WHAT IS CLAIMED IS:

1. A flow control device (FCD) module, comprising:

a base pipe having a port coupling an exterior of the base pipe and an interior of the base pipe;

an FCD unit coupled to the base pipe about the port and configured to control production fluid from an oil and gas formation to the interior of the base pipe;

one or more separate isolated activation channels extending along at least a portion of the base pipe, the one or more separate isolated activation channels configured to fluidly couple with one or more hydraulic activation chambers of a screen subassembly; and

one or more covers surrounding the base pipe and positioned about the FCD unit, the one or more covers forming a production fluid channel between the screen subassembly and the FCD unit, wherein the one or more separate isolated activation channels are positioned between the base pipe and the one more covers surrounding the base pipe.

2. The FCD module according to Claim 1, wherein the one or more covers are removable.

3. The FCD module according to Claim 1, wherein the one or more separate isolated activation channels are disposed exteriorly about the base pipe.

4. The FCD module according to Claim 1, further including a diverter ring positioned about the base pipe, the diverter ring configured to physically and fluidly couple the FCD module to the screen subassembly.

5. The FCD module according to Claim 4, wherein the diverter ring includes one or more ring hydraulic activation channels which are configured to fluidly couple the one or more separate isolated activation channels and the one or more hydraulic activation chambers of the screen subassembly.

6. The FCD module according to Claim 4, wherein the diverter ring includes one or more ring production fluid channels which are configured to fluidly couple production fluid from the formation with the production fluid channel of the FCD module.

7. A sand control screen assembly, comprising:

a screen subassembly, including:

a blank pipe section;

one or more hydraulic activation chambers disposed exteriorly of the blank pipe section; and

a filter medium disposed about the one or more hydraulic activation chambers for receiving production fluid from an oil and gas formation; and

an FCD module fluidly coupled to the screen subassembly, the FCD module including;

a base pipe having a port coupling an exterior of the base pipe and an interior of the base pipe;

an FCD unit coupled to the base pipe about the port and configured to control production fluid from the oil and gas formation to the interior of the base pipe;

one or more separate isolated activation channels extending along at least a portion of the base pipe, the one or more separate isolated activation channels fluidly coupled with the one or more hydraulic activation chambers of the screen subassembly; and

one or more covers surrounding the base pipe and positioned about the FCD unit and forming a production fluid channel between the filter medium and the FCD unit, wherein the one or more separate isolated activation channels are positioned between the base pipe and the one more covers surrounding the base pipe.

8. The sand control screen assembly according to Claim 7, wherein the one or more hydraulic activation chambers are bladders.

9. The sand control screen assembly according to Claim 7, wherein the one or more covers are removable.

10. The sand control screen assembly according to Claim 7, further comprising a diverter ring coupled about the base pipe between the FCD unit and the screen subassembly.

11. The sand control screen assembly according to Claim 10, wherein the diverter ring includes one or more ring hydraulic activation channels which fluidly couple the one or more separate isolated activation channels and the one or more hydraulic activation chambers.

12. The sand control screen assembly according to Claim 10, wherein the diverter ring includes one or more ring production fluid channels which fluidly couple production fluid from the formation with the production fluid channel of the FCD module.

13. The sand control screen assembly according to Claim 10, wherein the diverter ring is coupled with the FCD module by a threaded connection.

14. A well system, comprising:

a wellbore;

production tubing extending from a surface of the wellbore; and

a sand control screen assembly coupled to the production tubing, the sand control screen assembly including:

a blank pipe section;

one or more hydraulic activation chambers disposed exteriorly of the blank pipe section; and

a filter medium disposed about the one or more hydraulic activation chambers for receiving production fluid from an oil and gas formation; and

an FCD module fluidly coupled to the screen assembly, the FCD module including;

a base pipe having a port coupling an exterior of the base pipe and an interior of the base pipe;

an FCD unit coupled to the base pipe about the port and configured to control production fluid from the oil and gas formation to the interior of the base pipe;

one or more separate isolated activation channels extending along at least a portion of the base pipe, the one or more separate isolated activation channels fluidly coupled with the one or more hydraulic activation chambers; and

one or more covers surrounding the base pipe and positioned about the FCD unit and forming a production fluid channel between the filter medium and the FCD unit, wherein the one or more separate isolated activation channels are positioned between the base pipe and the one more covers surrounding the base pipe.

15. The well system according to Claim 14, wherein the one or more hydraulic activation chambers are bladders.

16. The well system according to Claim 14, wherein the one or more covers are removable.

17. The well system according to Claim 14, further comprising a diverter ring coupled between the FCD unit and the screen subassembly, wherein the diverter ring includes:

one or more ring hydraulic activation channels which fluidly couple the one or more separate isolated activation channels and the one or more hydraulic activation chambers; and

one or more ring production fluid channels which fluidly couple production fluid from the formation with the production fluid channel of the FCD module.