



MANÁSOLDA® - CLÁSSICO

Dynamic gas mixer for mixing two gases, with adjustment of the gas concentration from 0 to 100%, control of the flow rate and outlet pressure of the gas mixture. Also includes safety valves and sintered filters for the mixer inlet doors.

Suitable for welding, plasma cutting, laser cutting, steel/metal processing, offshore, shipbuilding, and other segments where the proper gas mixture is an important factor to guarantee quality and consistency in the manufacturing process.

BENEFITS:

- **A GAS MIXER REDUCES GAS MIXTURE COST/WELDING COST:** Generating your own gas mixture represent significant monthly savings, reducing the cost of the final product, increasing competitiveness and productivity.
- **GAS MIXER FLEXIBILITY – THE IDEAL GAS MIXTURE FOR EACH WELDING OR CUTTINGS TASK –** Different materials, thickness and welding processes require different gas mixtures for better performance. MANÁSOLDA® generates the most optimized gas mixture for your process.
- **ELIMINATES CYLINDER STOCK AND HANDLING WITH DIFFERENT GAS MIXTURES:** Having the freedom to generate your own gas mixture saves time and money by reducing the number of cylinders and eliminating the high cost of cylinders with commercial/premixed gas mixtures.
- **MINIMIZES WELD PREPARATION TIME:** It is not necessary to change cylinders, regulators, flow control devices or hoses when changing from one mixture to another.
- **IDEAL FOR TRAINING/QUALIFICATION:** Welders can quickly notice the effect of different gas mixtures on the quality and penetration of the weld.
- **EASY TO WORK WITH PRESSURE AND FLOW CONTROL:** Just adjust the knobs to concentrate the mixture, adjust the pressure and flow out of the gas mixture. Eliminates the need for additional flow control devices when used in single station applications. For multiple stations, ideal to adopt independent flow meters. No need electric power to work.
- **HOMOGENEOUS GAS MIXTURES:** Mixtures of gases stored in cylinders can separate (stratify) if stored for a long time. The gas mixtures generated by MANÁSOLDA® are homogeneous and of high precision, thus eliminating the risk of eliminating stratification.

| MANÁSOLDA® CLÁSSICO – Dynamic Gas Mixer with adjustment of the gas concentration from 0 to 100% | | | | |
|---|---|----------|--|--------|
| Carrier Gas | Argon (Ar) | | Nitrogen (N ₂) | |
| Balance Gas | Carbon Dioxide (CO ₂) Helium (He) Nitrogen (N ₂) | | Carbon Dioxide (CO ₂) Helium (He) Hydrogen (H ₂) | |
| Gas mixture range (%) ISO 14175 | Examples of gas mixtures suitable for welding and cutting From 0 to 100% for CO ₂ (Carbon Dioxide) e N ₂ (Nitrogen) Ar (Argon) and CO ₂ (Carbon Dioxide) (from 0 to 25%) Ar (Argon) and He (Helium) (from 0 to 25%) <i>This gas mixer is not suitable for mixing flammable gases. If in doubt, consult MANÁGAS® for technical indication.</i> | | | |
| Inlet Pressure | Min. 5 bar (70 psi) Max. 20 bar (290 psi) | | | |
| Outlet Pressure | De 1 a 8 bar (14,5 a 116 psi) | | | |
| Safety Valve | 2 bar (30 psi) above inlet pressure | | | |
| Flow Rate | 0,72 to 12,3 m ³ /h – (12 – 205 L/min) (in Nitrogen) | | | |
| Inlet Door | 1/4 or 3/8 NPT Female | | | |
| Outlet Door | 1/4 or 3/8 NPT Female | | | |
| Dimensions and Weight | Length | Width | Height | Weight |
| | 300 (mm) | 290 (mm) | 200 (mm) | 7 kg |

Important: We can meet other demands for additional gas mixtures, according to the customer's needs.



OPTIONS:

- **INLINE GAS ANALYZER FOR CONTROL, DOCUMENTATION AND ADJUSTMENT OF GAS MIXTURE CONCENTRATION;**
- **ALARM SYSTEM, FOR OPTICAL AND ACOUSTIC SIGNALING OF FAULT GAS MIXTURE CONCENTRATION;**
- **ALARM SYSTEM, FOR OPTICAL AND ACOUSTIC SIGNALING OF FAULT/LOW SUPPLY PRESSURE (INLET GASES);**
- **USB PORT TO ALLOW THE GAS MIXER TO BE LINKED TO A PC OR PLC TO RECORD GAS CONCENTRATION X TIME;**
- **INTEGRATED BAR-CODE READER FOR EASILY AND QUICKLY DATA LOGGING OF INSPECTOR/WELDER;**
- **MIXED GAS RECEIVERS WITH 250L, 280L, 550L and 890L VOLUMES.**

GAS MIXTURES FOR WELDING, LASER CUTTING AND PLASMA CUTTING:

| GAS MIXTURE RANGE | GAS MIXTURE CONTENT | APPLICATION |
|------------------------------------|---|----------------------------|
| 0 to 100% of CO ₂ in Ar | 5% of CO ₂ (Carbon Dioxide) in Ar (Argon) | Welding Shield Gas |
| | 25% of CO ₂ (Carbon Dioxide) in Ar (Argon) | |
| 0 to 100% of O ₂ in Ar | 5% of O ₂ (Oxigênio) in Ar (Argon) | Welding Shield Gas |
| 0 to 100% of He in Ar | 25% of He (Helium) in Ar (Argon) | Welding Shield Gas |
| 0 to 100% of He in Ar | 75% of He (Helium) in Ar (Argon) | Welding Shield Gas |
| 0 to 100% of H ₂ in Ar | 5% of H ₂ (Hydrogen) in Ar (Argon) | Welding and Plasma Cutting |
| | 5% of H ₂ (Hydrogen) in Ar (Argon) | |

GAS MIXTURES FOR ADDITIONAL APPLICATIONS:

| GAS MIXTURE RANGE | GAS MIXTURE CONTENT | APPLICATION |
|--|--|------------------------------------|
| 0 to 100% of N ₂ in Ar | 10% of N ₂ (Nitrogen) in Ar (Argon) | Gas Filling for incandescent lamps |
| 0 to 100% of CO ₂ in N ₂ | 30% of CO ₂ (Carbon Dioxide) in N ₂ (Nitrogen) | Food Packaging |
| 0 to 100% of O ₂ in N ₂ | 5% of O ₂ (Oxygen) in N ₂ (Nitrogen) | Food Packaging |
| 0 to 100% of He in N ₂ | 10% of He (Helium) in N ₂ (Nitrogen) | Leak Detection |
| 0 to 100% of H ₂ in N ₂ | 10% of H ₂ (Hydrogen) in N ₂ (Nitrogen) | Furnace Atmosphere |
| | 75% of H ₂ (Hydrogen) in N ₂ (Nitrogen) | |

Gas Mixtures Range

- 0-100% Carbon Dioxide balance Argon
- 0-100% Oxygen balance Argon
- 0-100% Helium balance Argon
- 0-100% Hydrogen balance Argon
- 0-100% Nitrogen balance Argon
- 0-100% Carbon Dioxide balance Nitrogen
- 0-100% Oxygen balance Nitrogen
- 0-100% Helium balance Nitrogen
- 0-100% Hydrogen balance Nitrogen
- Customized gas mixtures for O₂ or more gases

