Up to two questions “Funnel the Spec” to one product type.

Start at the top, follow the path down, end on the recommendation. Designed for distributors to send a customer ahead of a quote call.

QUESTION 1

Where in the system is the protection going?

AT THE COMPRESSOR, DISCHARGE OR HEAD

QUESTION 2A

Backflow protection (check valve) or over-pressure protection (relief valve)?

IF BACKFLOW · COMPRESSOR DISCHARGE LINE

RECOMMEND

Discharge Check Valve

Match the temperature rating to the compressor type: reciprocating discharge 300–400°F needs a hot-discharge valve, rotary-screw discharge 180–210°F tolerates general-service. Cross-reference by compressor make / model / HP and discharge port size.

IF OVER-PRESSURE · COMPRESSOR HEAD OR DISCHARGE-SIDE

RECOMMEND

Safety Relief Valve

Small-body valve (1/8"–3/8" NPT) set 10–25 PSI above compressor cut-out. ASME-certified, sized to the compressor's full SCFM. Fires only on a genuine control failure (pressure switch welded, unloader stuck, downstream valve closed mid-run).

AT THE RECEIVER OR AFTERCOOLER VESSEL

QUESTION 2B

Backflow at the receiver inlet, or ASME-mandatory relief on the vessel?

IF BACKFLOW · RECEIVER INLET · MULTI-COMPRESSOR SYSTEM

RECOMMEND

Discharge Check Valve

Required where multiple compressors share a receiver and one machine could backflow into another, or where the receiver needs isolation for service without bringing down the upstream compressor. Size to the receiver inlet connection; temperature rating per the upstream discharge.

IF OVER-PRESSURE · ASME RELIEF ON THE VESSEL

RECOMMEND

Safety Relief Valve

Read the vessel ASME nameplate: set pressure at or below MAWP. Relieving capacity equal to or above the upstream compressor's max SCFM at the set pressure. ASME UV stamp + National Board number required, no exceptions.

CODE OR AUDIT CONVERSATION, "DO I NEED ONE"

QUESTION 2C

Is this a code-vessel question, or an over-pressure event the customer is reacting to?

IF CODE · OSHA INSPECTION · INSURANCE AUDIT

RECOMMEND

Safety Relief Valve

Yes: ASME Section VIII, OSHA 1910.169, and the National Board Inspection Code mandate one on every pressurized vessel. Cite the code, attach the annual lift-test service, and quote the matched ASME-certified valve. Non-ASME is not a substitute.

IF BACKFLOW EVENT · NOISE ON SHUTDOWN · RECEIVER BLEEDING OVERNIGHT

RECOMMEND

Discharge Check Valve

Failed discharge check is the leading suspect. On a rotary-screw, the symptom is also a reverse-rotation event damaging the air-end every shutdown: quote the matched cross-reference and ship same-day. Don't wait for the next PM.

Two rules behind the tree. **Discharge checks are temperature-rated**: match the rating to the compressor type (general-service for rotary-screw discharge, hot-discharge for reciprocating). **Relief valves are code-certified**: ASME UV stamp + National Board number on every quote, set pressure at or below vessel MAWP, relieving capacity at or above compressor full SCFM. The conversation here is "what does the code require and what does the position need," not "which brand performs better." On every receiver and every compressor service quote, both lines get checked.

"Performance valves compete on dew point and CFM. Safety valves compete on UV stamps, National Board numbers, and temperature ratings. The code does the selling."

SPC DISTRIBUTOR PLAYBOOK · SYSTEM SAFETY VALVES · HOW TO CLOSE THE RECEIVER QUOTE