

Changes needed? ask A. Ferrero.

COMPASS Checklist 2007

Date: _____ 2007 Night _____ Day _____ Evening _____

Shiftleader: _____

to be performed twice per shift

General Checks	Time
First run number after checklist done:	
Print and check Beam Line Magnet Status and Spill	<i>(not yet available)</i>
Print and check STATUS GENERAL	<i>(not yet available)</i>
Check Murphy for every run	
Print Booky twice and check every run Write a comment on the logbook, describing if and what problems were found	≈ 2 and 6 hrs after shift start
Print and check Scaler 48 hr booky once per shift <small>(cd \$HOME then ./guitest then click Make Booky then print tmplast.ps)</small>	
Check triggers in TCS status window regularly	
Print and check masked alarms in slow control Print and check channels OFF and channel settings lists Periodically check all MMs/DCs are ON (rightmost screen) _____	how many channels off? _____
run check_trigger: check if trigger rates are ok	
run check_daq: look for red lines; if yes, call DAQ expert	
check EVB disk usage, if any in red state call DAQ expert	
Reference Run number	
SM2-NMR reading (Scope & history in DCS) SM1-Hall (DVM) “+” Value: (59.97 ± 0.04) _____ / “-” Value: (59.72 ± 0.04) _____ <small>(valid for target solenoid field @ 1T. “+” and “-” refer to the target filed configurations.)</small>	1.5935 ± 0.0005 _____ / _____
DAQ Barrack, check no audible alarm _____ T below $\simeq 30^{\circ}\text{c}$ _____	
RICH Gassystem: PD0 – PD7 flow meters > 50 l/h(24.5.03): _____ If not ok: switch off PD HV and call expert Check the blue compressor: it must be running (vibrations): _____ If not on: switch off PD HV and call expert	
MW2 Gassystem Check 6 input flow meters: 10-35 l/h 1 – 6: _____ Check 6 output bubblers: all bubbling? 1 – 6: _____ If some are not bubbling: call expert safety bubbler should not bubble more than 0.1 - 1 hz _____	
MW1 and RICH Wall Gassystem Check 8 MW1 input flow meters $\simeq 10 - 20$ l/h 1 – 8 _____ Check 8 RW input flow meters (fm): fm 1-3,5-8 $\simeq 5 - 20$ l/h _____, fm 4 $\simeq 14 - 20$ l/h _____	

MM and DC Gassystems

Check 6 MM output bubblers: all bubbling? 1 – 6 _____

Check 3 DC output bubblers: all bubbling? 1 – 3 _____

Check that security bubblers are NOT bubbling (lower row): _____

RICH light gas pipe: He system

Check 2 flow meters: #8: Range 6 < flow < 16 l/s: #10 Range 10 < flow < 20 l/s:

Note: #8 close to lower limit

MW2 Gas Control Modules (green rack)MW2: Ar 90 _____ CH₄ 30 _____

If flows deviate by more than 2 units: Press “RESET” button on control unit

PLC3 (W45, MM, DC, RWall/MW1) (do not care about MW2 here)

press “Logo” to get started (Note: press “Esc” to get back one menu)

Check that W45, MM, DC, RWall/MW1 Battery are ON _____

If something is not ON, call expert and switch off HV of chamber concerned

Press “**MM**”: Check “Flowmeters: ON”? _____ check Ne flow: 6 ± 1 l/h: _____Press “Curves”(R8): Check “Actual Value” C₂H₆ is 10% _____Press “Next”(R8): Check “Actual Value” CF₄ is 10% _____Press “**DC**”: Check “Flowmeters: ON”? _____ check Ar flow: 7 ± 2 l/h: _____Press “Curves”(R8): Check “Actual Value” C₂H₆ is 45 ± 1% _____Press “Next”(R8): Check “Actual Value” CF₄ is 10% _____Press “**W45**”: Check “Flowmeters: ON”? _____ check Argon flow: 80 ± 20 l/h _____Press “Curves”(R8): Check “Actual Value” CF₄ is 10% _____Press “Next”(R8): Check “Actual Value” CO₂ is 5% _____Press “**Rich Wall**”: Check “Flowmeters: ON”? _____Press “Curves”(R8): Check “Actual Value” CO₂ is 30% _____

Press “Logo” to finish

Flows Silicon: 3 flow meters (between grey rack with bubblers and green rack)

Si01: ≈350 l/h _____ Si02: ≈350 l/h _____ Si03: ≈350 l/h _____

PLC2 (STRAW, MWPC, GEMs, CSI)

press “Logo” to get started (Note: press “Esc” to get back one menu)

Check that Straw, MWPC, GEM, CSI Battery are ON _____

If something is not ON, call expert and switch off HV of chamber concerned

Press “**Straw setting**”: Check “Flowmeters: ON”? _____Check Ar flow: 105 ± 5 l/h: _____ CF₄ flow: 13 ± 1 l/h: _____ CO₂ flow: 13 ± 1 l/h: _____Press “CF₄ mixture curve”(R6): Check “Actual Value” CF₄ is 10% _____Press “Esc”, then “CO₂ mixture curve”(R8): Check “Actual Value” CO₂ is 10% _____Press “**MWPC setting**”: Check “Flowmeters: ON”? _____Press “CO₂ mixture curve”(R6): Check “Actual Value” CO₂ is 6% _____Press “Esc”, then “CF₄ mixture curve”(R8): Check “Actual Value” CF₄ is 20% _____Press “**GEMs setting**”: Check “Flowmeters: ON”? _____Check Ar flow: 30 l/h: _____ CO₂ flow: 13 l/h: _____Press “CO₂ mixture curve”(R6): Check “Actual Value” CO₂ is constant at 30% _____

Press “Logo” to finish

GEMs: flow to GM01 to GM11: 3 < flow < 5 l/h (upper edge of ball) _____

Knock on the glass cover if the ball does not move

MWPCs

MWPCs input flow meters: between 5 and 17 units _____

Straws

Flow meters 1-3, 5-17 with 60 l/h ? _____

All flowmeter readings between red labels ? _____

W45 Cl. 1 50 60 l/h _____ Cl. 2 50 60 l/h _____ Cl. 3 50 60 l/h _____