Clyde | Established 1920

Natural gas

LP gas

60 kW
to
180 kW

Clyde CG

Pipework sets and frames

- ***Cascade up to 12 boilers in back-to-back frames***
- ***Up to 2160 kW output from a cascaded system***
- ***Supporting frame and pipework kits available for wall mounting or floor standing***
- ***Low Velocity Headers for effective connection to the system***

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Engineering Data Sheet 778/2

October 2011

Dimensions

General

A range of pre-fabricated pipework kits are available for the CG range of boilers. These are two, three and four boiler assemblies with LCS common headers, lever full-bore isolating valves and non-return valves and all interconnecting pipework between the boilers and headers. Safety valves and drain cocks are not included. The pipework and low velocity header are secured to floor standing stanchions, and the kits are available with or without boiler mounting frames.

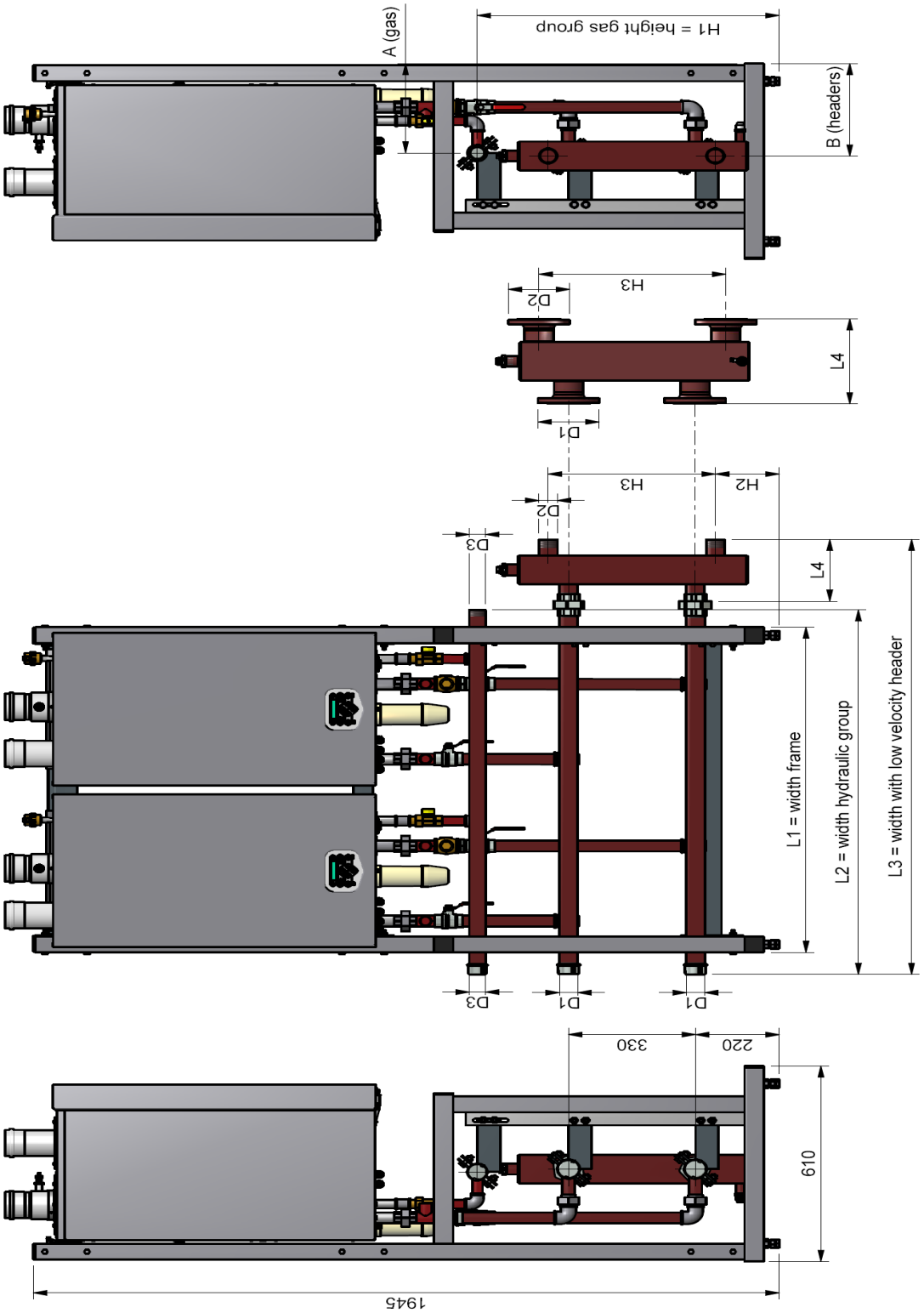

Fig 1 Dimensions and general schematic of pipework and frame kits

Dimensions

CG60 - 120					
			2 Boilers	**3 Boilers**	4 Boilers
L1	Frame length	mm	1015	1520	1980
L2	Header length	mm	1138	1646	2095
L3	Total length	mm	1357	1914	2395
L4	LVH length	mm	190	265	290
H1	Gas height	mm	787	787	787
H2	LVH connection height	mm	167	139	161
H3	LVH C - C height	mm	436	487	440
D1	Flow and return diameter		R1½	DN65 PN6	DN80 PN6
D2	System connection		R1½	DN65 PN6	DN80 PN6
D3	Gas pipe diameter		R1¼	R1¼ for CG60 - 80 R1½ for CG100 - 120	R2
A	Gas connection from wall	mm	280	280 for CG60 - 80 290 for CG100 -120	280
B	Header centre from wall	mm	288	288	288

CG150 - 180					
			2 Boilers	**3 Boilers**	4 Boilers
L1	Frame length	mm	1015	1520	1980
L2	Header length	mm	1141	1650	2108
L3	Total length	mm	1409	1945	2465
L4	LVH length	mm	265	290	355
H1	Gas height	mm	765	777	767
H2	LVH connection height	mm	144	163	166
H3	LVH C - C height	mm	487	440	439
D1	Flow and return diameter		DN65 PN6	DN80 PN6	DN100 PN6
D2	System connection		DN65 PN6	DN80 PN6	DN100 PN6
D3	Gas pipe diameter		R2	R2	DN80
A	Gas connection from wall	mm	338	338	338
B	Header centre from wall	mm	283	283	283

Table 1 - Dimensions for Fig 1

Breakdown of component groups

Fig 2 shows how the complete pipework and frame kit is broken down into four component groups;

- ❑ The supporting frame
- ❑ The connecting group between the boiler and common pipe headers
- ❑ The common headers of the hydraulic group
- ❑ The Low Velocity Header

All four components can be purchased together as a complete kit, or as individual component groups

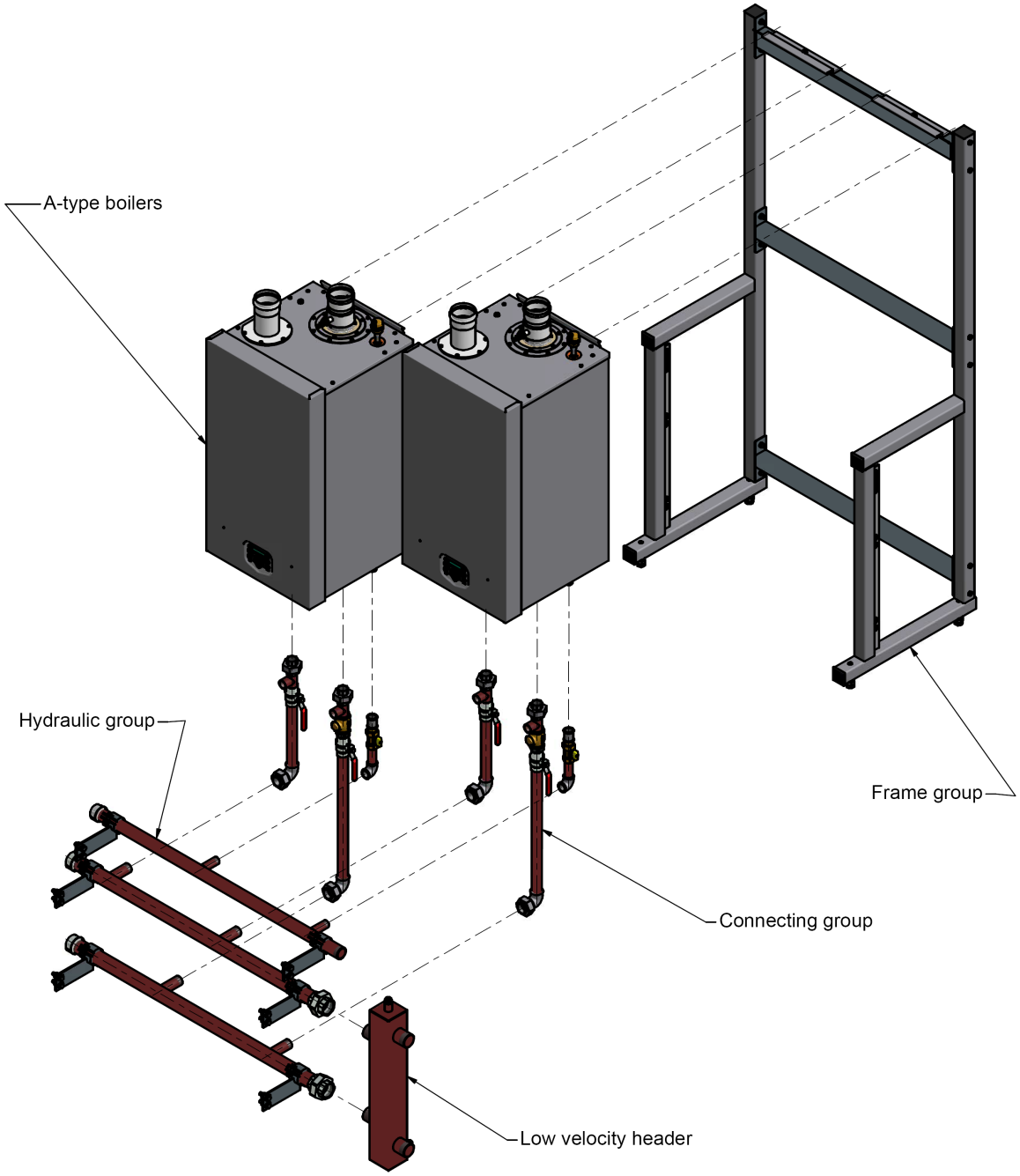

Fig 2 Breakdown of pipework and frame kit into component groups

Low Velocity Headers

Low velocity headers are used to separate hydraulically the boilers from the rest of the system. They should be used whenever a circulating pump is installed in addition to the boiler pump. Used in conjunction with a system filter and air separator, they are invaluable when connecting a new boiler to an existing system.

Fig 3 below shows two models of LVH suitable for use with a ΔT20 system. Refer to Clyde for advice and sizing for other system operating parameters.

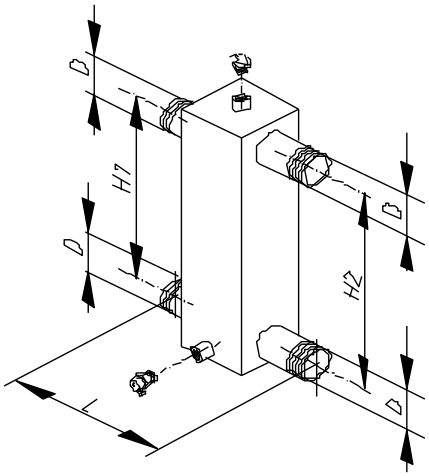

Fig 3a LVH for up to 2 no CG60 to 120 boilers

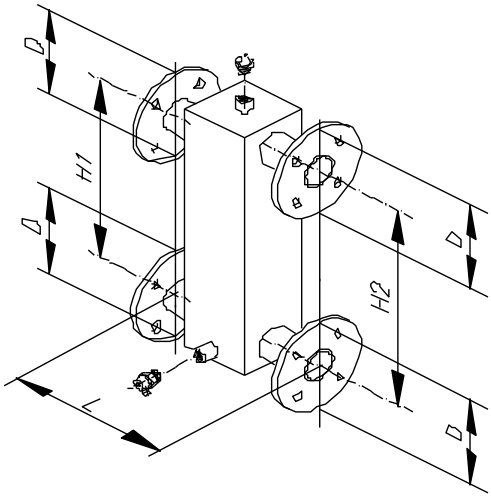

Fig 3b LVH for up to 4 no CG boilers

Boiler selection	**2 x 60 - 120**	**3 x 60 - 120** **2 x 150 - 180**	**4 x 60 - 120** **3 x 150 - 180**	**4 x 150 - 180**
D mm	R 1 ½	DN65 PN6 (2 ½")	DN80 PN6 (3")	DN100 PN6 (4")
H1 mm (primary side)	330	330	330	330
H2 mm (distribution side)	436	487	440	439
L mm	190	265	290	355

Table 2 Dimensions for LVH

Pipework set for 2 boilers 60 - 120 kW

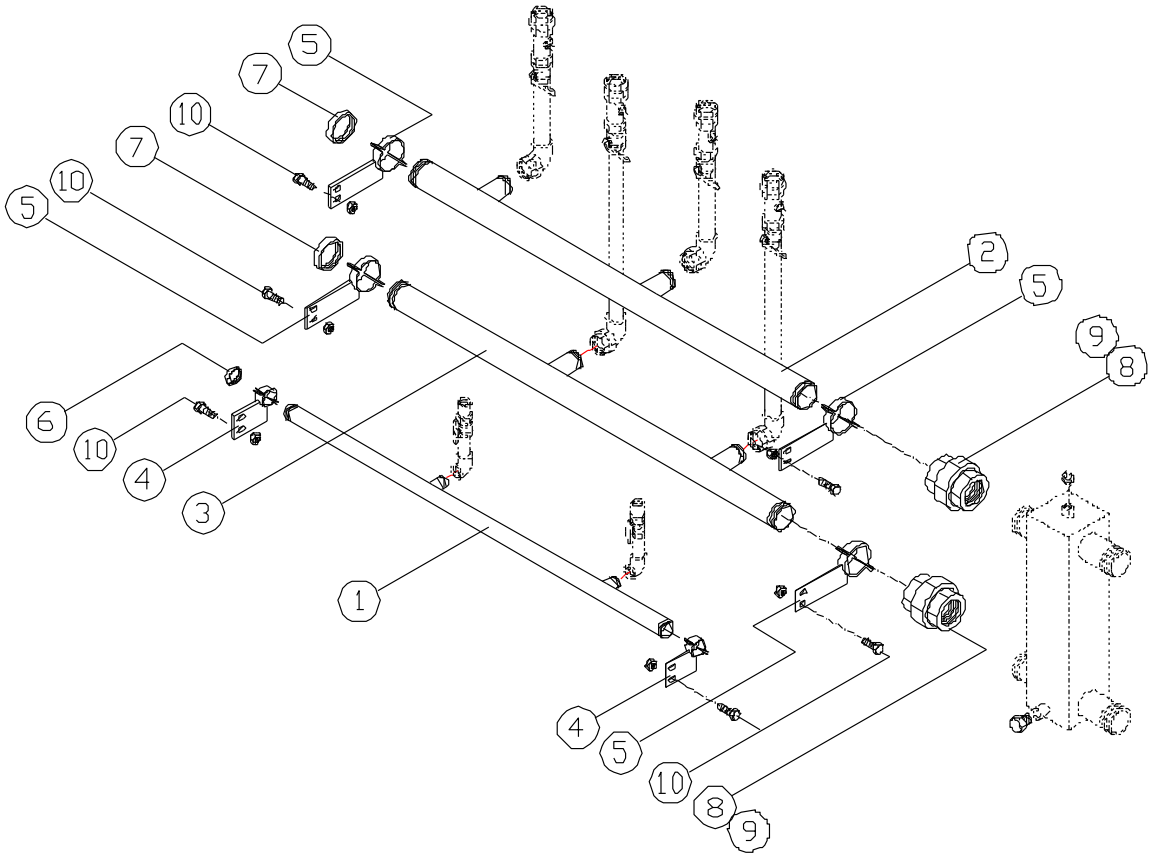

Fig 4 Pipework set for 2 boilers 60 - 120 kW

Key to Fig 4

1	R1¼ gas header
2	R1½ flow header
3	R1½ return header
4	Gas header clamp
5	Water header clamp
6	Gas header cap
7	Water header cap
8	R1½ union
9	R1½ union gasket
10	M10 x 35 bolt, nut and washer

Pipework set for 3 and 4 boilers 60 - 120 kW

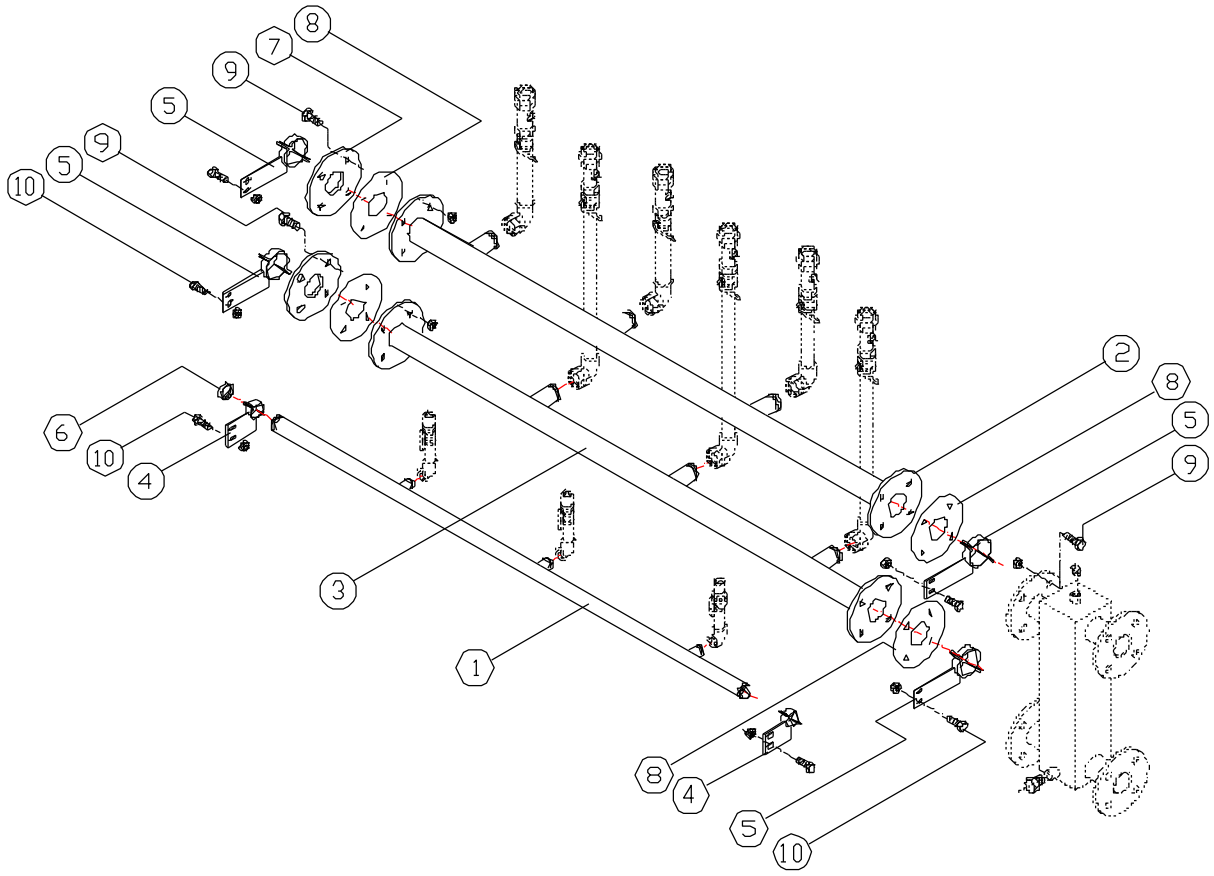

Fig 5 Pipework set for 3 and 4 boilers 60 - 120 kW

Key to Fig 5

1	R1¼ gas header for 3 x CG60 - 80 R1½ gas header for 3 x CG100 - 120 R2 gas header for 4 boilers
2 + 3	DN65 flow/return header for 3 boilers DN80 flow/return header for 4 boilers
4	Gas header clamp
5	Water header clamp
6	Gas header cap
7	Water header blank flange
8	Flange gasket
9	M12 x 60 bolt, nut and washer
10	M10 x 35 bolt, nut and washer

Pipework set for 2 and 3 boilers 150 - 180 kW

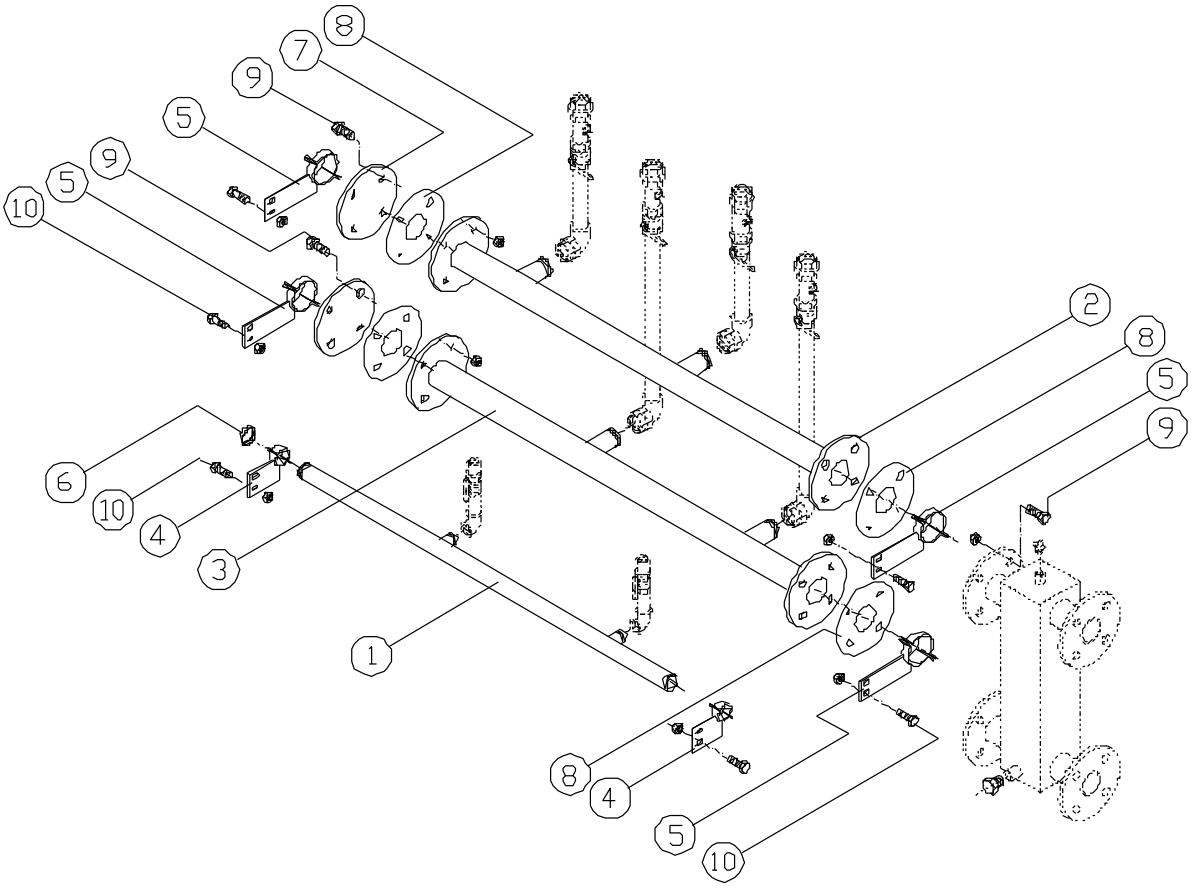

Fig 6 Pipework set for 2 and 3 boilers 150 - 180 kW

Key to Fig 6

1	R2 gas header
2 + 3	DN65 flow/return header for 2 boilers DN80 flow/return header for 3 boilers
4	Gas header clamp
5	Water header clamp
6	Gas header cap
7	Water header blank flange
8	Flange gasket
9	M12 x 60 bolt, nut and washer
10	M10 x 35 bolt, nut and washer

Pipework set for 4 boilers 150 - 180 kW

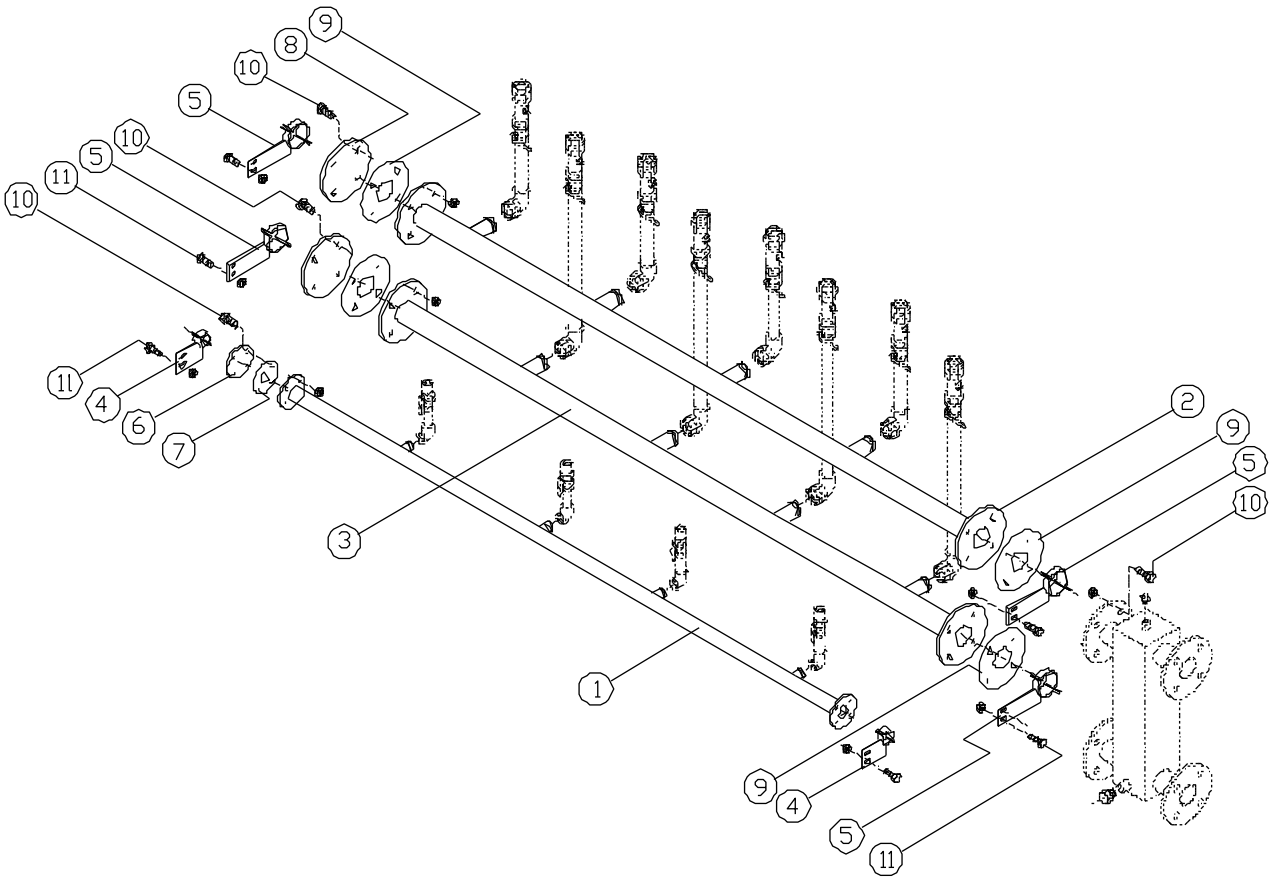

Fig 7 Pipework set for 4 boilers 150 - 180 kW

Key to Fig 7

1	DN80 gas header
2 + 3	DN100 flow/return header
4	Gas header clamp
5	Water header clamp
6	Gas header blank flange
7	Flange gasket
8	Water header blank flange
9	Flange gasket
10	M16 x 60 bolt, nut and washer
11	M10 x 35 bolt, nut and washer

Notes

Notes

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