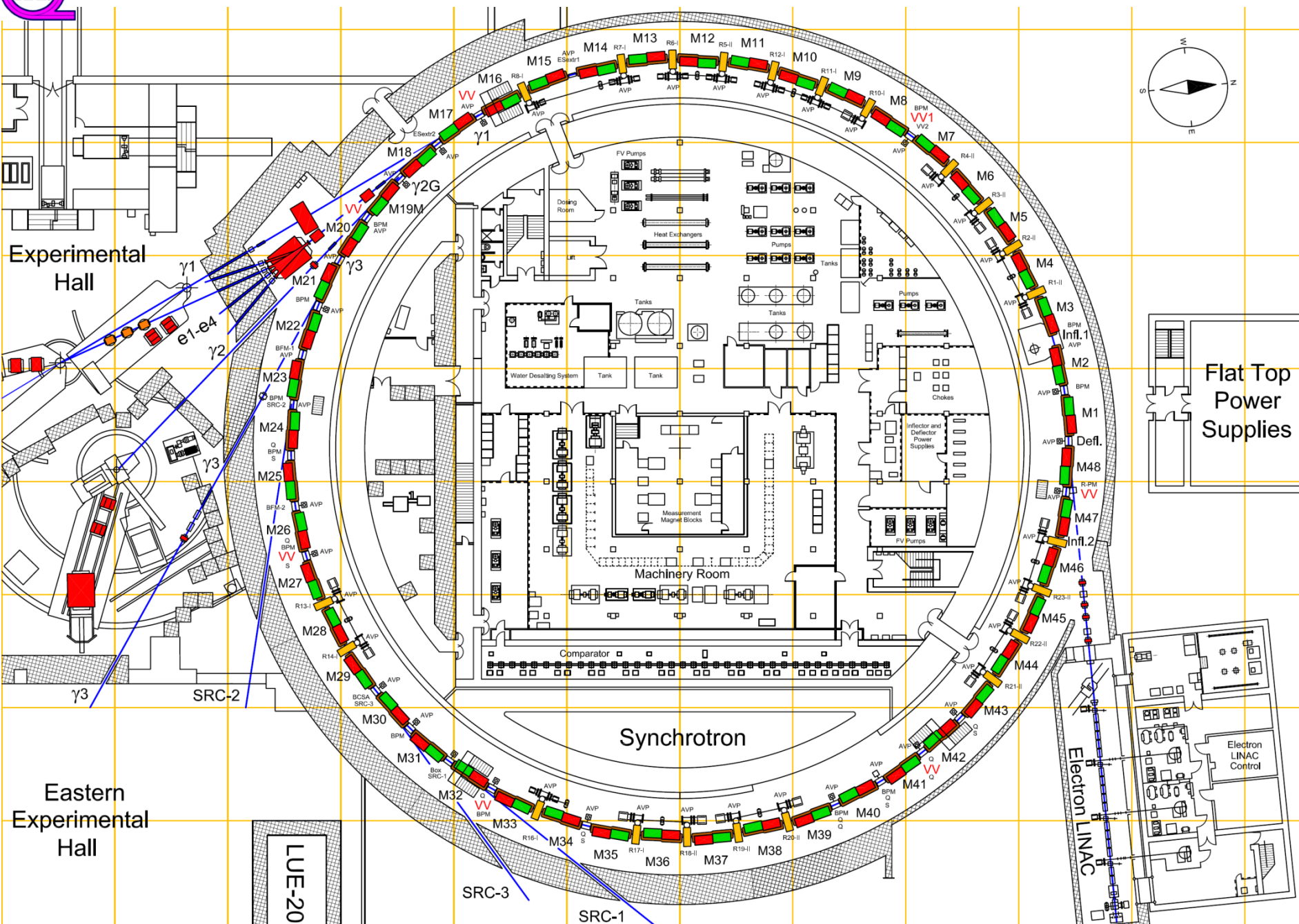
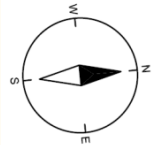


Synchrotron Complex AANL



Experimental Hall

Eastern Experimental Hall

Flat Top Power Supplies

Synchrotron

Electron LINAC

LUE-20

SRC-3

SRC-1

SRC-2

Machinery Room

Comparator

Dosing Room

Heat Exchangers

Tanks

FV Pumps

Water Desalting System

Tanks

Pumps

Chokes

Inflector and Deflector Power Supplies

Mechanical

Measurement Magnet Blocks

AVP

BPM

R-PM

Defl.

Inf. 1

Inf. 2

M48

M47

M46

M45

M44

M43

M42

M41

M40

M39

M38

M37

M36

M35

M34

M33

M32

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M19M

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Linear Accelerator LUE-75



Control Panel



Electron Gun



1st Acceleration Section



3 Acceleration Sections



1st Klystron



1st Klystron Supply



2nd Klystron



2nd Klystron Supply



3rd Klystron



3rd Klystron Supply



Turbo Molecular & Titanium Vacuum Pumps



Bending Magnet



Cooling & Temperature Stabilization Systems



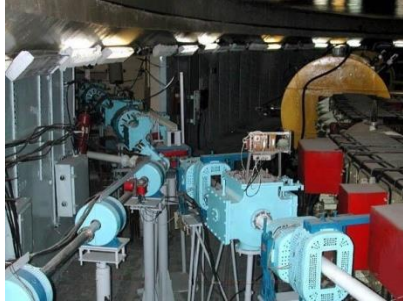


Linear Accelerator LUE-75

		Analogue		Digital		Analogue		Digital		
		Pcs	Pcs	Notes	Pcs	Notes	Pcs	Notes	Pcs	
Main Supply AC Voltage	1	3	Voltage	0		0		0		Calc. Instability
Main Supply AC Frequency	1	3	Freq	0		0		0		
Stabilized Supply AC Voltage	1	3	Voltage	0		0		0		Calc. Instability
Stabilized Supply AC Frequency	1	3	Freq	0		0		0		
Acceleration Sections	4	4	Temp.	0		0		0		
		4	Temp.	0		4	Temp.St	0		Stabilized 0.5°C
		2	Temp.	0		0		0		Water Volumes
Wave Absorber	4	4	Temp.	0		0		0		Ring Hall
Klystrons	3	3	Temp.	0		0		0		
		3	Pressure	0		0		0		
Klystrons Inductors	3	3	Temp.	0		0		0		
Klystrons Power Supplies	3	3	Current	0		3	Current	0		
Klystrons Lenses	3	3	Current	0		3	Current	0		
Klystrons Vacuum	3	3	Voltage	0		0		0		
		3	Current	0		0		0		
Sections Input Power (from Klys)	4	4	Power	0		0		0		Termo pair
Sections Correction Magnets	8	8	Current	0		0		1	I/O	
LINAC Magnetic Lenses	6	6	Current	0		6	Current	1	I/O	
Modulator Power Supply	1	1	Current	0		1	Current	1	I/O	
Sections Vacuum	4	8	Vacuum	0		0		8	I/O	Inputs+Outputs
Titan Vacuum Pumps SU	6	6	Current	0		0		6	I/O	
		6	Voltage	0		0		0		
		6	Temp.	0		0		0		
Turbo Molecular Vacuum Pumps	1	0		0		0		1	I/O	
Initial Vacuum Pumps	1	0		0		0		1	I/O	
Vacuum Valves	1	0		1	Op/Close	0		0		
Gun Cathode	1	1	Current	0		1	Current	1	I/O	
		1	Temp.	0		0		0		
Bending Magnet	1	1	Current	0		1	Current	1	I/O	Calc..Instability
		1	Field	0		0		0		
		1	Temp.	0		0		0		
TOTAL		97		1		19		21		



Injection Beam Line



No		Q-ty	Inputs				Outputs				Notes
			Analogue		Digital		Analogue		Digital		
			Pcs	Notes	Pcs	Notes	Pcs	Notes	Pcs	Notes	
	Correctors	2	2	Current	0		2	Current	2	I/O	
		6	6	Current	0		6	Current	6	I/O	
	Lenses	4	4	Current	0		4	Current	4	I/O	
	Deflector	1	1	Current	0		1	Current	1	I/O	0.1% - 0.01%
	Inflector	1	1	Voltage	0		0		1	I/O	5%
	Vacuum Valve	1	0		1	I/O	0		0		Beam Line Output
	Vit-1	3	3	Vacuum	0		0		3	I/O	
			3	Temp.	0		0		0		
	Turbo molecular Vacuum Pump	1	0		0		0		1	I/O	
	Titanium Vacuum Pump	2	2	Temp.	0		0		0		
	Titanium Vacuum Pump Power Supply	2	2	Current	0		0		1	I/O	In the control room
			2	Voltage	0		0		0		
			2	Temp.	0		0		0		
	Total		28		1		13		19		



Synchrotron



Injection Beam Line



Deflector



Inflector



48 Bending Magnets



γ_2 Extraction



12 Quadrupoles



Beam Position Monitors



Turbo Molecular Vacuum Pumps



Titanium Vacuum Pumps



Vacuum Valves

Synchrotron



	Q-ty	Inputs				Outputs				Notes
		Analogue		Digital		Analogue		Digital		
		Pcs	Notes	Pcs	Notes	Pcs	Notes	Pcs	Notes	
Main DC Power Supply	1	1	Voltage	0		0		1	I/O	
		1	Current	0		1	Current	0		
		1	Temp.	0		0		0		
Vacuum System	0	0		0		0		0		
Initial Vacuum Pumps	12	0		0		0		12	I/O	
Turbo Molecular Pumps	12	0		0		0		12	I/O	
Titan Pumps	52	52	Temp.	0		0		0		
Titan Pump Power Supplies	52	52	Current	0		0		52	I/O	
		52	Voltage	0		0		0		
		52	Temp.	0		0		0		
Vacuum Valves	7	0		7	Op/Close	0		0		
Vit-1	6	6	Vacuum	0		0		6	I/O	
		6	Temp.	0		0		0		
Bending Magnets	0	0		0		0		0		
BM Field	48	48	Field	0		0		0		
BM Radial Bump	48	48	Current	0		48	Current	48	I/O	On focusing half blocks
BM Median corrector 1	16	16	Current	0		16	Current	1	I/O	Na nechetnix polublokax
BM Median corrector 2	16	16	Current	0		16	Current	1	I/O	
BM Gradient correction 1	1	1	Current	0		1	Current	1	I/O	Na chetnix polublokax
BM Gradient correction 2	1	1	Current	0		1	Current	1	I/O	
BM quadratic correction	1	1	Current	0		1	Current	1	I/O	
Quadruples	12	12	Current	0		12	Current	12	I/O	
		12	Field	0		0		0		
		12	Temp.	0		0		0		
Sextuples	12	12	Current	0		12	Current	12	I/O	
		12	Field	0		0		0		
		12	Temp.	0		0		0		
BPM	6	6	Voltage	6		0		0		
Additional BPM	48	192	Voltage	0		0		0		
General	0	0		0		0		0		
Radiation Levels	0	6	Radiation	0		0		0		
Temperature	0	6	Temp.	0		0		0		
Ozone Level	6	6	Ozone	0		0		0		
Doors	2	0		2	Op/Close	0		0		
TOTAL		642		15		108		160		