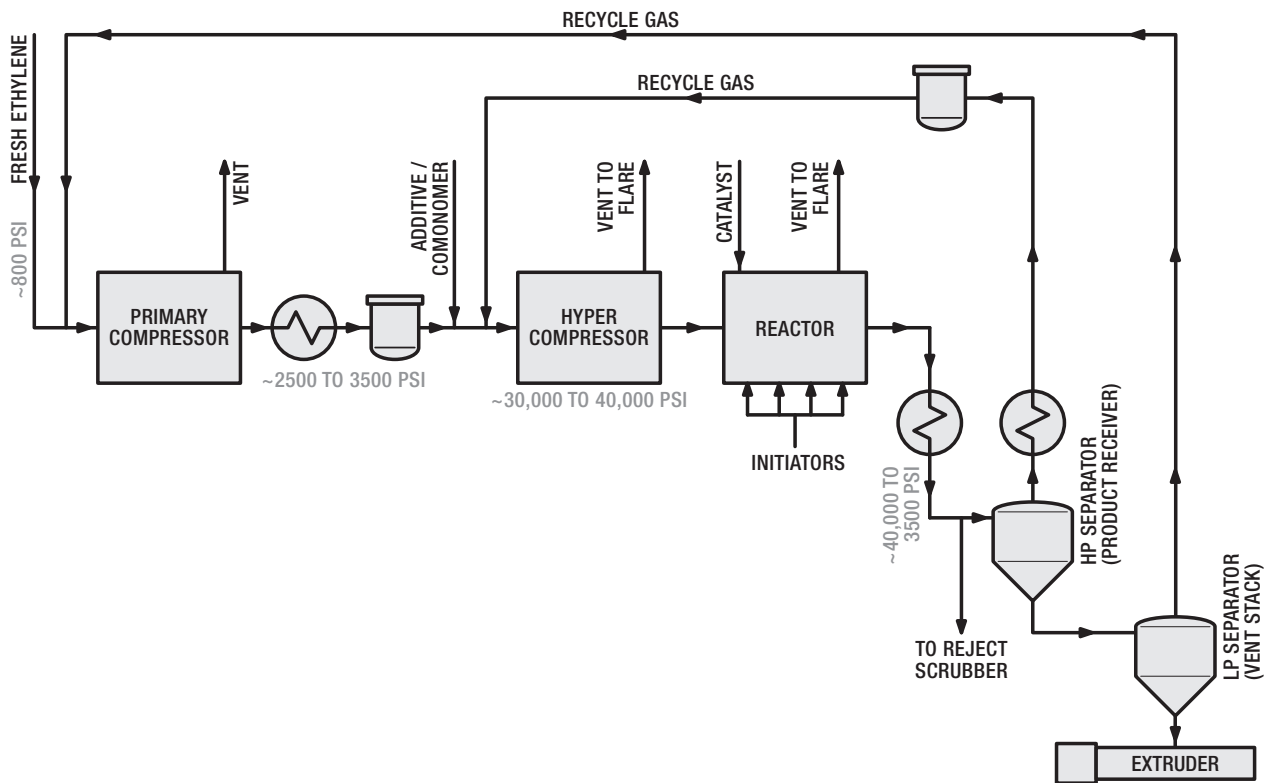


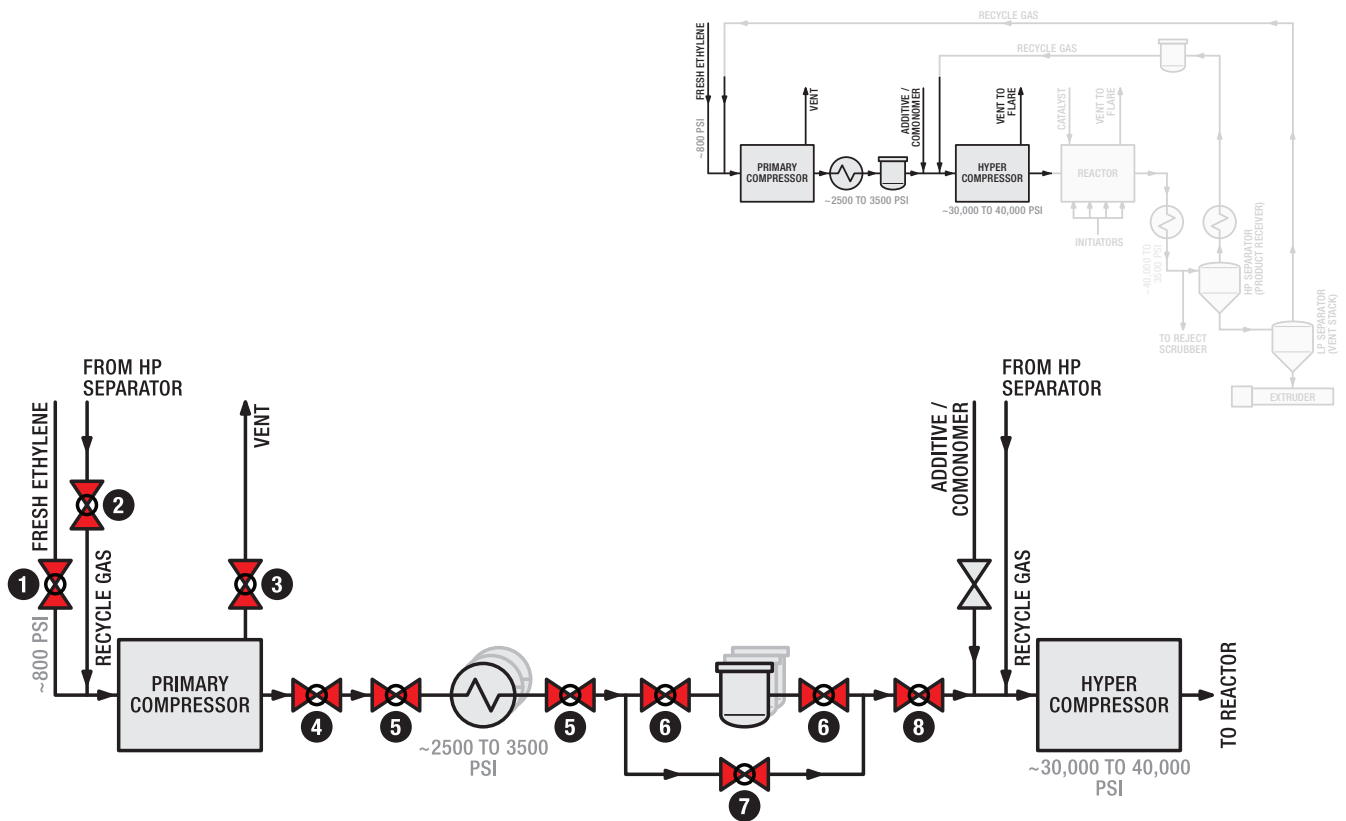
# Low Density Polyethylene (LDPE)

## Process Overview



# Low Density Polyethylene (LDPE)

## Primary Compressor



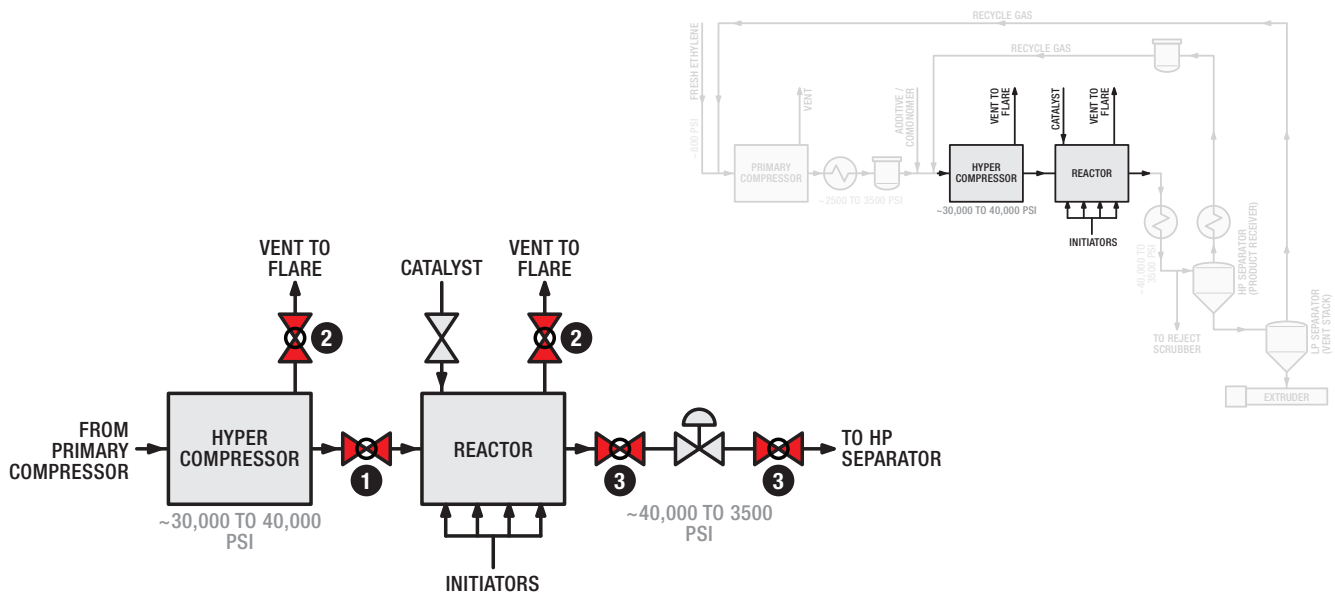
### LDPE – Primary Compressor

| Valve Number | Valve Description       | Design Temperature Range |           | Design Pressure Range |             | Pipe Size |          | Recommended Valve <sup>1</sup> |          |          |              |      |               |             |
|--------------|-------------------------|--------------------------|-----------|-----------------------|-------------|-----------|----------|--------------------------------|----------|----------|--------------|------|---------------|-------------|
|              |                         | deg F                    | deg C     | psig                  | bar g       | in        | dn       | C-Series                       | T-Series | G-Series | ISOLATOR 2.0 | IRSP | Watson Series | FlexStream® |
| 1            | Fresh Feed              | 150 – 250                | 65 – 120  | 500 – 600             | 34 – 41     | 2 – 4     | 50 – 100 |                                |          |          | •            |      |               |             |
| 2            | Recycle Feed            | 250 – 350                | 120 – 175 | 500 – 600             | 34 – 41     | 2 – 4     | 50 – 100 |                                |          |          | •            |      |               |             |
| 3            | Primary Compressor Vent | 300 – 400                | 150 – 200 | 5000–6000             | 345 – 414   | 1/2 – 1   | 13 – 25  | •                              |          |          |              |      |               |             |
| 4            | Primary Compressor      | 300 – 400                | 150 – 200 | 5000–6000             | 345 – 414   | 2 – 4     | 50 – 100 | •                              |          |          |              |      |               |             |
| 5            | Cooler                  | 300 – 400                | 150 – 200 | 5000–6000             | 345 – 414   | 2 – 4     | 50 – 100 | •                              |          |          |              |      |               |             |
| 6            | Filter                  | 300 – 400                | 150 – 200 | 5000–6000             | 345 – 414   | 2 – 4     | 50 – 100 | •                              |          |          |              |      |               |             |
| 7            | Filter Bypass           | 300 – 400                | 150 – 200 | 5000–6000             | 345 – 414   | 2 – 4     | 50 – 100 | •                              |          |          |              |      |               |             |
| 8            | Hyper Compressor Filter | 300 – 400                | 150 – 200 | 5000–6000             | 345 – 414   | 2 – 4     | 50 – 100 | •                              |          |          |              |      |               |             |
|              | Heat Exchanger          | 300 – 1500               | 150 – 815 | 200 – 900             | 13.8 – 62.1 | 1/2 – 4   | 13 – 100 |                                |          |          |              | •    |               |             |
|              | General Ball Valves     | 25 – 900                 | -4 – 480  | 25 – 600              | 1.7 – 41.4  | 1 – 4     | 25 – 100 |                                |          | •        |              |      |               |             |

<sup>1</sup> Recommend ISOLATOR 2.0 or T-Series if size, pressure and temperature conditions are met.

# Low Density Polyethylene (LDPE)

## Reactor



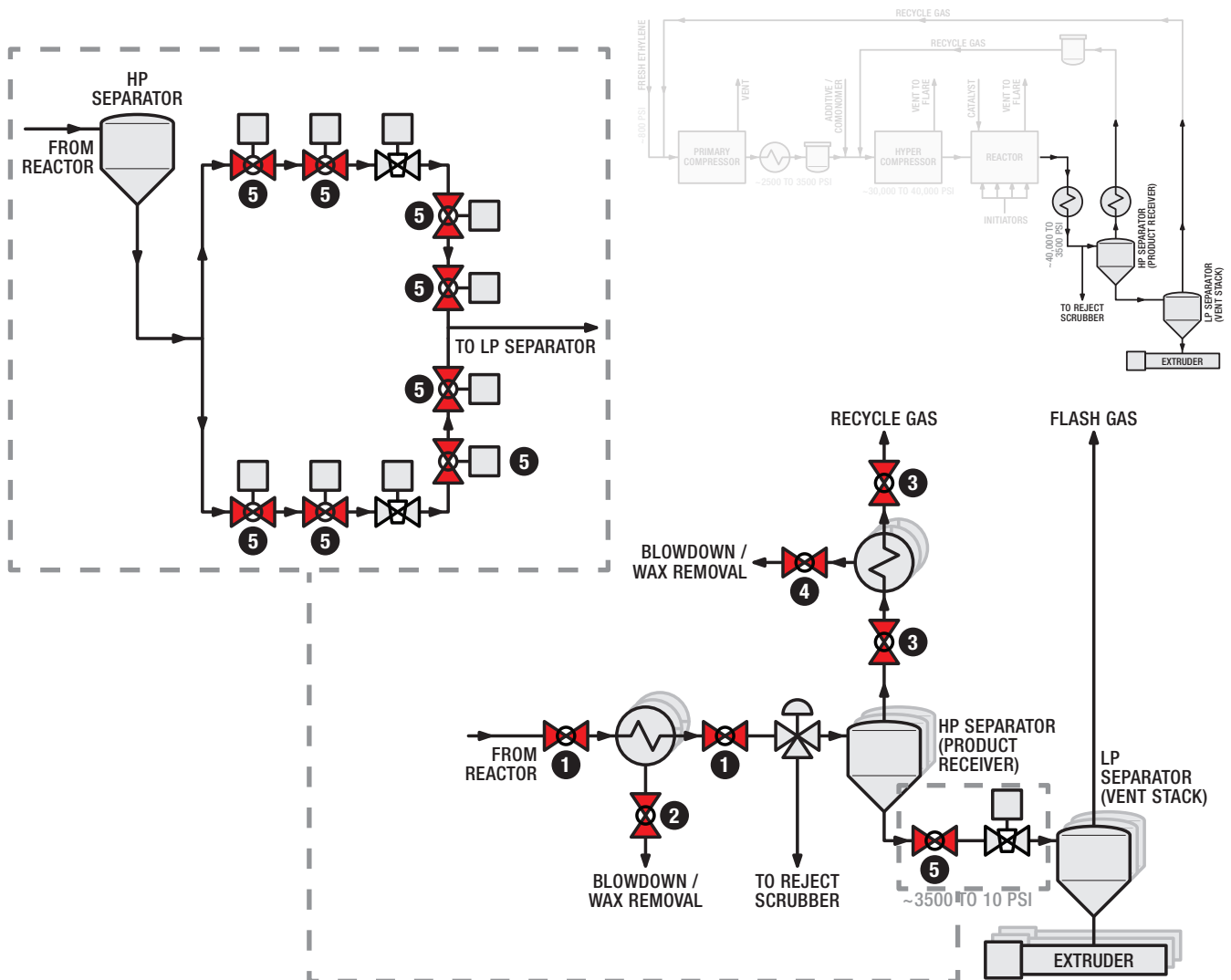
### LDPE – Reactor

| Valve Number | Valve Description          | Design Temperature Range |           | Design Pressure Range |             | Pipe Size |         | Recommended Valve <sup>1</sup> |          |          |              |       |               |             |  |
|--------------|----------------------------|--------------------------|-----------|-----------------------|-------------|-----------|---------|--------------------------------|----------|----------|--------------|-------|---------------|-------------|--|
|              |                            | deg F                    | deg C     | psig                  | bar g       | in        | dn      | C-Series                       | T-Series | G-Series | ISOLATOR 2.0 | iRSVP | Watson Series | FlexStream® |  |
| 1            | Hyper Compressor Discharge | 400 – 500                | 200 – 260 | 16,000 – 40,000       | 1103–2758   | 1 – 2     | 25 – 50 | •                              |          |          |              |       |               |             |  |
| 2            | Reactor Vent               | 400 – 500                | 200 – 260 | 16,000 – 40,000       | 1103–2758   | 1/2 – 1   | 13 – 25 | •                              |          |          |              |       |               |             |  |
| 3            | High Pressure Letdown      | 400 – 500                | 200 – 260 | 3500–6250             | 241 – 431   | 2 – 3     | 50 – 75 | •                              |          |          |              |       |               |             |  |
|              | Heat Exchanger             | 300 – 1500               | 150 – 815 | 200 – 900             | 13.8 – 62.1 | 1/2 – 2   | 13 – 50 |                                |          |          |              | •     |               |             |  |
|              | General Ball Valves        | 25 – 900                 | -4 – 480  | 25 – 600              | 1.7 – 41.4  | 1 – 3     | 25 – 75 |                                |          | •        |              |       |               |             |  |

<sup>1</sup> Recommend ISOLATOR 2.0 or T-Series if size, pressure and temperature conditions are met.

# Low Density Polyethylene (LDPE)

## High Pressure Separator (Product Receiver)



LDPE – High Pressure Separator (Product Receiver)

| Valve Number | Valve Description        | Design Temperature Range |           | Design Pressure Range |             | Pipe Size |          | Recommended Valve <sup>1</sup> |          |          |              |      |               |             |  |
|--------------|--------------------------|--------------------------|-----------|-----------------------|-------------|-----------|----------|--------------------------------|----------|----------|--------------|------|---------------|-------------|--|
|              |                          | deg F                    | deg C     | psig                  | bar g       | in        | dn       | C-Series                       | T-Series | G-Series | ISOLATOR 2.0 | iRSP | Watson Series | FlexStream® |  |
| 1            | Product Receiving Cooler | 400 – 500                | 200 – 260 | 2400–3500             | 165 – 241   | 2 – 4     | 50 – 102 | •                              |          |          |              |      |               |             |  |
| 2            | Wax Blowdown             | 400 – 500                | 200 – 260 | 2400–3500             | 165 – 241   | 1/2 – 1   | 13 – 25  | •                              |          |          |              |      |               |             |  |
| 3            | Recycle Gas Cooler       | 400 – 500                | 200 – 260 | 2400–3500             | 165 – 241   | 2 – 4     | 50 – 100 | •                              |          |          |              |      |               |             |  |
| 4            | Wax Blowdown             | 400 – 500                | 200 – 260 | 2400–3500             | 165 – 241   | 1/2 – 1   | 13 – 25  | •                              |          |          |              |      |               |             |  |
| 5            | Low Pressure Letdown     | 400 – 500                | 200 – 260 | 2400–3500             | 165 – 241   | 2 – 4     | 50 – 100 | •                              |          |          |              |      |               |             |  |
|              | Heat Exchanger           | 300 – 1500               | 150 – 815 | 200 – 900             | 13.8 – 62.1 | 1/2 – 2   | 13 – 50  |                                |          |          |              | •    |               |             |  |
|              | General Ball Valves      | 25 – 900                 | -4 – 480  | 25 – 600              | 1.7 – 41.4  | 1 – 3     | 25 – 75  |                                |          | •        |              |      |               |             |  |

<sup>1</sup> Recommend ISOLATOR 2.0 or T-Series if size, pressure and temperature conditions are met.