

## Technical Comparison of NiTech Reactors and Crystallisers

A comparison of "standard" units produced by NiTech Solutions

Unit Purpose	Unit Name	Variant	Volume (L)	Reactor Length (m)	Typical Residence (min)	Wetted Materials	Temperature (°C)	Process Pressure (barG)	Weight (kg)	w x d x h (m)
Batch Screening Models	DN15 Evaluation Unit (Static Baffles)	-	0.175	1.0	-	Glass	0 - 100	3.0	20	1.1 x 0.8 x 1.01
		Compact	0.175	1.0	-	Glass	-20 - 120	3.0	20	0.93 x 0.48 x 1.01
	Batch Evaluation Unit (Dynamic Baffles)	DN25	0.1	-	-	Glass	0 - 100	Ambient	40	0.41 x 0.41 x 0.815 & 0.52 x 0.4 x 0.3
		DN40	0.25	-	-	Glass	0 - 100	Ambient	40	0.41 x 0.41 x 0.815 & 0.52 x 0.4 x 0.3
	DN60 OBR	Glass	3.2	1.2	-	Glass	0 - 100	Ambient	130	0.6 x 0.6 x 1.95
		HP	3.2	1.2	-	316L	0 - 100	10.0	145	0.6 x 0.6 x 1.95
Continuous Lab Models	DN15 Lite	2.0	1.25	7.0	30	Glass	0 - 100	3.0	75	1.1 x 0.8 x 1.01
		Compact	1.25	7.0	30	Glass	0 - 100	3.0	75	0.93 x 0.48 x 1.01
	DN15 Standard	2.0	2.5	14	60	Glass	0 - 100	3.0	85	1.1 x 0.8 x 1.01
		Compact	2.5	14	60	Glass	0 - 100	3.0	85	0.93 x 0.48 x 1.01
	DN15 Plus	2.0	3.5	20	90	Glass	0 - 100	3.0	95	1.1 x 0.8 x 1.35
		Compact	3.5	20	90	Glass	0 - 100	3.0	95	0.93 x 0.48 x 1.35
Continuous Pilot Models	DN15 Pilot Lite	-	1.25	7.0	30	316L	0 - 150	10.0	135	2.05 x 1 x 1.5
	DN15 Pilot Standard	-	2.5	14	60	316L	0 - 150	10.0	165	2.05 x 1 x 1.5
	DN15 Pilot Plus	-	3.5	20	90	316L	0 - 150	10.0	205	2.05 x 1 x 1.5

Options						
150 °C max	200 °C max	25 barG max	LP Pumps	HP Pumps	Sight glass	ATEX
Y	N	N	Y	N	N	N
Y	N	N	Y	N	N	N
Y	N	N	Y	N	N	N
Y	N	N	Y	N	N	N
Y	N	N	Y	N	N	N
Y	N	N	Y	N	N	N
Y	N	N	Y	N	N	N
Y	N	N	Y	N	N	N
Y	N	N	Y	N	N	N
Y	N	N	Y	N	N	N
Y	N	N	Y	N	N	N
STD	Y	Y	Y	Y	STD	Y
STD	Y	Y	Y	Y	STD	Y
STD	Y	Y	Y	Y	STD	Y

**Notes:** Typical residence times based on 40 mL/min  
 All units have PTFE and PEEK wetted parts  
 "Glass" is borosilicate glass  
 "316L" units have an option of C22  
 Jacket pressure is 0 - 1.0 barG