

Reactor (SS)		Min. stirring volume (L)	Operating Pressure (bar g)	Operating Temperature (°C)	Working Volume
R8	Distillator	100	10mbar	-5 / +150	6044
R19	Reactor	100	0.5	-5 / +20	3400
R5	Distillator	70	10mbar	+20 / +180	1190
R101H	Hydrogenator	1000	40	0 / +150	2550
R101	Reactor	50	0.5	-5 / +140	2486
R102	Reactor	50	0.5	+10 / +40	1696
R103	Reactor	100	0.5	-5 / +140	4233
R401	Reactor Distillator	50	0.5 4mbar	-10 / +160	2593
R402	Reactor	50	0.5	-10 / +160	2423
R404	Reactor Hydrogenator	50	0.5 14	-10 / +160	2593

Reactor (MSG)		Min. stirring volume (L)	Operating Pressure (bar g)	Operating Temperature (°C)	Working Volume
R1	Reactor	60	0.5	-5 / +140	2944
R2	Reactor	60	0.5	-10 / +150	2950
R3	Reactor	/	5	-10 / +150	2944
R6	Reactor	60	0.5	-5 / +140	2944
R12	Reactor	60	0.5	-5 / +140	2944
R9	Reactor	100	0.5	-10 / +150	7950
R10	Reactor	100	0.5	-5 / +140	1968
R11	Reactor Hydrogenator	100	0.5 2.5	-10 / +150	2944
R14	Reactor	200	0	+20 / +180	2620
R15	Reactor	400	0.5	-10 / +140	6973
R16	Reactor	450	0.5	-10 / +140	6973
R17	Reactor	600	0.5	-10 / +150	6973

Reactor (MSGL)		Min. stirring volume (L)	Operating Pressure (bar g)	Operating Temperature (°C)	Working Volume	Autoclaves, Dryers ...		Min. stirring volume (L)	Operating Pressure (bar g)	Operating Temperature (°C)	Working Volume
R20	Reactor	100	0	+20 / +150	2890	A31	Hydrogenator	200	140	+20/ +250	385
R21	Reactor Distillator	400	0.5 4mbar	-5 / +150	6973	A32	Hydrogenator	200	140	+20/ +250	385
R201	Reactor	450	0.5	-5/+140	4574	A33	Hydrogenator	200	140	+20/ +250	385
R203	Reactor	450	0.5	-5/+140	6447	A34	Hydrogenator	200	140	+20/ +250	385
R204	Reactor	450	0.5	-5/+140	6979	S18	Dryers	NA	4mbar	T° Max 100	2550
R7	Reactor Distillator	450	0.5 4mbar	-5/+180	4574	S23	Dryers	NA	4mbar	T° Max 100	2550
R104A	Reactor	/	0.5	-5/+140	4157	Guédu	Dryers	NA	4mbar	T° Max 100	3000
R104B	Reactor	/	0.5	-5/+140	4574	SP	Dryers	NA	4mbar	T° Max 100	1000
R110	Reactor	200	0.5	-5/+140	6973	S26	Dryers	NA	4mbar	T° Max 100	2550
R403	Reactor	150	0.5	-10 / +150	6973	SHV3000	Dryers	NA	4mbar	T° Max 100	2550

Analytical Equipment

Name of Equipment	Number
HPLC (VWD, DAD, RID and ELS)	6
UPLC (DAD)	2
GC (ALS, HS with FID)	8
TOC	1
Refractometer	1
Auto titrators	4
UV Spectrometer	1
FT-IR	1
Polarimeter	1
DSC	2

QC



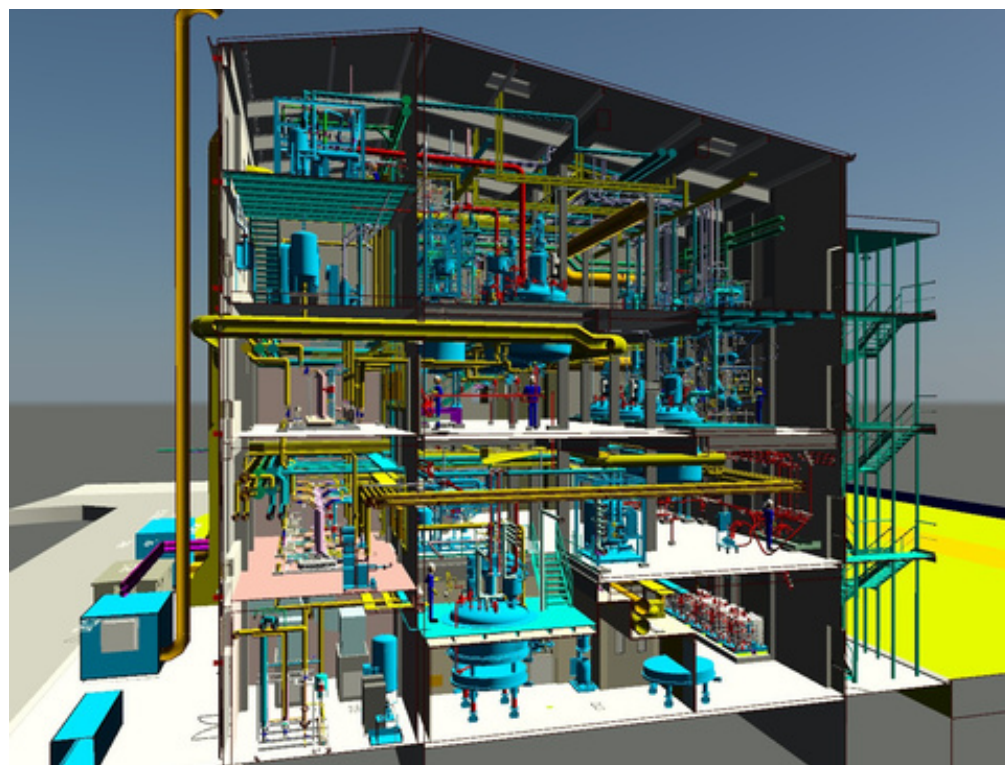
Analytical Equipment

Name of Equipment	Number
HPTLC	1
OVEN	2
Analytical balance	3
Purified water (Milli Q)	1
Coulometer	2
pH, conductivity meter	2
Calcination Furnace	1

New Unit Synthesis - DUNOPALE

Reactor		Min. stirring volume (L)	Operating Pressure (bar)	Operating Temperature (°C)	Working Volume
R301	Reactor	40	-1 / +0.5	-10 / +200	4000
R302	Reactor	60	-1 / +0.5	-10 / +200	8500
R303	Reactor	60	-1 / +6	-10 / +200	4000
R304	Reactor	100	-1 / +0.5	-10 / +200	6500
R305	Reactor	100	-1 / +0.5	-10 / +200	6500
R306	Reactor		-1 / +6	-10 / +200	4000
FLS313	DRYER	NA	-1 / +3	-10 / +100	3720

DUNOPALE



UNIVERSITY OF ROUEN



Analytical Equipment -
University Of ROUEN

Name of Equipment

NMR : 1H (400 MHz), 13C, 19F, 31P

LC/MS

GC/MS