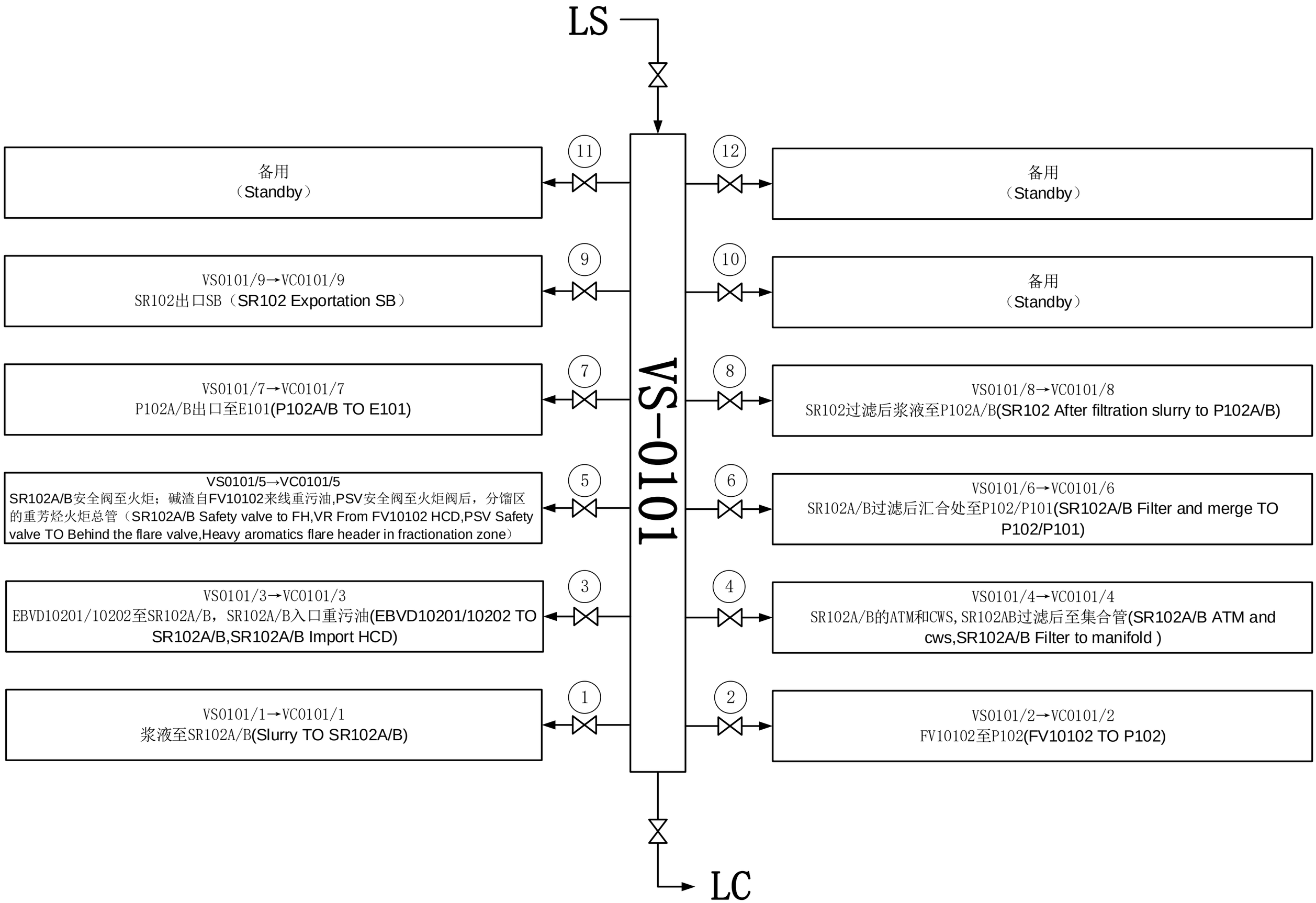
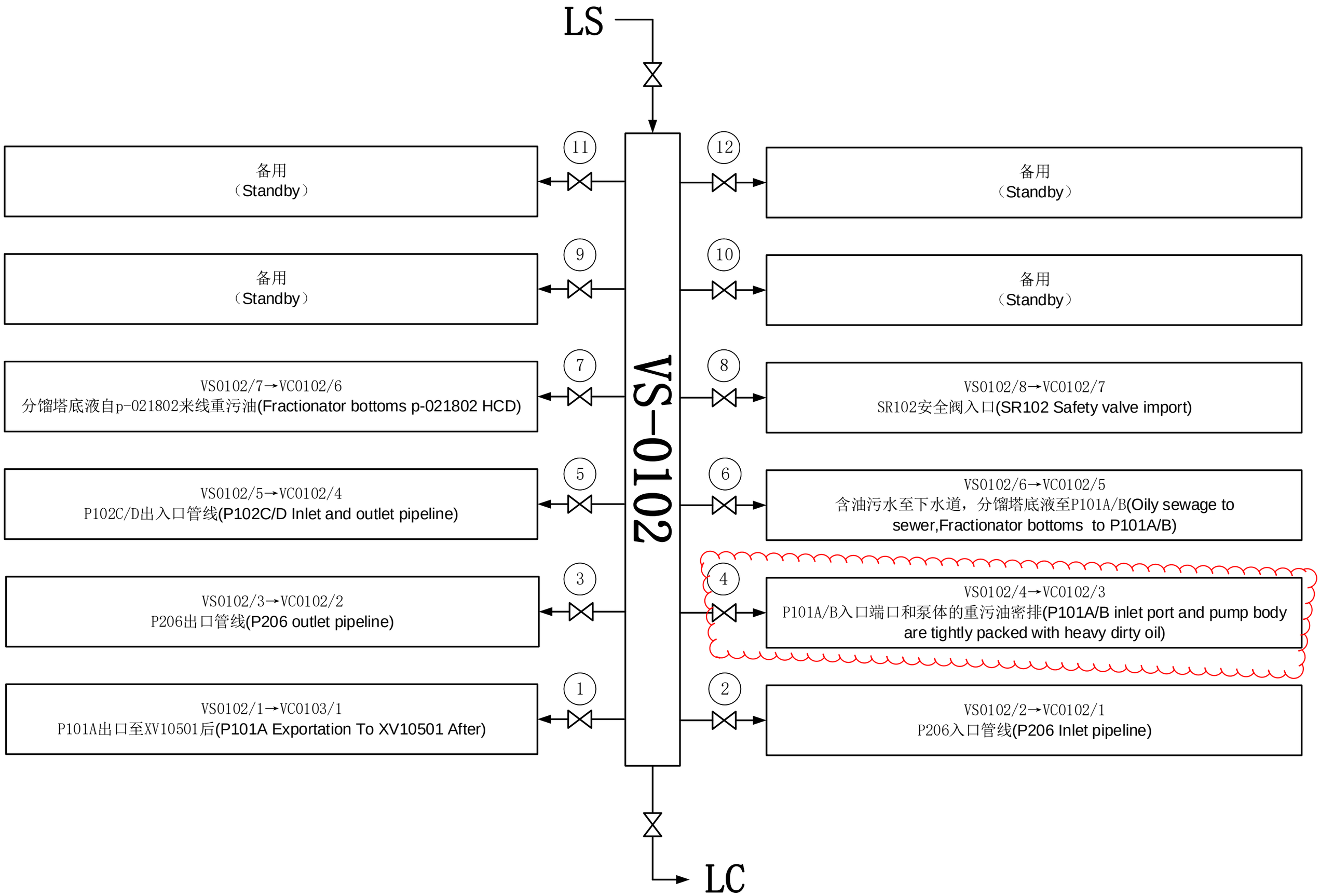
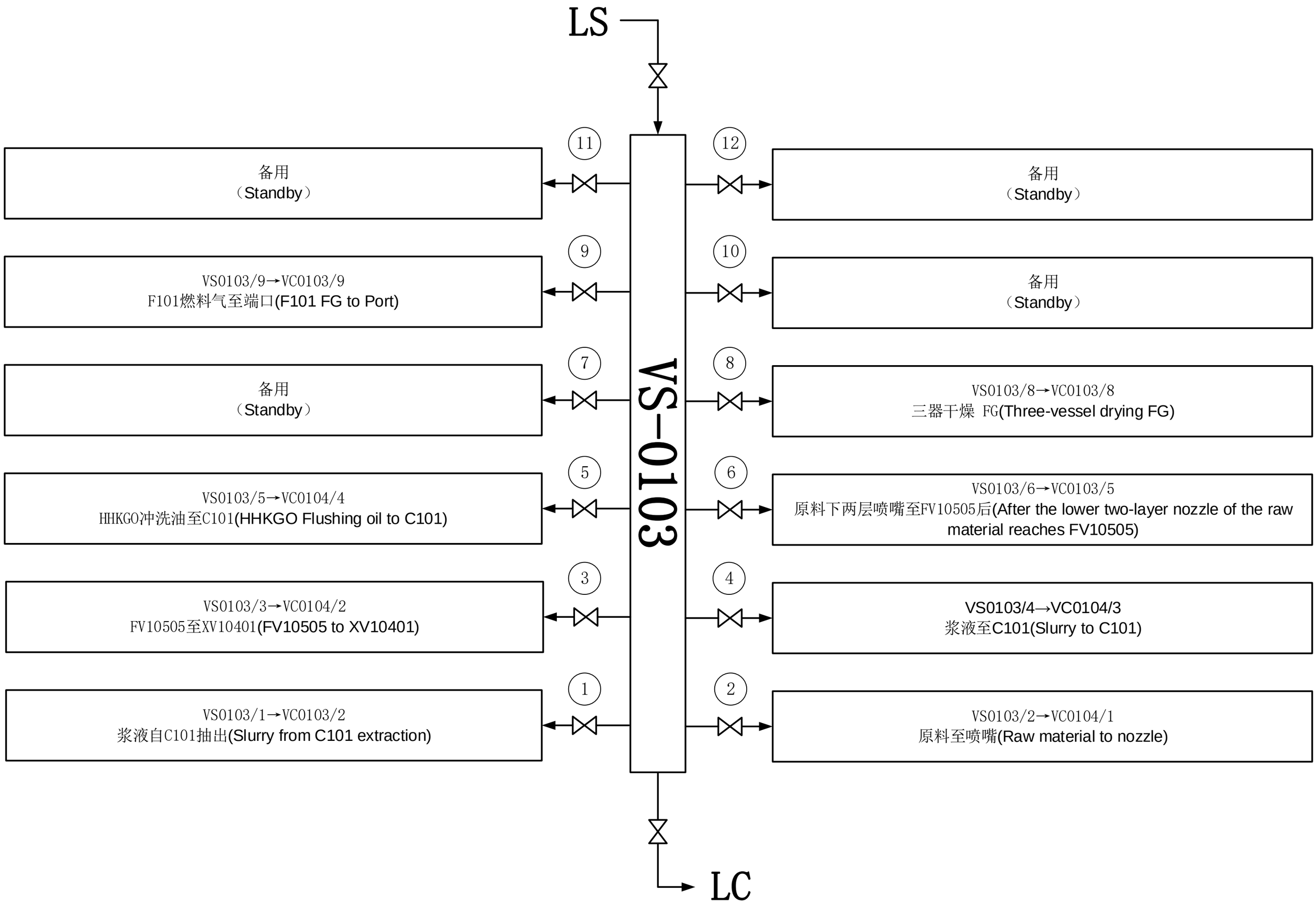
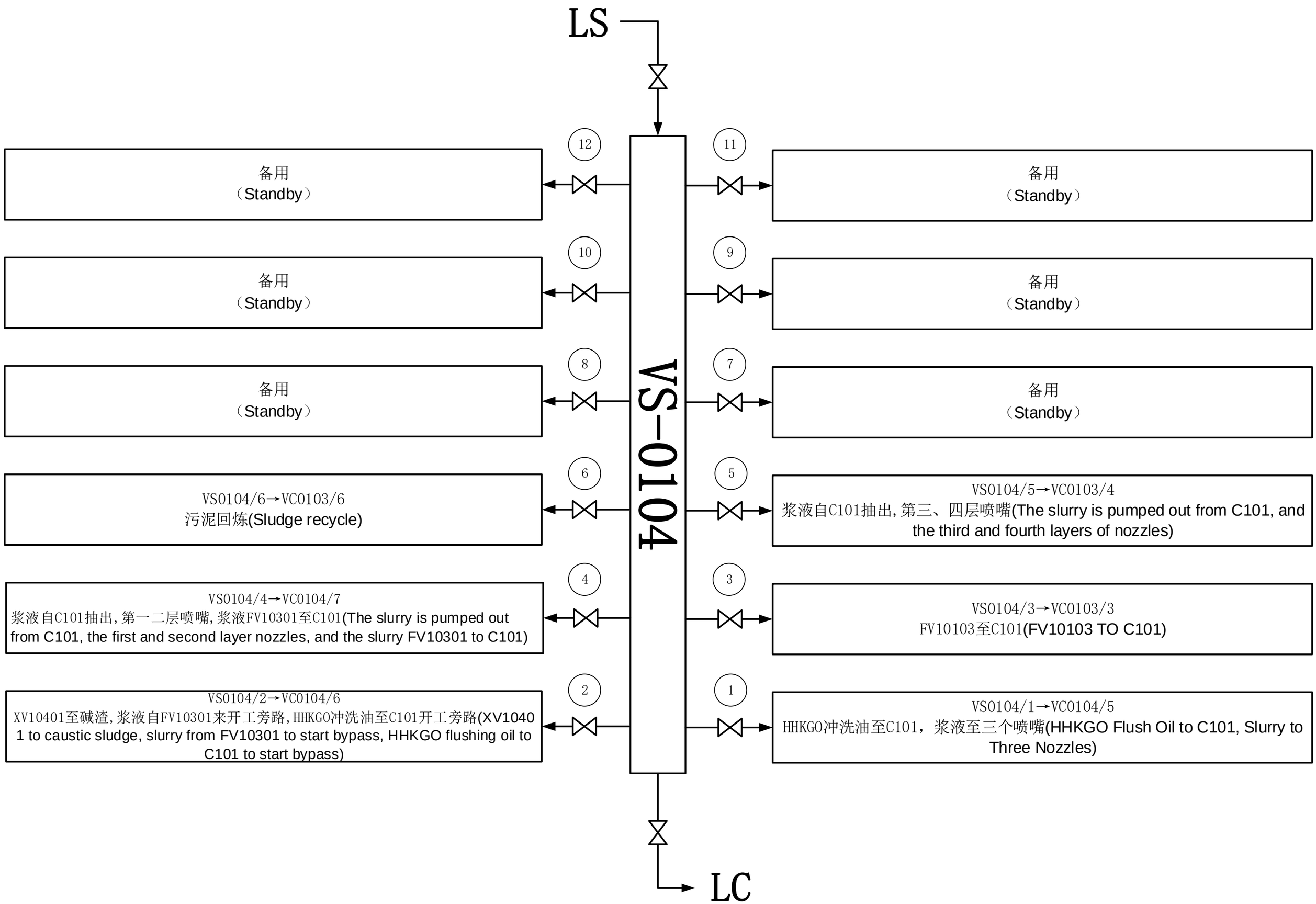
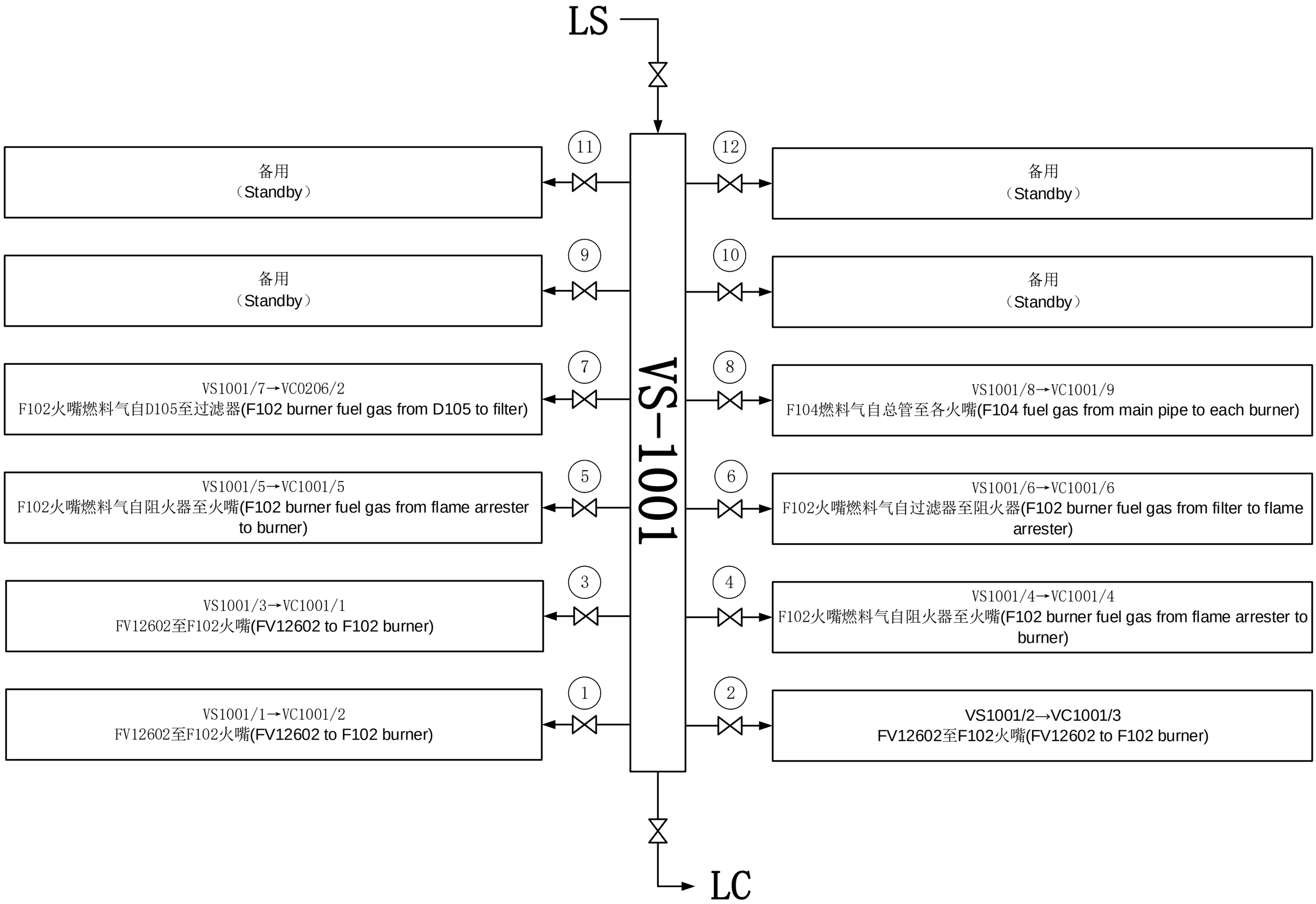
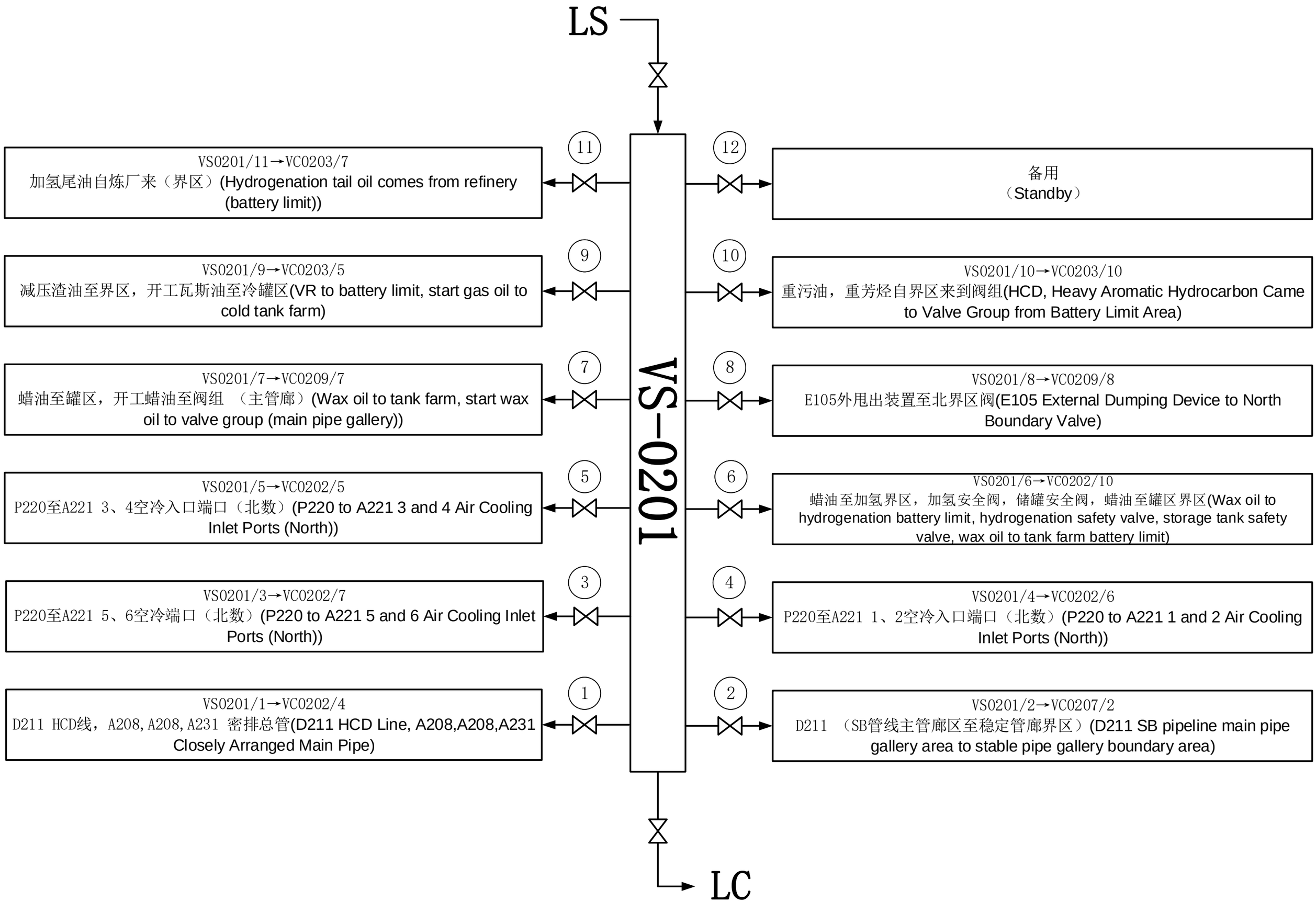

LS
VS-0101
LC
11
备用
（Standby）
12
备用
（Standby）
9
VS0101/9→VC0101/9
SR102出口SB（SR102 Exportation SB）
10
备用
（Standby）
7
VS0101/7→VC0101/7
P102A/B出口至E101(P102A/B TO E101)
8
VS0101/8→VC0101/8
SR102过滤后浆液至P102A/B(SR102 After filtration slurry to P102A/B)
5
VS0101/5→VC0101/5
SR102A/B安全阀至火炬；碱渣自FV10102来线重污油,PSV安全阀至火炬阀后，分馏区的重芳烃火炬总管（SR102A/B Safety valve to FH,VR From FV10102 HCD,PSV Safety valve TO Behind the flare valve,Heavy aromatics flare header in fractionation zone）
6
VS0101/6→VC0101/6
SR102A/B过滤后汇合处至P102/P101(SR102A/B Filter and merge TO P102/P101)
3
VS0101/3→VC0101/3
EBVD10201/10202至SR102A/B，SR102A/B入口重污油(EBVD10201/10202 TO SR102A/B,SR102A/B Import HCD)
4
VS0101/4→VC0101/4
SR102A/B的ATM和CWS,SR102AB过滤后至集合管(SR102A/B ATM and cws,SR102A/B Filter to manifold)
1
VS0101/1→VC0101/1
浆液至SR102A/B(Slurry TO SR102A/B)
2
VS0101/2→VC0101/2
FV10102至P102(FV10102 TO P102)

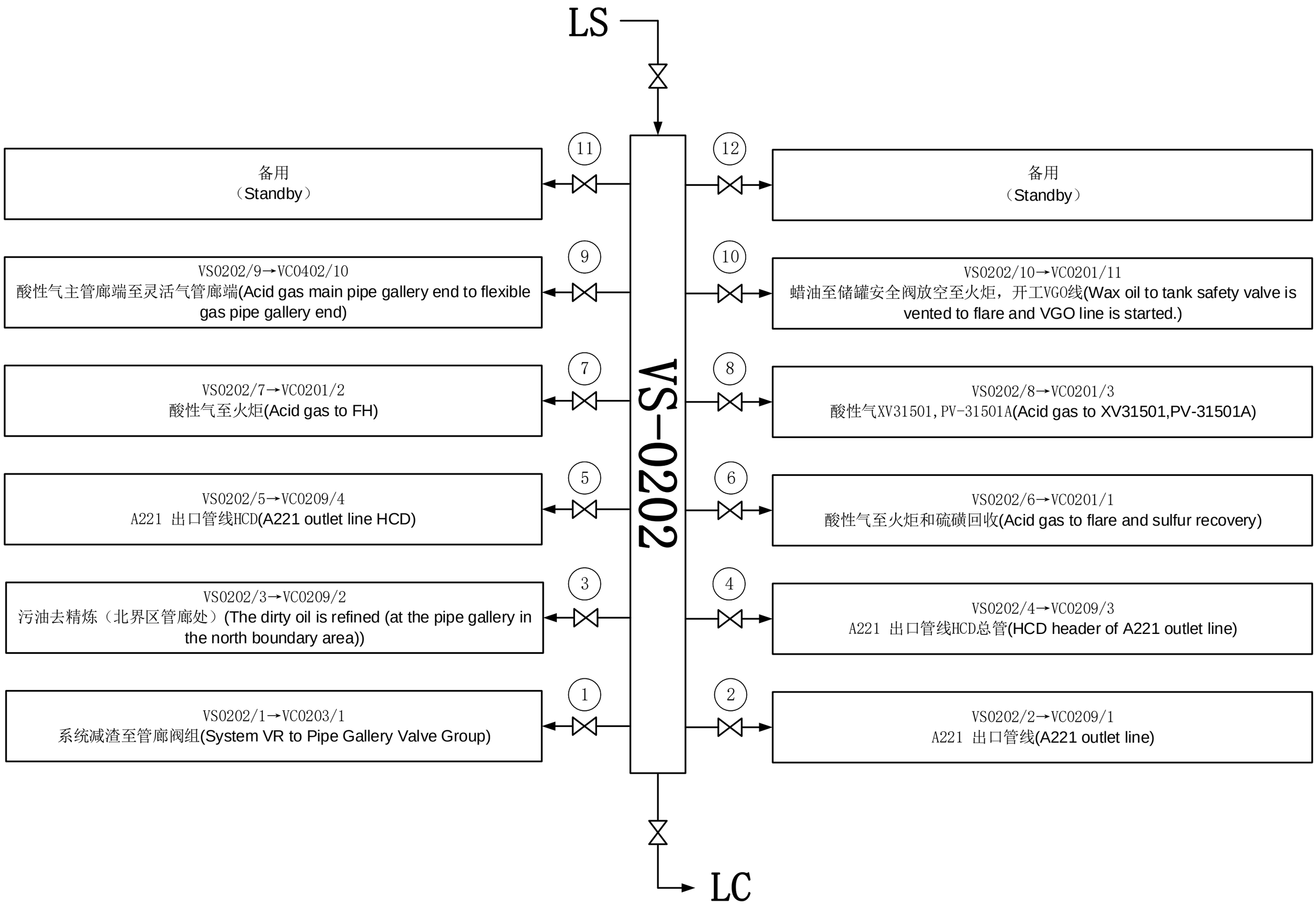

LS
VS-0102
LC
11
备用
（Standby）
12
备用
（Standby）
9
备用
（Standby）
10
备用
（Standby）
7
VS0102/7→VC0102/6
分馏塔底液自p-021802来线重污油(Fractionator bottoms p-021802 HCD)
8
VS0102/8→VC0102/7
SR102安全阀入口(SR102 Safety valve import)
5
VS0102/5→VC0102/4
P102C/D出入口管线(P102C/D Inlet and outlet pipeline)
6
VS0102/6→VC0102/5
含油污水至下水道，分馏塔底液至P101A/B(Oily sewage to sewer,Fractionator bottoms to P101A/B)
3
VS0102/3→VC0102/2
P206出口管线(P206 outlet pipeline)
4
VS0102/4→VC0102/3
P101A/B入口端口和泵体的重污油密排(P101A/B inlet port and pump body are tightly packed with heavy dirty oil)
1
VS0102/1→VC0103/1
P101A出口至XV10501后(P101A Exportation To XV10501 After)
2
VS0102/2→VC0102/1
P206入口管线(P206 Inlet pipeline)

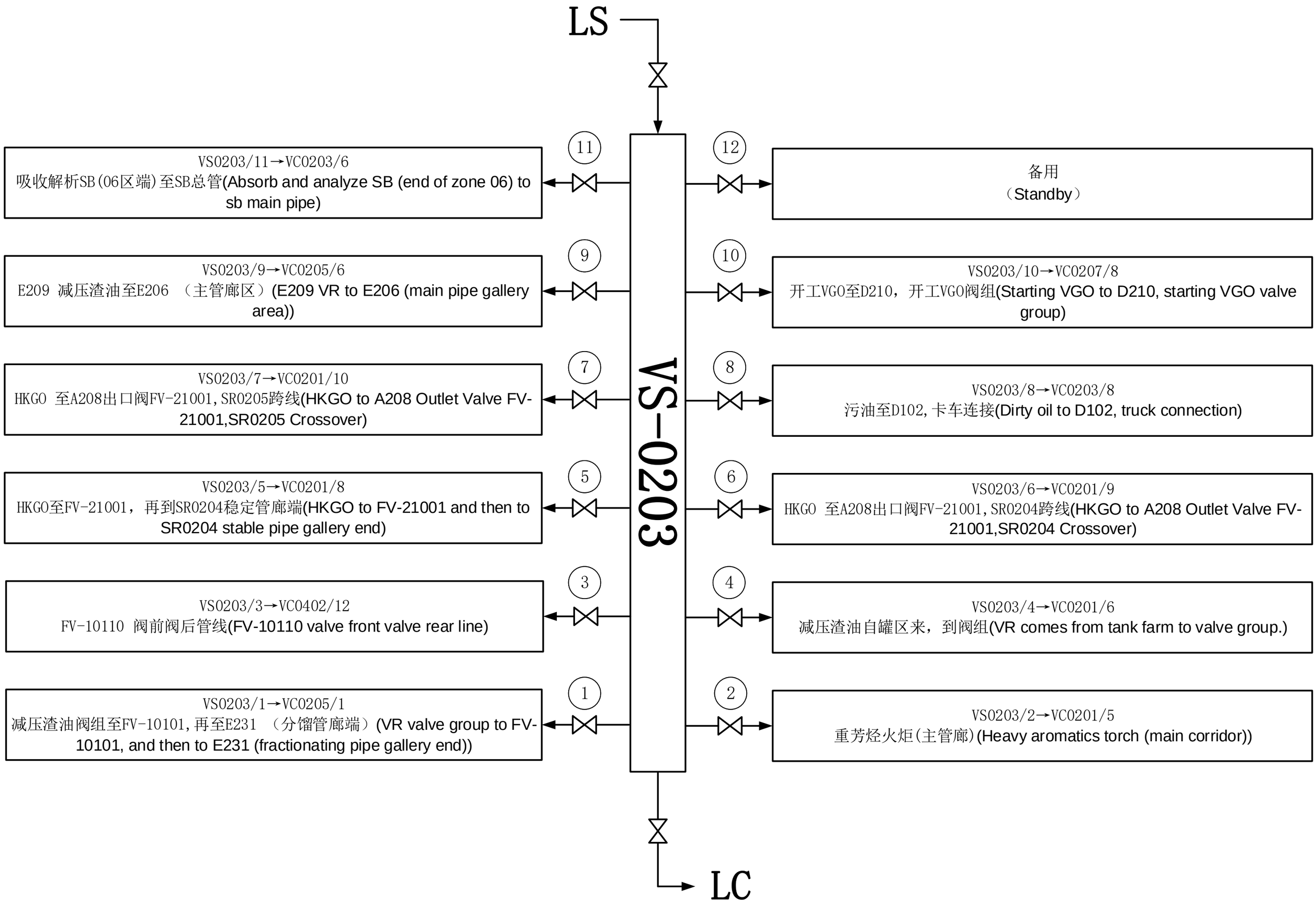

LS
VS-0103
11
12
9
10
7
8
5
6
3
4
1
2
备用
（Standby）
备用
（Standby）
VS0103/9→VC0103/9
F101燃料气至端口(F101 FG to Port)
备用
（Standby）
备用
（Standby）
VS0103/8→VC0103/8
三器干燥 FG(Three-vessel drying FG)
VS0103/5→VC0104/4
HHKGO冲洗油至C101(HHKGO Flushing oil to C101)
VS0103/6→VC0103/5
原料下两层喷嘴至FV10505后(After the lower two-layer nozzle of the raw material reaches FV10505)
VS0103/3→VC0104/2
FV10505至XV10401(FV10505 to XV10401)
VS0103/4→VC0104/3
浆液至C101(Slurry to C101)
VS0103/1→VC0103/2
浆液自C101抽出(Slurry from C101 extraction)
VS0103/2→VC0104/1
原料至喷嘴(Raw material to nozzle)
LC

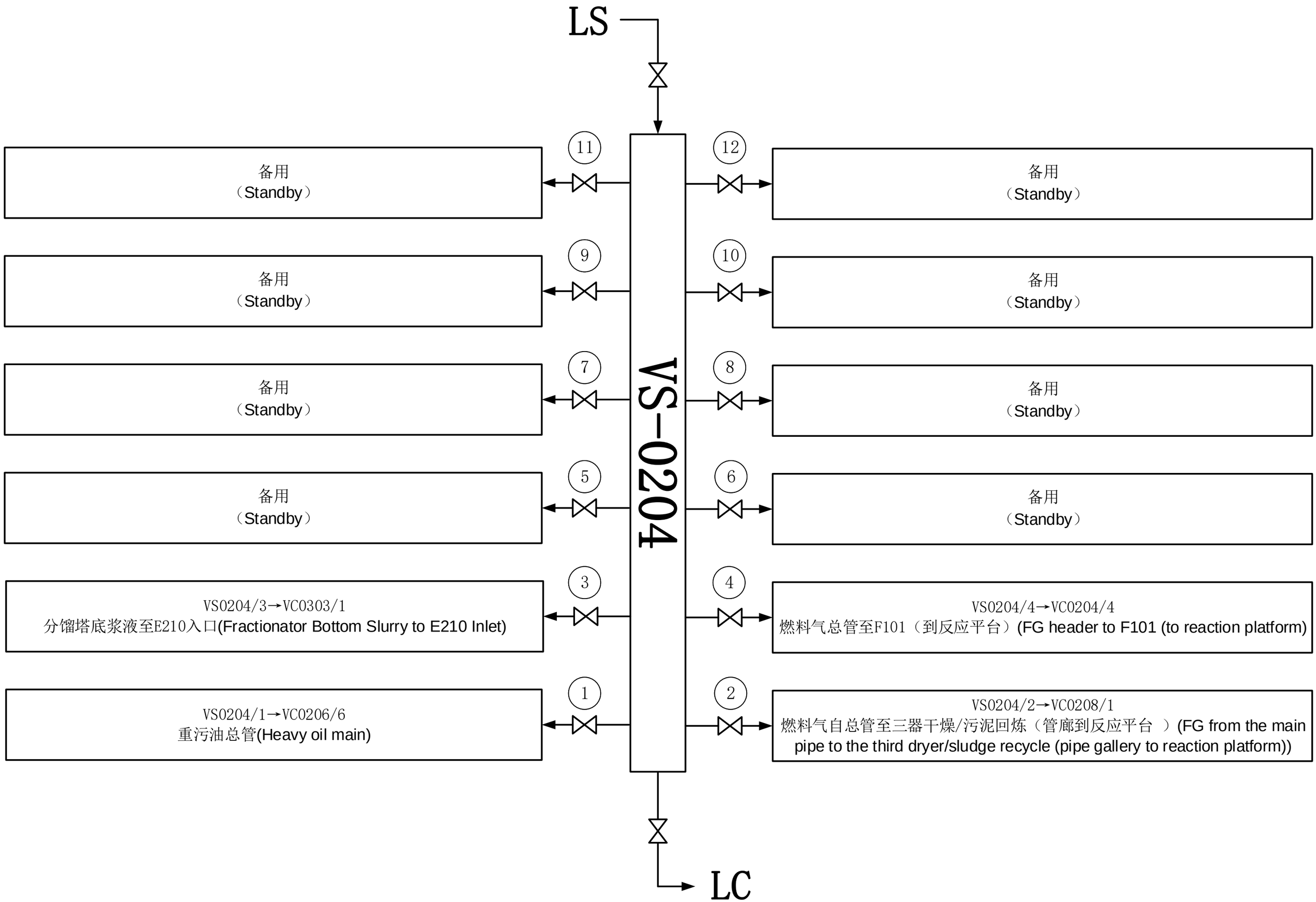

LS
VS-0104
12
11
10
9
8
7
6
5
4
3
2
1
备用
（Standby）
备用
（Standby）
备用
（Standby）
备用
（Standby）
备用
（Standby）
备用
（Standby）
VS0104/6→VC0103/6
污泥回炼(Sludge recycle)
VS0104/5→VC0103/4
浆液自C101抽出,第三、四层喷嘴(The slurry is pumped out from C101, and the third and fourth layers of nozzles)
VS0104/4→VC0104/7
浆液自C101抽出,第一二层喷嘴,浆液FV10301至C101(The slurry is pumped out from C101, the first and second layer nozzles, and the slurry FV10301 to C101)
VS0104/3→VC0103/3
FV10103至C101(FV10103 TO C101)
VS0104/2→VC0104/6
XV10401至碱渣,浆液自FV10301来开工旁路,HHKGO冲洗油至C101开工旁路(XV10401 to caustic sludge, slurry from FV10301 to start bypass, HHKGO flushing oil to C101 to start bypass)
VS0104/1→VC0104/5
HHKGO冲洗油至C101，浆液至三个喷嘴(HHKGO Flush Oil to C101, Slurry to Three Nozzles)
LC

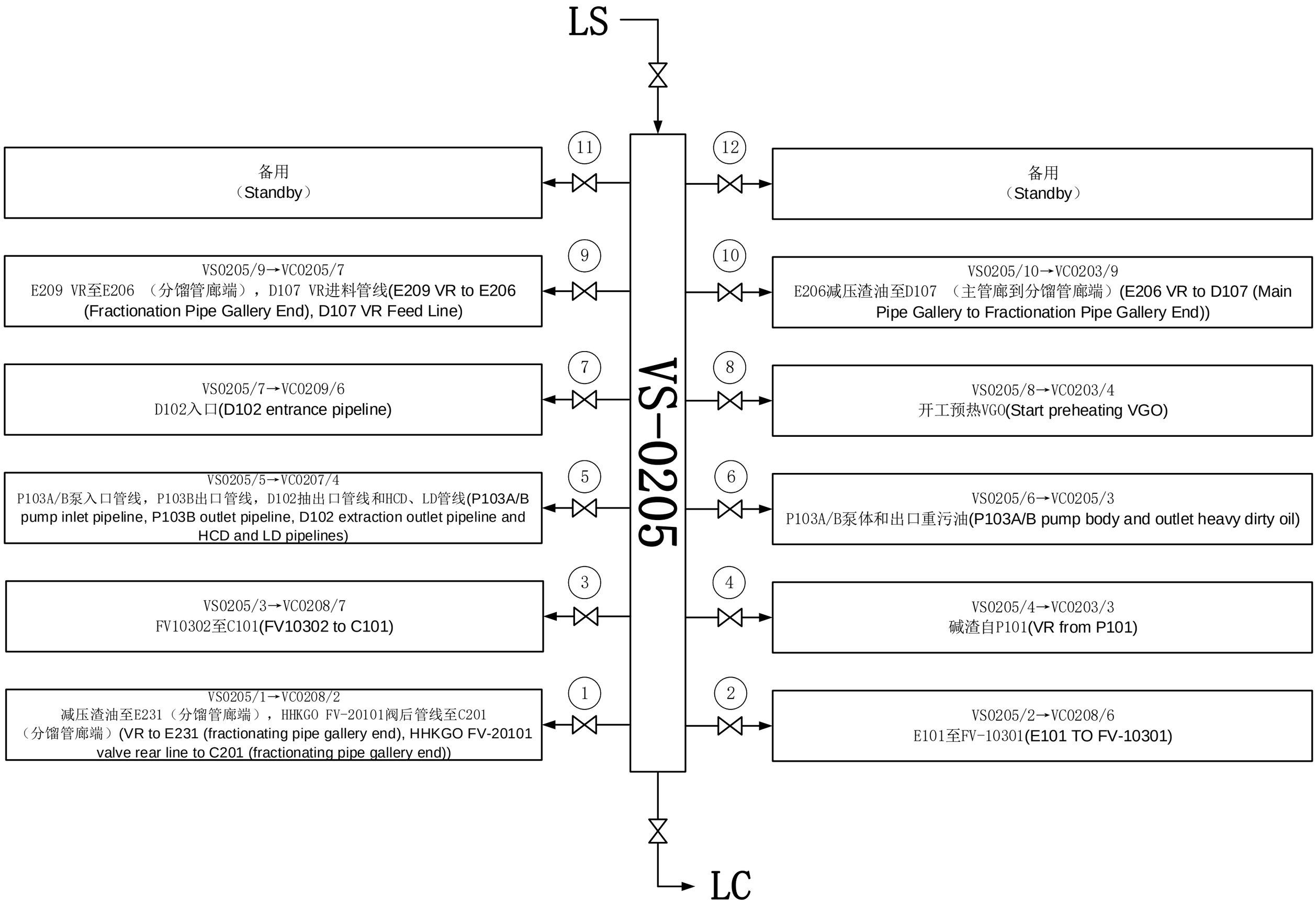

LS
VS-1001
11
12
9
10
7
8
5
6
3
4
1
2
备用
（Standby）
备用
（Standby）
备用
（Standby）
备用
（Standby）
VS1001/7→VC0206/2
F102火嘴燃料气自D105至过滤器(F102 burner fuel gas from D105 to filter)
VS1001/8→VC1001/9
F104燃料气自总管至各火嘴(F104 fuel gas from main pipe to each burner)
VS1001/5→VC1001/5
F102火嘴燃料气自阻火器至火嘴(F102 burner fuel gas from flame arrester to burner)
VS1001/6→VC1001/6
F102火嘴燃料气自过滤器至阻火器(F102 burner fuel gas from filter to flame arrester)
VS1001/3→VC1001/1
FV12602至F102火嘴(FV12602 to F102 burner)
VS1001/4→VC1001/4
F102火嘴燃料气自阻火器至火嘴(F102 burner fuel gas from flame arrester to burner)
VS1001/1→VC1001/2
FV12602至F102火嘴(FV12602 to F102 burner)
VS1001/2→VC1001/3
FV12602至F102火嘴(FV12602 to F102 burner)
LC

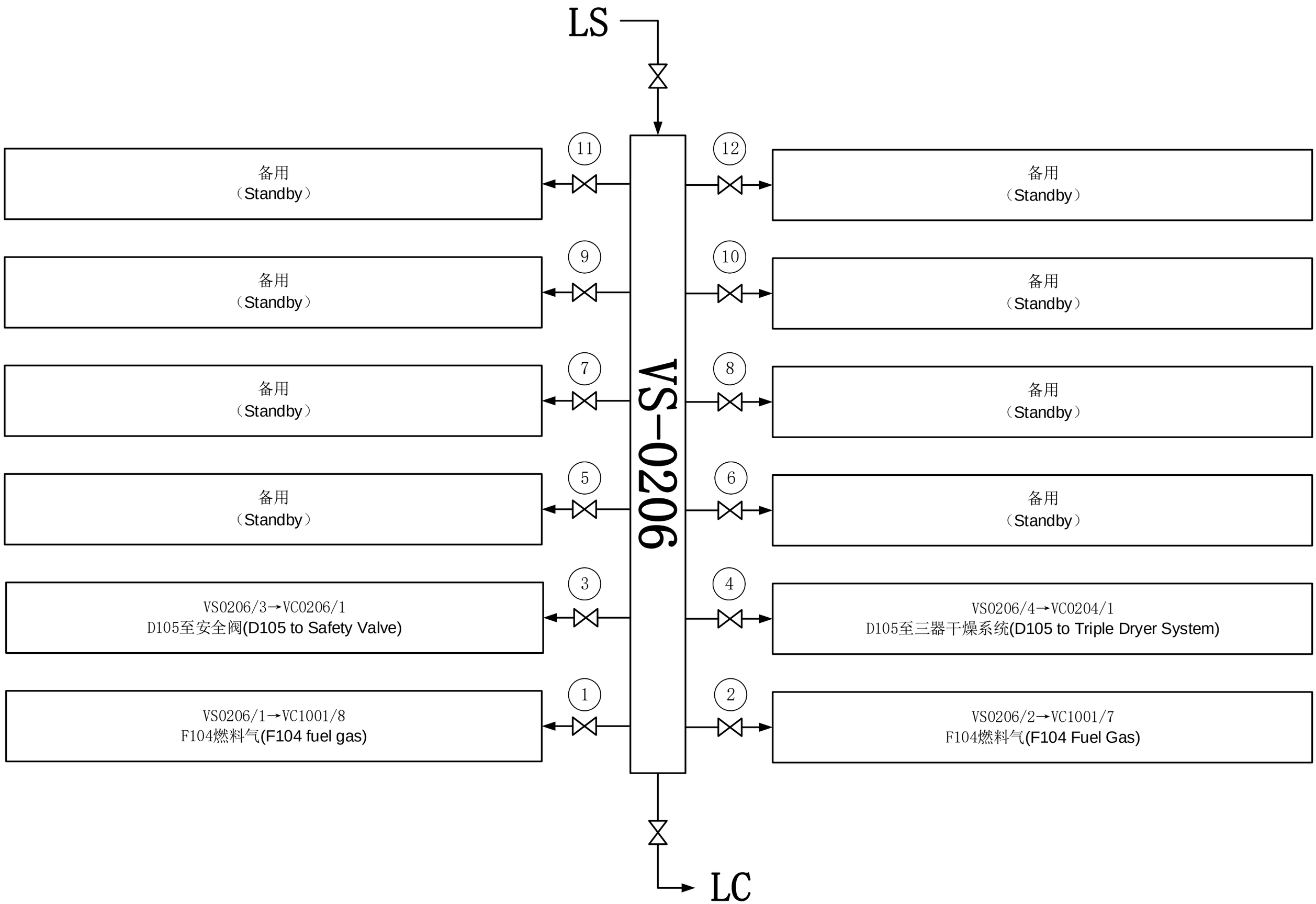

LS
VS-0201
LC
11
VS0201/11→VC0203/7
加氢尾油自炼厂来（界区）(Hydrogenation tail oil comes from refinery (battery limit))
12
备用
（Standby）
9
VS0201/9→VC0203/5
减压渣油至界区，开工瓦斯油至冷罐区(VR to battery limit, start gas oil to cold tank farm)
10
VS0201/10→VC0203/10
重污油，重芳烃自界区来到阀组(HCD, Heavy Aromatic Hydrocarbon Came to Valve Group from Battery Limit Area)
7
VS0201/7→VC0209/7
蜡油至罐区，开工蜡油至阀组 （主管廊）(Wax oil to tank farm, start wax oil to valve group (main pipe gallery))
8
VS0201/8→VC0209/8
E105外甩出装置至北界区阀(E105 External Dumping Device to North Boundary Valve)
5
VS0201/5→VC0202/5
P220至A221 3、4空冷入口端口（北数）(P220 to A221 3 and 4 Air Cooling Inlet Ports (North))
6
VS0201/6→VC0202/10
蜡油至加氢界区，加氢安全阀，储罐安全阀，蜡油至罐区界区(Wax oil to hydrogenation battery limit, hydrogenation safety valve, storage tank safety valve, wax oil to tank farm battery limit)
3
VS0201/3→VC0202/7
P220至A221 5、6空冷端口（北数）(P220 to A221 5 and 6 Air Cooling Inlet Ports (North))
4
VS0201/4→VC0202/6
P220至A221 1、2空冷入口端口（北数）(P220 to A221 1 and 2 Air Cooling Inlet Ports (North))
1
VS0201/1→VC0202/4
D211 HCD线，A208,A208,A231 密排总管(D211 HCD Line, A208,A208,A231 Closely Arranged Main Pipe)
2
VS0201/2→VC0207/2
D211 （SB管线主管廊区至稳定管廊界区）(D211 SB pipeline main pipe gallery area to stable pipe gallery boundary area)

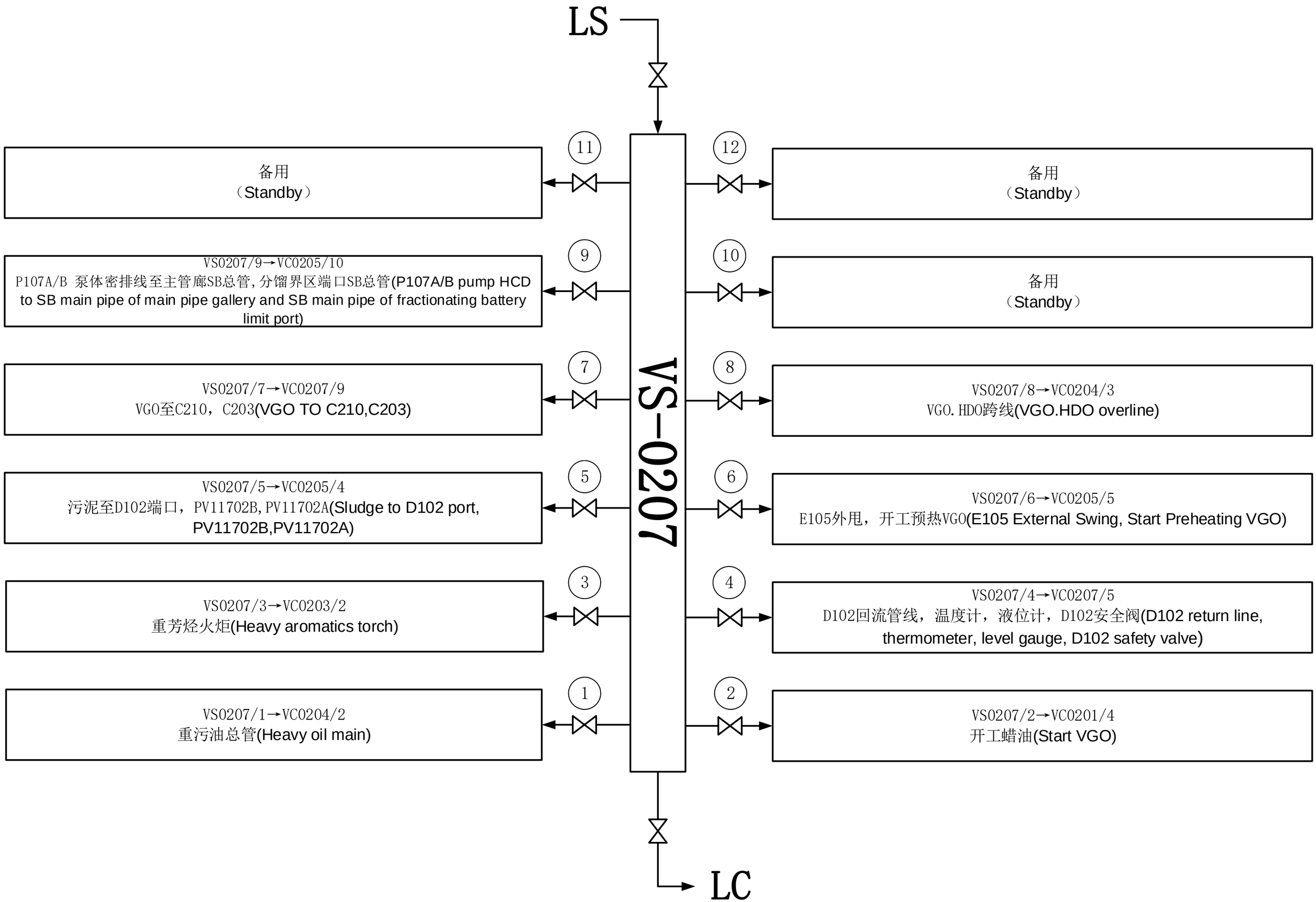

LS
VS-0202
LC
11
备用
（Standby）
12
备用
（Standby）
9
VS0202/9→VC0402/10
酸性气主管廊端至灵活气管廊端(Acid gas main pipe gallery end to flexible gas pipe gallery end)
10
VS0202/10→VC0201/11
蜡油至储罐安全阀放空至火炬，开工VGO线(Wax oil to tank safety valve is vented to flare and VGO line is started.)
7
VS0202/7→VC0201/2
酸性气至火炬(Acid gas to FH)
8
VS0202/8→VC0201/3
酸性气XV31501,PV-31501A(Acid gas to XV31501,PV-31501A)
5
VS0202/5→VC0209/4
A221 出口管线HCD(A221 outlet line HCD)
6
VS0202/6→VC0201/1
酸性气至火炬和硫磺回收(Acid gas to flare and sulfur recovery)
3
VS0202/3→VC0209/2
污油去精炼（北界区管廊处）(The dirty oil is refined (at the pipe gallery in the north boundary area))
4
VS0202/4→VC0209/3
A221 出口管线HCD总管(HCD header of A221 outlet line)
1
VS0202/1→VC0203/1
系统减渣至管廊阀组(System VR to Pipe Gallery Valve Group)
2
VS0202/2→VC0209/1
A221 出口管线(A221 outlet line)

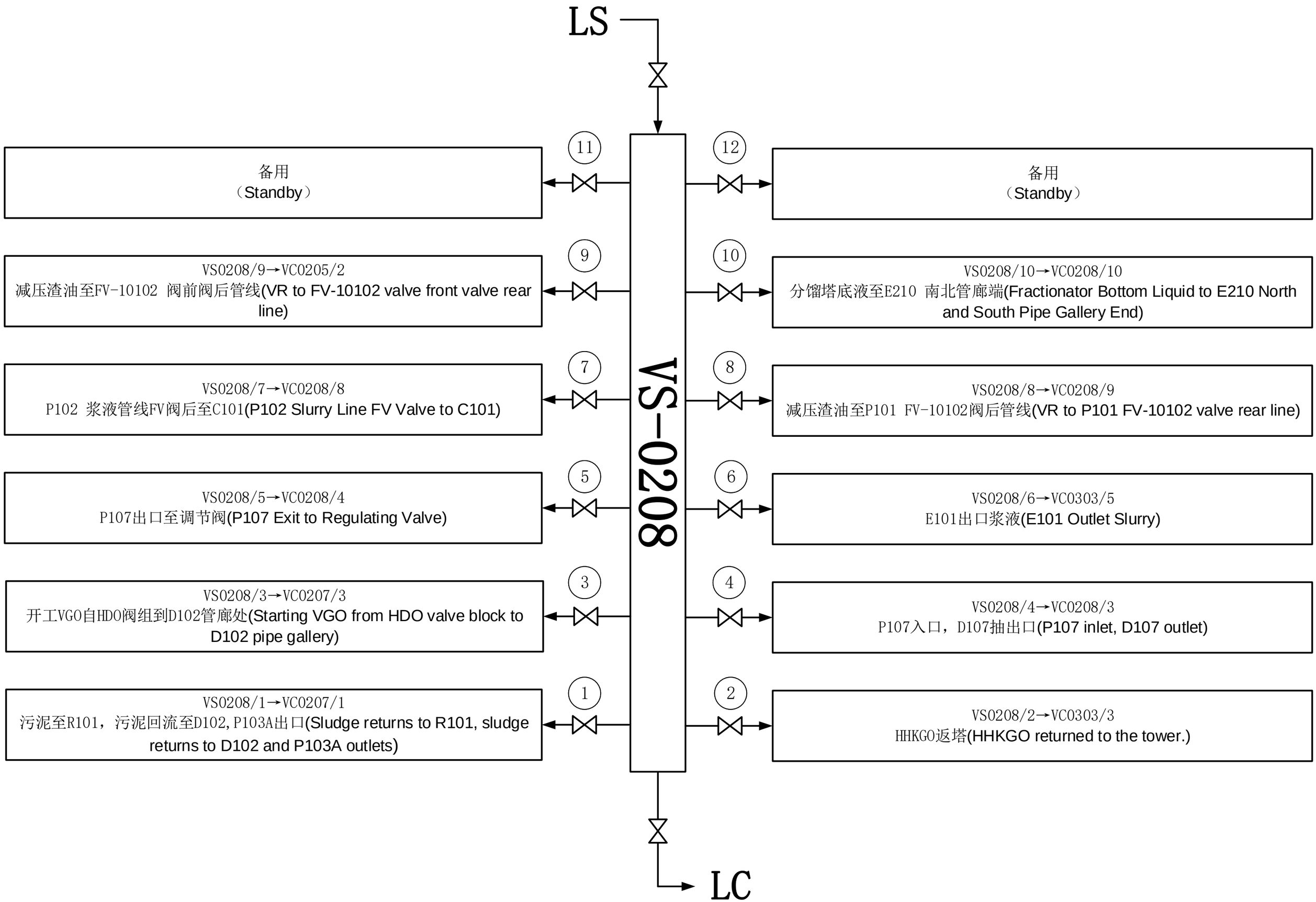

LS
VS-0203
11
VS0203/11→VC0203/6
吸收解析SB(06区端)至SB总管(Absorb and analyze SB (end of zone 06) to sb main pipe)
12
备用
（Standby）
9
VS0203/9→VC0205/6
E209 减压渣油至E206 （主管廊区）(E209 VR to E206 (main pipe gallery area))
10
VS0203/10→VC0207/8
开工VGO至D210，开工VGO阀组(Starting VGO to D210, starting VGO valve group)
7
VS0203/7→VC0201/10
HKGO 至A208出口阀FV-21001,SR0205跨线(HKGO to A208 Outlet Valve FV-21001,SR0205 Crossover)
8
VS0203/8→VC0203/8
污油至D102,卡车连接(Dirty oil to D102, truck connection)
5
VS0203/5→VC0201/8
HKGO至FV-21001，再到SR0204稳定管廊端(HKGO to FV-21001 and then to SR0204 stable pipe gallery end)
6
VS0203/6→VC0201/9
HKGO 至A208出口阀FV-21001,SR0204跨线(HKGO to A208 Outlet Valve FV-21001,SR0204 Crossover)
3
VS0203/3→VC0402/12
FV-10110 阀前阀后管线(FV-10110 valve front valve rear line)
4
VS0203/4→VC0201/6
减压渣油自罐区来，到阀组(VR comes from tank farm to valve group.)
1
VS0203/1→VC0205/1
减压渣油阀组至FV-10101,再至E231 （分馏管廊端）(VR valve group to FV-10101, and then to E231 (fractionating pipe gallery end))
2
VS0203/2→VC0201/5
重芳烃火炬(主管廊)(Heavy aromatics torch (main corridor))
LC

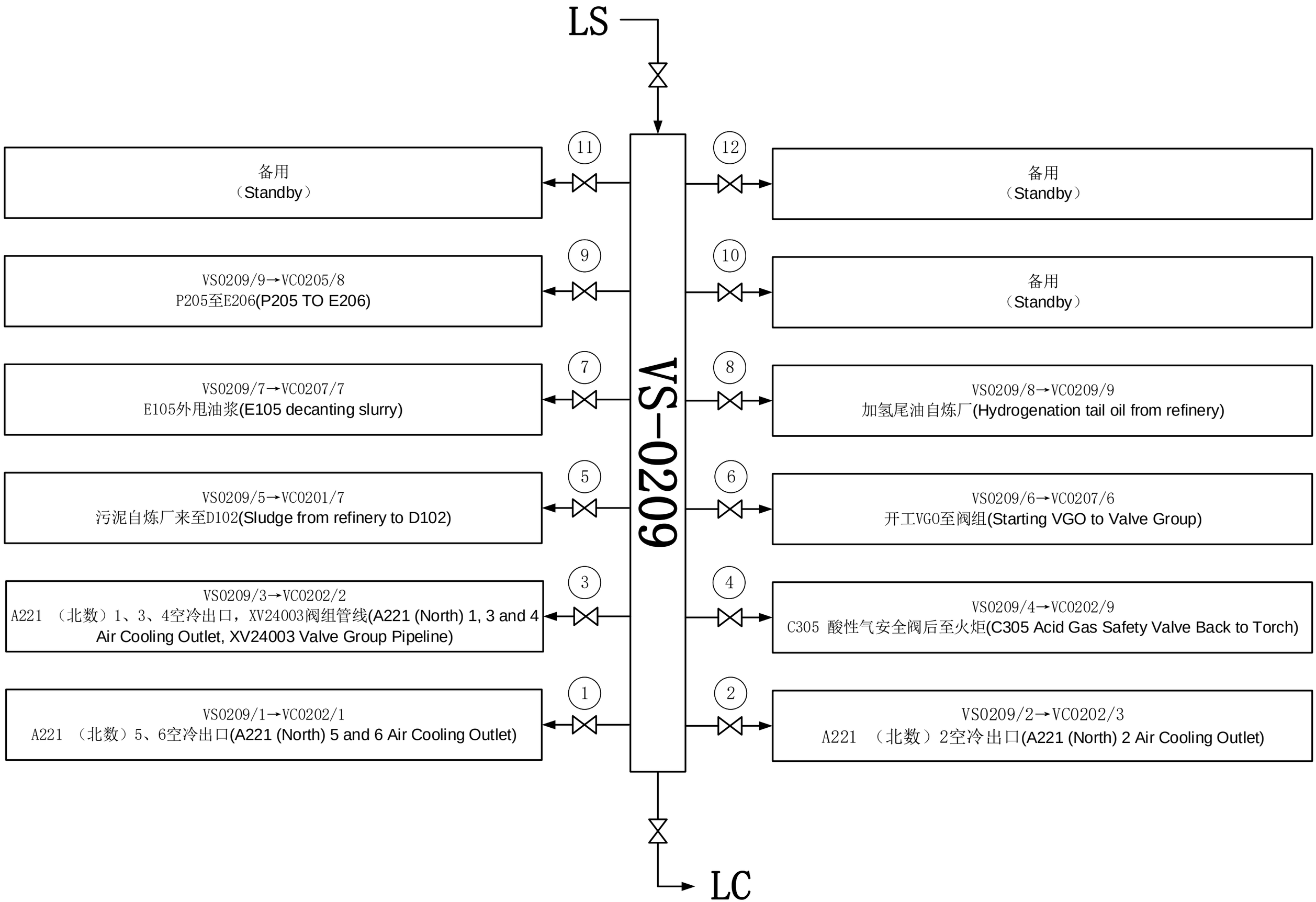

LS
VS-0204
11
12
9
10
7
8
5
6
3
4
1
2
备用
（Standby）
备用
（Standby）
备用
（Standby）
备用
（Standby）
备用
（Standby）
备用
（Standby）
VS0204/3→VC0303/1
分馏塔底浆液至E210入口(Fractionator Bottom Slurry to E210 Inlet)
VS0204/4→VC0204/4
燃料气总管至F101（到反应平台）(FG header to F101 (to reaction platform)
VS0204/1→VC0206/6
重污油总管(Heavy oil main)
VS0204/2→VC0208/1
燃料气自总管至三器干燥/污泥回炼（管廊到反应平台 ）(FG from the main pipe to the third dryer/sludge recycle (pipe gallery to reaction platform))
LC

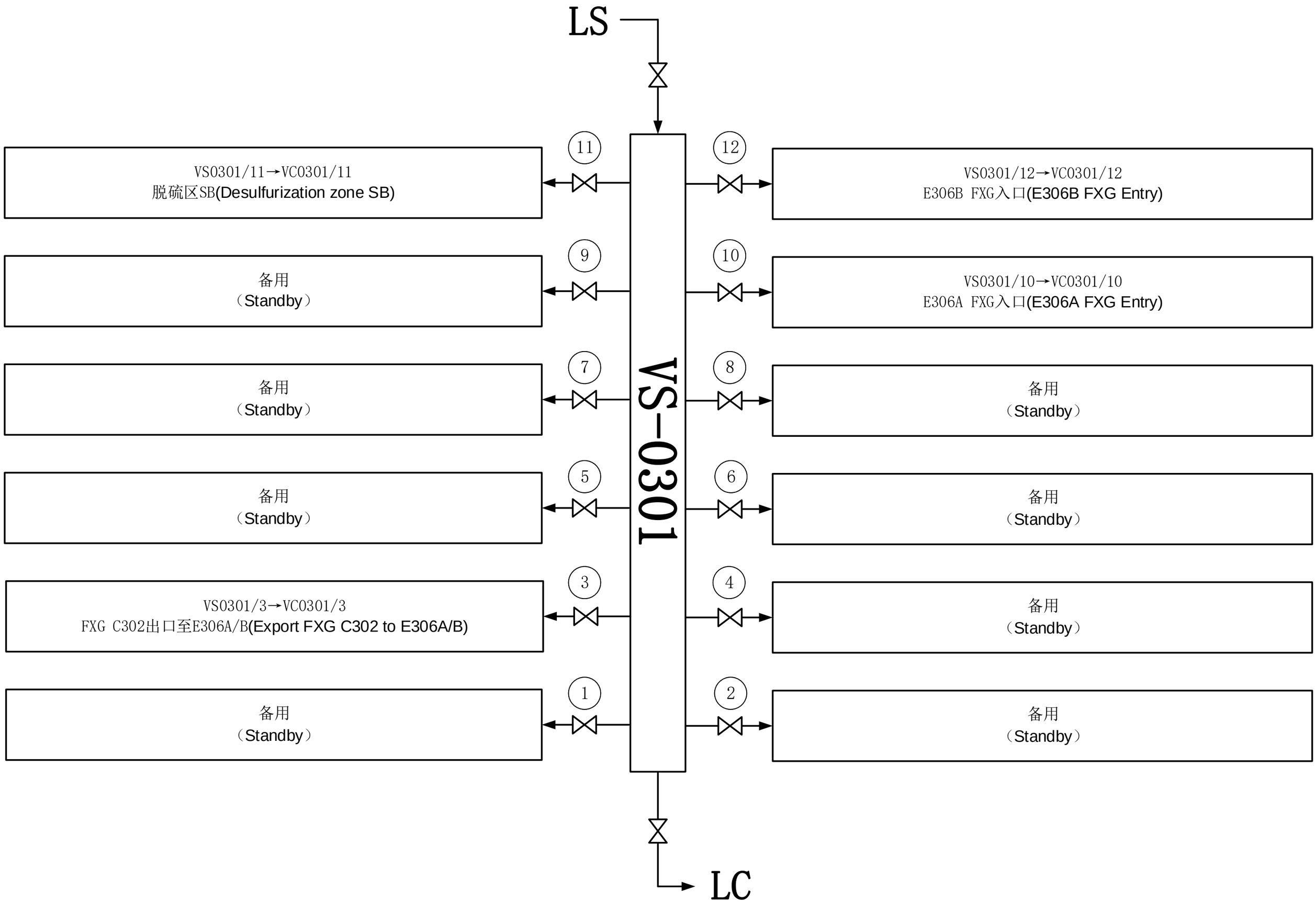

LS
VS-0205
11
12
备用
（Standby）
备用
（Standby）
9
10
VS0205/9→VC0205/7
E209 VR至E206 （分馏管廊端），D107 VR进料管线(E209 VR to E206 (Fractionation Pipe Gallery End), D107 VR Feed Line)
VS0205/10→VC0203/9
E206减压渣油至D107 （主管廊到分馏管廊端）(E206 VR to D107 (Main Pipe Gallery to Fractionation Pipe Gallery End))
7
8
VS0205/7→VC0209/6
D102入口(D102 entrance pipeline)
VS0205/8→VC0203/4
开工预热VGO(Start preheating VGO)
5
6
VS0205/5→VC0207/4
P103A/B泵入口管线，P103B出口管线，D102抽出口管线和HCD、LD管线(P103A/B pump inlet pipeline, P103B outlet pipeline, D102 extraction outlet pipeline and HCD and LD pipelines)
VS0205/6→VC0205/3
P103A/B泵体和出口重污油(P103A/B pump body and outlet heavy dirty oil)
3
4
VS0205/3→VC0208/7
FV10302至C101(FV10302 to C101)
VS0205/4→VC0203/3
碱渣自P101(VR from P101)
1
2
VS0205/1→VC0208/2
减压渣油至E231（分馏管廊端），HHKGO FV-20101阀后管线至C201（分馏管廊端）(VR to E231 (fractionating pipe gallery end), HHKGO FV-20101 valve rear line to C201 (fractionating pipe gallery end))
VS0205/2→VC0208/6
E101至FV-10301(E101 TO FV-10301)
LC

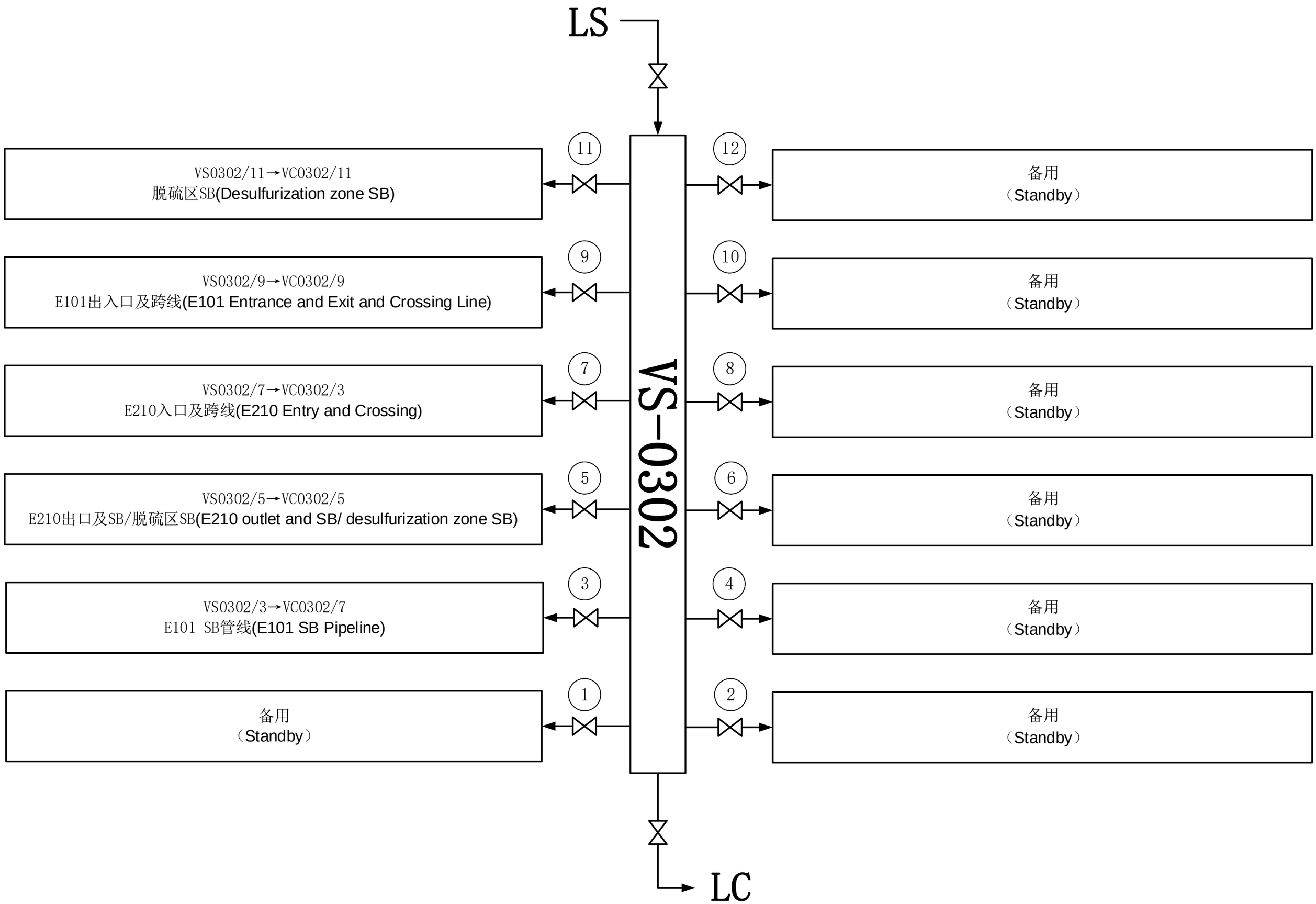

LS
VS-0206
11
12
9
10
7
8
5
6
3
4
1
2
备用
（Standby）
备用
（Standby）
备用
（Standby）
备用
（Standby）
备用
（Standby）
备用
（Standby）
VS0206/3→VC0206/1
D105至安全阀(D105 to Safety Valve)
VS0206/4→VC0204/1
D105至三器干燥系统(D105 to Triple Dryer System)
VS0206/1→VC1001/8
F104燃料气(F104 fuel gas)
VS0206/2→VC1001/7
F104燃料气(F104 Fuel Gas)
LC

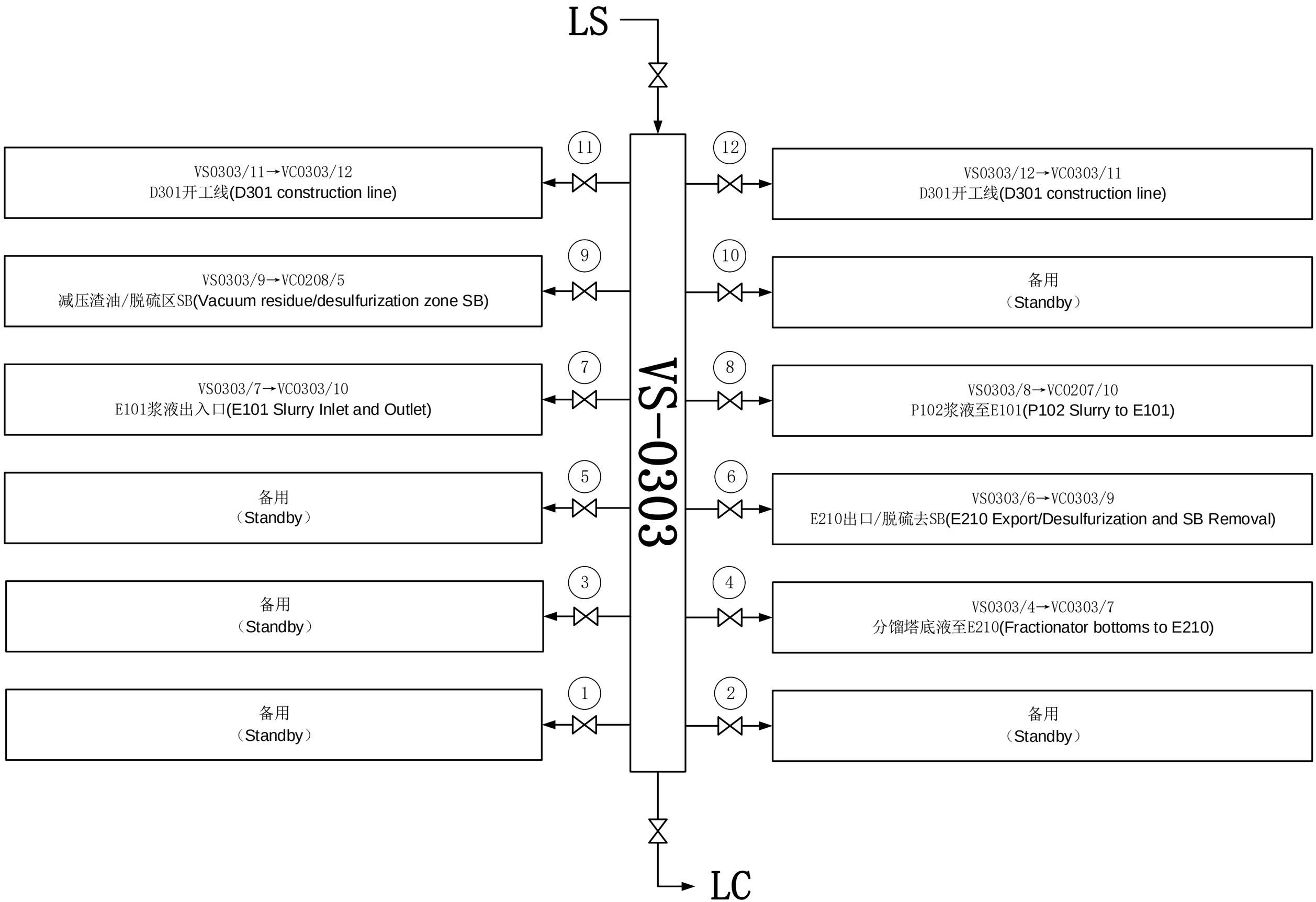

LS
VS-0207
LC
11
备用
（Standby）
12
备用
（Standby）
9
VS0207/9→VC0205/10
P107A/B 泵体密排线至主管廊SB总管,分馏界区端口SB总管(P107A/B pump HCD to SB main pipe of main pipe gallery and SB main pipe of fractionating battery limit port)
10
备用
（Standby）
7
VS0207/7→VC0207/9
VGO至C210，C203(VGO TO C210,C203)
8
VS0207/8→VC0204/3
VGO.HDO跨线(VGO.HDO overline)
5
VS0207/5→VC0205/4
污泥至D102端口，PV11702B,PV11702A(Sludge to D102 port, PV11702B,PV11702A)
6
VS0207/6→VC0205/5
E105外甩，开工预热VGO(E105 External Swing, Start Preheating VGO)
3
VS0207/3→VC0203/2
重芳烃火炬(Heavy aromatics torch)
4
VS0207/4→VC0207/5
D102回流管线，温度计，液位计，D102安全阀(D102 return line, thermometer, level gauge, D102 safety valve)
1
VS0207/1→VC0204/2
重污油总管(Heavy oil main)
2
VS0207/2→VC0201/4
开工蜡油(Start VGO)

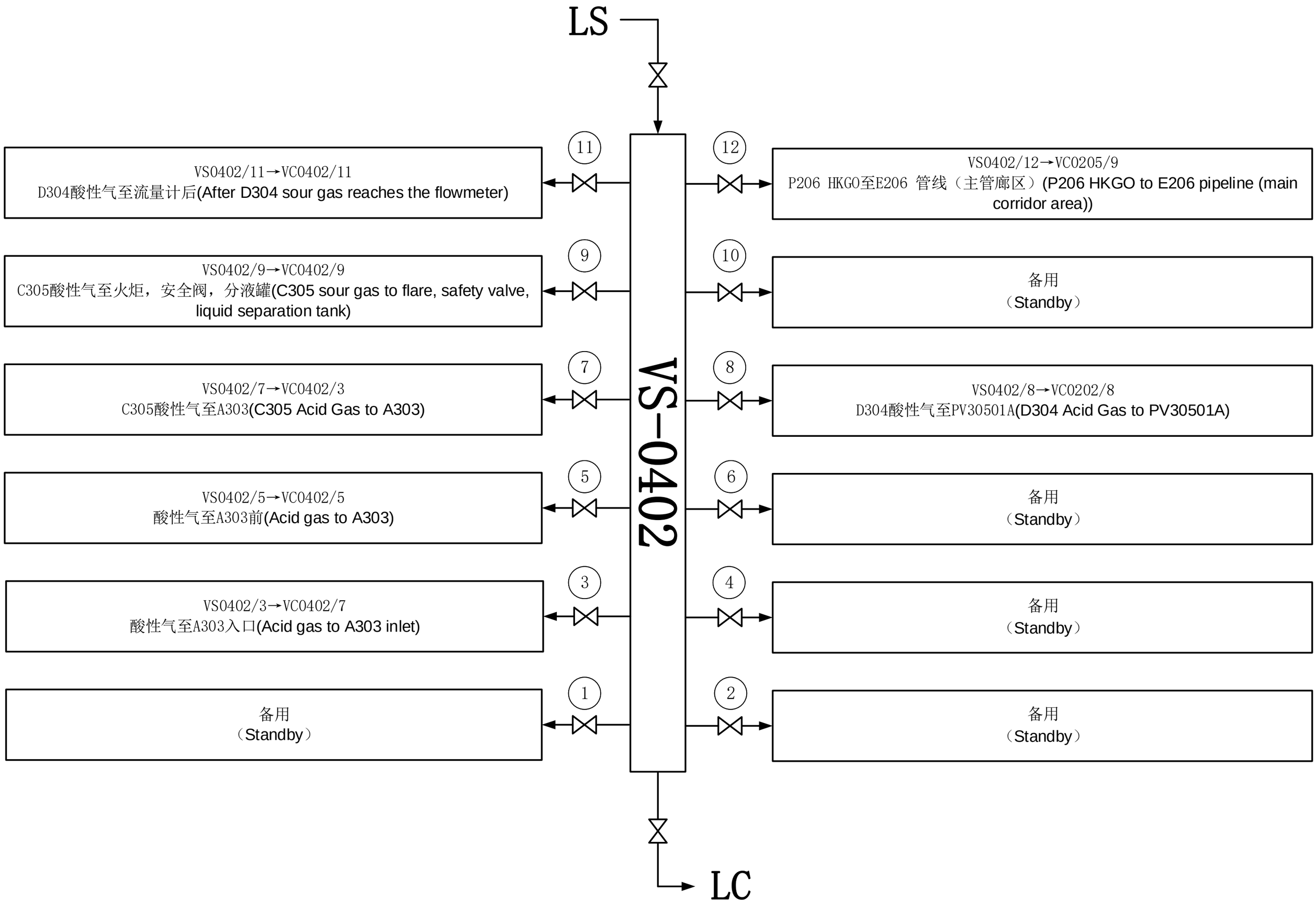

LS
VS-0208
LC
11
备用
（Standby）
12
备用
（Standby）
9
VS0208/9→VC0205/2
减压渣油至FV-10102 阀前阀后管线(VR to FV-10102 valve front valve rear line)
10
VS0208/10→VC0208/10
分馏塔底液至E210 南北管廊端(Fractionator Bottom Liquid to E210 North and South Pipe Gallery End)
7
VS0208/7→VC0208/8
P102 浆液管线FV阀后至C101(P102 Slurry Line FV Valve to C101)
8
VS0208/8→VC0208/9
减压渣油至P101 FV-10102阀后管线(VR to P101 FV-10102 valve rear line)
5
VS0208/5→VC0208/4
P107出口至调节阀(P107 Exit to Regulating Valve)
6
VS0208/6→VC0303/5
E101出口浆液(E101 Outlet Slurry)
3
VS0208/3→VC0207/3
开工VGO自HDO阀组到D102管廊处(Starting VGO from HDO valve block to D102 pipe gallery)
4
VS0208/4→VC0208/3
P107入口，D107抽出口(P107 inlet, D107 outlet)
1
VS0208/1→VC0207/1
污泥至R101，污泥回流至D102,P103A出口(Sludge returns to R101, sludge returns to D102 and P103A outlets)
2
VS0208/2→VC0303/3
HHKGO返塔(HHKGO returned to the tower.)

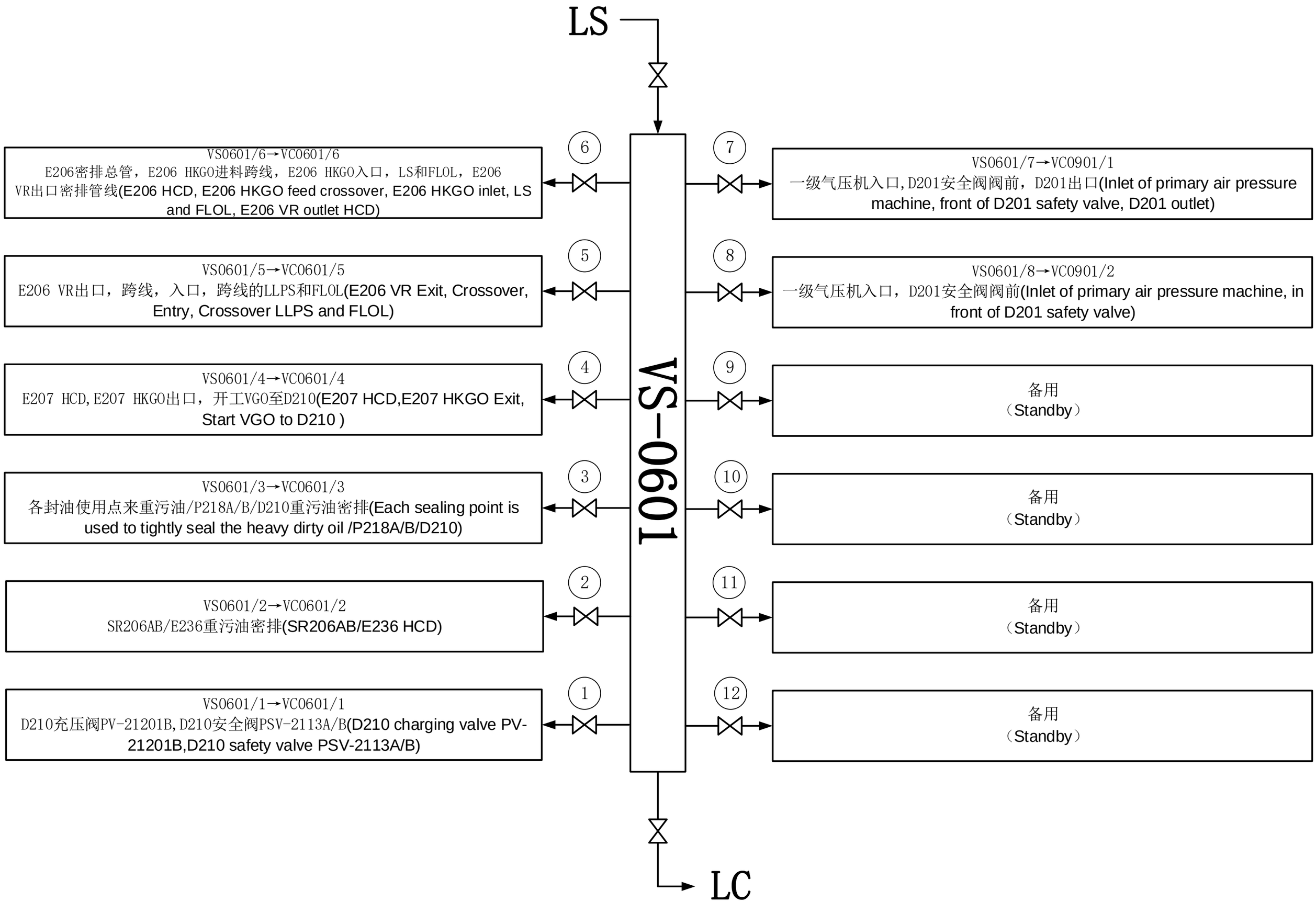

LS
VS-0209
LC
11
备用
（Standby）
12
备用
（Standby）
9
VS0209/9→VC0205/8
P205至E206(P205 TO E206)
10
备用
（Standby）
7
VS0209/7→VC0207/7
E105外甩油浆(E105 decanting slurry)
8
VS0209/8→VC0209/9
加氢尾油自炼厂(Hydrogenation tail oil from refinery)
5
VS0209/5→VC0201/7
污泥自炼厂来至D102(Sludge from refinery to D102)
6
VS0209/6→VC0207/6
开工VGO至阀组(Starting VGO to Valve Group)
3
VS0209/3→VC0202/2
A221 （北数）1、3、4空冷出口，XV24003阀组管线(A221 (North) 1, 3 and 4 Air Cooling Outlet, XV24003 Valve Group Pipeline)
4
VS0209/4→VC0202/9
C305 酸性气安全阀后至火炬(C305 Acid Gas Safety Valve Back to Torch)
1
VS0209/1→VC0202/1
A221 （北数）5、6空冷出口(A221 (North) 5 and 6 Air Cooling Outlet)
2
VS0209/2→VC0202/3
A221 （北数）2空冷出口(A221 (North) 2 Air Cooling Outlet)

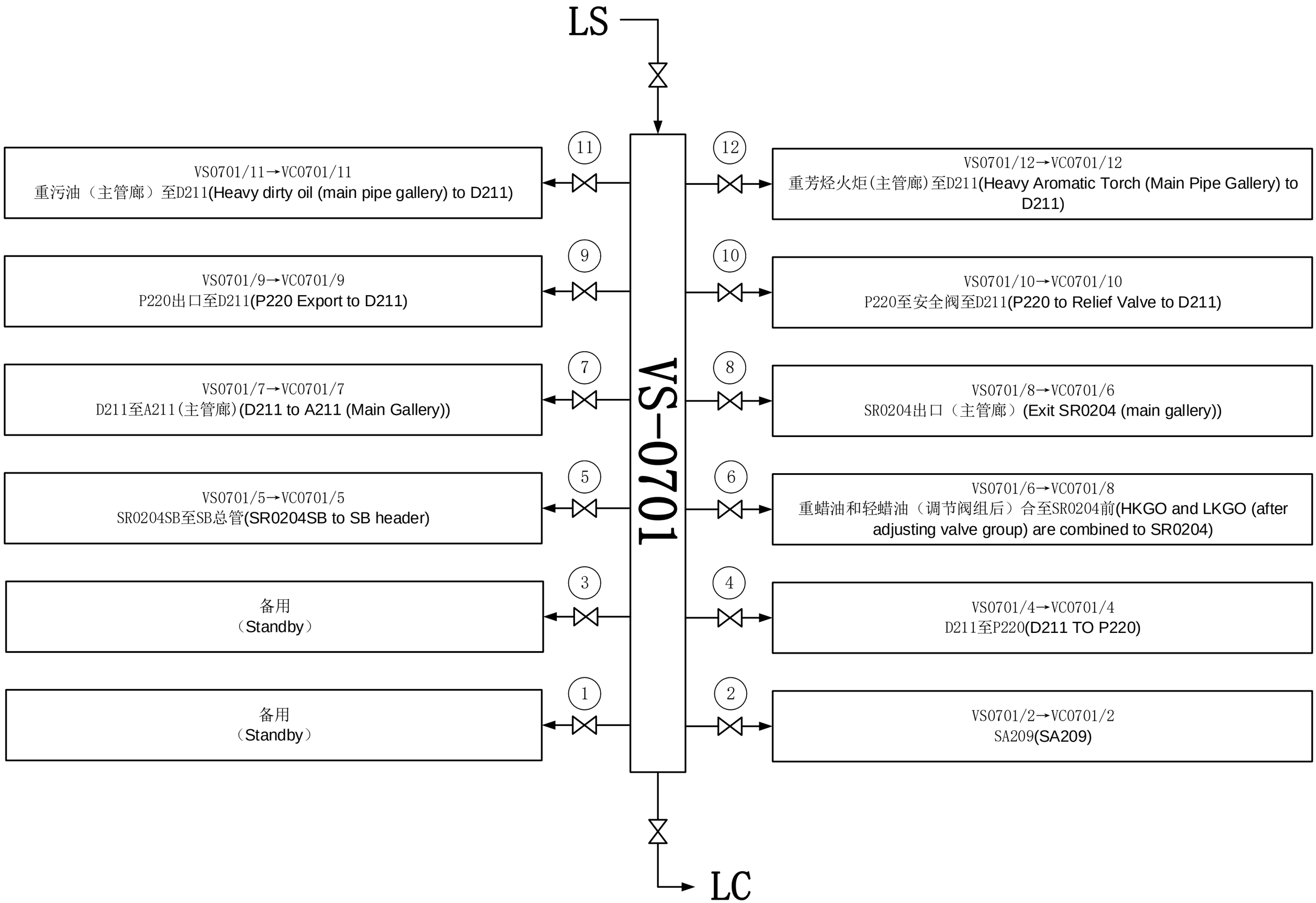

LS
VS-0301
11
VS0301/11→VC0301/11
脱硫区SB(Desulfurization zone SB)
12
VS0301/12→VC0301/12
E306B FXG入口(E306B FXG Entry)
9
备用
（Standby）
10
VS0301/10→VC0301/10
E306A FXG入口(E306A FXG Entry)
7
备用
（Standby）
8
备用
（Standby）
5
备用
（Standby）
6
备用
（Standby）
3
VS0301/3→VC0301/3
FXG C302出口至E306A/B(Export FXG C302 to E306A/B)
4
备用
（Standby）
1
备用
（Standby）
2
备用
（Standby）
LC

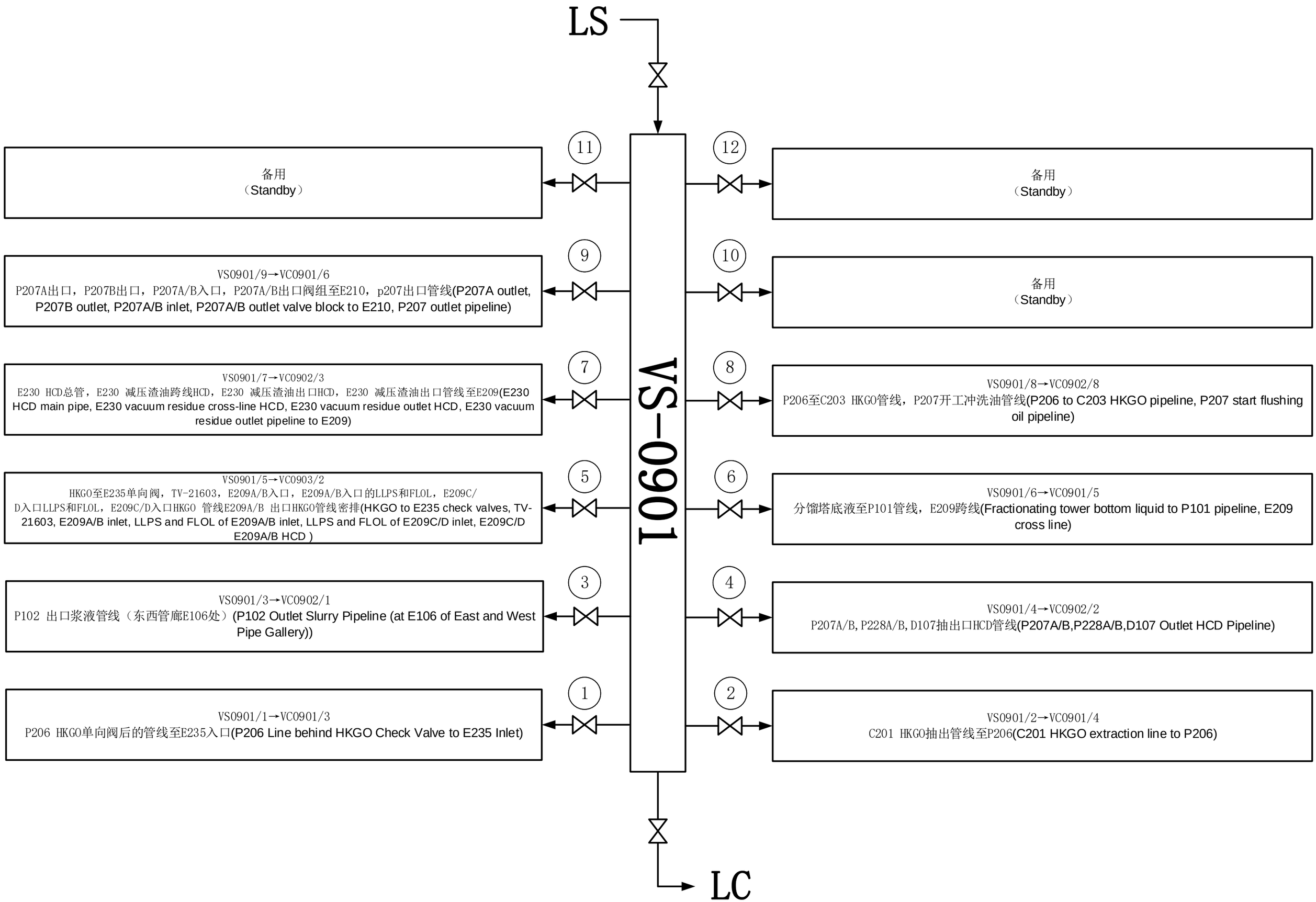

LS
VS-0302
11
12
VS0302/11→VC0302/11
脱硫区SB(Desulfurization zone SB)
备用
（Standby）
9
10
VS0302/9→VC0302/9
E101出入口及跨线(E101 Entrance and Exit and Crossing Line)
备用
（Standby）
7
8
VS0302/7→VC0302/3
E210入口及跨线(E210 Entry and Crossing)
备用
（Standby）
5
6
VS0302/5→VC0302/5
E210出口及SB/脱硫区SB(E210 outlet and SB/ desulfurization zone SB)
备用
（Standby）
3
4
VS0302/3→VC0302/7
E101 SB管线(E101 SB Pipeline)
备用
（Standby）
1
2
备用
（Standby）
备用
（Standby）
LC

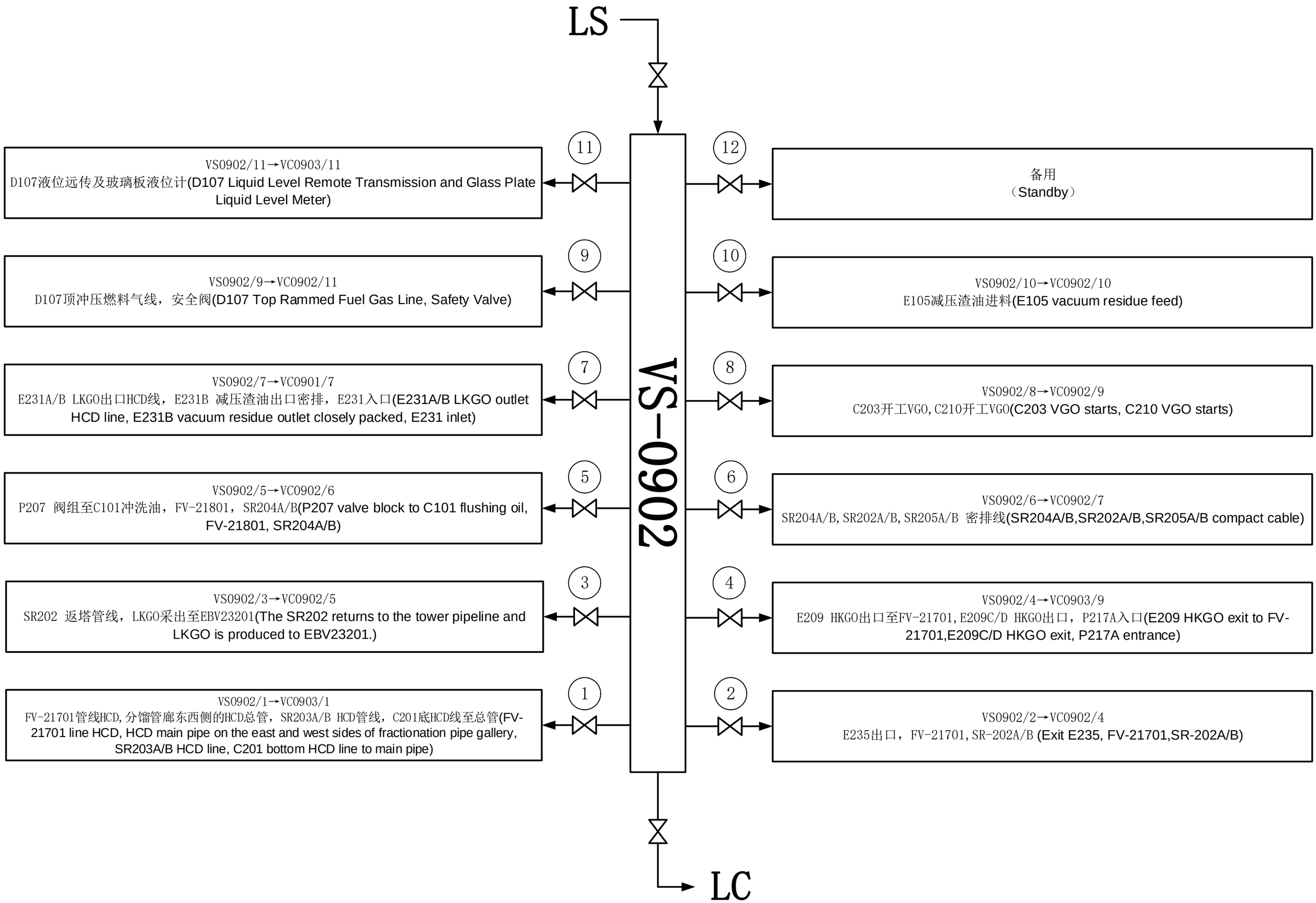

LS
VS-0303
11
VS0303/11→VC0303/12
D301开工线(D301 construction line)
12
VS0303/12→VC0303/11
D301开工线(D301 construction line)
9
VS0303/9→VC0208/5
减压渣油/脱硫区SB(Vacuum residue/desulfurization zone SB)
10
备用
（Standby）
7
VS0303/7→VC0303/10
E101浆液出入口(E101 Slurry Inlet and Outlet)
8
VS0303/8→VC0207/10
P102浆液至E101(P102 Slurry to E101)
5
备用
（Standby）
6
VS0303/6→VC0303/9
E210出口/脱硫去SB(E210 Export/Desulfurization and SB Removal)
3
备用
（Standby）
4
VS0303/4→VC0303/7
分馏塔底液至E210(Fractionator bottoms to E210)
1
备用
（Standby）
2
备用
（Standby）
LC

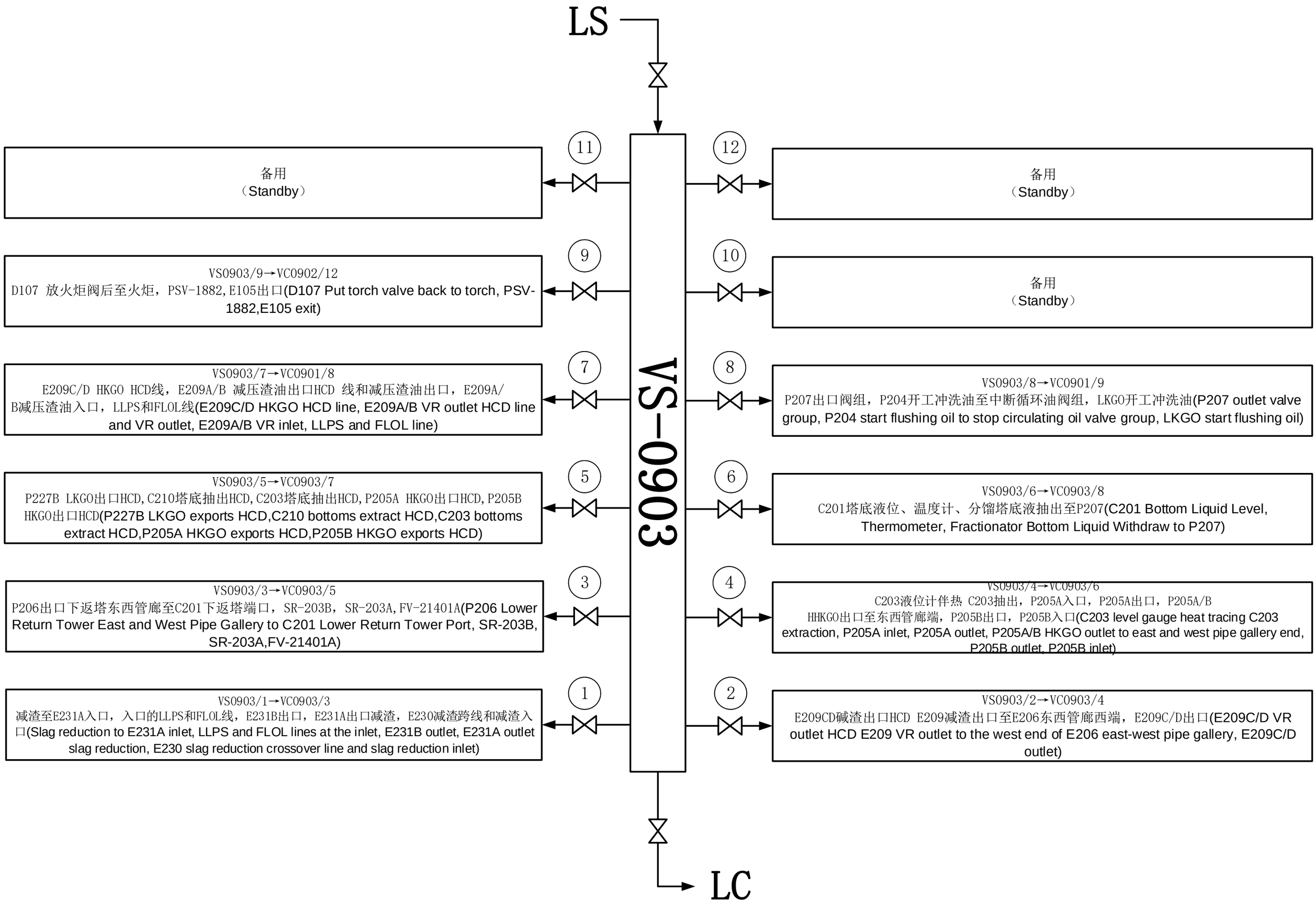

LS
VS-0402
11
VS0402/11→VC0402/11
D304酸性气至流量计后(After D304 sour gas reaches the flowmeter)
12
VS0402/12→VC0205/9
P206 HKGO至E206 管线（主管廊区）(P206 HKGO to E206 pipeline (main corridor area))
9
VS0402/9→VC0402/9
C305酸性气至火炬，安全阀，分液罐(C305 sour gas to flare, safety valve, liquid separation tank)
10
备用
（Standby）
7
VS0402/7→VC0402/3
C305酸性气至A303(C305 Acid Gas to A303)
8
VS0402/8→VC0202/8
D304酸性气至PV30501A(D304 Acid Gas to PV30501A)
5
VS0402/5→VC0402/5
酸性气至A303前(Acid gas to A303)
6
备用
（Standby）
3
VS0402/3→VC0402/7
酸性气至A303入口(Acid gas to A303 inlet)
4
备用
（Standby）
1
备用
（Standby）
2
备用
（Standby）
LC

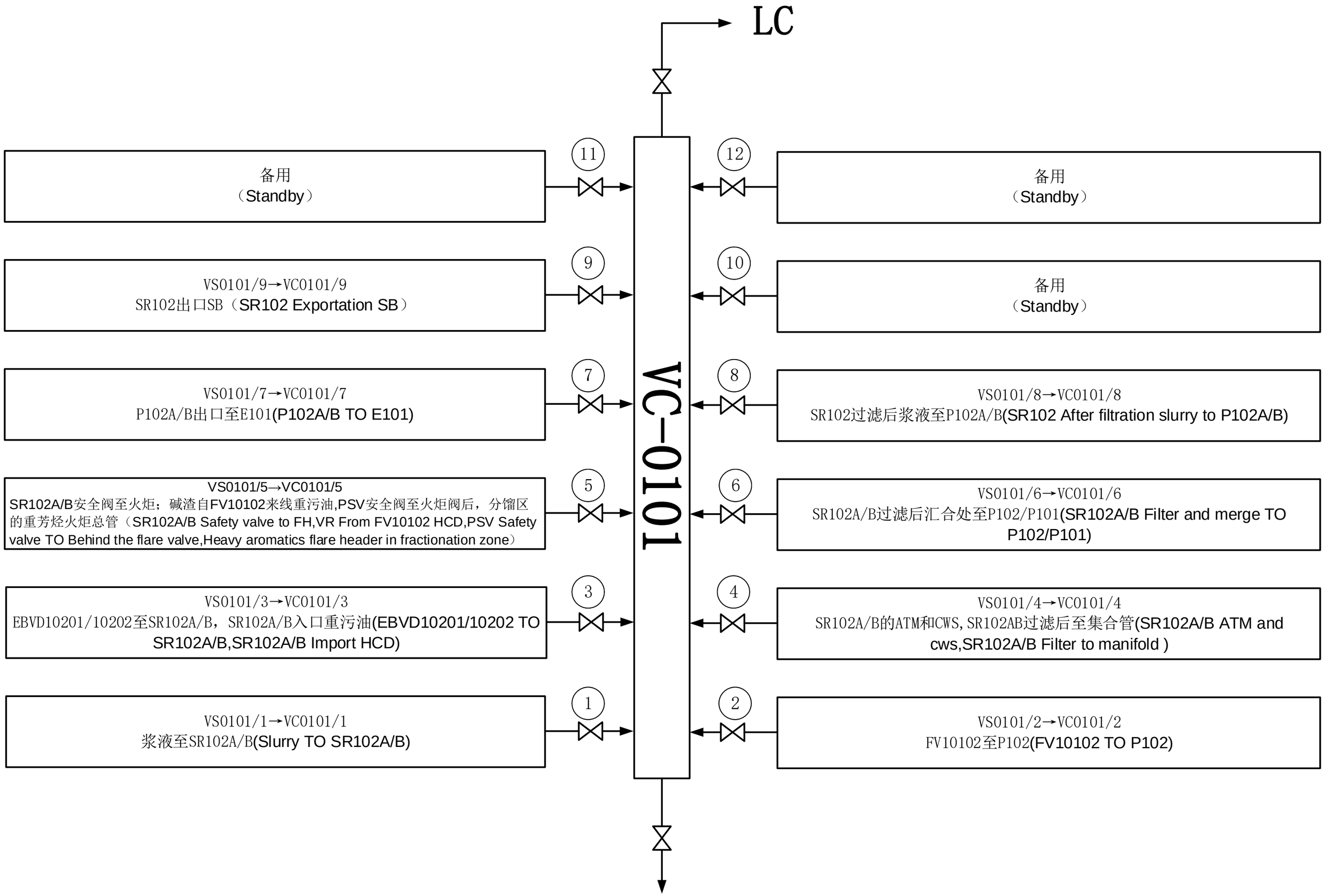

LS
VS-0601
LC
6
VS0601/6→VC0601/6
E206密排总管，E206 HKGO进料跨线，E206 HKGO入口，LS和FLOL，E206 VR出口密排管线(E206 HCD, E206 HKGO feed crossover, E206 HKGO inlet, LS and FLOL, E206 VR outlet HCD)
5
VS0601/5→VC0601/5
E206 VR出口，跨线，入口，跨线的LLPS和FLOL(E206 VR Exit, Crossover, Entry, Crossover LLPS and FLOL)
4
VS0601/4→VC0601/4
E207 HCD,E207 HKGO出口，开工VGO至D210(E207 HCD,E207 HKGO Exit, Start VGO to D210)
3
VS0601/3→VC0601/3
各封油使用点来重污油/P218A/B/D210重污油密排(Each sealing point is used to tightly seal the heavy dirty oil /P218A/B/D210)
2
VS0601/2→VC0601/2
SR206AB/E236重污油密排(SR206AB/E236 HCD)
1
VS0601/1→VC0601/1
D210充压阀PV-21201B,D210安全阀PSV-2113A/B(D210 charging valve PV-21201B,D210 safety valve PSV-2113A/B)
7
VS0601/7→VC0901/1
一级气压机入口,D201安全阀阀前，D201出口(Inlet of primary air pressure machine, front of D201 safety valve, D201 outlet)
8
VS0601/8→VC0901/2
一级气压机入口，D201安全阀阀前(Inlet of primary air pressure machine, in front of D201 safety valve)
9
备用
（Standby）
10
备用
（Standby）
11
备用
（Standby）
12
备用
（Standby）

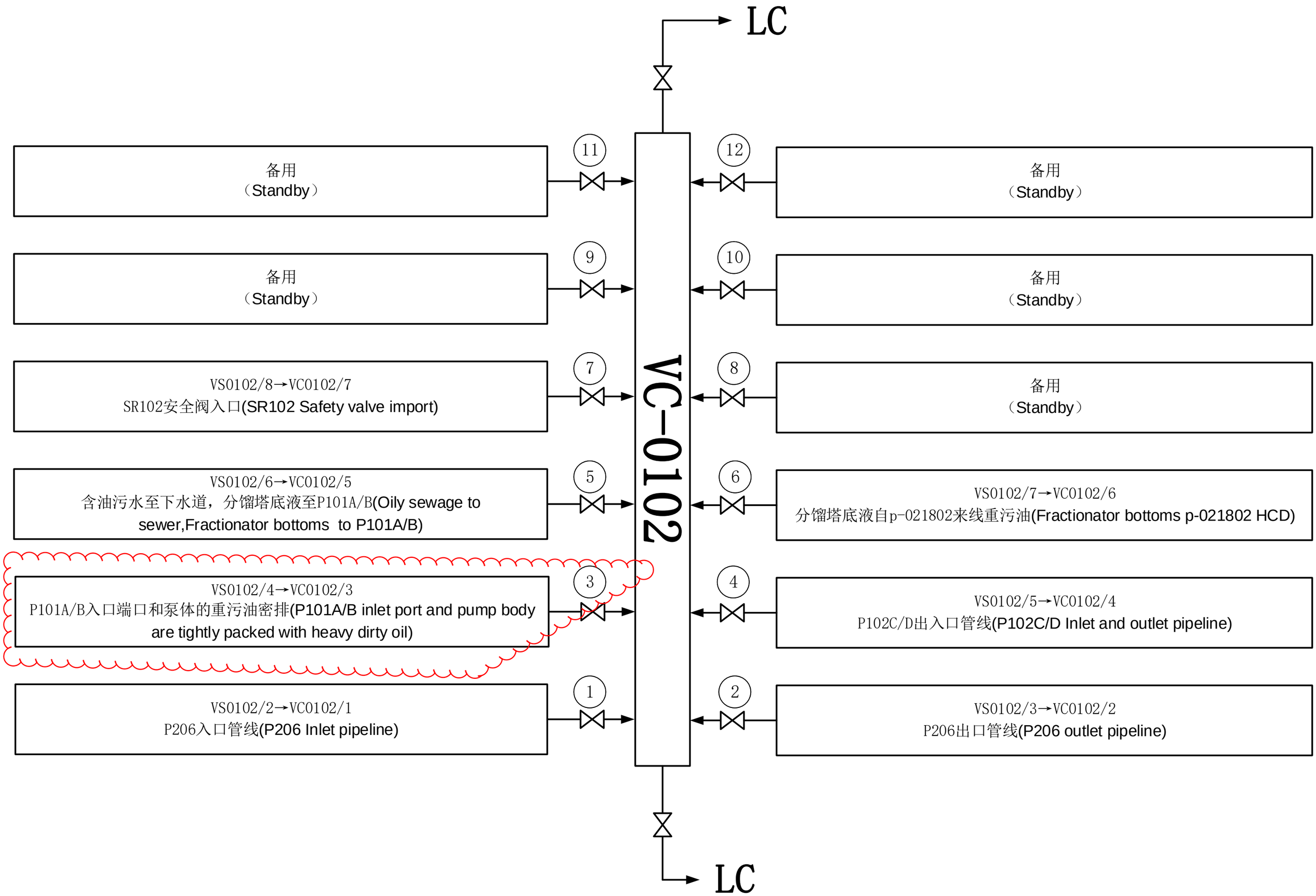

LS
VS-0701
11
VS0701/11→VC0701/11
重污油（主管廊）至D211(Heavy dirty oil (main pipe gallery) to D211)
9
VS0701/9→VC0701/9
P220出口至D211(P220 Export to D211)
7
VS0701/7→VC0701/7
D211至A211(主管廊)(D211 to A211 (Main Gallery))
5
VS0701/5→VC0701/5
SR0204SB至SB总管(SR0204SB to SB header)
3
备用
（Standby）
1
备用
（Standby）
12
VS0701/12→VC0701/12
重芳烃火炬(主管廊)至D211(Heavy Aromatic Torch (Main Pipe Gallery) to D211)
10
VS0701/10→VC0701/10
P220至安全阀至D211(P220 to Relief Valve to D211)
8
VS0701/8→VC0701/6
SR0204出口（主管廊）(Exit SR0204 (main gallery))
6
VS0701/6→VC0701/8
重蜡油和轻蜡油（调节阀组后）合至SR0204前(HKGO and LKGO (after adjusting valve group) are combined to SR0204)
4
VS0701/4→VC0701/4
D211至P220(D211 TO P220)
2
VS0701/2→VC0701/2
SA209(SA209)
LC

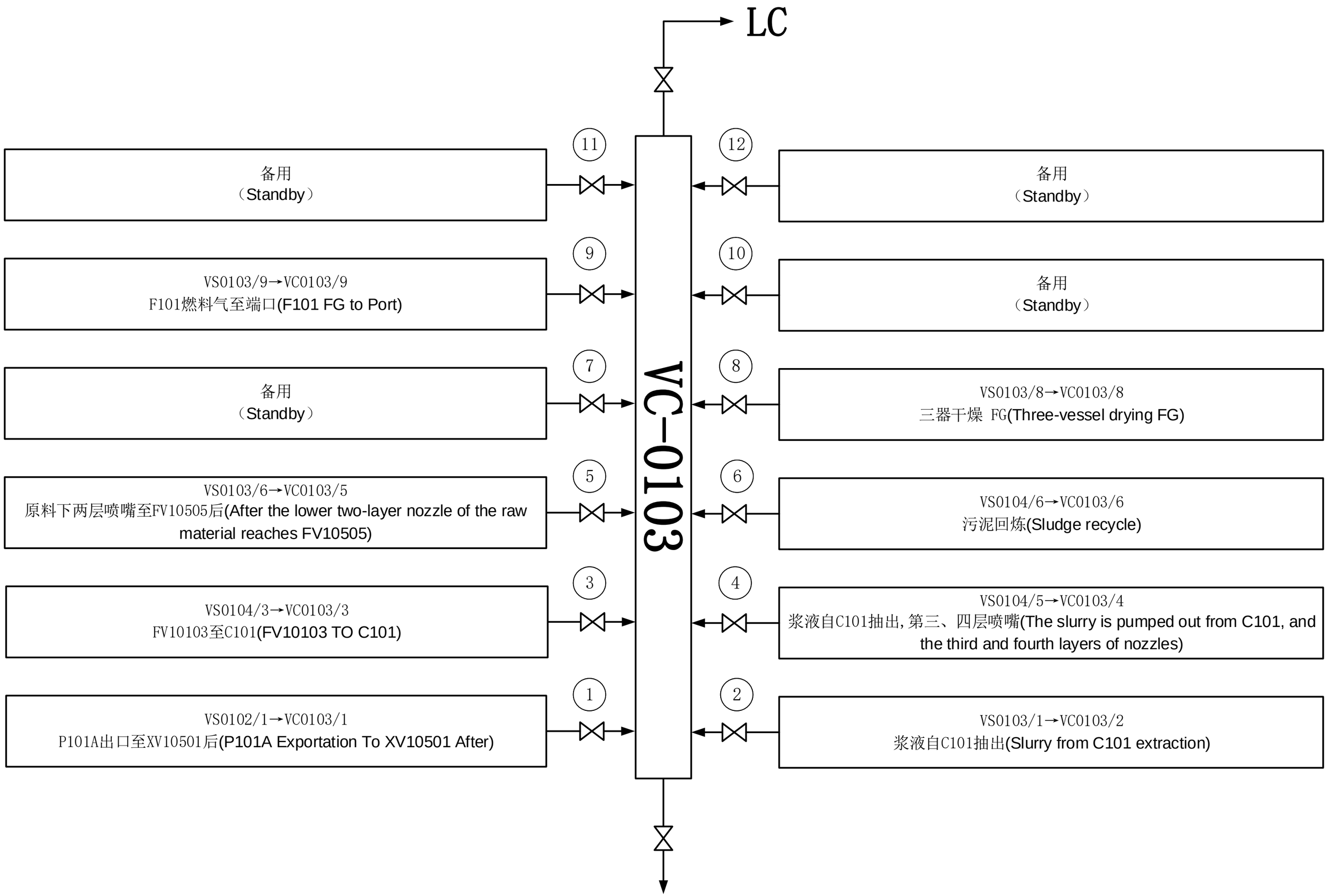

LS
VS-0901
LC
11
备用
（Standby）
12
备用
（Standby）
9
VS0901/9→VC0901/6
P207A出口，P207B出口，P207A/B入口，P207A/B出口阀组至E210，p207出口管线(P207A outlet, P207B outlet, P207A/B inlet, P207A/B outlet valve block to E210, P207 outlet pipeline)
10
备用
（Standby）
7
VS0901/7→VC0902/3
E230 HCD总管，E230 减压渣油跨线HCD，E230 减压渣油出口HCD，E230 减压渣油出口管线至E209(E230 HCD main pipe, E230 vacuum residue cross-line HCD, E230 vacuum residue outlet HCD, E230 vacuum residue outlet pipeline to E209)
8
VS0901/8→VC0902/8
P206至C203 HKGO管线，P207开工冲洗油管线(P206 to C203 HKGO pipeline, P207 start flushing oil pipeline)
5
VS0901/5→VC0903/2
HKGO至E235单向阀，TV-21603，E209A/B入口，E209A/B入口的LLPS和FLOL，E209C/D入口LLPS和FLOL，E209C/D入口HKGO 管线E209A/B 出口HKGO管线密排(HKGO to E235 check valves, TV-21603, E209A/B inlet, LLPS and FLOL of E209A/B inlet, LLPS and FLOL of E209C/D inlet, E209C/D E209A/B HCD)
6
VS0901/6→VC0901/5
分馏塔底液至P101管线，E209跨线(Fractionating tower bottom liquid to P101 pipeline, E209 cross line)
3
VS0901/3→VC0902/1
P102 出口浆液管线（东西管廊E106处）(P102 Outlet Slurry Pipeline (at E106 of East and West Pipe Gallery))
4
VS0901/4→VC0902/2
P207A/B,P228A/B,D107抽出口HCD管线(P207A/B,P228A/B,D107 Outlet HCD Pipeline)
1
VS0901/1→VC0901/3
P206 HKGO单向阀后的管线至E235入口(P206 Line behind HKGO Check Valve to E235 Inlet)
2
VS0901/2→VC0901/4
C201 HKGO抽出管线至P206(C201 HKGO extraction line to P206)

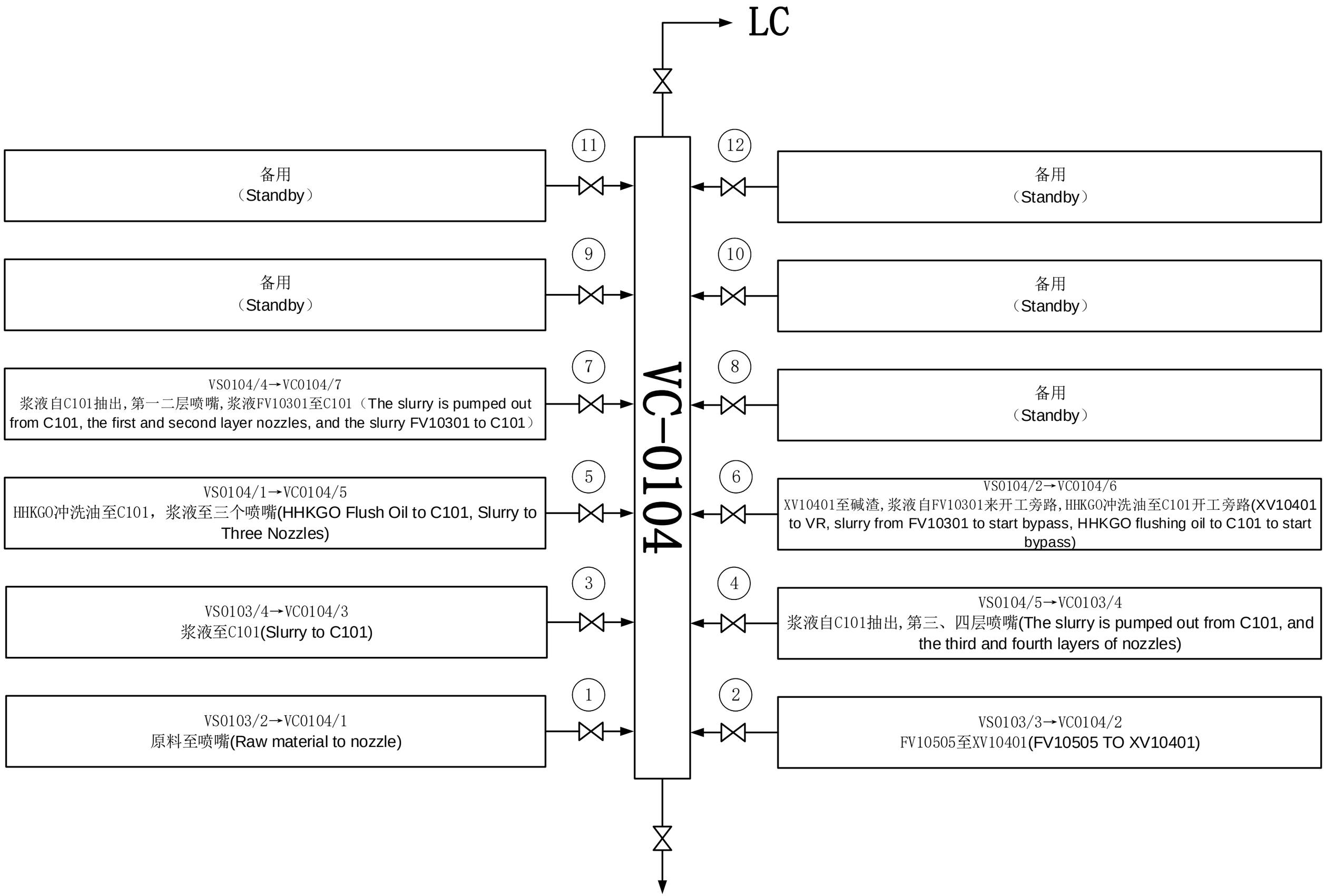

LS
VS-0902
LC
11
VS0902/11→VC0903/11
D107液位远传及玻璃板液位计(D107 Liquid Level Remote Transmission and Glass Plate Liquid Level Meter)
12
备用
（Standby）
9
VS0902/9→VC0902/11
D107顶冲压燃料气线，安全阀(D107 Top Rammed Fuel Gas Line, Safety Valve)
10
VS0902/10→VC0902/10
E105减压渣油进料(E105 vacuum residue feed)
7
VS0902/7→VC0901/7
E231A/B LKGO出口HCD线，E231B 减压渣油出口密排，E231入口(E231A/B LKGO outlet HCD line, E231B vacuum residue outlet closely packed, E231 inlet)
8
VS0902/8→VC0902/9
C203开工VGO,C210开工VGO(C203 VGO starts, C210 VGO starts)
5
VS0902/5→VC0902/6
P207 阀组至C101冲洗油，FV-21801，SR204A/B(P207 valve block to C101 flushing oil, FV-21801, SR204A/B)
6
VS0902/6→VC0902/7
SR204A/B,SR202A/B,SR205A/B 密排线(SR204A/B,SR202A/B,SR205A/B compact cable)
3
VS0902/3→VC0902/5
SR202 返塔管线，LKGO采出至EBV23201(The SR202 returns to the tower pipeline and LKGO is produced to EBV23201.)
4
VS0902/4→VC0903/9
E209 HKGO出口至FV-21701,E209C/D HKGO出口，P217A入口(E209 HKGO exit to FV-21701,E209C/D HKGO exit, P217A entrance)
1
VS0902/1→VC0903/1
FV-21701管线HCD,分馏管廊东西侧的HCD总管，SR203A/B HCD管线，C201底HCD线至总管(FV-21701 line HCD, HCD main pipe on the east and west sides of fractionation pipe gallery, SR203A/B HCD line, C201 bottom HCD line to main pipe)
2
VS0902/2→VC0902/4
E235出口，FV-21701,SR-202A/B (Exit E235, FV-21701,SR-202A/B)

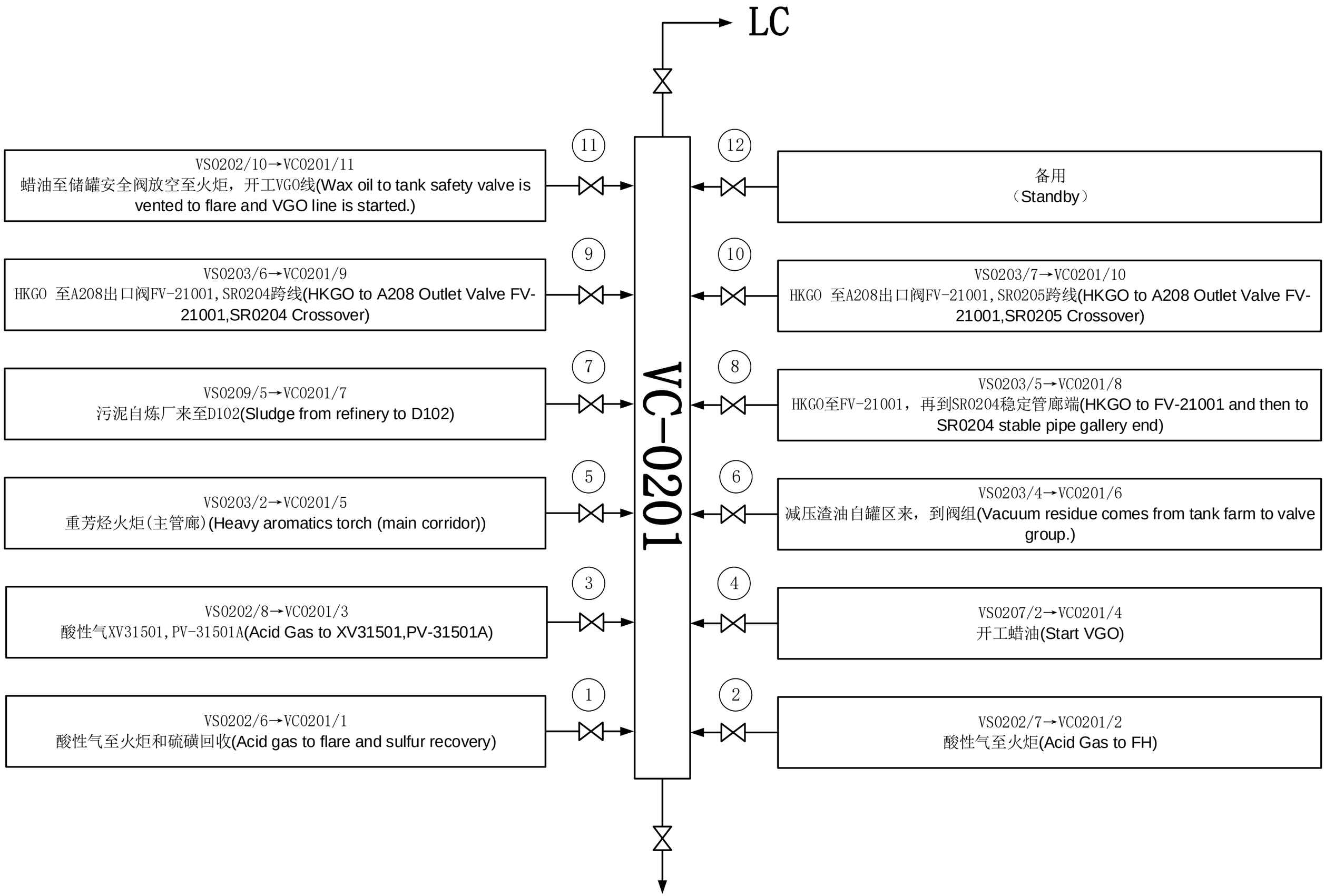

LS
VS-0903
LC
11
备用
（Standby）
12
备用
（Standby）
9
VS0903/9→VC0902/12
D107 放火炬阀后至火炬，PSV-1882,E105出口(D107 Put torch valve back to torch, PSV-1882,E105 exit)
10
备用
（Standby）
7
VS0903/7→VC0901/8
E209C/D HKGO HCD线，E209A/B 减压渣油出口HCD 线和减压渣油出口，E209A/B减压渣油入口，LLPS和FLOL线(E209C/D HKGO HCD line, E209A/B VR outlet HCD line and VR outlet, E209A/B VR inlet, LLPS and FLOL line)
8
VS0903/8→VC0901/9
P207出口阀组，P204开工冲洗油至中断循环油阀组，LKGO开工冲洗油(P207 outlet valve group, P204 start flushing oil to stop circulating oil valve group, LKGO start flushing oil)
5
VS0903/5→VC0903/7
P227B LKGO出口HCD,C210塔底抽出HCD,C203塔底抽出HCD,P205A HKGO出口HCD,P205B HKGO出口HCD(P227B LKGO exports HCD,C210 bottoms extract HCD,C203 bottoms extract HCD,P205A HKGO exports HCD,P205B HKGO exports HCD)
6
VS0903/6→VC0903/8
C201塔底液位、温度计、分馏塔底液抽出至P207(C201 Bottom Liquid Level, Thermometer, Fractionator Bottom Liquid Withdraw to P207)
3
VS0903/3→VC0903/5
P206出口下返塔东西管廊至C201下返塔端口，SR-203B，SR-203A,FV-21401A(P206 Lower Return Tower East and West Pipe Gallery to C201 Lower Return Tower Port, SR-203B, SR-203A,FV-21401A)
4
VS0903/4→VC0903/6
C203液位计伴热 C203抽出，P205A入口，P205A出口，P205A/B HHKGO出口至东西管廊端，P205B出口，P205B入口(C203 level gauge heat tracing C203 extraction, P205A inlet, P205A outlet, P205A/B HKGO outlet to east and west pipe gallery end, P205B outlet, P205B inlet)
1
VS0903/1→VC0903/3
减渣至E231A入口，入口的LLPS和FLOL线，E231B出口，E231A出口减渣，E230减渣跨线和减渣入口(Slag reduction to E231A inlet, LLPS and FLOL lines at the inlet, E231B outlet, E231A outlet slag reduction, E230 slag reduction crossover line and slag reduction inlet)
2
VS0903/2→VC0903/4
E209CD碱渣出口HCD E209减渣出口至E206东西管廊西端，E209C/D出口(E209C/D VR outlet HCD E209 VR outlet to the west end of E206 east-west pipe gallery, E209C/D outlet)

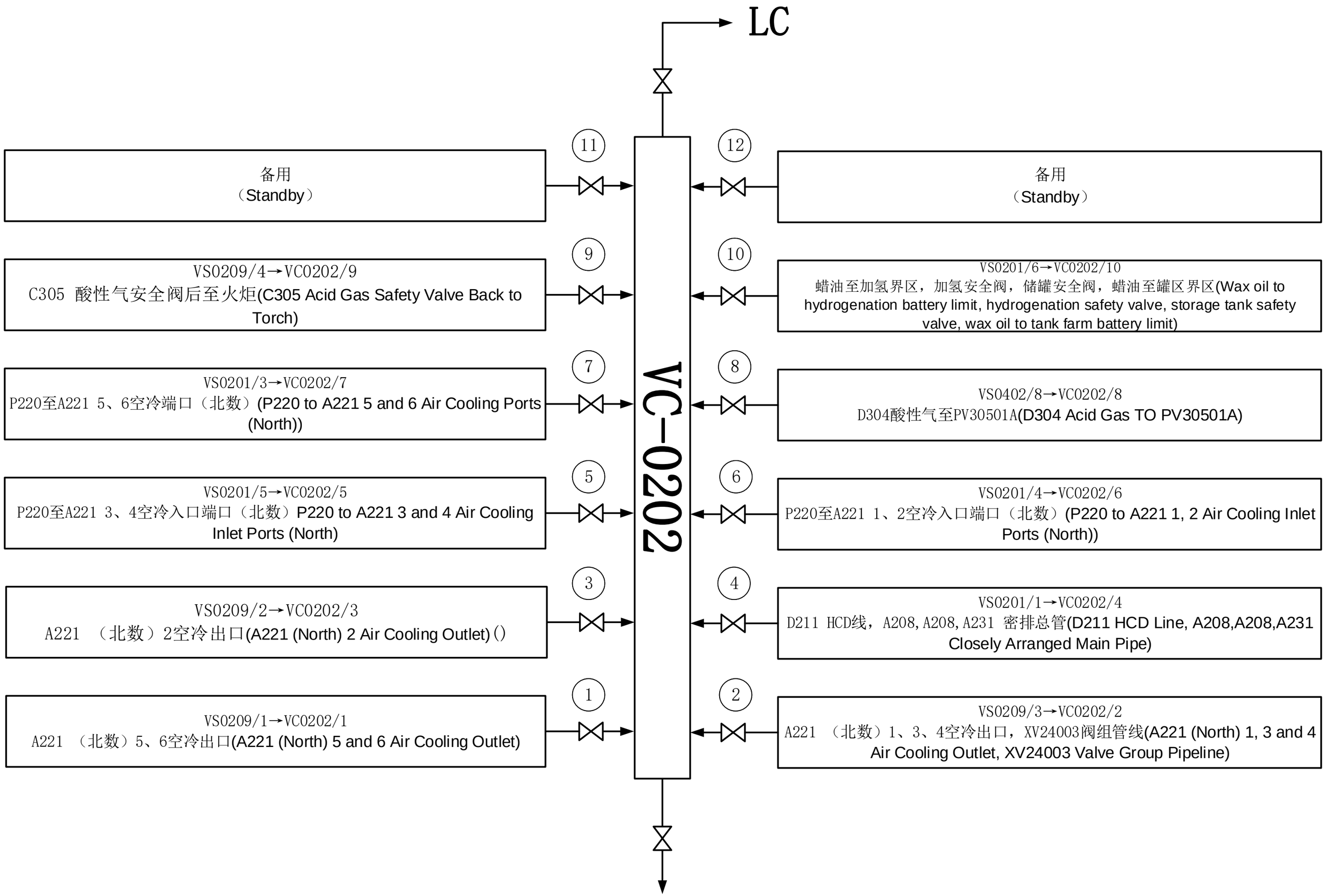

LC
VC-0101
11
12
9
10
7
8
5
6
3
4
1
2
备用
（Standby）
备用
（Standby）
VS0101/9→VC0101/9
SR102出口SB（SR102 Exportation SB）
备用
（Standby）
VS0101/7→VC0101/7
P102A/B出口至E101(P102A/B TO E101)
VS0101/8→VC0101/8
SR102过滤后浆液至P102A/B(SR102 After filtration slurry to P102A/B)
VS0101/5→VC0101/5
SR102A/B安全阀至火炬；碱渣自FV10102来线重污油,PSV安全阀至火炬阀后，分馏区的重芳烃火炬总管（SR102A/B Safety valve to FH,VR From FV10102 HCD,PSV Safety valve TO Behind the flare valve,Heavy aromatics flare header in fractionation zone）
VS0101/6→VC0101/6
SR102A/B过滤后汇合处至P102/P101(SR102A/B Filter and merge TO P102/P101)
VS0101/3→VC0101/3
EBVD10201/10202至SR102A/B，SR102A/B入口重污油(EBVD10201/10202 TO SR102A/B,SR102A/B Import HCD)
VS0101/4→VC0101/4
SR102A/B的ATM和CWS,SR102AB过滤后至集合管(SR102A/B ATM and cws,SR102A/B Filter to manifold)
VS0101/1→VC0101/1
浆液至SR102A/B(Slurry TO SR102A/B)
VS0101/2→VC0101/2
FV10102至P102(FV10102 TO P102)

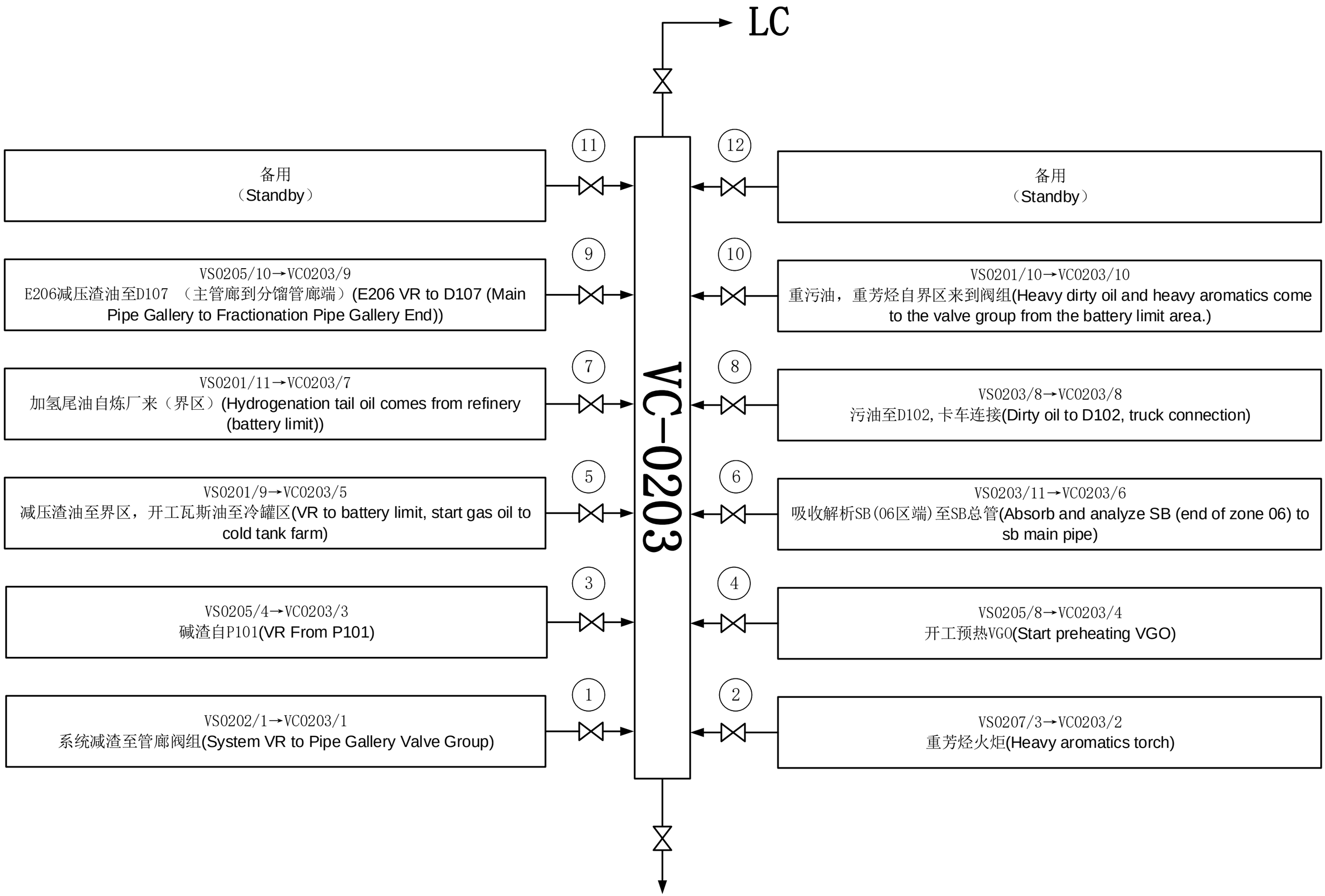

LC
VC-0102
11
12
备用
（Standby）
备用
（Standby）
9
10
备用
（Standby）
备用
（Standby）
7
8
VS0102/8→VC0102/7
SR102安全阀入口(SR102 Safety valve import)
备用
（Standby）
5
6
VS0102/6→VC0102/5
含油污水至下水道，分馏塔底液至P101A/B(Oily sewage to sewer,Fractionator bottoms to P101A/B)
VS0102/7→VC0102/6
分馏塔底液自p-021802来线重污油(Fractionator bottoms p-021802 HCD)
3
4
VS0102/4→VC0102/3
P101A/B入口端口和泵体的重污油密排(P101A/B inlet port and pump body are tightly packed with heavy dirty oil)
VS0102/5→VC0102/4
P102C/D出入口管线(P102C/D Inlet and outlet pipeline)
1
2
VS0102/2→VC0102/1
P206入口管线(P206 Inlet pipeline)
VS0102/3→VC0102/2
P206出口管线(P206 outlet pipeline)
LC

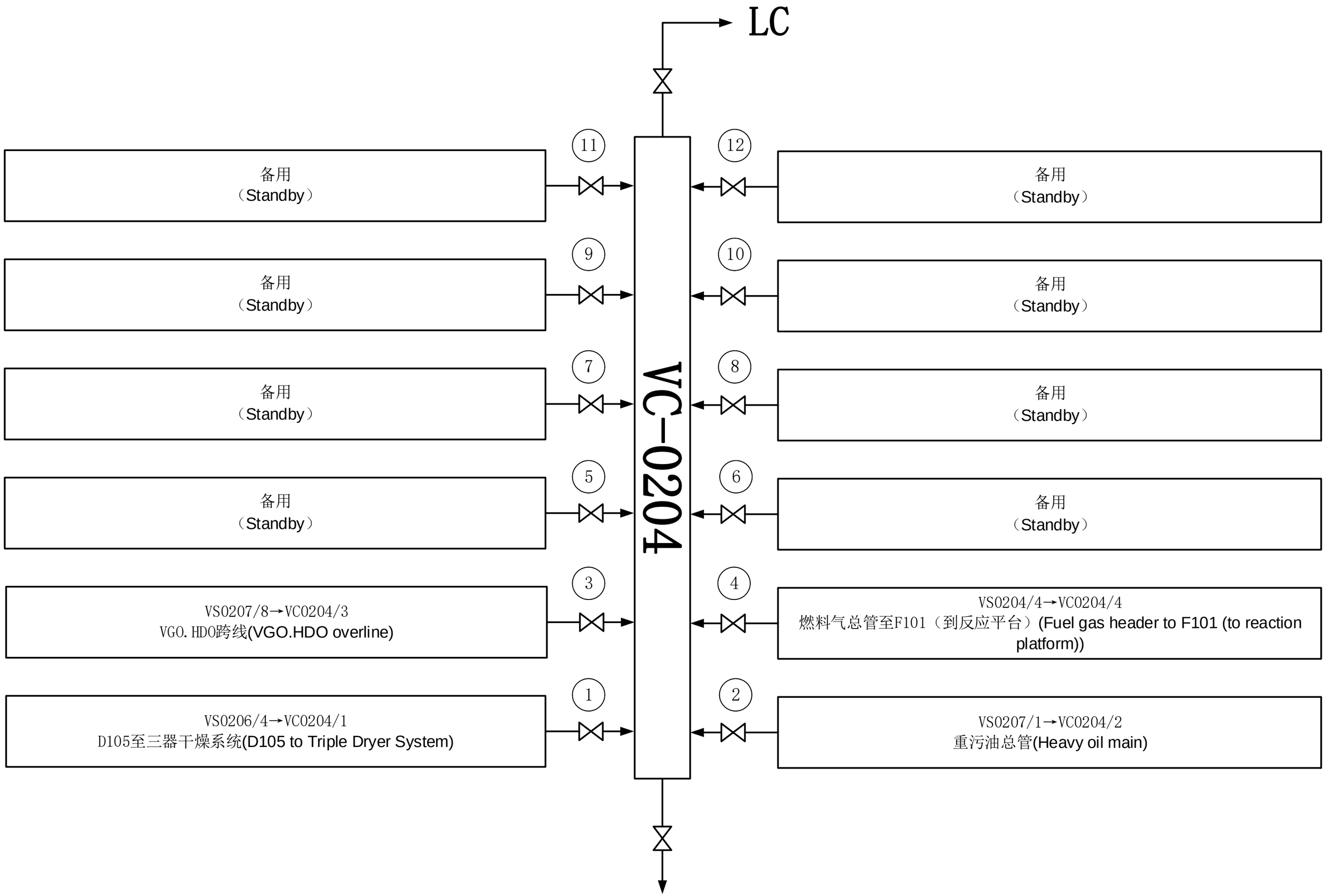

LC
VC-0103
11
备用
（Standby）
12
备用
（Standby）
9
VS0103/9→VC0103/9
F101燃料气至端口(F101 FG to Port)
10
备用
（Standby）
7
备用
（Standby）
8
VS0103/8→VC0103/8
三器干燥 FG(Three-vessel drying FG)
5
VS0103/6→VC0103/5
原料下两层喷嘴至FV10505后(After the lower two-layer nozzle of the raw material reaches FV10505)
6
VS0104/6→VC0103/6
污泥回炼(Sludge recycle)
3
VS0104/3→VC0103/3
FV10103至C101(FV10103 TO C101)
4
VS0104/5→VC0103/4
浆液自C101抽出,第三、四层喷嘴(The slurry is pumped out from C101, and the third and fourth layers of nozzles)
1
VS0102/1→VC0103/1
P101A出口至XV10501后(P101A Exportation To XV10501 After)
2
VS0103/1→VC0103/2
浆液自C101抽出(Slurry from C101 extraction)

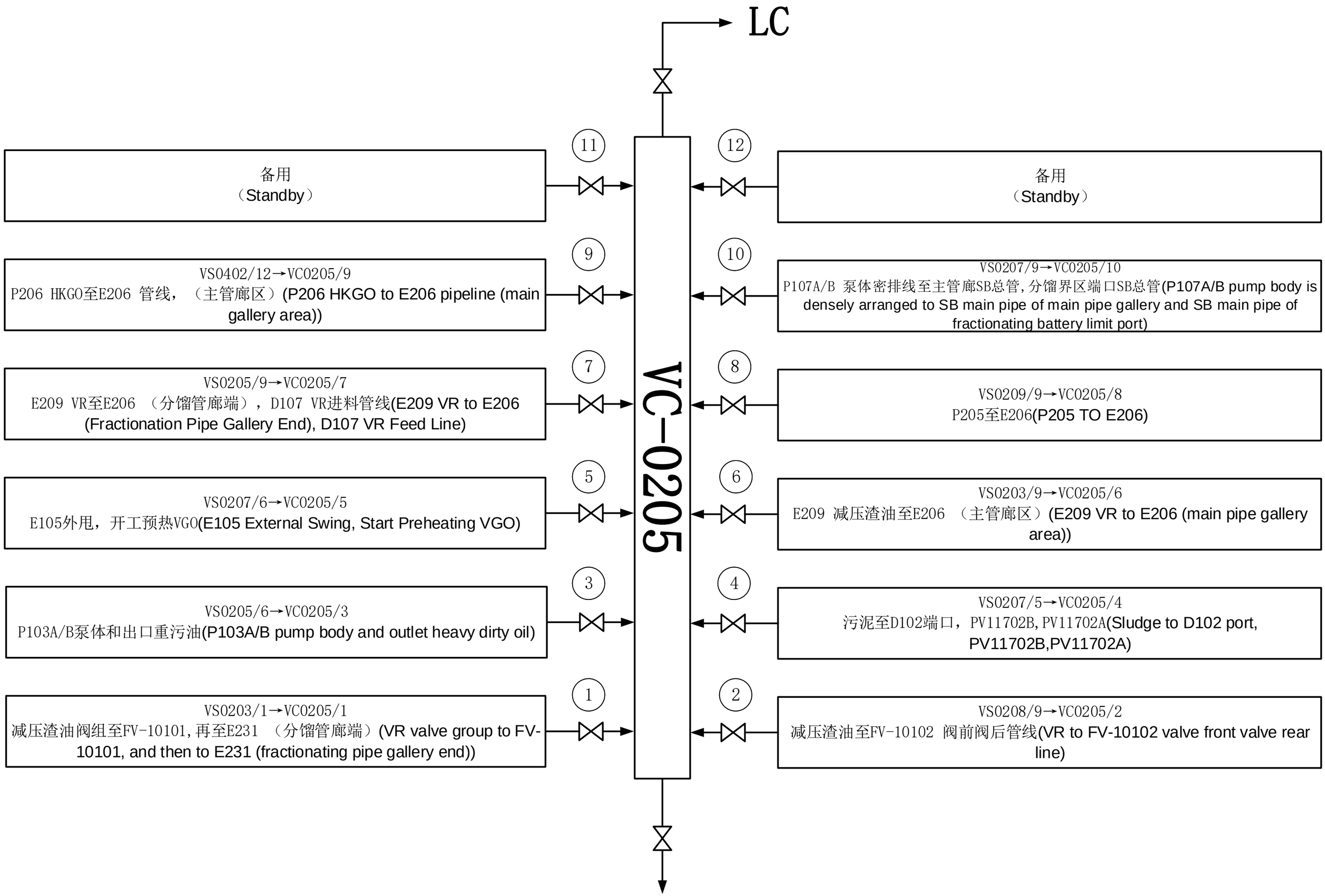

LC
VC-0104
11
12
备用
（Standby）
备用
（Standby）
9
10
备用
（Standby）
备用
（Standby）
7
8
VS0104/4→VC0104/7
浆液自C101抽出，第一二层喷嘴，浆液FV10301至C101（The slurry is pumped out from C101, the first and second layer nozzles, and the slurry FV10301 to C101）
备用
（Standby）
5
6
VS0104/1→VC0104/5
HHKGO冲洗油至C101，浆液至三个喷嘴(HHKGO Flush Oil to C101, Slurry to Three Nozzles)
VS0104/2→VC0104/6
XV10401至碱渣，浆液自FV10301来开工旁路，HHKGO冲洗油至C101开工旁路(XV10401 to VR, slurry from FV10301 to start bypass, HHKGO flushing oil to C101 to start bypass)
3
4
VS0103/4→VC0104/3
浆液至C101(Slurry to C101)
VS0104/5→VC0103/4
浆液自C101抽出，第三、四层喷嘴(The slurry is pumped out from C101, and the third and fourth layers of nozzles)
1
2
VS0103/2→VC0104/1
原料至喷嘴(Raw material to nozzle)
VS0103/3→VC0104/2
FV10505至XV10401(FV10505 TO XV10401)

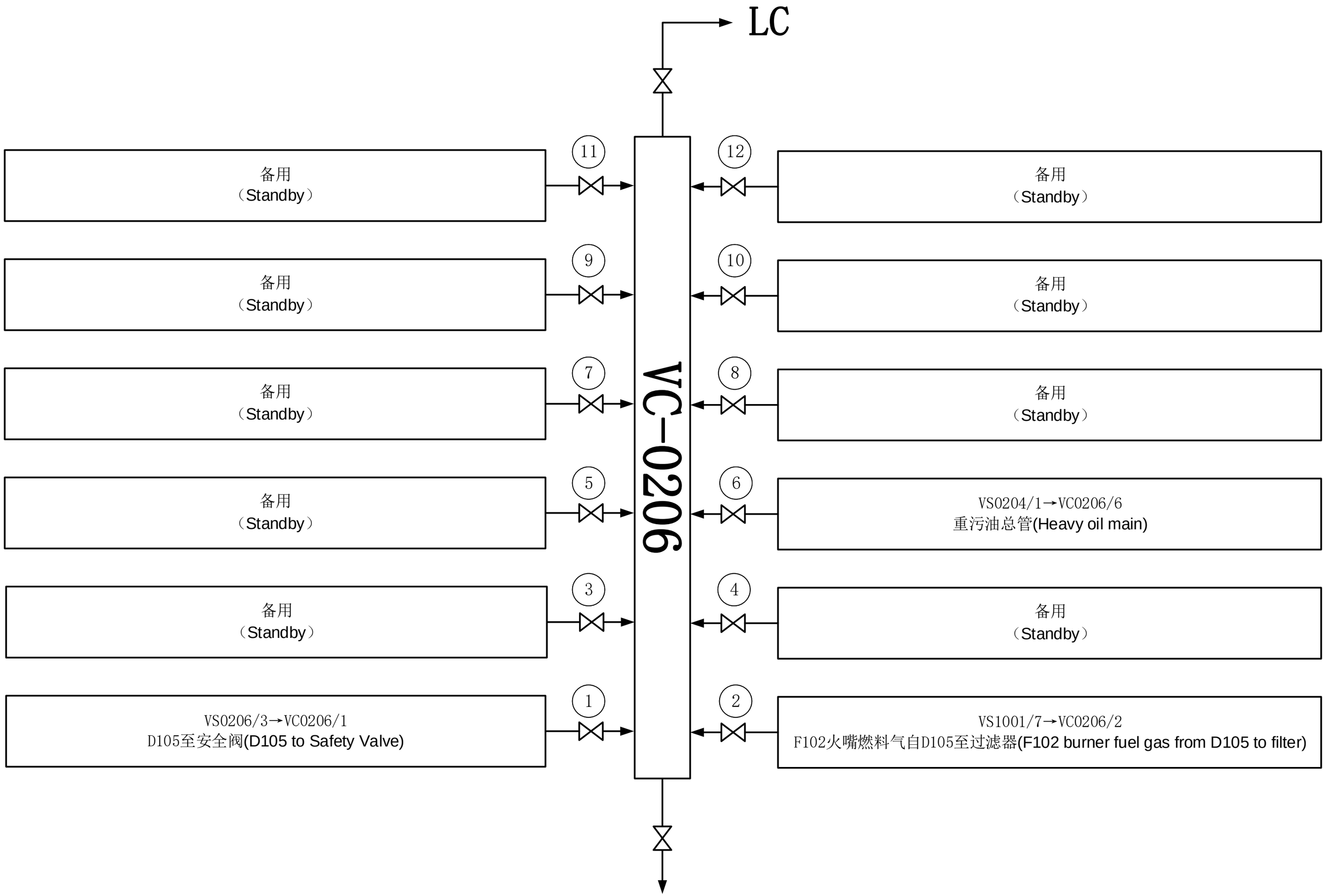

LC
VC-0201
11
VS0202/10→VC0201/11
蜡油至储罐安全阀放空至火炬，开工VGO线(Wax oil to tank safety valve is vented to flare and VGO line is started.)
9
VS0203/6→VC0201/9
HKGO 至A208出口阀FV-21001,SR0204跨线(HKGO to A208 Outlet Valve FV-21001,SR0204 Crossover)
7
VS0209/5→VC0201/7
污泥自炼厂来至D102(Sludge from refinery to D102)
5
VS0203/2→VC0201/5
重芳烃火炬(主管廊)(Heavy aromatics torch (main corridor))
3
VS0202/8→VC0201/3
酸性气XV31501,PV-31501A(Acid Gas to XV31501,PV-31501A)
1
VS0202/6→VC0201/1
酸性气至火炬和硫磺回收(Acid gas to flare and sulfur recovery)
12
备用
（Standby）
10
VS0203/7→VC0201/10
HKGO 至A208出口阀FV-21001,SR0205跨线(HKGO to A208 Outlet Valve FV-21001,SR0205 Crossover)
8
VS0203/5→VC0201/8
HKGO至FV-21001，再到SR0204稳定管廊端(HKGO to FV-21001 and then to SR0204 stable pipe gallery end)
6
VS0203/4→VC0201/6
减压渣油自罐区来，到阀组(Vacuum residue comes from tank farm to valve group.)
4
VS0207/2→VC0201/4
开工蜡油(Start VGO)
2
VS0202/7→VC0201/2
酸性气至火炬(Acid Gas to FH)

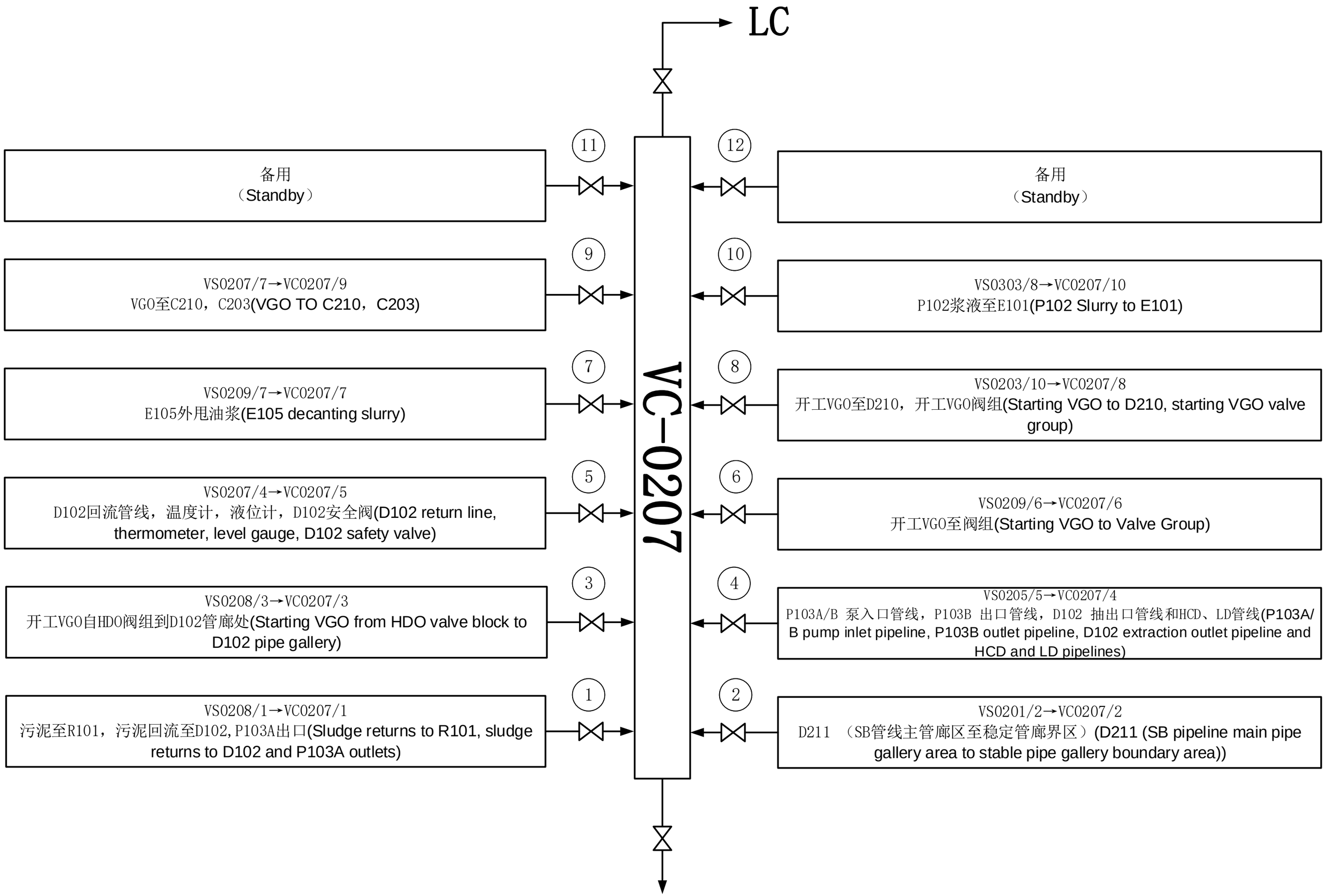

LC
VC-0202
11
备用
（Standby）
12
备用
（Standby）
9
VS0209/4→VC0202/9
C305 酸性气安全阀后至火炬(C305 Acid Gas Safety Valve Back to Torch)
10
VS0201/6→VC0202/10
蜡油至加氢界区，加氢安全阀，储罐安全阀，蜡油至罐区界区(Wax oil to hydrogenation battery limit, hydrogenation safety valve, storage tank safety valve, wax oil to tank farm battery limit)
7
VS0201/3→VC0202/7
P220至A221 5、6空冷端口（北数）(P220 to A221 5 and 6 Air Cooling Ports (North))
8
VS0402/8→VC0202/8
D304酸性气至PV30501A(D304 Acid Gas TO PV30501A)
5
VS0201/5→VC0202/5
P220至A221 3、4空冷入口端口（北数）P220 to A221 3 and 4 Air Cooling Inlet Ports (North)
6
VS0201/4→VC0202/6
P220至A221 1、2空冷入口端口（北数）(P220 to A221 1, 2 Air Cooling Inlet Ports (North))
3
VS0209/2→VC0202/3
A221 （北数）2空冷出口(A221 (North) 2 Air Cooling Outlet)()
4
VS0201/1→VC0202/4
D211 HCD线，A208,A208,A231 密排总管(D211 HCD Line, A208,A208,A231 Closely Arranged Main Pipe)
1
VS0209/1→VC0202/1
A221 （北数）5、6空冷出口(A221 (North) 5 and 6 Air Cooling Outlet)
2
VS0209/3→VC0202/2
A221 （北数）1、3、4空冷出口，XV24003阀组管线(A221 (North) 1, 3 and 4 Air Cooling Outlet, XV24003 Valve Group Pipeline)

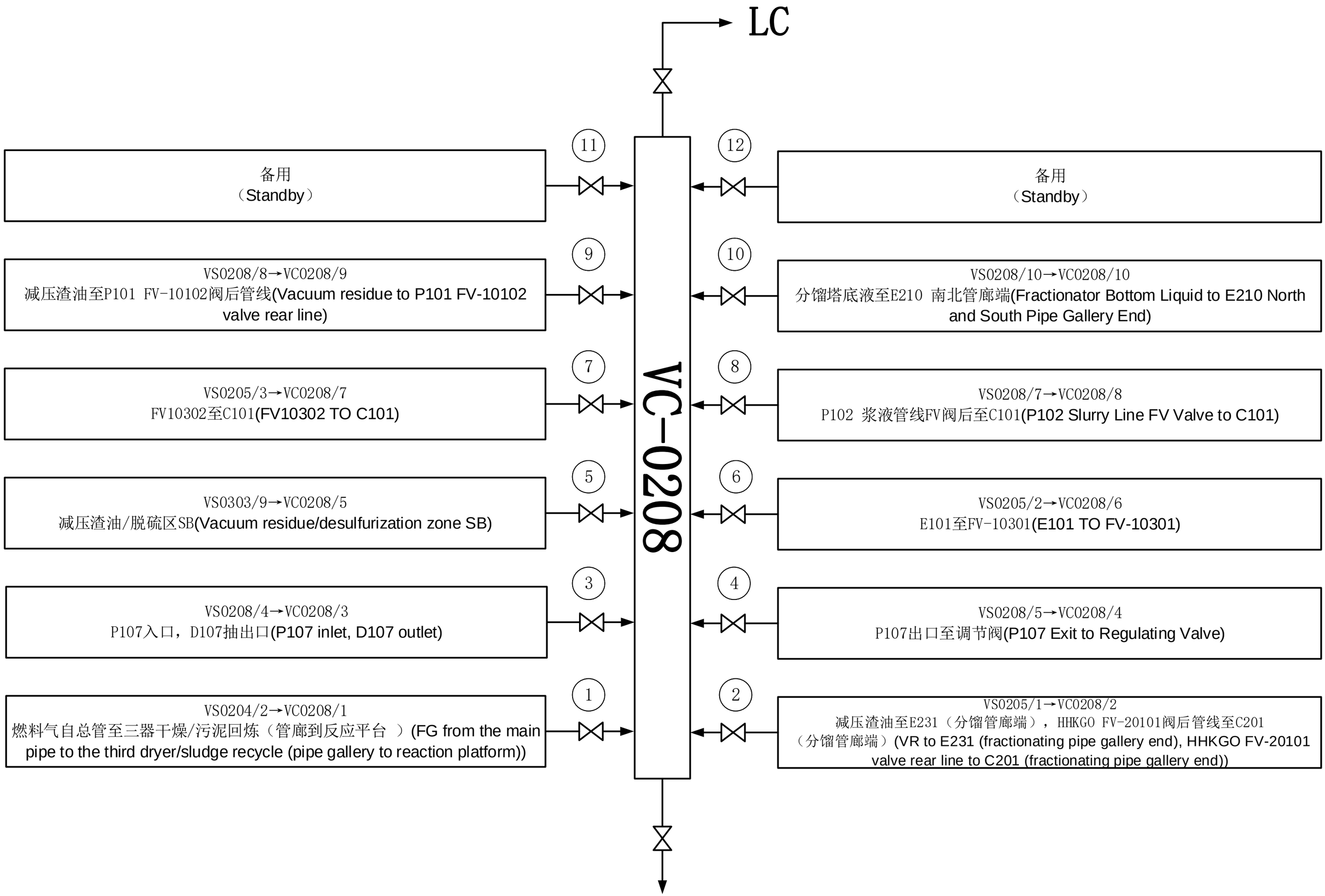

LC
VC-0203
11
备用
（Standby）
12
备用
（Standby）
9
VS0205/10→VC0203/9
E206减压渣油至D107 （主管廊到分馏管廊端）(E206 VR to D107 (Main Pipe Gallery to Fractionation Pipe Gallery End))
10
VS0201/10→VC0203/10
重污油，重芳烃自界区来到阀组(Heavy dirty oil and heavy aromatics come to the valve group from the battery limit area.)
7
VS0201/11→VC0203/7
加氢尾油自炼厂来（界区）(Hydrogenation tail oil comes from refinery (battery limit))
8
VS0203/8→VC0203/8
污油至D102, 卡车连接(Dirty oil to D102, truck connection)
5
VS0201/9→VC0203/5
减压渣油至界区，开工瓦斯油至冷罐区(VR to battery limit, start gas oil to cold tank farm)
6
VS0203/11→VC0203/6
吸收解析SB(06区端)至SB总管(Absorb and analyze SB (end of zone 06) to sb main pipe)
3
VS0205/4→VC0203/3
碱渣自P101(VR From P101)
4
VS0205/8→VC0203/4
开工预热VGO(Start preheating VGO)
1
VS0202/1→VC0203/1
系统减渣至管廊阀组(System VR to Pipe Gallery Valve Group)
2
VS0207/3→VC0203/2
重芳烃火炬(Heavy aromatics torch)

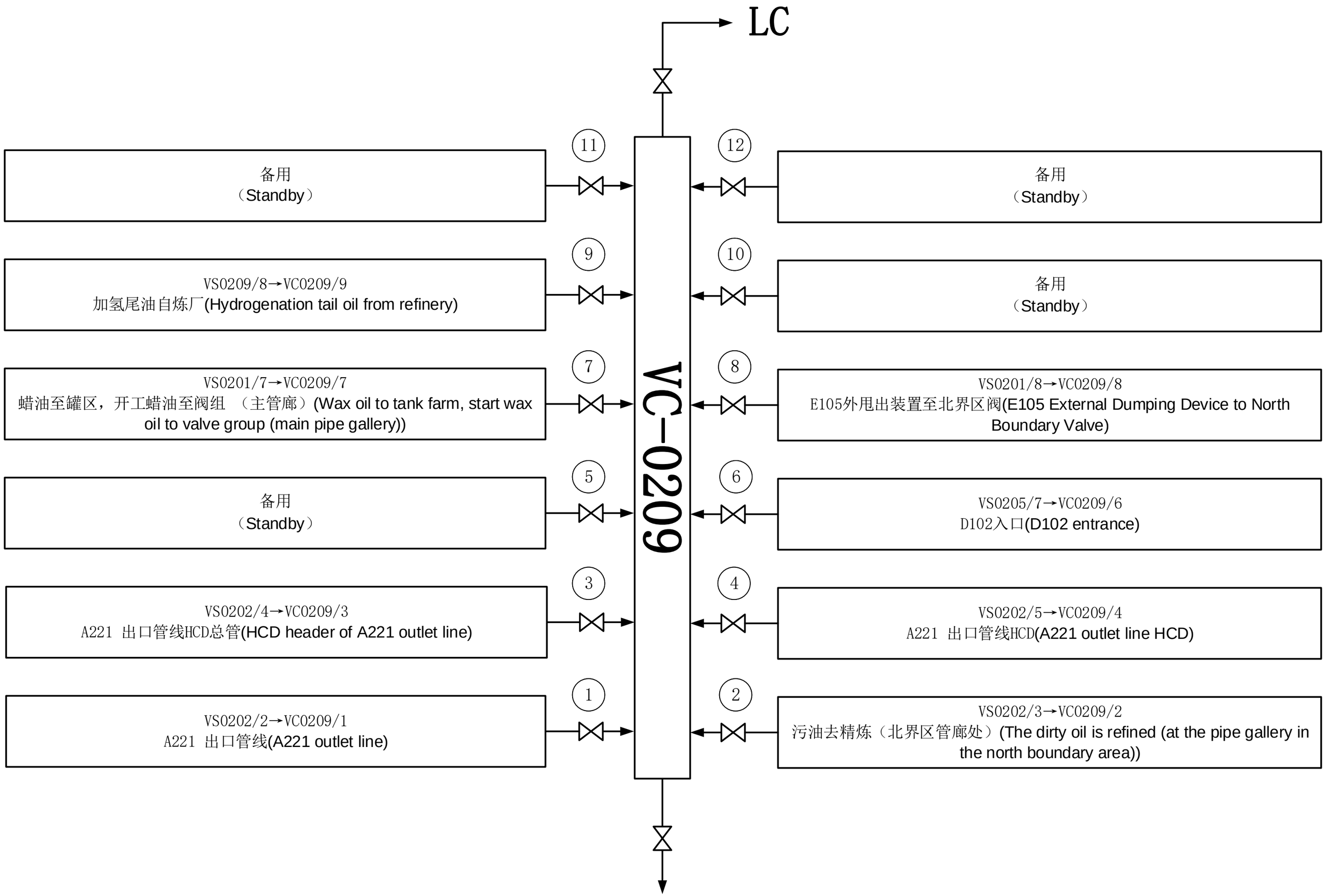

LC
VC-0204
11
12
9
10
7
8
5
6
3
4
1
2
备用
（Standby）
备用
（Standby）
备用
（Standby）
备用
（Standby）
备用
（Standby）
备用
（Standby）
VS0207/8→VC0204/3
VGO.HDO跨线(VGO.HDO overline)
VS0206/4→VC0204/1
D105至三器干燥系统(D105 to Triple Dryer System)
VS0204/4→VC0204/4
燃料气总管至F101（到反应平台）(Fuel gas header to F101 (to reaction platform))
VS0207/1→VC0204/2
重污油总管(Heavy oil main)

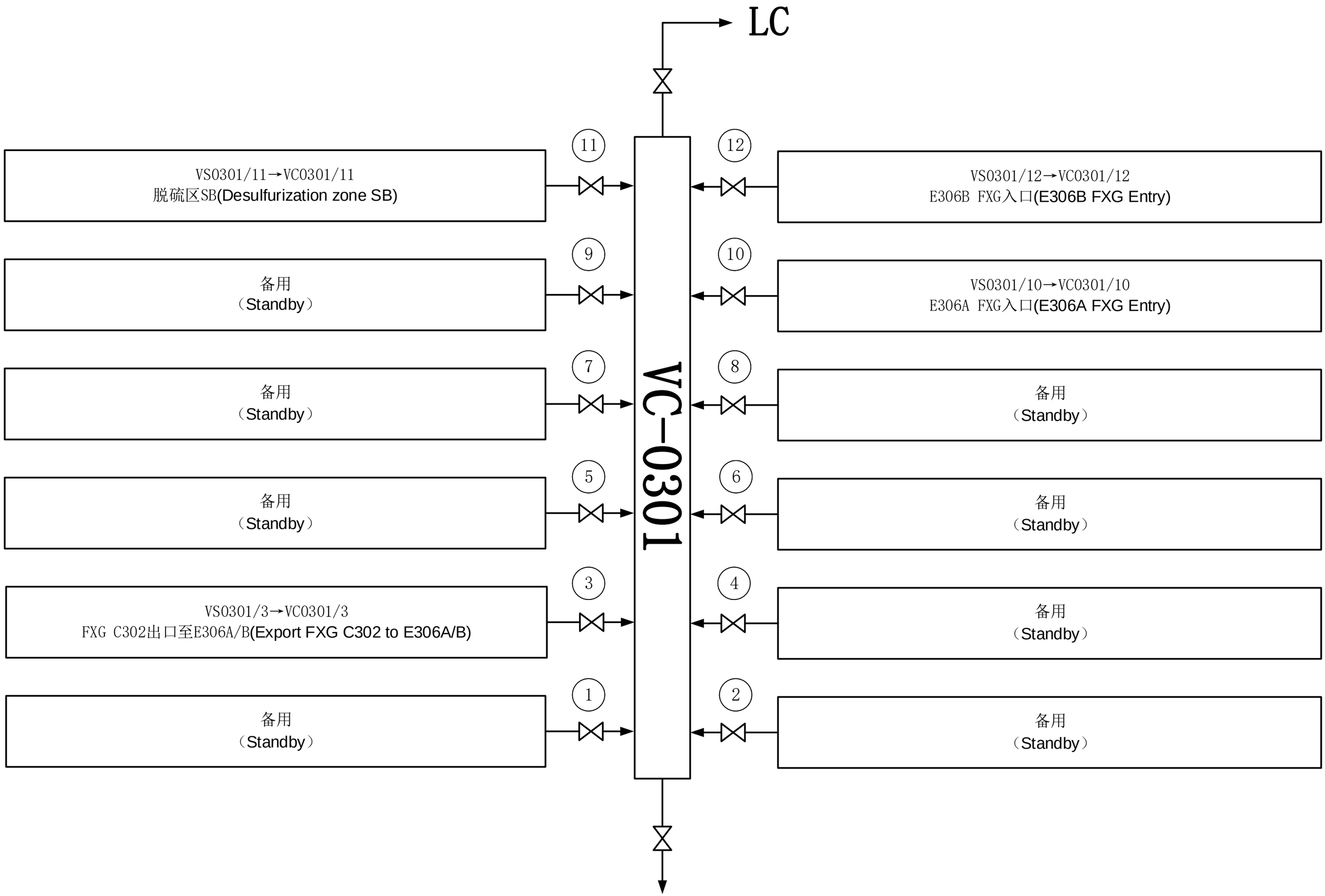

LC
VC-0205
11
备用
（Standby）
12
备用
（Standby）
9
VS0402/12→VC0205/9
P206 HKGO至E206 管线，（主管廊区）(P206 HKGO to E206 pipeline (main gallery area))
10
VS0207/9→VC0205/10
P107A/B 泵体密排线至主管廊SB总管,分馏界区端口SB总管(P107A/B pump body is densely arranged to SB main pipe of main pipe gallery and SB main pipe of fractionating battery limit port)
7
VS0205/9→VC0205/7
E209 VR至E206 （分馏管廊端），D107 VR进料管线(E209 VR to E206 (Fractionation Pipe Gallery End), D107 VR Feed Line)
8
VS0209/9→VC0205/8
P205至E206(P205 TO E206)
5
VS0207/6→VC0205/5
E105外甩，开工预热VGO(E105 External Swing, Start Preheating VGO)
6
VS0203/9→VC0205/6
E209 减压渣油至E206 （主管廊区）(E209 VR to E206 (main pipe gallery area))
3
VS0205/6→VC0205/3
P103A/B泵体和出口重污油(P103A/B pump body and outlet heavy dirty oil)
4
VS0207/5→VC0205/4
污泥至D102端口，PV11702B,PV11702A(Sludge to D102 port, PV11702B,PV11702A)
1
VS0203/1→VC0205/1
减压渣油阀组至FV-10101,再至E231 （分馏管廊端）(VR valve group to FV-10101, and then to E231 (fractionating pipe gallery end))
2
VS0208/9→VC0205/2
减压渣油至FV-10102 阀前阀后管线(VR to FV-10102 valve front valve rear line)

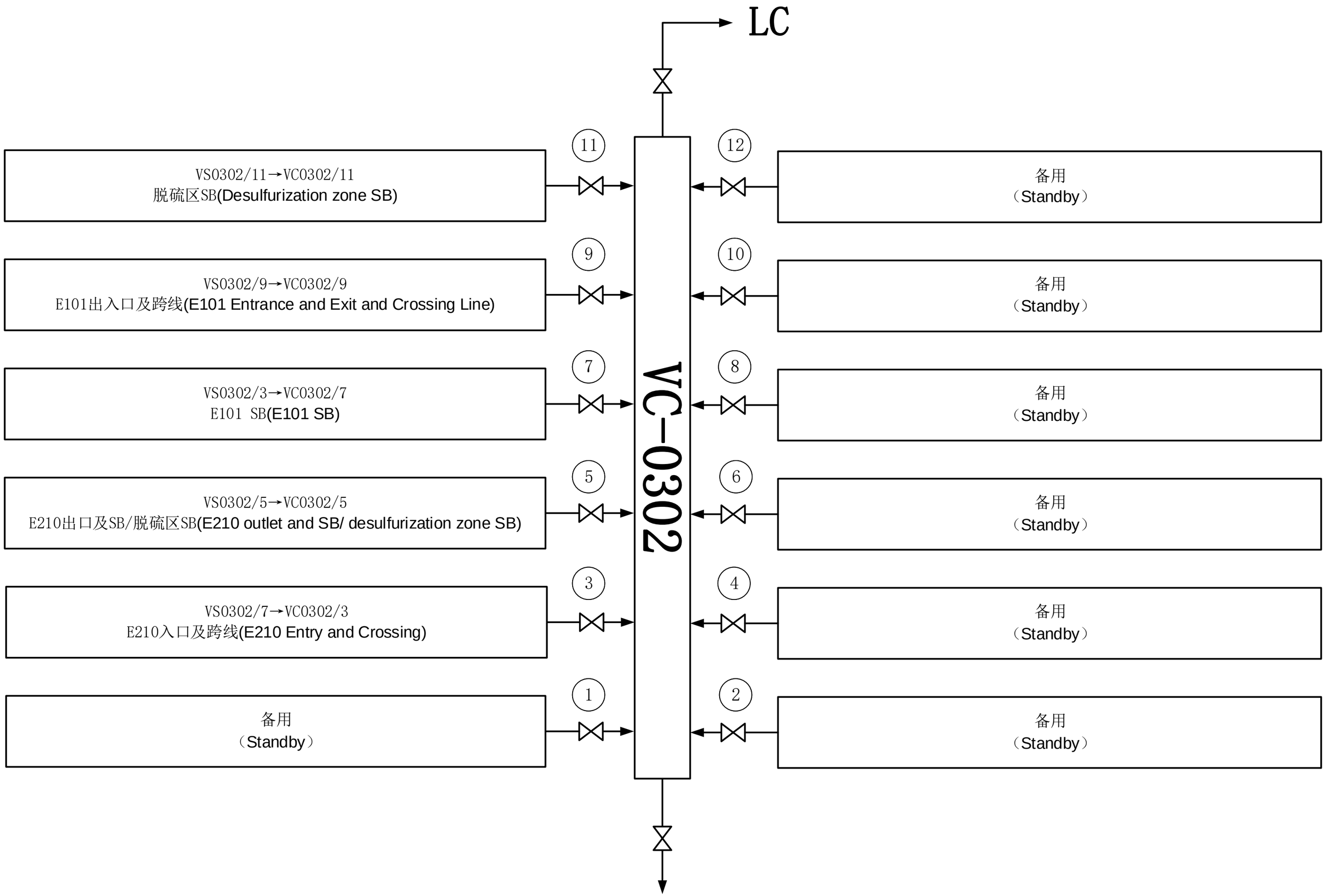

LC
VC-0206
11
12
9
10
7
8
5
6
3
4
1
2
备用
（Standby）
备用
（Standby）
备用
（Standby）
备用
（Standby）
备用
（Standby）
备用
（Standby）
VS0206/3→VC0206/1
D105至安全阀(D105 to Safety Valve)
VS0204/1→VC0206/6
重污油总管(Heavy oil main)
VS1001/7→VC0206/2
F102火嘴燃料气自D105至过滤器(F102 burner fuel gas from D105 to filter)

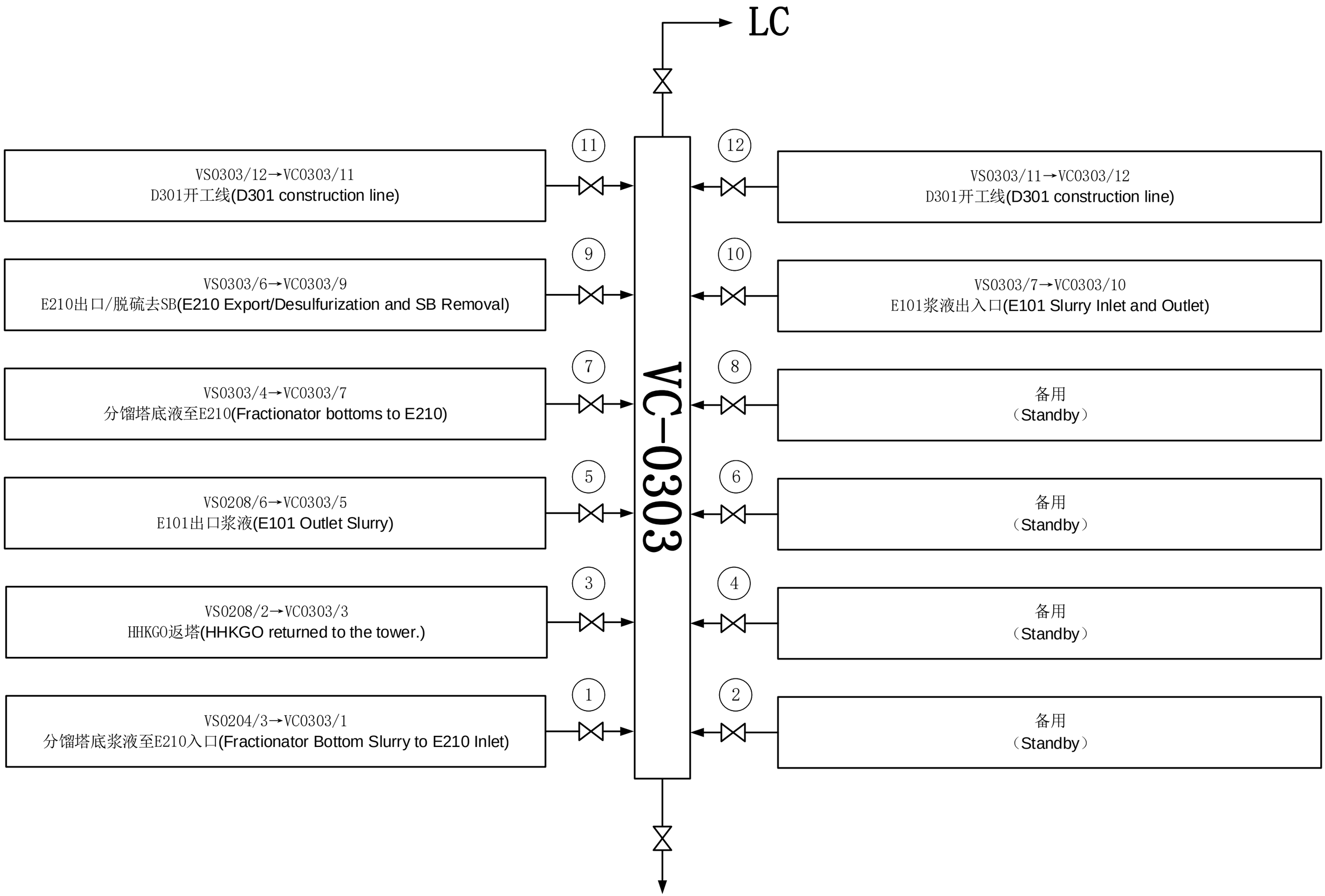

LC
VC-0207
11
备用
（Standby）
9
VS0207/7→VC0207/9
VGO至C210，C203(VGO TO C210，C203)
7
VS0209/7→VC0207/7
E105外甩油浆(E105 decanting slurry)
5
VS0207/4→VC0207/5
D102回流管线，温度计，液位计，D102安全阀(D102 return line, thermometer, level gauge, D102 safety valve)
3
VS0208/3→VC0207/3
开工VGO自HDO阀组到D102管廊处(Starting VGO from HDO valve block to D102 pipe gallery)
1
VS0208/1→VC0207/1
污泥至R101，污泥回流至D102,P103A出口(Sludge returns to R101, sludge returns to D102 and P103A outlets)
12
备用
（Standby）
10
VS0303/8→VC0207/10
P102浆液至E101(P102 Slurry to E101)
8
VS0203/10→VC0207/8
开工VGO至D210，开工VGO阀组(Starting VGO to D210, starting VGO valve group)
6
VS0209/6→VC0207/6
开工VGO至阀组(Starting VGO to Valve Group)
4
VS0205/5→VC0207/4
P103A/B 泵入口管线，P103B 出口管线，D102 抽出口管线和HCD、LD管线(P103A/B pump inlet pipeline, P103B outlet pipeline, D102 extraction outlet pipeline and HCD and LD pipelines)
2
VS0201/2→VC0207/2
D211 （SB管线主管廊区至稳定管廊界区）(D211 (SB pipeline main pipe gallery area to stable pipe gallery boundary area))

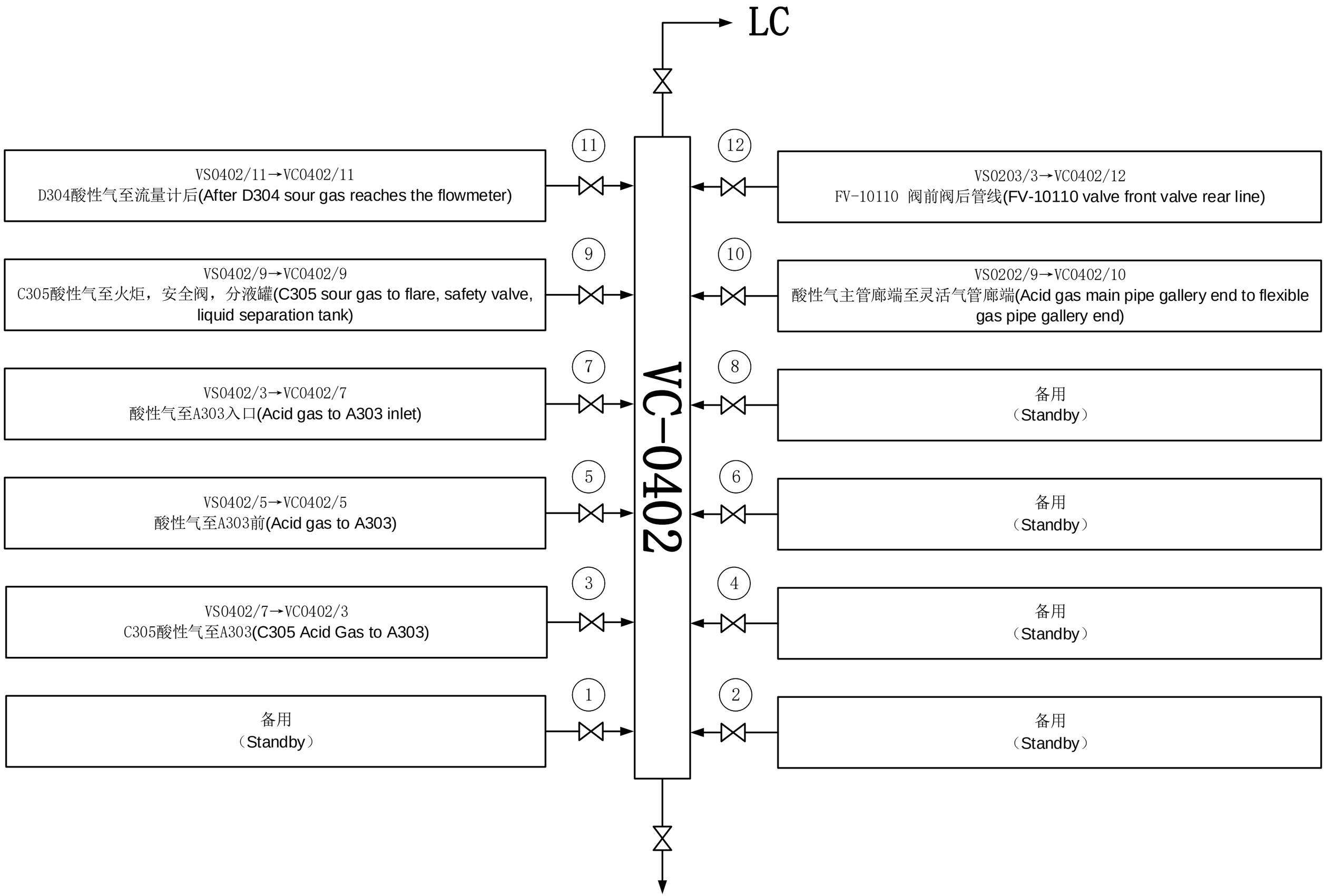

LC
VC-0208
11
备用
（Standby）
12
备用
（Standby）
9
VS0208/8→VC0208/9
减压渣油至P101 FV-10102阀后管线(Vacuum residue to P101 FV-10102 valve rear line)
10
VS0208/10→VC0208/10
分馏塔底液至E210 南北管廊端(Fractionator Bottom Liquid to E210 North and South Pipe Gallery End)
7
VS0205/3→VC0208/7
FV10302至C101(FV10302 TO C101)
8
VS0208/7→VC0208/8
P102 浆液管线FV阀后至C101(P102 Slurry Line FV Valve to C101)
5
VS0303/9→VC0208/5
减压渣油/脱硫区SB(Vacuum residue/desulfurization zone SB)
6
VS0205/2→VC0208/6
E101至FV-10301(E101 TO FV-10301)
3
VS0208/4→VC0208/3
P107入口，D107抽出口(P107 inlet, D107 outlet)
4
VS0208/5→VC0208/4
P107出口至调节阀(P107 Exit to Regulating Valve)
1
VS0204/2→VC0208/1
燃料气自总管至三器干燥/污泥回炼（管廊到反应平台 ）(FG from the main pipe to the third dryer/sludge recycle (pipe gallery to reaction platform))
2
VS0205/1→VC0208/2
减压渣油至E231（分馏管廊端），HHKGO FV-20101阀后管线至C201（分馏管廊端）(VR to E231 (fractionating pipe gallery end), HHKGO FV-20101 valve rear line to C201 (fractionating pipe gallery end))

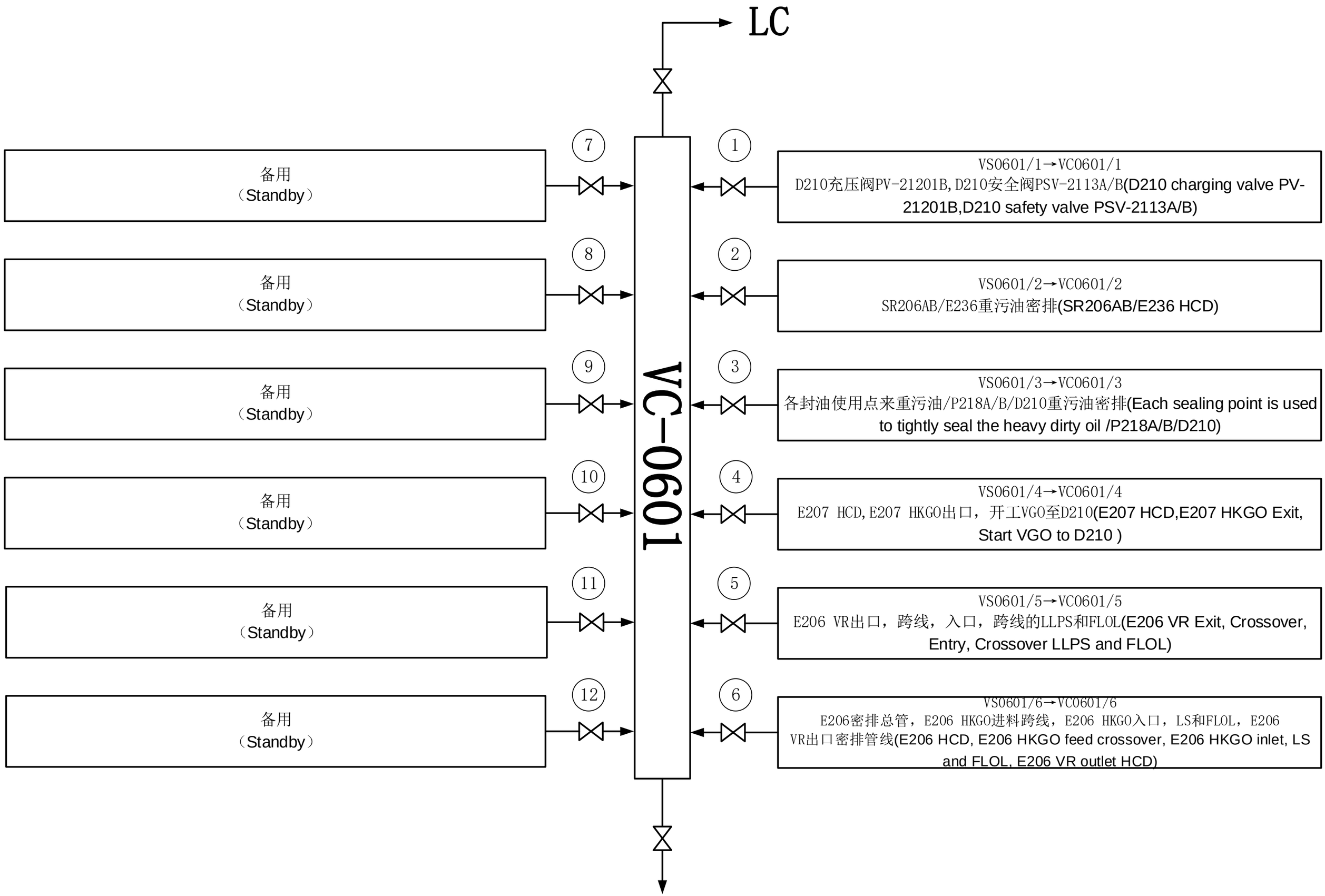

LC
VC-0209
11
备用
（Standby）
12
备用
（Standby）
9
VS0209/8→VC0209/9
加氢尾油自炼厂(Hydrogenation tail oil from refinery)
10
备用
（Standby）
7
VS0201/7→VC0209/7
蜡油至罐区，开工蜡油至阀组 （主管廊）(Wax oil to tank farm, start wax oil to valve group (main pipe gallery))
8
VS0201/8→VC0209/8
E105外甩出装置至北界区阀(E105 External Dumping Device to North Boundary Valve)
5
备用
（Standby）
6
VS0205/7→VC0209/6
D102入口(D102 entrance)
3
VS0202/4→VC0209/3
A221 出口管线HCD总管(HCD header of A221 outlet line)
4
VS0202/5→VC0209/4
A221 出口管线HCD(A221 outlet line HCD)
1
VS0202/2→VC0209/1
A221 出口管线(A221 outlet line)
2
VS0202/3→VC0209/2
污油去精炼（北界区管廊处）(The dirty oil is refined (at the pipe gallery in the north boundary area))

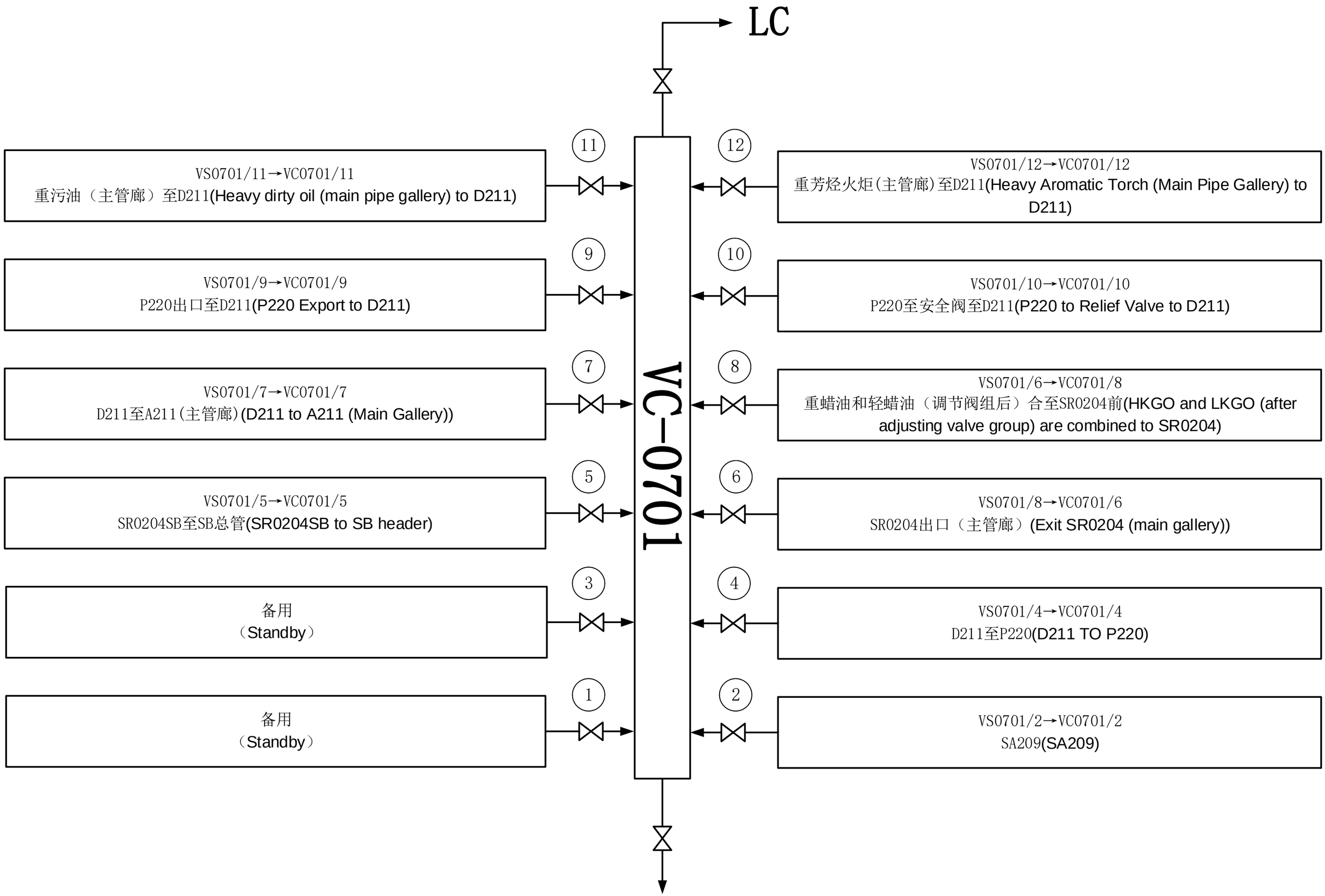

LC
VC-0301
11
VS0301/11→VC0301/11
脱硫区SB(Desulfurization zone SB)
9
备用
（Standby）
7
备用
（Standby）
5
备用
（Standby）
3
VS0301/3→VC0301/3
FXG C302出口至E306A/B(Export FXG C302 to E306A/B)
1
备用
（Standby）
12
VS0301/12→VC0301/12
E306B FXG入口(E306B FXG Entry)
10
VS0301/10→VC0301/10
E306A FXG入口(E306A FXG Entry)
8
备用
（Standby）
6
备用
（Standby）
4
备用
（Standby）
2
备用
（Standby）

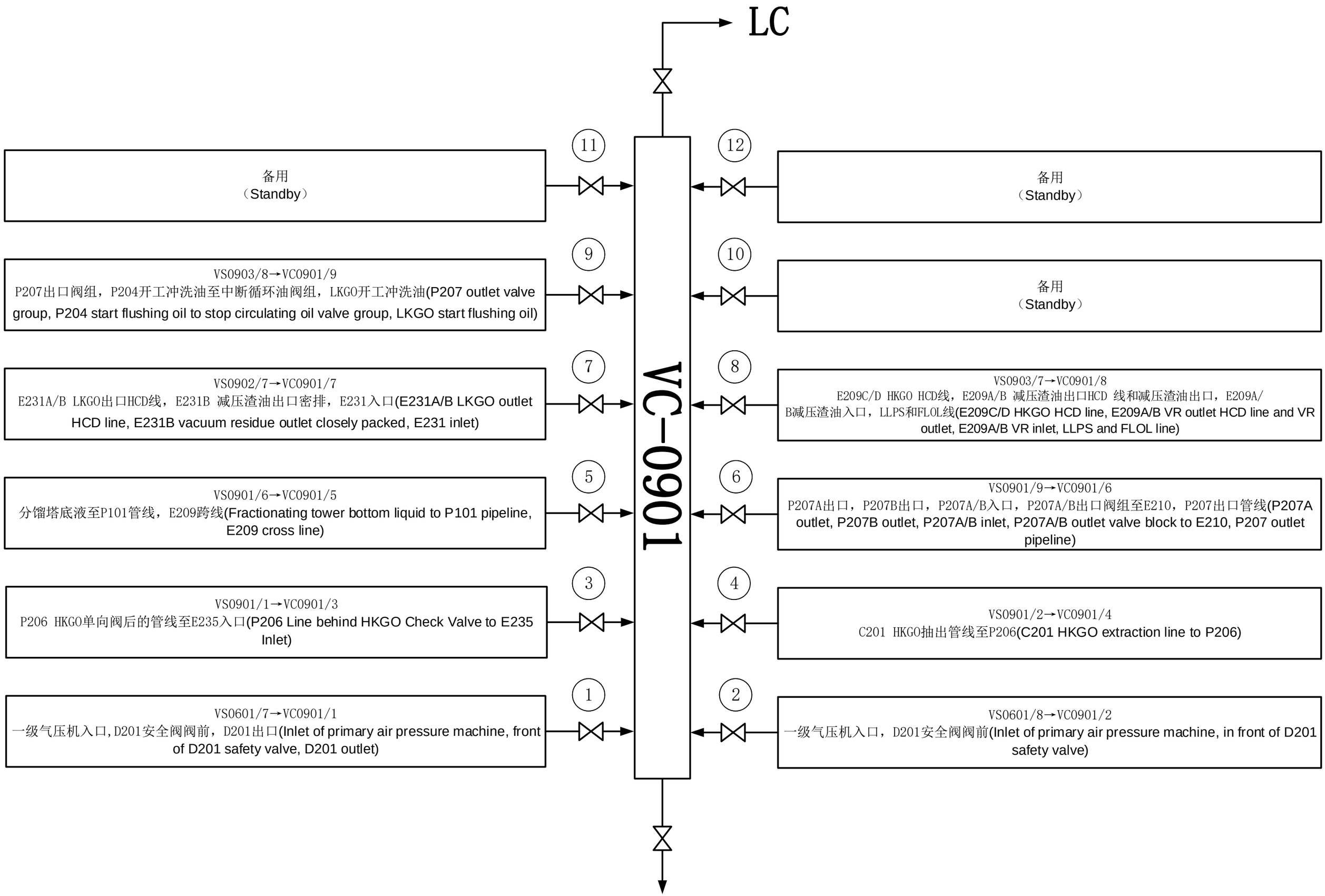

LC
VC-0302
11
VS0302/11→VC0302/11
脱硫区SB(Desulfurization zone SB)
12
备用
（Standby）
9
VS0302/9→VC0302/9
E101出入口及跨线(E101 Entrance and Exit and Crossing Line)
10
备用
（Standby）
7
VS0302/3→VC0302/7
E101 SB(E101 SB)
8
备用
（Standby）
5
VS0302/5→VC0302/5
E210出口及SB/脱硫区SB(E210 outlet and SB/ desulfurization zone SB)
6
备用
（Standby）
3
VS0302/7→VC0302/3
E210入口及跨线(E210 Entry and Crossing)
4
备用
（Standby）
1
备用
（Standby）
2
备用
（Standby）

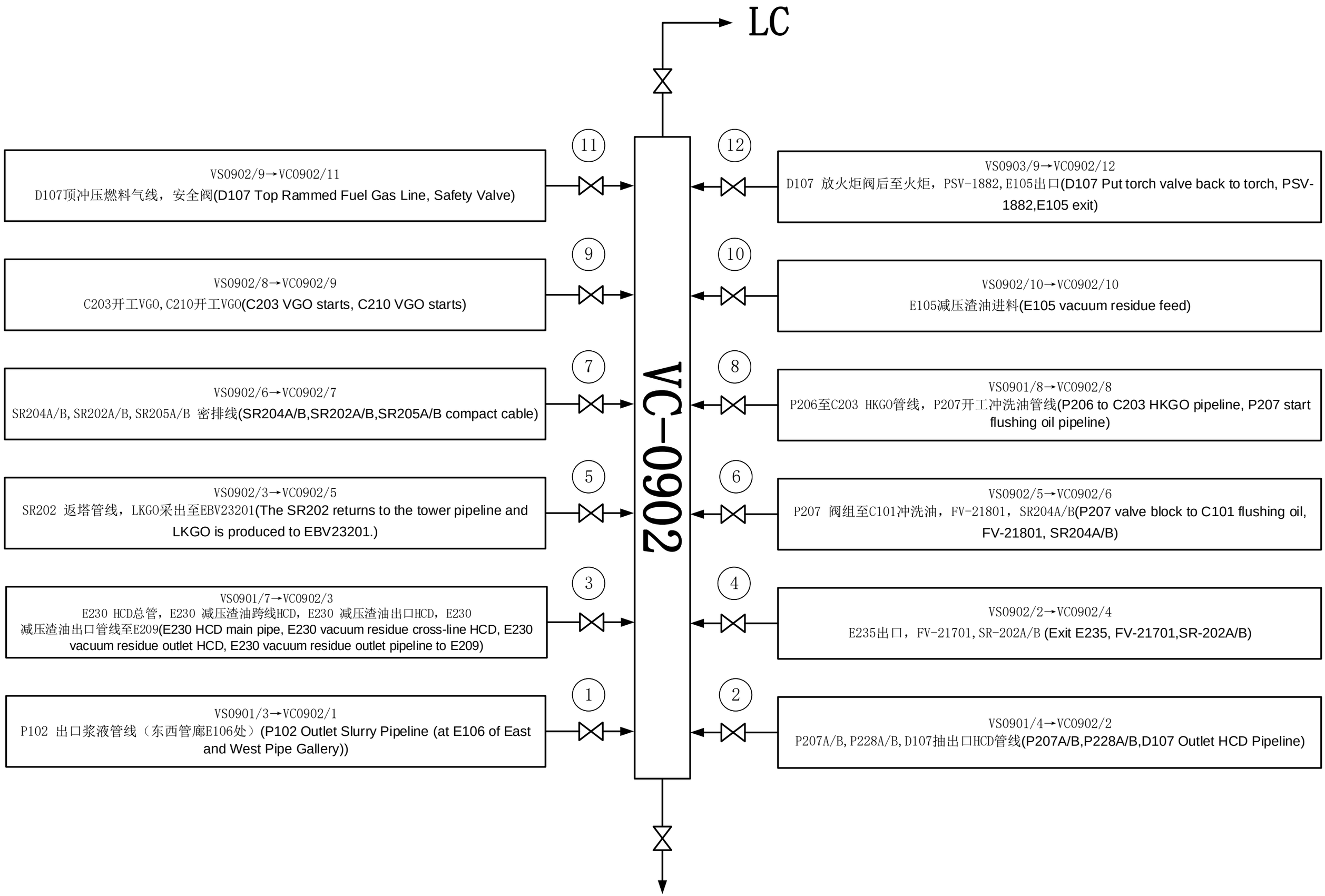

LC
VC-0303
11
VS0303/12→VC0303/11
D301开工线(D301 construction line)
12
VS0303/11→VC0303/12
D301开工线(D301 construction line)
9
VS0303/6→VC0303/9
E210出口/脱硫去SB(E210 Export/Desulfurization and SB Removal)
10
VS0303/7→VC0303/10
E101浆液出入口(E101 Slurry Inlet and Outlet)
7
VS0303/4→VC0303/7
分馏塔底液至E210(Fractionator bottoms to E210)
8
备用
（Standby）
5
VS0208/6→VC0303/5
E101出口浆液(E101 Outlet Slurry)
6
备用
（Standby）
3
VS0208/2→VC0303/3
HHKGO返塔(HHKGO returned to the tower.)
4
备用
（Standby）
1
VS0204/3→VC0303/1
分馏塔底浆液至E210入口(Fractionator Bottom Slurry to E210 Inlet)
2
备用
（Standby）

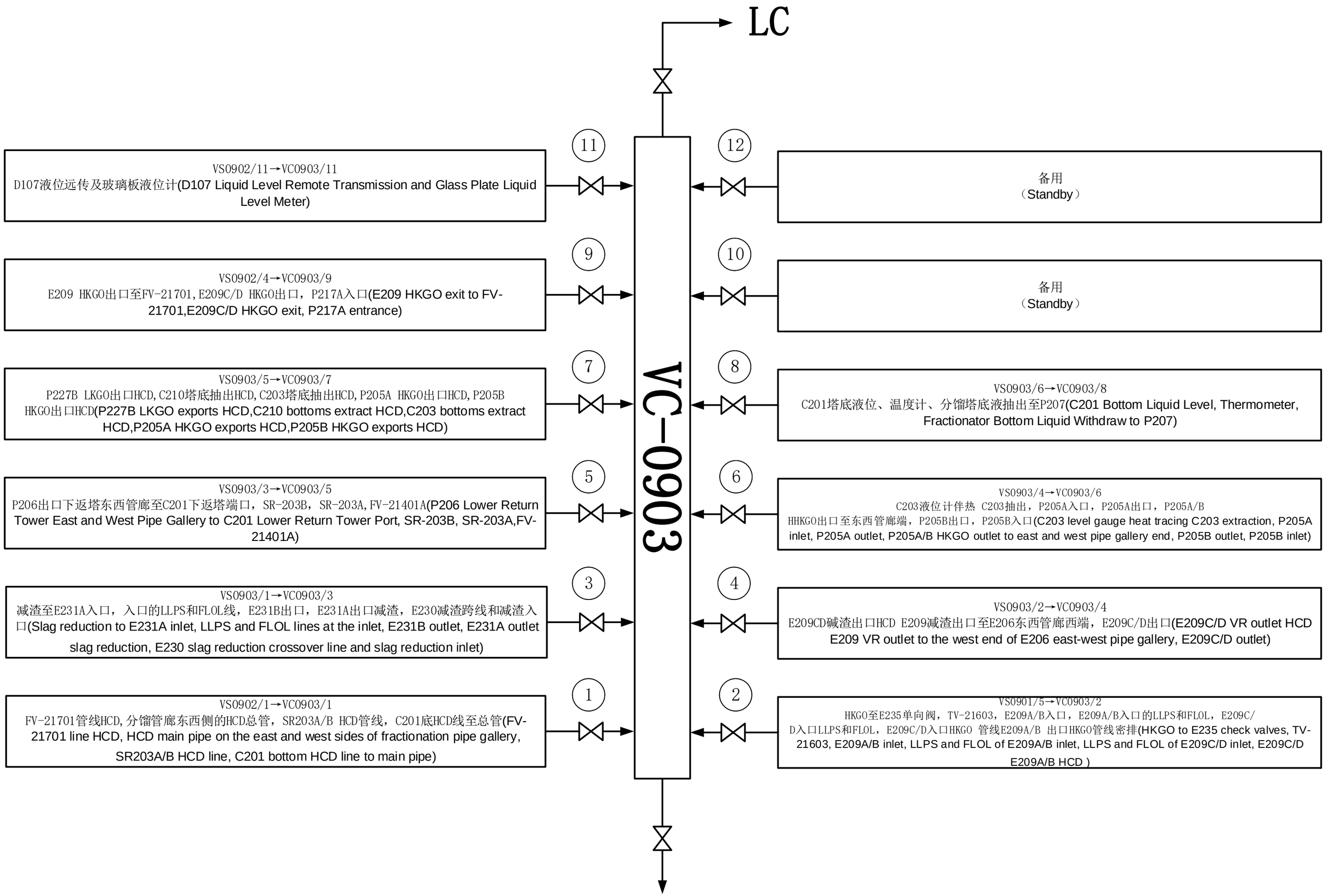

LC
VC-0402
11
VS0402/11→VC0402/11
D304酸性气至流量计后(After D304 sour gas reaches the flowmeter)
9
VS0402/9→VC0402/9
C305酸性气至火炬，安全阀，分液罐(C305 sour gas to flare, safety valve, liquid separation tank)
7
VS0402/3→VC0402/7
酸性气至A303入口(Acid gas to A303 inlet)
5
VS0402/5→VC0402/5
酸性气至A303前(Acid gas to A303)
3
VS0402/7→VC0402/3
C305酸性气至A303(C305 Acid Gas to A303)
1
备用
（Standby）
12
VS0203/3→VC0402/12
FV-10110 阀前阀后管线(FV-10110 valve front valve rear line)
10
VS0202/9→VC0402/10
酸性气主管廊端至灵活气管廊端(Acid gas main pipe gallery end to flexible gas pipe gallery end)
8
备用
（Standby）
6
备用
（Standby）
4
备用
（Standby）
2
备用
（Standby）

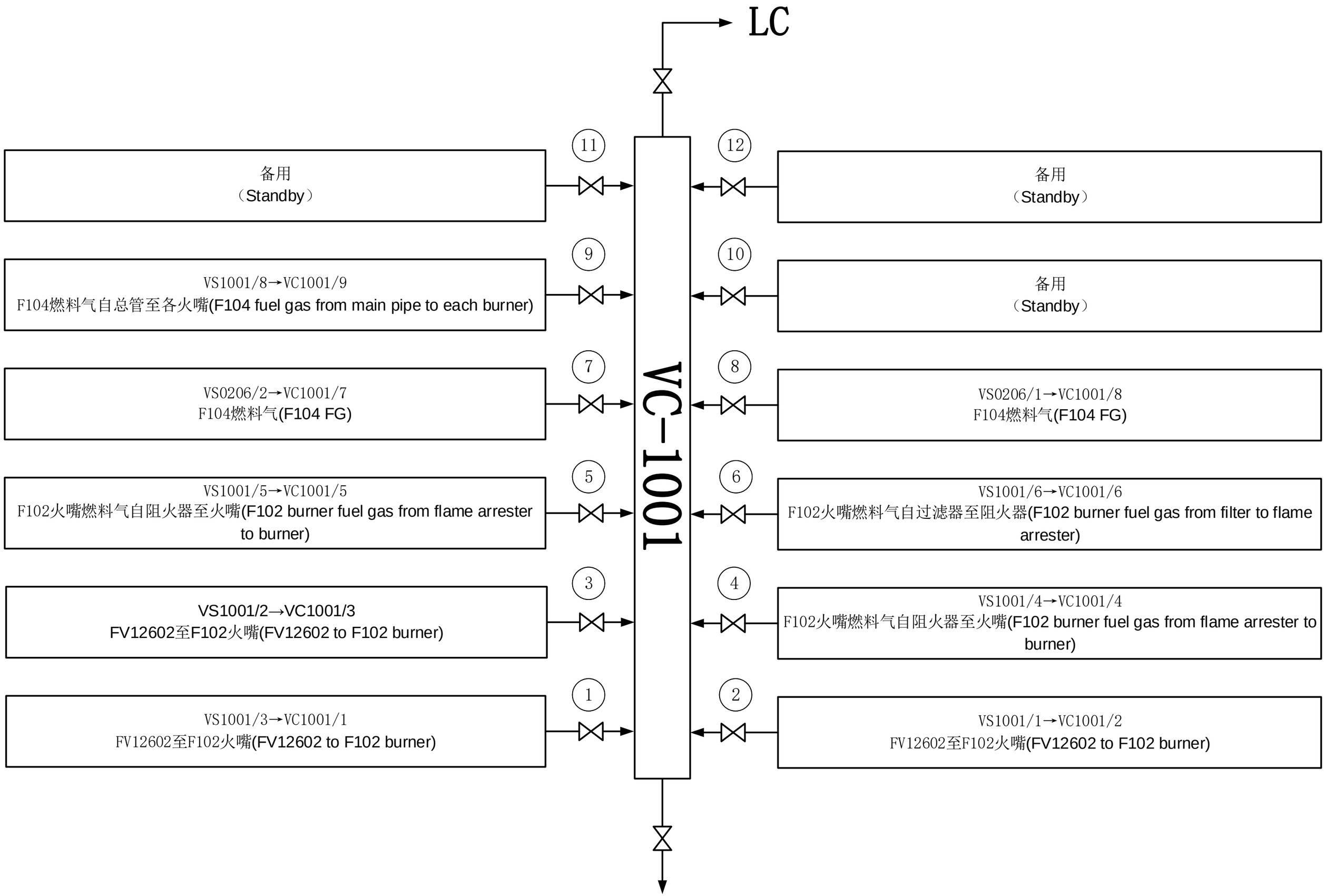

LC
VC-0601
7
备用
（Standby）
8
备用
（Standby）
9
备用
（Standby）
10
备用
（Standby）
11
备用
（Standby）
12
备用
（Standby）
1
VS0601/1→VC0601/1
D210充压阀PV-21201B,D210安全阀PSV-2113A/B(D210 charging valve PV-21201B,D210 safety valve PSV-2113A/B)
2
VS0601/2→VC0601/2
SR206AB/E236重污油密排(SR206AB/E236 HCD)
3
VS0601/3→VC0601/3
各封油使用点来重污油/P218A/B/D210重污油密排(Each sealing point is used to tightly seal the heavy dirty oil /P218A/B/D210)
4
VS0601/4→VC0601/4
E207 HCD,E207 HKGO出口，开工VGO至D210(E207 HCD,E207 HKGO Exit, Start VGO to D210)
5
VS0601/5→VC0601/5
E206 VR出口，跨线，入口，跨线的LLPS和FLOL(E206 VR Exit, Crossover, Entry, Crossover LLPS and FLOL)
6
VS0601/6→VC0601/6
E206密排总管，E206 HKGO进料跨线，E206 HKGO入口，LS和FLOL，E206 VR出口密排管线(E206 HCD, E206 HKGO feed crossover, E206 HKGO inlet, LS and FLOL, E206 VR outlet HCD)


LC
VC-0701
11
VS0701/11→VC0701/11
重污油（主管廊）至D211(Heavy dirty oil (main pipe gallery) to D211)
9
VS0701/9→VC0701/9
P220出口至D211(P220 Export to D211)
7
VS0701/7→VC0701/7
D211至A211(主管廊)(D211 to A211 (Main Gallery))
5
VS0701/5→VC0701/5
SR0204SB至SB总管(SR0204SB to SB header)
3
备用
（Standby）
1
备用
（Standby）
12
VS0701/12→VC0701/12
重芳烃火炬(主管廊)至D211(Heavy Aromatic Torch (Main Pipe Gallery) to D211)
10
VS0701/10→VC0701/10
P220至安全阀至D211(P220 to Relief Valve to D211)
8
VS0701/6→VC0701/8
重蜡油和轻蜡油（调节阀组后）合至SR0204前(HKGO and LKGO (after adjusting valve group) are combined to SR0204)
6
VS0701/8→VC0701/6
SR0204出口（主管廊）(Exit SR0204 (main gallery))
4
VS0701/4→VC0701/4
D211至P220(D211 TO P220)
2
VS0701/2→VC0701/2
SA209(SA209)


LC
VC-0901
11
备用
（Standby）
12
备用
（Standby）
9
VS0903/8→VC0901/9
P207出口阀组，P204开工冲洗油至中断循环油阀组，LKGO开工冲洗油(P207 outlet valve group, P204 start flushing oil to stop circulating oil valve group, LKGO start flushing oil)
10
备用
（Standby）
7
VS0902/7→VC0901/7
E231A/B LKGO出口HCD线，E231B 减压渣油出口密排，E231入口(E231A/B LKGO outlet HCD line, E231B vacuum residue outlet closely packed, E231 inlet)
8
VS0903/7→VC0901/8
E209C/D HKGO HCD线，E209A/B 减压渣油出口HCD 线和减压渣油出口，E209A/B减压渣油入口，LLPS和FLOL线(E209C/D HKGO HCD line, E209A/B VR outlet HCD line and VR outlet, E209A/B VR inlet, LLPS and FLOL line)
5
VS0901/6→VC0901/5
分馏塔底液至P101管线，E209跨线(Fractionating tower bottom liquid to P101 pipeline, E209 cross line)
6
VS0901/9→VC0901/6
P207A出口，P207B出口，P207A/B入口，P207A/B出口阀组至E210，P207出口管线(P207A outlet, P207B outlet, P207A/B inlet, P207A/B outlet valve block to E210, P207 outlet pipeline)
3
VS0901/1→VC0901/3
P206 HKGO单向阀后的管线至E235入口(P206 Line behind HKGO Check Valve to E235 Inlet)
4
VS0901/2→VC0901/4
C201 HKGO抽出管线至P206(C201 HKGO extraction line to P206)
1
VS0601/7→VC0901/1
一级气压机入口,D201安全阀阀前，D201出口(Inlet of primary air pressure machine, front of D201 safety valve, D201 outlet)
2
VS0601/8→VC0901/2
一级气压机入口，D201安全阀阀前(Inlet of primary air pressure machine, in front of D201 safety valve)


LC
VC-0902
11
VS0902/9→VC0902/11
D107顶冲压燃料气线，安全阀(D107 Top Rammed Fuel Gas Line, Safety Valve)
9
VS0902/8→VC0902/9
C203开工VGO,C210开工VGO(C203 VGO starts, C210 VGO starts)
7
VS0902/6→VC0902/7
SR204A/B,SR202A/B,SR205A/B 密排线(SR204A/B,SR202A/B,SR205A/B compact cable)
5
VS0902/3→VC0902/5
SR202 返塔管线，LKGO采出至EBV23201(The SR202 returns to the tower pipeline and LKGO is produced to EBV23201.)
3
VS0901/7→VC0902/3
E230 HCD总管，E230 减压渣油跨线HCD，E230 减压渣油出口HCD，E230 减压渣油出口管线至E209(E230 HCD main pipe, E230 vacuum residue cross-line HCD, E230 vacuum residue outlet HCD, E230 vacuum residue outlet pipeline to E209)
1
VS0901/3→VC0902/1
P102 出口浆液管线（东西管廊E106处）(P102 Outlet Slurry Pipeline (at E106 of East and West Pipe Gallery))
12
VS0903/9→VC0902/12
D107 放火炬阀后至火炬，PSV-1882,E105出口(D107 Put torch valve back to torch, PSV-1882,E105 exit)
10
VS0902/10→VC0902/10
E105减压渣油进料(E105 vacuum residue feed)
8
VS0901/8→VC0902/8
P206至C203 HKGO管线，P207开工冲洗油管线(P206 to C203 HKGO pipeline, P207 start flushing oil pipeline)
6
VS0902/5→VC0902/6
P207 阀组至C101冲洗油，FV-21801，SR204A/B(P207 valve block to C101 flushing oil, FV-21801, SR204A/B)
4
VS0902/2→VC0902/4
E235出口，FV-21701,SR-202A/B (Exit E235, FV-21701,SR-202A/B)
2
VS0901/4→VC0902/2
P207A/B,P228A/B,D107抽出口HCD管线(P207A/B,P228A/B,D107 Outlet HCD Pipeline)


LC
VC-0903
11
VS0902/11→VC0903/11
D107液位远传及玻璃板液位计(D107 Liquid Level Remote Transmission and Glass Plate Liquid Level Meter)
12
备用
（Standby）
9
VS0902/4→VC0903/9
E209 HKGO出口至FV-21701,E209C/D HKGO出口，P217A入口(E209 HKGO exit to FV-21701,E209C/D HKGO exit, P217A entrance)
10
备用
（Standby）
7
VS0903/5→VC0903/7
P227B LKGO出口HCD,C210塔底抽出HCD,C203塔底抽出HCD,P205A HKGO出口HCD,P205B HKGO出口HCD(P227B LKGO exports HCD,C210 bottoms extract HCD,C203 bottoms extract HCD,P205A HKGO exports HCD,P205B HKGO exports HCD)
8
VS0903/6→VC0903/8
C201塔底液位、温度计、分馏塔底液抽出至P207(C201 Bottom Liquid Level, Thermometer, Fractionator Bottom Liquid Withdraw to P207)
5
VS0903/3→VC0903/5
P206出口下返塔东西管廊至C201下返塔端口，SR-203B，SR-203A,FV-21401A(P206 Lower Return Tower East and West Pipe Gallery to C201 Lower Return Tower Port, SR-203B, SR-203A,FV-21401A)
6
VS0903/4→VC0903/6
C203液位计伴热 C203抽出，P205A入口，P205A出口，P205A/B HHKGO出口至东西管廊端，P205B出口，P205B入口(C203 level gauge heat tracing C203 extraction, P205A inlet, P205A outlet, P205A/B HKGO outlet to east and west pipe gallery end, P205B outlet, P205B inlet)
3
VS0903/1→VC0903/3
减渣至E231A入口，入口的LLPS和FLOL线，E231B出口，E231A出口减渣，E230减渣跨线和减渣入口(Slag reduction to E231A inlet, LLPS and FLOL lines at the inlet, E231B outlet, E231A outlet slag reduction, E230 slag reduction crossover line and slag reduction inlet)
4
VS0903/2→VC0903/4
E209CD碱渣出口HCD E209减渣出口至E206东西管廊西端，E209C/D出口(E209C/D VR outlet HCD E209 VR outlet to the west end of E206 east-west pipe gallery, E209C/D outlet)
1
VS0902/1→VC0903/1
FV-21701管线HCD,分馏管廊东西侧的HCD总管，SR203A/B HCD管线，C201底HCD线至总管(FV-21701 line HCD, HCD main pipe on the east and west sides of fractionation pipe gallery, SR203A/B HCD line, C201 bottom HCD line to main pipe)
2
VS0901/5→VC0903/2
HKGO至E235单向阀，TV-21603，E209A/B入口，E209A/B入口的LLPS和FLOL，E209C/D入口LLPS和FLOL，E209C/D入口HKGO 管线E209A/B 出口HKGO管线密排(HKGO to E235 check valves, TV-21603, E209A/B inlet, LLPS and FLOL of E209A/B inlet, LLPS and FLOL of E209C/D inlet, E209C/D E209A/B HCD)


LC
VC-1001
11
备用
（Standby）
12
备用
（Standby）
9
VS1001/8→VC1001/9
F104燃料气自总管至各火嘴(F104 fuel gas from main pipe to each burner)
10
备用
（Standby）
7
VS0206/2→VC1001/7
F104燃料气(F104 FG)
8
VS0206/1→VC1001/8
F104燃料气(F104 FG)
5
VS1001/5→VC1001/5
F102火嘴燃料气自阻火器至火嘴(F102 burner fuel gas from flame arrester to burner)
6
VS1001/6→VC1001/6
F102火嘴燃料气自过滤器至阻火器(F102 burner fuel gas from filter to flame arrester)
3
VS1001/2→VC1001/3
FV12602至F102火嘴(FV12602 to F102 burner)
4
VS1001/4→VC1001/4
F102火嘴燃料气自阻火器至火嘴(F102 burner fuel gas from flame arrester to burner)
1
VS1001/3→VC1001/1
FV12602至F102火嘴(FV12602 to F102 burner)
2
VS1001/1→VC1001/2
FV12602至F102火嘴(FV12602 to F102 burner)