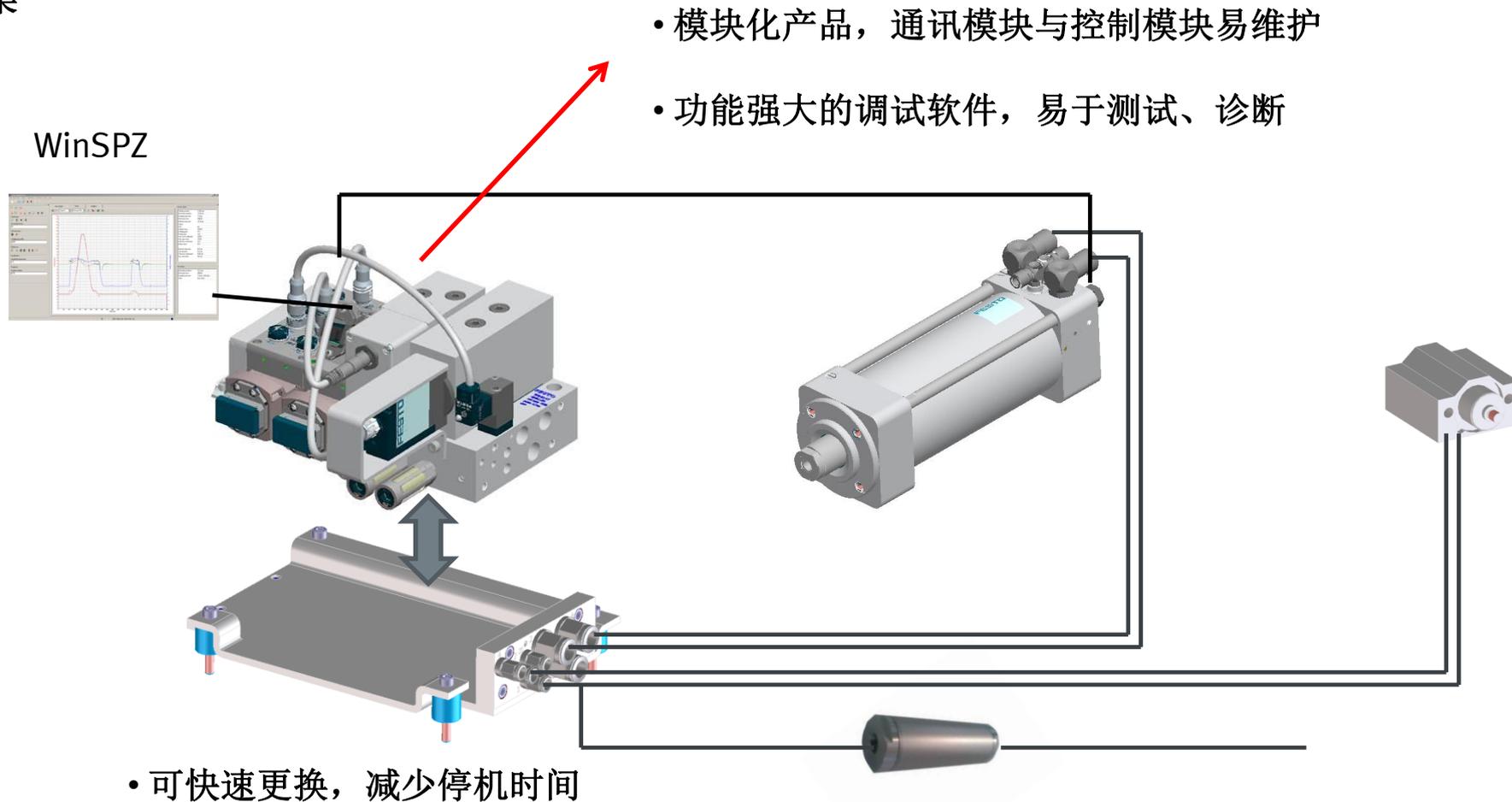


系统构成

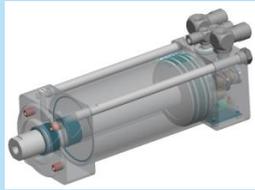


系统构成

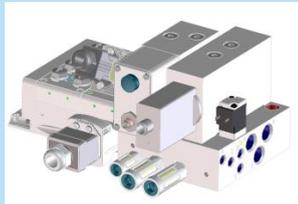
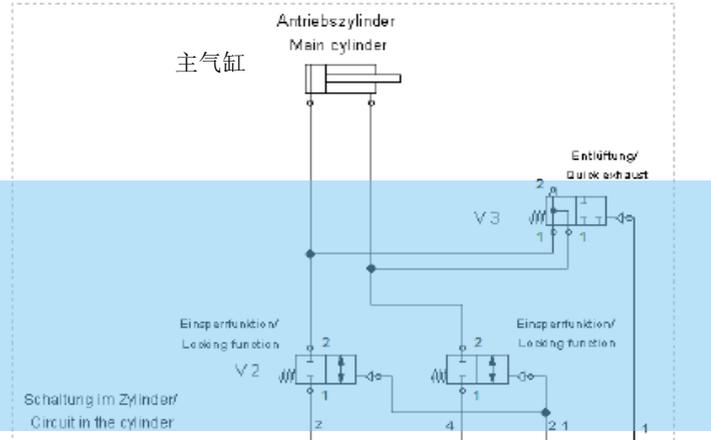
气伺服系统构架



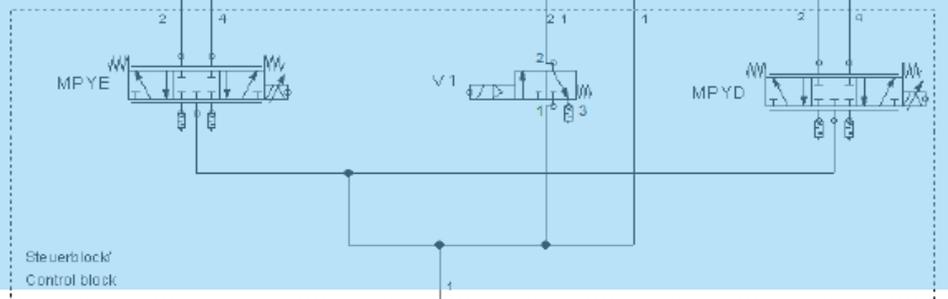
气路原理



主气缸附加模块



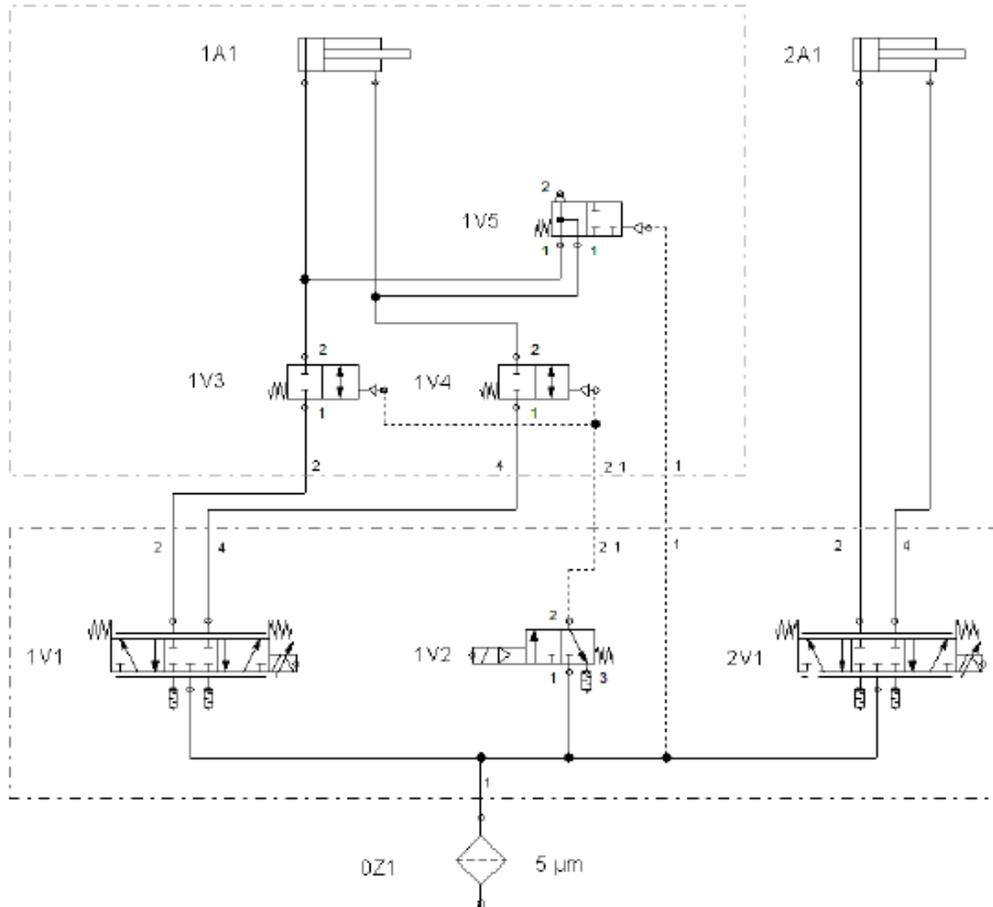
气伺服控制模块



Ausgleichzylinder
 Balancing cylinder
 平衡缸



气路原理



标号	描述
1V1	比例方向阀MPYE，控制主气缸
1V2	锁死阀MSEB，控制主气缸切断阀
1V3	切断阀，集成在主气缸上
1V4	切断阀，集成在主气缸上
1V5	排气阀，集成在主气缸上
1A1	主气缸
2V1	比例压力阀MPYD
2A1	平衡缸
OZ1	5µm过滤器

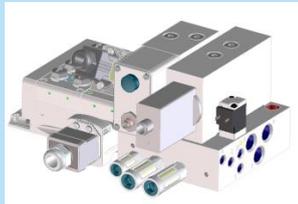
Figure 7: Pneumatic circuit diagram

气路原理->压力供应, 同时 US2 on

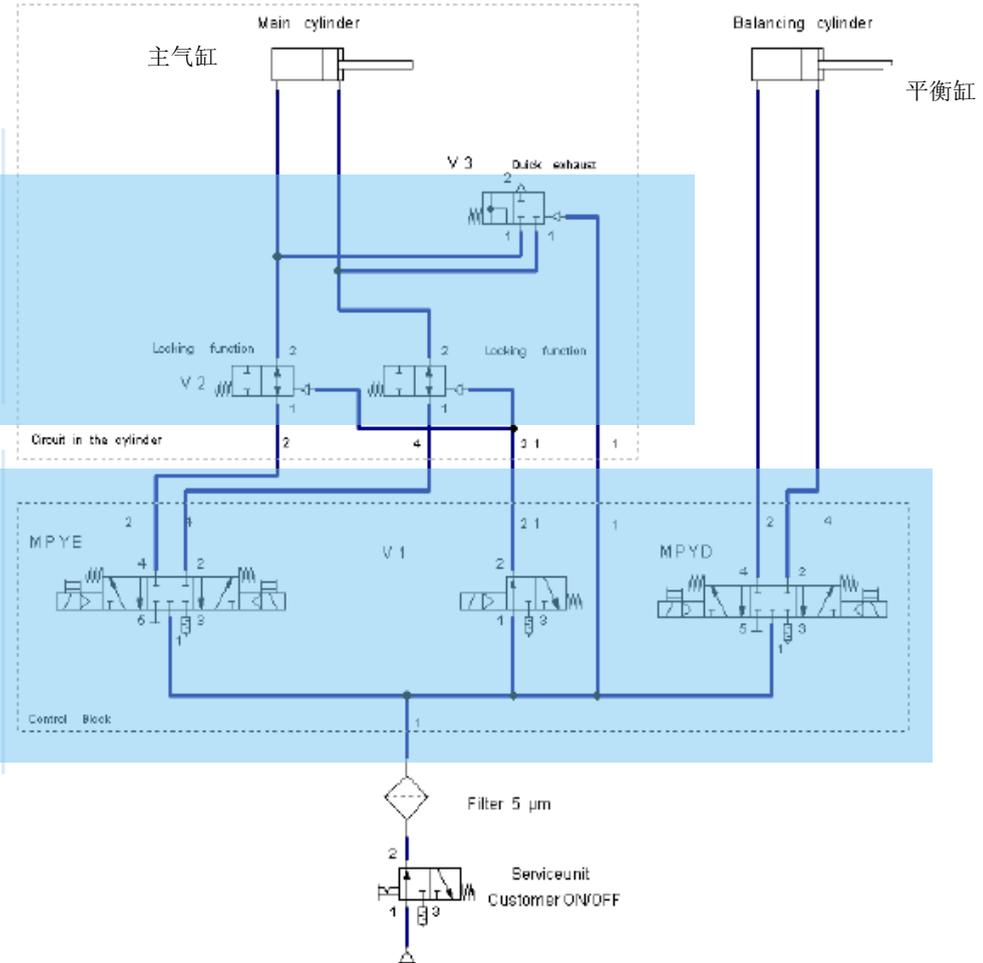
气源接通, US2接通 (正常工作状态)



主气缸附加模块



气伺服控制模块



正常工作

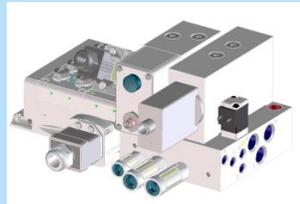
US2 打开 (机器人控制焊枪动作, 保护罩关闭)

气路原理->压力供应, 同时US2 off

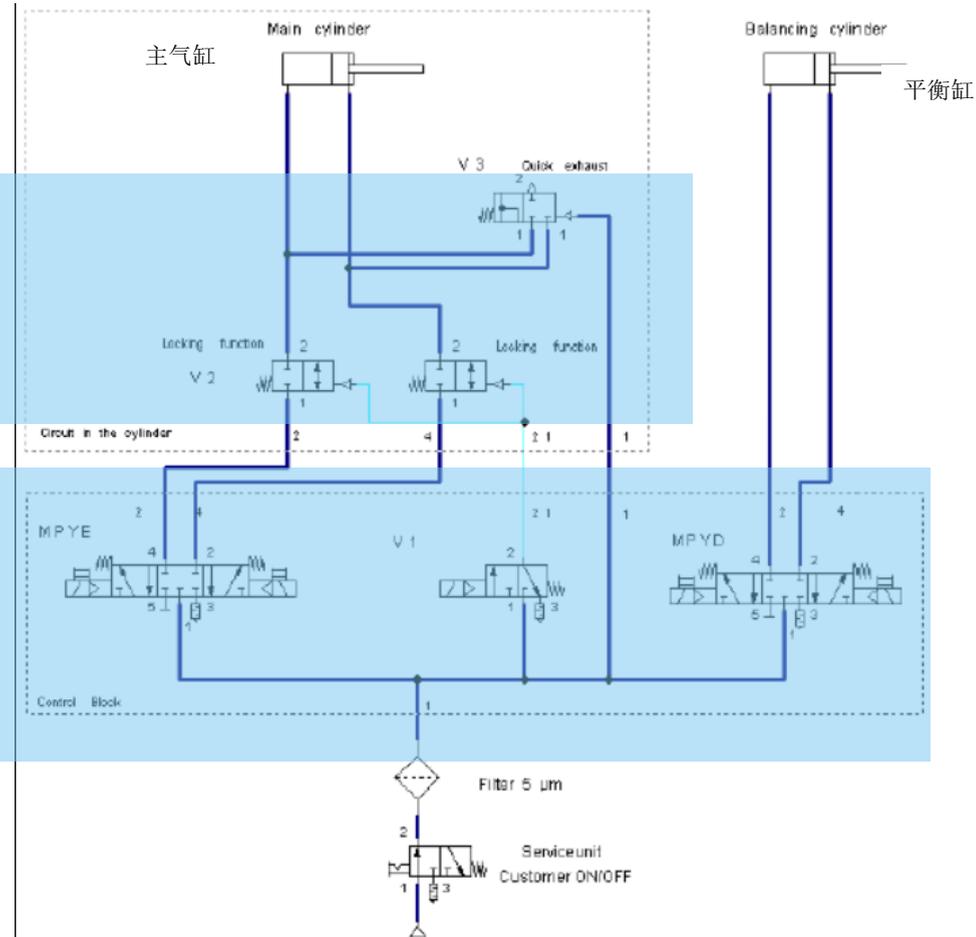
气源接通, **US2断开** (如, 安全门打开)
此时主气缸被锁定



主气缸附加模块



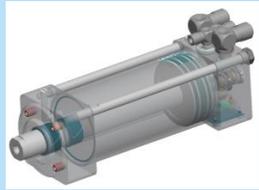
气伺服控制模块



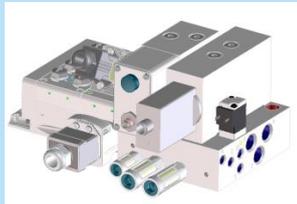
主气缸被锁死。
锁死阀V1断电复位, 阀V2将MPYE到主气缸之间的压力供应切断, 阀V2与主气缸和MPYE阀之间的气管内都有压力. 此时, 阀MPYE不能控制主气缸的动作。

气路原理->切断供气压力

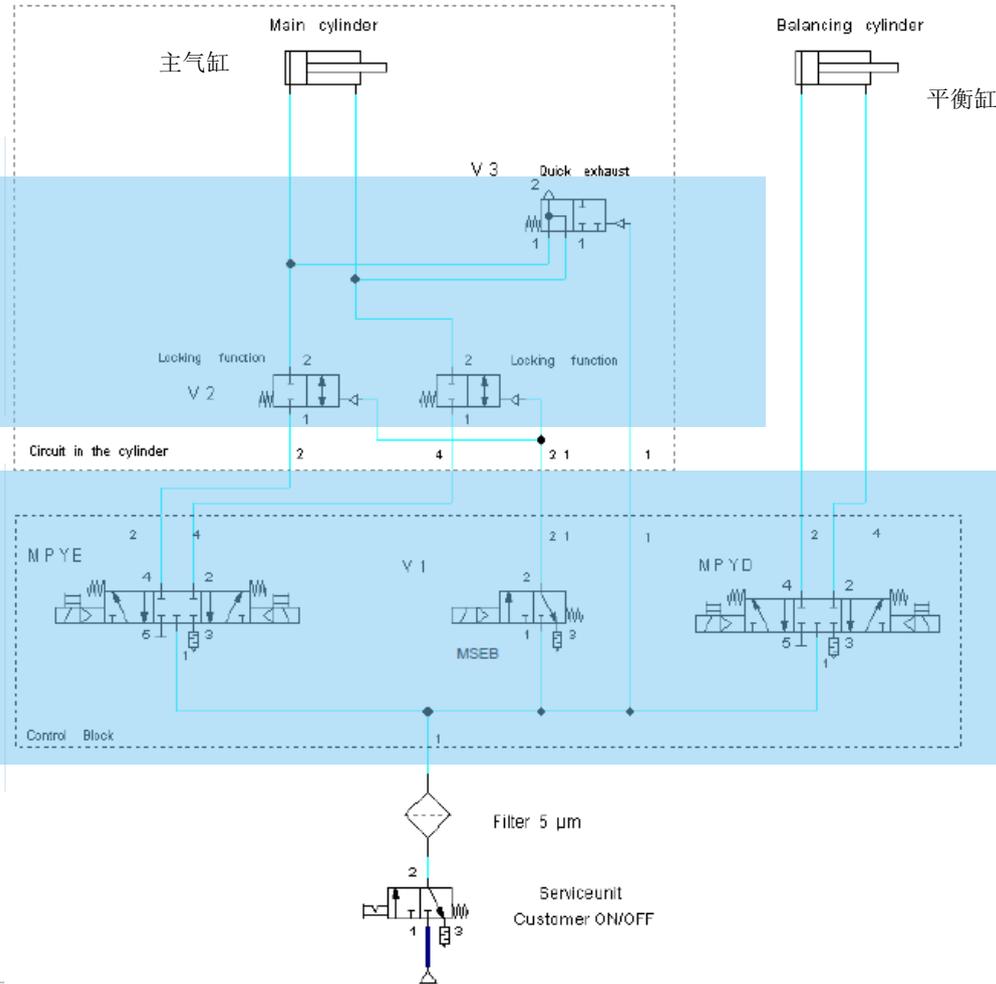
气源断开，无论US2接通还是断开
主气缸内压缩空气快速排出



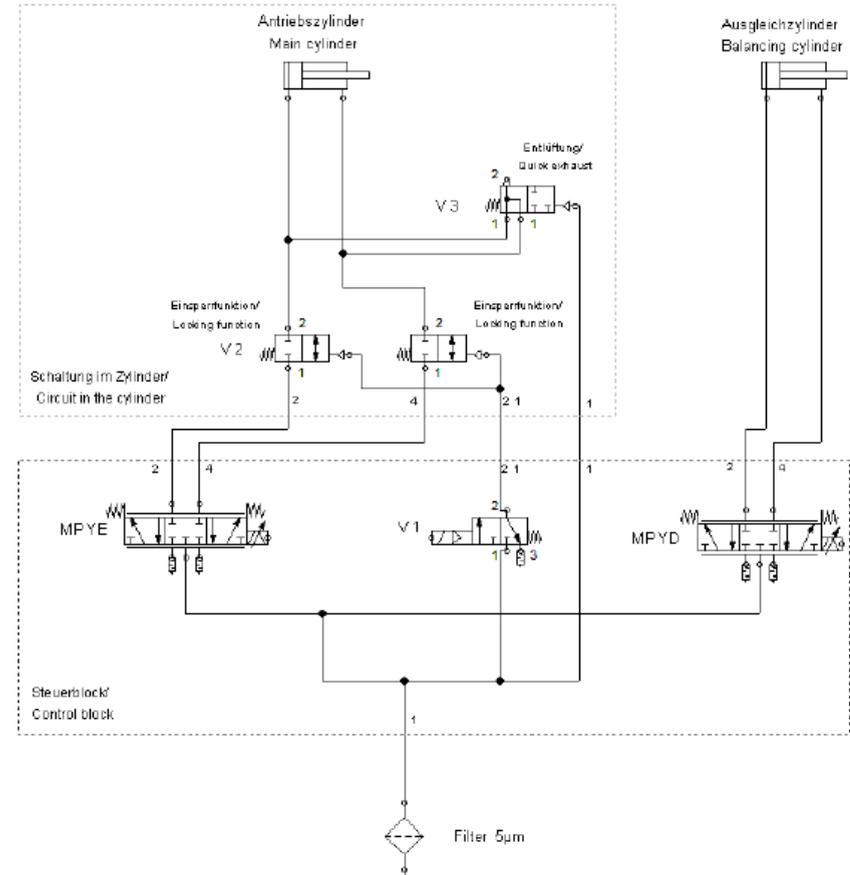
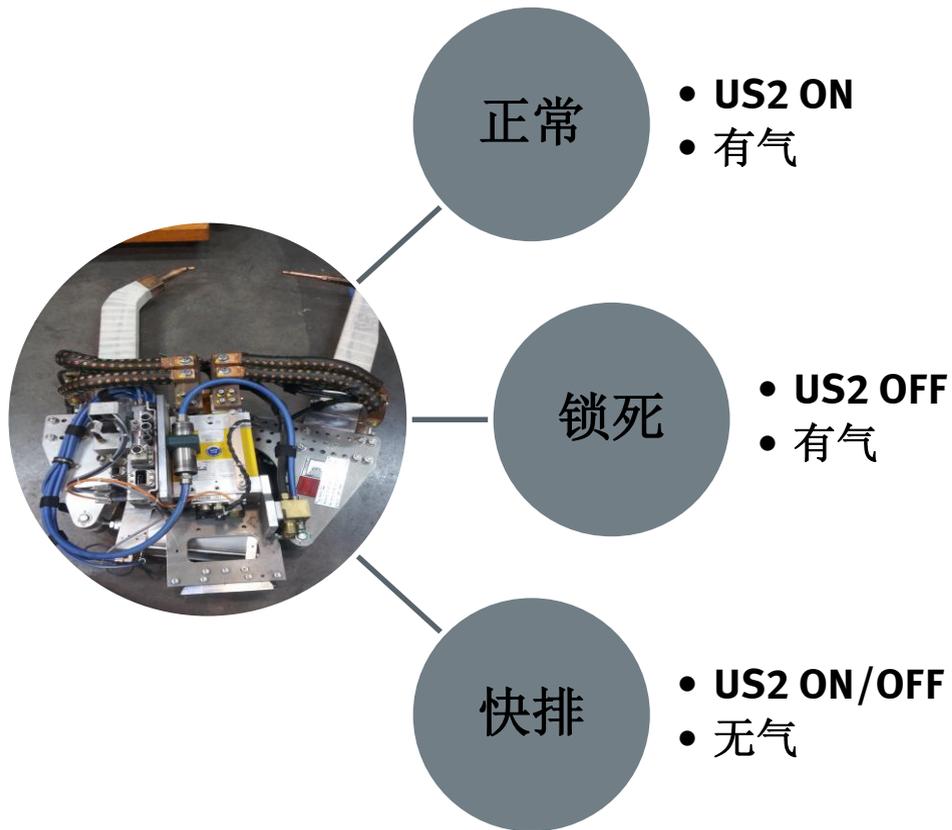
主气缸附加模块



气伺服控制模块



总结



Thanks!

