

COMPASS Checklist 2006

Date: _____ 2006 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	≈ 2 and 6 hrs after shift start
Print and check Scaler 48 hr booky once per shift	<i>(not yet available)</i>
Print and check masked alarms in slow control Print and check channels OFF and channel settings lists check DC/ $\mu\Omega$ control is displayed on up. right 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	
Reference Run number	
SM2-NMR reading (Scope & history in DCS)	1.5935 ± 0.0005 __ / __
SM1-Hall (DVM) + Value: (59.63 ± 0.04) __ / - Value: (59.70 ± 0.04) __	
DAQ Barrack, check no audible alarm _____ T below ≈ 30°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 Mixture: CH ₄ : ≈ 16 _____ Ar: ≈ 100 _____ safety bubbler should not bubble more than 0.1 - 1 hz _____	
MW1 and RICH Wall Gassystem Check 8 MW1 input flow meters ≈ 10 – 20 l/h 1 – 8 _____ Check 8 RW (ch1-ch8) input flow meters ≈ 5 – 15 l/h 1 – 8 _____	
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	

<p>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</p>
<p>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)</p>
<p>Check that W45, MM, DC, RWall/MW1 Battery are ON _____ If something is not ON, call expert and switch off HV of chamber concerned</p>
<p>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% _____</p>
<p>Press "DC": Check "Flowmeters: ON"? _____ check Ar flow: 7 ± 2 l/h: _____ Press "Curves" (R8): Check "Actual Value" C₂H₆ is 44 ± 1% _____ Press "Next" (R8): Check "Actual Value" CF₄ is 10% _____</p>
<p>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% _____</p>
<p>Press "Rich Wall": Check "Flowmeters: ON"? _____ Press "Curves" (R8): Check "Actual Value" CO₂ is 30% _____</p>
<p>Press "Logo" to finish</p>
<p>Flows Silicon: 3 flow meters (between grey rack with bubblers and green rack) Si01: ≈ 500 l/h _____ Si02: ≈ 350 l/h _____ Si03: ≈ 350 l/h _____</p>
<p>PLC2 (STRAW, MWPC, GEMs, CSI) press "Logo" to get started (Note: press "Esc" to get back one menu)</p>
<p>Check that Straw, MWPC, GEM, CSI Battery are ON _____ If something is not ON, call expert and switch off HV of chamber concerned</p>
<p>Press "Straw setting": Check "Flowmeters: ON"? _____ Check Ar flow: 95 ± 5 l/h: _____ CF₄ flow: 12 ± 1 l/h: _____ CO₂ flow: 12 ± 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% _____</p>
<p>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% _____</p>
<p>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% _____</p>
<p>Press "Logo" to finish</p>
<p>GEMs: flow to GM01 to GM11: $3 < \text{flow} < 5$ l/h (upper edge of ball) _____ Knock on the glass cover if the ball does not move</p>
<p>MWPCs MWPCs input flow meters: between 5 and 17 units _____</p>
<p>Straws Flow meters 1-3, 5-10, 12-17 with 60 l/h? _____ All flowmeter readings between red labels? _____</p>
<p>W45 Ch 1: 50 – 60 l/h _____ Ch 2: 50 – 60 l/h _____ Ch 3: 50 – 60 l/h _____ Ch 4: 50 – 60 l/h _____ Ch 5: 50 – 60 l/h _____ Ch 6: 50 – 60 l/h _____</p>