

Degasser Unit (Unit 9600) in two parallel trains		Request Process Flow Schemes 9600/09/010 to 9600/08/015	
Degasser Unit Train A		Degasser Unit Train B	
E9605A, E9605C, E9605E, E9605G, E9606A	Famet live oil/stabilised oil heat exchangers, 1,460mm i.d., 8157mm l, 23,000kg, KCS	E9605B, E9605D, E9605F, E9605H, E9606B	Famet live oil/stabilised oil heat exchangers, 1,460mm i.d., 8157mm l, 23,000kg, KCS
V9601	Arsopi live oil/heat transfer fluid heater, 1,450mm i.d., 5,960mm l, 17,000kg, KCS NOT INCLUDED: Arsopi degasser vessel, main vessel 6,700mm dia., 33,000mm l, boot 1,500mm i.d., 2,350mm l, CS	V9604B	Arsopi live oil/HTF heater, 1,450mm i.d., 5,960mm l, 17,000kg, KCS Quast degasser vessel, main vessel 4,500 dia., 22,500mm l, boot 1,200mm i.d., 1,200mm l, 82,000kg, KCS, horizontal
P-9615A	Weir Gabbioneta stabilised crude pump, 480kW, 8,000kg	P9615B	Weir Gabbioneta stabilised crude pump, 480kW, 8,000kg
P9616A	Weir Gabbioneta degasser water pumps, 5.5kW, 900kg	P9616B	Weir Gabbioneta degasser water pumps, 5.5kW, 900kg
V9605A	Arsopi 1 st stage knock-out drum, 1,500mm i.d., 2,570mm l, 4,715kg, KCS, vertical with half skirt	V9605B	2x Arsopi 1 st stage knock-out drum, 1,500mm i.d., 2,570mm l, 4,715kg, KCS, vertical with half skirt
K9601A	Siemens degasser fixed speed, two stage, centrifugal compressor with control valve suction controlling pressure in degasser vessel anti-surge spillback (routed to inlet of degasser vessel) with air cooler 1,800kW motor space heater for motor driver gearbox twin full flow primary seal gas filters twin full flow buffer gas filters compressor lube oil system including main pump auxiliary pump reservoir with 2x heaters twin filter accumulator rundown tank air cooler with fans noise enclosure with 2x air circulation fans	K9601B	Siemens degasser compressor with control valve suction controlling pressure in degasser vessel anti-surge spillback (routed to inlet of degasser vessel) with air cooler 1,800kW motor space heater for motor driver gearbox twin full flow primary seal gas filters twin full flow buffer gas filters compressor lube oil system including main pump auxiliary pump reservoir with 2x heaters twin filter accumulator rundown tank air cooler with fans Noise enclosure with 2x air circulation fans
E9607A	Famet 1 st stage condenser with 2x 15kW fans, 4x 17.5kW winterising heaters, each 9,000mm x 3,500mm x 800mm (2x heater bundle), 12,000kg, stainless steel	E9607B	Famet 1 st stage condenser with 2x 15kW fans, 4x 17.5kW winterising heaters, each 9,000mm x 3,500mm x 800mm (2x heater bundle), 12,000kg, stainless steel
V9606A	Arsopi 1 st stage separator, main vessel, 1,800mm, 5,400mm l, boot 475mm i.d., 1,400mm l, 5450kg, KCS, horizontal	V9606B	Arsopi 1 st stage separator, main vessel, 1,800mm, 5,400mm l, boot 475mm i.d., 1,400mm l, 5450kg, KCS, horizontal
V9607A	Arsopi 2 nd stage knock-out drum, 1,000mm i.d., 2,570mm l, 1,700kg, KCS, vertical on legs	V9607B	Arsopi 2 nd stage knock-out drum, 1,000mm i.d., 2,570mm l, 1,700kg, KCS, vertical on legs
P9617A	Weir & Gabbioneta 1 st stage HC pump, 55kW, 1,900kg	P9617B	2 Weir & Gabbioneta 1 st stage HC pump, 55kW, 1,900kg
E9608A	Famet 2 nd stage condenser with 2x 22.2kW fans, 4x 25kW winterising heaters, each 9,000mm x 5,200mm x 750mm (2x heater bundle), 11,000kg, stainless steel	E9608B	Famet 2 nd stage condenser with 2x 22.2kW fans, 4x 25kW winterising heaters, each 9,000mm x 5,200mm x 750mm (2x heater bundle), 11,000kg, stainless steel
V9608A	Arsopi 2 nd stage separator, main vessel 1,750mm i.d., 5,200mm l, boot 400mm i.d., 1,100mm l, 9,160kg, KCS, horizontal	V9608B	Arsopi 2 nd stage separator, main vessel 1,750mm i.d., 5,200mm l, boot 400mm i.d., 1,100mm l, 9,160kg, KCS, horizontal
P9618A	Weir & Gabbioneta stabiliser feed pump, 22kW, 1,100kg	P9618B	Weir & Gabbioneta stabiliser feed pump, 22kW, 1,100kg
E9609A	Famet 2 nd stage condenser with 2x 7.5kW fans, 4x 15kW winterising heaters, each 9,000mm x 3,450mm x 750mm (1x heater bundle), 7,500kg, stainless steel	E9609B	Famet 2 nd stage condenser each with 2x 7.5kW fans, 4x 15kW winterising heaters, each 9,000mm x 3,450mm x 750mm (1x heater bundle), 7,500kg, stainless steel

Heat Transfer Fluid (HTF) System	
F9601	LHT HTF furnace, CS structure, alloy internals
K9605A, K9605S	2x LHT 55kW forced draught fans
K9606	LHT 45kW induced draught fan
E9610	LHT air preheater
E9613	LHT flue gas cooler
T9604	Siemerink HTF storage tank, 6,000mm i.d., 8,000mm l, 16,500kg
P9625	HTF makeup pump, 30kW, 600kg
V9610	Arsopi HTF expansion vessel, 3,000mm i.d., 8,400mm l, 35,000kg, KCS, vertical with skirt
P9620A, P9620S	2x Weir & Gabbioneta HTF HT circulation pumps, 360kW, 7,000kg
P9621A, P9612S	2x Weir & Gabbioneta HTF LT circulation pumps, 260kW, 5,500kg
V9611	Arsopi HTF drain collection vessel, 1,800mm dia., 4,500mm l, boot 800mm dia., 500mm l, 7,600kg, KCS, horizontal
P9626	Weir & Gabbioneta HTF drain pump, 5.5kW, 1,150kg
V9625	Arsopi furnace LP fuel gas knock-out drum, 810mm i.d., 2,450mm h, stainless steel, vertical on legs, 1,000kg, stainless steel

Forwards to F9601 HTF furnace or to Flare

Gas Plant Unit (Unit 9400)		Request Process Flow Scheme 9400/08/001 to /003
Stabiliser		
E9401	Arsopi stabiliser feed shell & tube heat exchanger preheater, 520mm i.d., 4,154mm l, 2,400kg, KCS	
C9401	Arsopi stabiliser column including internals, 1,600mm i.d., 32,590mm l, 38,000kg, vertical with skirt	Forwards to E9403 stabiliser OVHD condenser To E9404 naptha rundown cooler and then crude oil storage
E9402	Arsopi stabiliser reboiler, 740mm i.d., 5873mm l, 7,000kg, KCS, vertical with lugs	Returns to C9401 stabiliser column
E9403	Famet stabiliser OVHD condenser with 2x 18.5kW fans, 4x 25kW winterising heaters, LTCS	
V9401	Arsopi stabiliser OVHD accumulator, main vessel 1,900mm i.d., 5,800mm l, boot 400mm i.d., 1,100mm l, 7,085kg, KCS	Forwards to P9401A/S stabiliser reflux pumps or P9402A/S stabiliser LPG pumps Forwards gas to V9903 LP fuel gas knock-out drum (not included) Boot forwards to P9616A/B degasser water pumps
P9401A, P9401S	2x Weir Gabbioneta stabiliser reflux pumps, 1,000kg, 15kW, KCS	
E9404	Famet naptha rundown cooler, 4,500mm x 1,800mm x 800mm, 2,700kg	Forwards to crude oil storage (not included)
Deethaniser		
P9402A, P9402S	2x Weir Gabbioneta stabiliser LPG pumps, 3,200kg, 75kW, KCS	Forwards to E9406 deethaniser OVHD condenser, or Forwards to E9302 butane shell & tube cooler
E9406	Famet deethaniser OVHD condenser with 2x 3kW fans, 3 20kW winterising heaters	
V9402	Arsopi deethaniser OVHD accumulator, main vessel 1,800mm i.d., 5,400mm l, boot 400mm i.d., 1,100mm l, 9,390kg, KCS	Forwards through P9403A/S deethaniser reflux pumps to C9402 deethaniser column Forwards gas to V9903 LP fuel gas knock-out drum (not included) Boot forwards to P9616A/B degasser water pumps
P9403A, P9403S	2x Weir Gabbioneta deethaniser reflux pumps, 1,000kg, 18.5kW, KCS	
C9402	Arsopi deethaniser column including internals, 1,300mm i.d., 19,890mm l, 25,730kg, vertical with skirt	Forwards to C9403 depropaniser column Returns to E9406 deethaniser OVHD condenser Returns to E9405 deethaniser reboiler
E9405	Arsopi deethaniser reboiler, 500mm i.d., 4,665mm l, 2,950kg, KCS	
Depropaniser		
C9403	Arsopi depropaniser column including internals, 1,200mm i.d., 30,810mm l, 38,700kg, vertical with skirt	Forwards through E9409 butane rundown cooler to V9302A/B/C/D/E/F/G butane adsorbent beds Forwards to E9408 depropaniser OVHD condenser Forwards to E9407 depropaniser reboiler
E9407	Arsopi depropaniser reboiler, 520mm i.d., 4,731mm l, 3,150kg, vertical with lugs, KCS	
E9408	Famet depropaniser OVHD condenser with 2x 22kW fans	
V9403	Arsopi depropaniser OVHD accumulator, main vessel 1,500mm i.d., 4,500mm l, boot 400mm i.d., 1,100mm l, 4,600kg, KCS	Returns through P9404A/S propane product/reflux pumps to C9403 depropaniser column or to V9301A/B/C/D/E/F/G propane adsorbent beds Forwards gas to V9903 LP fuel gas knock-out drum (not included) Boot forwards to P9616A/B degasser water pumps
P9404A, P9404S	2x Weir Gabbioneta propane product/reflux pumps, 1,400kg, 45kW, KCS	Forwards to C9403 depropaniser column or to V9301A/B/C/D/E/F/G propane adsorbent beds
E9409	Famet butane rundown cooler, 4,250mm x 1,500mm x 500mm with 2x 3kW fans	Forwards to V9302A/B/C/D/E/F/G butane adsorbent beds

Liquified Gas Treating Unit (Unit 9300)		Request Process Flow Scheme 9300/08/001 to /002
Liquid Propane Treating		
V9301A, V9301B, V9301C, V9301D, V9301E, V9301F	6x propane adsorbent beds, 700mm i.d., 3,100mm l, 2,200kg, KCS, vertical with half skirt	
E9301	Arsopi shell & tube propane cooler, 128.2mm i.d., 4801mm l, 700kg, KCS	
Liquid Butane Treating		
V9302A, V9302B, V9302C, V9302D, V9302E, V9302F	6x butane adsorbent beds, 700mm i.d., 3,100mm l, 2,200kg, KCS, vertical with half skirt	
E9302	Arsopi shell & tube butane cooler AES, 400mm i.d., 5765mm l, 2,100kg, KCS	
Water Treatment		
A9302	Scam TPE water softener unit	
T9303	Scam TPE biodispers tank	
P9303A, P9303S	2x Scam TPE biodispers dosing pumps	Forward to A9301 cooling water tower
T9304	Scam TPE performax tank	
P9304A, P9303S	2x Scam TPE performax dosing pumps	Forward to A9301 cooling water tower
A9301	Scam TPE cooling water tower with fan	
P9302A, P9302S	2x Weir & Gabbioneta cooling water circulation pumps, 22kW, 1,000kg	Forward to E9301 propane cooler and E9302 butane cooler
Butane, Propane & Off-spec storage tanks		
V9201, V9202, V9203, V9204	4x G&G International butane storage vessels, 8,000mm i.d., 30,500mm long, 290,000kg, installed horizontally on a sandbed and earth enclosed	
P9201	Weir Gabbioneta butane export pump, KCS	
V9205, V9206, V9207	3x G&G International propane storage vessel, 8,000mm inside diameter x 30,500mm long, 290,000kg, installed horizontally on a sandbed and earth enclosed	
P9202	Weir Gabbioneta propane export pump, 5,000kg, KCS	
V9208	G&G International off-spec storage vessel, 8,000mm inside diameter x 30,500mm long, 290,000kg, installed horizontally on a sandbed and earth enclosed	
P9203A	Weir Gabbioneta off-spec LPG pump, 1,500kg, KCS	
P9203S	Weir Gabbioneta spare pump for P9204 & P9203A, 1,500kg, KCS	

	Flare System	
P9204	Weir Gabbioneta flare knock-out vessel pump, 1,500kg, KCS	From E9301 propane cooler and E9302 butane cooler
V9209	Flare knock-out vessel, 2,200mm i.d. x 6,500mm l, 8400kg, horizontal	
V9210	LPG drain vessel, 900mm i.d. x 2,500 l, 1,500kg, horizontal	
V9303	Flare knock-out vessel, 1,700mm i.d., 4,000mm l, 4,100kg, KCS	
V9703	Arsopi flare knock-out drum, main vessel, 2,000mm i.d., 10,000mm l, boot 1,000mm i.d., 1,500mm l, 10,000kg, KCS, horizontal	
A9701	GBA flare stack, KCS	
P9703A, P9703S	2x Weir & Gabbioneta flare knock-out drum pumps, 4kW, 700kg, KCS	
V9904	ExHeat propane vaporiser, 257kW, KCS	From P9203A off-sec LPG pump
V9903	Arsopi LP fuel gas knock-out drum, 970mm i.d., 2,950mm l, 1400kg, KCS, vertical on legs	