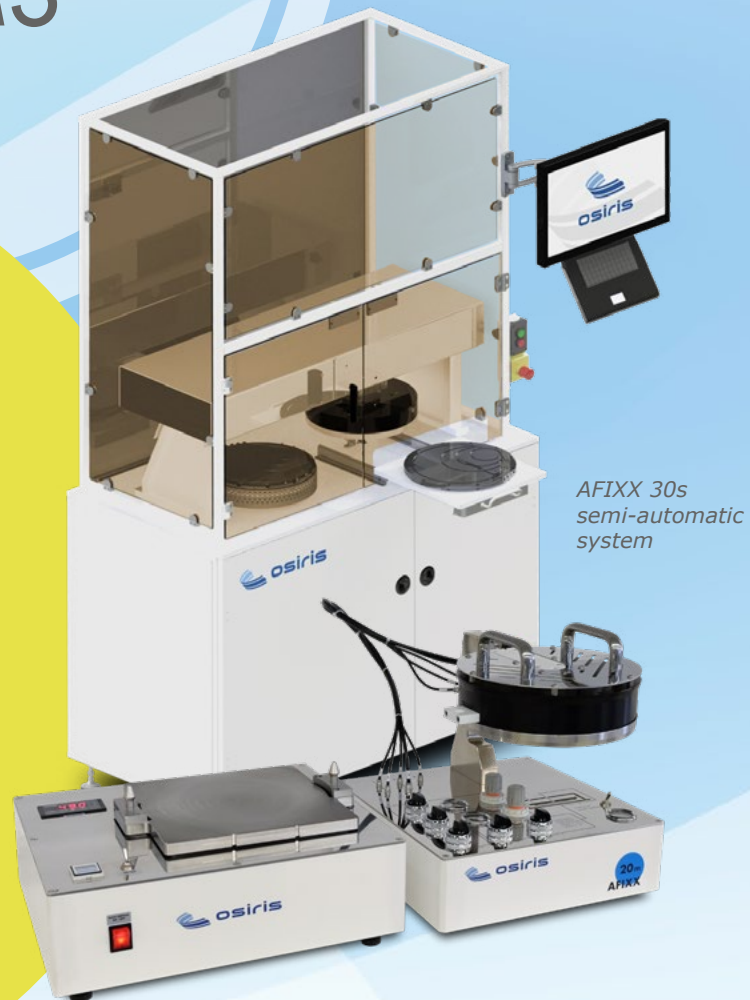


AFIXX M/S

TEMPORARY BONDING SYSTEMS

BENEFITS

- ÷ Wafer size from pieces up to Ø12"/300mm
- ÷ Suitable for very thin fragile substrates (< 40 µm)
- ÷ Laser marks for accurate alignment of wafer and carrier
- ÷ Excellent TTV
- ÷ With hotplate up to 200°C
- ÷ Compatible with silicon, compound and glass materials
- ÷ Designed for R&D and low volume production



*AFIXX 30s
semi-automatic
system*

*AFIXX 20m
manual system*

WAFERS UP TO Ø 300MM / Ø 12"

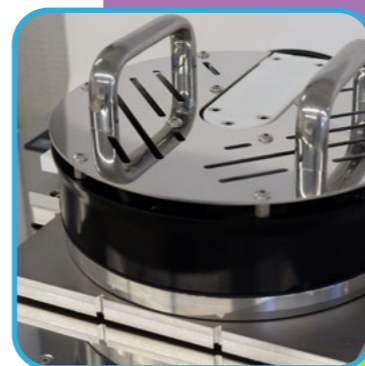
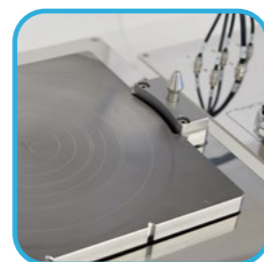
(SILICON, COMPOUND AND GLAS MATERIALS)

Temporary bonding of substrates onto different types of carriers:

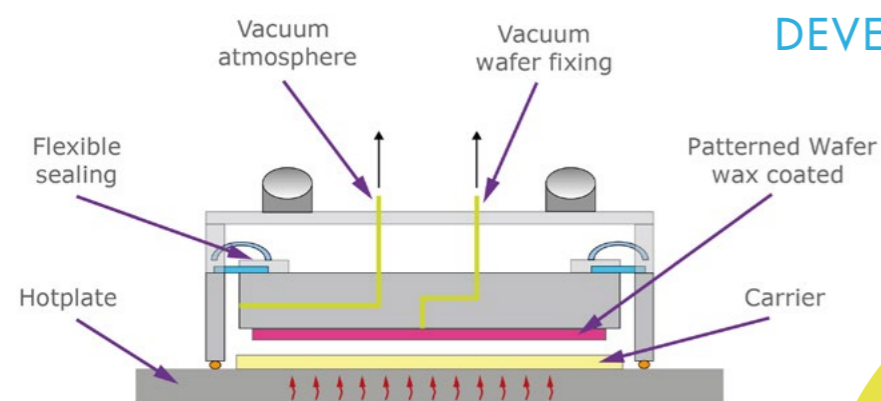
- ÷ Substrates on substrates
- ÷ Substrates on glass carrier
- ÷ Substrates on sapphire carrier
- ÷ Substrates on ceramic carrier

Different Adhesives such as:

- Wax > activated by thermal process
- Adhesive > activated by thermal and solvent influenced process



STRUCTURE DEVELOPMENT



IDEAL FOR R&D AND LOW VOLUME PRODUCTION

AFIXX M MANUAL SYSTEM

The table-top system was designed for manual temporary bonding of individual substrates onto rigid carriers or other substrates. It is suitable for very thin fragile substrates and flexible plastic materials.

This basic laboratory device uses the patented temporary bonding technology developed by osiris international.

It is a versatile system that is ideal for many R&D applications.

The AFIXX 20m is equipped with a hotplate to heat up to 200°C the carrier or substrates.

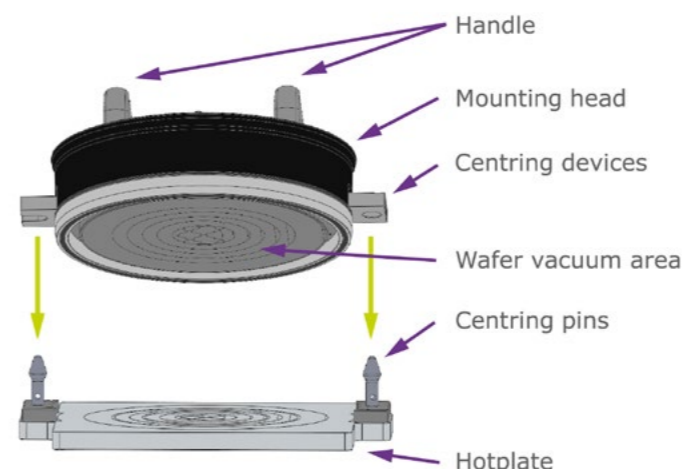
PROPERTIES (MAUNAL SYSTEM)

- ÷ For round wafer or square substrates
- ÷ Substrates sizes from pieces up to Ø 200 mm (Ø 8") or 150 x 150 mm (6 x 6 inch) optional for round wafers: Ø 300 mm (Ø 12")
- ÷ With hotplate up to 200°C
- ÷ Suitable for very thin fragile wafers (< 40 µm) and flexible plastic materials
- ÷ Laser Marks for accurate alignment of wafer and carrier
- ÷ Additional vacuum on / off switch for hotplate with digital display
- ÷ Manually adjustable level feet
- ÷ Excellent TTV
- ÷ Compatible with silicon, compound and glass materials
- ÷ Designed for R&D and low volume production



AFIXX 20m (Ø200mm)
Manual table-top system with hotplate.

SUITABLE FOR VERY THIN FRAGILE WAFERS AND FLEXIBLE PLASTIC MATERIALS
COMPATIBLE WITH SILICON, COMPOUND AND GLAS MATERIALS
LOW COST OF OWNERSHIP



Uniform and repeatable mounting process is ideal for applications such as; CMP, grinding, polishing and etching.

Excellent TTV

This patented vacuum temporary bonding device achieves void free bonds with ideal TTV.

MANUAL

ADDITIONAL OPTIONS

(MANUAL SYSTEM)

- ÷ Vacuum pump
- ÷ Heating plate with higher temperature up to 400°C
- ÷ Cooling plate



TECHNICAL DATA /AFIXX 20m

GENERAL

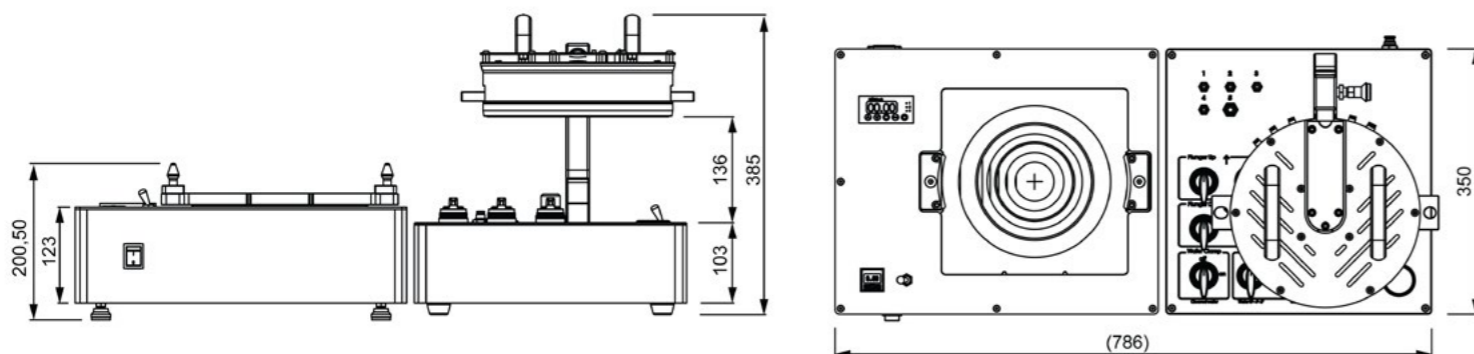
Substrate Size:	Ø 200 mm (Ø 8") or 150 x 150 mm (6 x 6 inch)
Housing:	made of PP white
Work surface:	micro-polished stainless steel and anodized aluminum

REQUIREMENTS

Power:	230 (110) VAC / 1 Phase / N / PE / 50(60) Hz
Vacuum:	-0.8 bar / -600 Torr, tube OD Ø8 mm

DIMENSIONS (W X D X H) approx.

Control console:	350 x 350 x 385 mm (13.8 x 13.8 x 15.2 inch)
Hotplate module:	411 x 350 x 200 mm (16.2 x 13.8 x 7.9 inch)
Whole system:	786 x 350 x 385 mm (30.9 x 13.8 x 15.2 inch)



PROPERTIES (SEMI-AUTOMATIC SYSTEM)

- ÷ Substrates sizes from pieces up to Ø300 mm (Ø12") or 230 x 230 mm (9"x 9")
- ÷ Automatic temporary bonding processing with manual loading and unloading station
- ÷ Integrated hotplate up to 200°C
- ÷ Suitable for very thin fragile wafers (< 40 µm) and flexible plastic materials
- ÷ Excellent TTV
- ÷ Laser Marks for accurate alignment of wafer and carrier
- ÷ Transparent doors for safe process observation
- ÷ System control unit used for operation GUI (windows 7/10)
- ÷ 22" touchscreen display
- ÷ Compatible with silicon, compound and glass materials
- ÷ Designed low volume production

AUTOMATIC TEMPORARY BONDING PROCESSING WITH MANUAL LOADING AND UNLOADING STATION

INTEGRATED HOTPLATE UP TO 200°C

EXCELLENT TTV

AFIXX 30s (Ø300mm)
Semi-Automatic systemAFIXX S
SEMI-AUTOMATIC SYSTEM

The semi-automatic stand-alone system was designed for temporary bonding of individual substrates onto rigid carriers or other substrates. It is suitable for very thin fragile substrates and flexible plastic materials. The unified and repeatable mounting process is ideal for applications such as CMP, grinding, polishing and etching.

The AFIXX 30s system has an integrated heating plate that can heat the carrier or substrates up to 200°C.

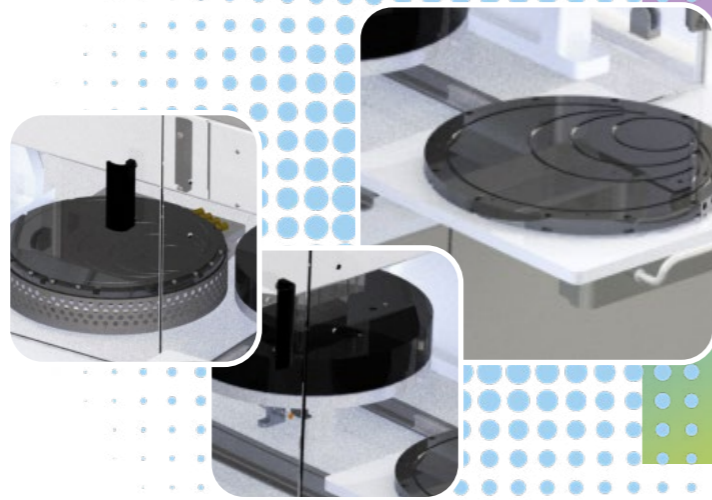
Loading and unloading is done manually. Optional, you can equip the system later with an automatic handling system. The temporary bonding process is executed automatically.

SEMI-AUTOMATIC

OPTIONS

(SEMI-AUTOMATIC SYSTEM)

- ÷ Wafer / Carrier transfer arm
- ÷ Micro climate with FFU
- ÷ Vacuum pump
- ÷ Cooling plate
- ÷ Hotplate up to 400 °C



TECHNICAL DATA /AFIXX 30s

GENERAL

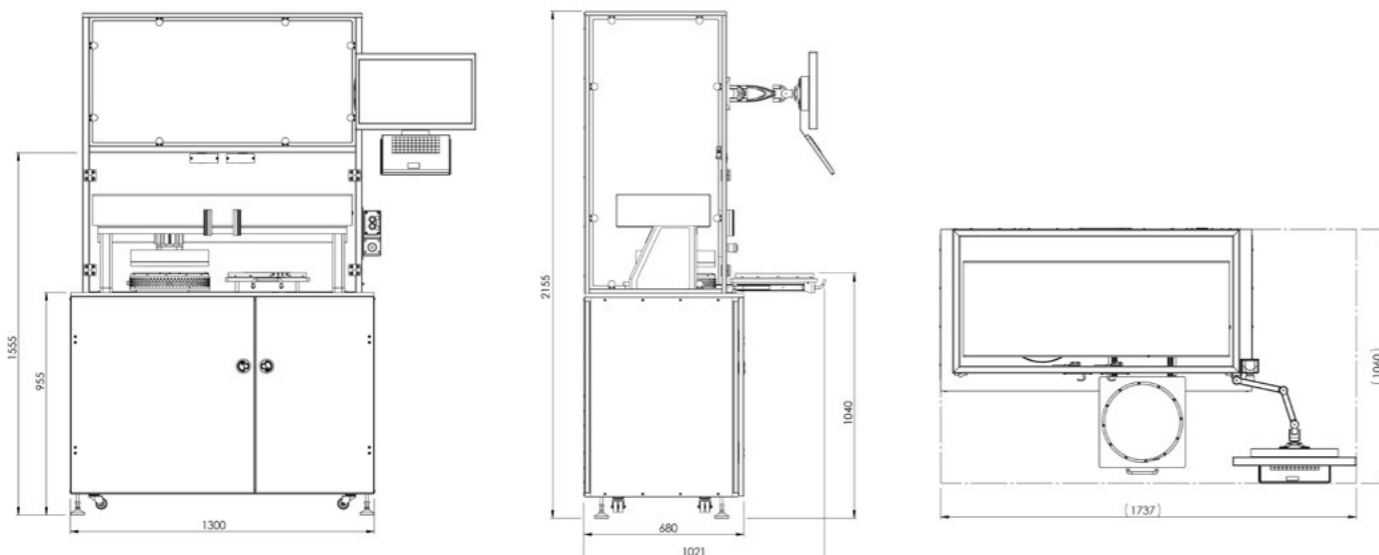
Substrate Size: up to Ø 300 mm (Ø 12") or 230 x 230 mm (9"x 9")
Housing: steel frame powder coated
Work surface: micro-polished stainless steel and anodized aluminum

REQUIREMENTS

Power: 230 (110) VAC / 1 Phase / N / PE / 50(60) Hz
Vacuum: -0.8 bar / -600 Torr, tube OD Ø8 mm
Exhaust: 1x OD Ø110 mm, max. 120m³/h

DIMENSIONS (W X D X H) approx.

Housing: 1.300 x 680 x 2.155 mm (51.2 x 26.8 x 84.8 inch)
Work area: 1.737 x 1.060 mm (68.4 x 41.7 inch)



AFIXX-SERIES

TEMPORARY BONDING PROCESSING SYSTEMS



MANUAL
TABLE-TOP SYSTEM
AFIXX 20m (Ø 200 mm)
with hotplate up to 200°C



SEMI-AUTOMATIC
STAND-ALONE SYSTEM
AFIXX 30s (Ø 200-300 mm)
with integrated hotplate up to 200°C



AUTOMATIC
STAND-ALONE SYSTEM
AFIXX 22a (Ø 200 mm)
Automatic (cassette to cassette)
platform for production with high
requirements for uniformity and
repeatability.



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Version: AFIXX-M/S_datasheet-osiris-200630

Data, design and specification of custom built machines depend on individual process conditions and can vary according to equipment configurations. Not all specifications may be valid simultaneously. Illustrations in this brochure are not legally binding. Osiris International GmbH reserves the right to change machine specifications without prior notice.