

## Equipment list of the Akitsu Works [1]

Factory	Feature	Equipment	Material	Size	Number of base	Remarks
F-1, F-2	<ul style="list-style-type: none"> <li>• Heat transfer equipment (230°C)</li> <li>• Deodorization equipment</li> <li>• Distillation equipment</li> <li>• Multi-process support</li> </ul>	Reaction vessel	GL	1,000L	1	
			GL	3,000L	12	
			GL	6,000L	1	
			SUS	3,000L	2	
			SUS	5,000L	2	1 autoclave (1MPa)
			PVDF	2,000L	2	
			PVDF	4,000L	2	
		Centrifugal machine	SUS304	42inch	1	
			Hastelloy	42inch	1	
		Scavenger	SUS	-	1	
F-3	<ul style="list-style-type: none"> <li>• Ultrapure water</li> <li>• Semi-clean room specifications</li> <li>• Special drying equipment</li> </ul>	Reaction vessel	GL	3,000L	2	
			GL	6,000L	1	
		Centrifugal machine	PFA	42inch	1	
F-5	<ul style="list-style-type: none"> <li>• Low temperature reaction (-10°C &lt;)</li> <li>• H<sub>2</sub>S/mercaptan gas</li> <li>• Full range of scrubbers</li> <li>• Multi-process support</li> <li>• </li> </ul>	Reaction vessel	GL	1,000L	3	
			GL	3,000L	6	
			GL	6,000L	2	
			SUS	500L	2	1 autoclave (1MPa)
			SUS	3,000L	1	
		Filter	GL	1.5 m <sup>3</sup>	1	
		Centrifugal machine	SUS304	42inch	1	
			Hastelloy	42inch	1	
F-6	<ul style="list-style-type: none"> <li>• Ultrapure water</li> <li>• MCF</li> </ul>	Reaction vessel	GL	3,000L	3	
			GL	6,000L	2	
		Filter	GL	1.5 m <sup>3</sup>	1	
		Centrifugal machine	SUS	42inch	1	
F-7	<ul style="list-style-type: none"> <li>• Ultrapure water</li> <li>• MCF</li> <li>• Large-scale solid-liquid separation</li> <li>• Special drying equipment</li> </ul>	Reaction vessel	GL	3,000L	5	
			GL	6,000L	2	
		Filter	GL	1.0 m <sup>3</sup>	1	
			GL	1.5 m <sup>3</sup>	1	
		Filter dryer	PTFE / Ti	2.5 m <sup>3</sup>	1	
		Centrifugal machine	SUS316L	42inch	1	
F-8	<ul style="list-style-type: none"> <li>• High pressure reaction</li> <li>• Large volume reaction</li> <li>• High temperature reaction</li> </ul>	Reaction vessel	SUS	6,000L	2	2 autoclave (1MPa)
			GL	3,000L	2	
			GL	6,000L	1	
			GL	8,000L	2	
		Filter	GL	1.0 m <sup>3</sup>	1	
F-10	<ul style="list-style-type: none"> <li>• Large volume reaction</li> <li>• Distillation vessel</li> <li>• Solid-liquid separation equipment</li> </ul>	Reaction vessel	SUS	1,500L	1	High vacuum resistant
			SUS	7,000L	1	
			SUS	8,000L	1	
			SUS	10,000L	1	
			GL	3,000L	1	
			GL	6,000L	1	
		Centrifugal machine	SUS	42inch	1	Top drain type
			SUS	48inch	1	Bottoming out

## Equipment list of the Akitsu Works [2]

Factory	Feature	Equipment	Material	Size	Number of base	Remarks
F-11	<ul style="list-style-type: none"> <li>• DCS control</li> <li>• Ultrapure water</li> <li>• MCF</li> <li>• Large-scale solid-liquid separation</li> <li>• Clean room (Class 100,000)</li> <li>• Special drying equipment</li> </ul>	Reaction vessel	GL	3,000L	2	
			GL	6,000L	5	
		Filter	ETFE	0.5 m <sup>2</sup>	1	
			ETFE	1.0 m <sup>2</sup>	1	
		Filter dryer	PTFE / Ti	2.5 m <sup>2</sup>	2	
		Centrifugal machine	SUS316	42inch	1	

P-1	<ul style="list-style-type: none"> <li>• Ultrapure water</li> <li>• Clean room</li> <li>• High pressure reaction</li> <li>• High temperature reaction</li> <li>• Teflon kettles</li> <li>• Distillation column</li> </ul>	Reaction vessel	GL	50L	2	
			GL	200L	1	
			GL	500L	4	1 autoclave (1MPa)
			SUS	500L	1	
			PFA	500L	1	
		Filter	GL	0.5 m <sup>2</sup>	2	
			PFA	0.2 m <sup>2</sup>	1	