Makr Shakr® is the world’s first, award-winning, robotic bar system.

Makr Shakr® allows users to create an almost limitless number of alcoholic and non-alcoholic drink combinations by accessing a simple app. The cocktail creations will then be assembled by two robotic arms, whose movements - shown on a large display positioned behind the bar - mimic the actions of a bartender, from the shaking of a martini to the thin slicing of a lemon garnish to the muddling of a mojito.

Makr Shakr® is a great example of how digital technologies are changing the interaction between people and products.
HOW DOES IT WORK

TO USE MAKR SHAKR®, USERS ACCESS AN APPLICATION THAT ALLOWS THEM TO PREPARE ONE OF APPROXIMATELY ONE GOOGOL (EQUAL TO $10^{100}$) CROWD-SOURCED DRINK COMBINATIONS.

To create an engaging bar experience, the robots' movements were modeled on the gestures of the Italian dancer and choreographer Marco Pelle from New York Theatre Ballet.

Guests will have the possibility to name their own recipes, access their order history and reorder their favorite cocktails, while rating and commenting on each other’s creations. They can gain inspiration by viewing other users’ recipes and comments before sending in their drink of choice.

Makr Shakr® doesn’t simply transform the users’ creativity into reality, it also involves them in the creation process by showing them each and every step.
PREVIOUS INSTALLATIONS

GOOGLE I/O
- MAY 15 2013, SAN FRANCISCO

MILAN DESIGN WEEK
- APRIL 9-14 2013, MILAN

EXPO MILAN 2015
- AUGUST - SEPTEMBER 2015, MILAN

ABSOLUT SYMPOSIUM
- NOVEMBER 4 2015, TURIN
MICROSOFT FUTURE DECODED
—
NOVEMBER 10-11 2015, LONDON

AUTODESK UNIVERSITY
—
DECEMBER 1-3 2015, LAS VEGAS

SOBEWFF 2016
—
FEBRUARY 25-28 2016, MIAMI

KENT IFUSE LAUNCH
—
JUNE 5-18 2016, BUCHAREST
STARTING SEPTEMBER 2015, MAKR SHAKR® IS AVAILABLE IN A PORTABLE, POP-UP VERSION FOR TEMPORARY EVENTS.

Makr Shakr® goes on tour: thanks to our fully re-designed and re-engineered mobile version, the robotic bar experience can now be delivered to any event and location upon request. Arriving ready to use, the whole system can be unpacked with minimum effort.
### TECH SPECS

- **2** robotic arms
- **up to 120** drinks per hour
- **1** google drink combinations
- **4** actions: muddle, stir, shake, strain
- **16** BiB lines
- **up to 6** syrup dispensers
- **2** ice machines
- **4** lemon cutters
- **4** cup dispensers
- **4** granular dispensers
- **1 or 2 sides** bar accessibility
- **6** drink delivery tracks (on both sides)

- **QR code** drink release technology
- **WiFi** network infrastructure
- **4** display LED walls with cocktails details and infographics
- **6 hrs** off the grid operating autonomy
- **12 hrs** installation/deployment time
- **20ft** high-cube type container for easy shipping and quick deployment

- **6090x2438x2896** dimensions when closed (mm)
- **8150x2780x2896** dimensions when open (mm)
- **13 tons** gross weight of the container
- **400 liters** internal storage
- **25kW** three-phase 400V 63A 5p power supply
6 FEATURES

**A - LED WALLS**
4 high-brightness LED walls (1920mm x 1200mm) to visualize real-time information on current orders, queue time and usage statistics;

**B - AUTOMATED BAR**
Ice machines, soda and juice dispensing machines, lemon cutters, cup dispensers, muddlers, blenders, granular dispensers, washing areas are housed behind the side walls;

**C - COUNTER**
Black glossy finish Corian counter. The backlit panels on the front can be moved and lifted and the space underneath can be used for storage;

**D - BOTTLES**
173 bottles (up to 61 different spirits) mounted on the ceiling of the structure, paired with custom-designed valves for millilitre-precision dispensing;

**E - CONVEYORS**
6 delivery systems to move drinks from the robots’ operating zone to the guests reach on both sides of the counter, activated by users from the app or thanks to integrated QR Code readers;

**F - ROBOTS**
2 six-axis waterproof robotic arms to mix and serve drinks. Robots also perform dances on request.
Two +/-270° laser scanners guarantee the immediate and complete stop of the robot if the safety zone is breached.

During operations, the automated bar can be easily refilled and maintained by accessing these areas from the two sides of the container;
8 FOOTPRINT

- **Electrical Power**: 63A 5P
- **Potable Water Inlet**
- **Gray Water Outlet**

**Side 'B' Container**
- Height: 2896mm - 9' 6"
- Weight: 11 tons

**Side 'A'**
- Internet Cable

Dimensions:
- 2438mm - 8' 0"
- 6520mm - 21' 4.7"
- 1870mm - 6' 1.6"
- 8150mm - 26' 8.9"
- 6090mm - 20'
- 2780mm - 9' 1.5"
- 2438mm - 8' 0"
Container height: 2896mm - 9' 6"
Container weight: 11 tons
To create and order drinks, users can either access the Makr Shakr® app, available on the web and optimised for iOS and Android smartphones, or use a customized app on pre-set tablets. The app enables direct communication between people and the robots thanks to a series of simple and intuitive steps, as shown below.

**ACCESS CONTROL**
On the first screen, clients need to give their birth date. This can either cause a complete restriction of access (to avoid underage drinking) or trigger the availability of alcoholic and non-alcoholic drinks and ingredients;

**MENU**
The first screen works as a quick menu, on which the user can browse across his/her customised drinks, featured, classic and popular ones, or jump right to the drink builder to create a new recipe;

**ACTIVITY**
The activity screen is a unified summary of personal stats, past and current orders. Drinks’ completion percentage is displayed, and ready orders are immediately notified;

**DRINK BUILDER**
The drink builder is the real core of the app, conveying infinite combination possibilities in a simple, straightforward and fun interface, with hundreds of different ingredients to choose from;

**CUSTOM COCKTAILS**
Once created, a new recipe can be saved, named, immediately ordered and shared on social networks. Every new recipe can then be opened and modified again, allowing infinite variations;

**RECIPE BROWSING**
Along with the drink builder, users can choose between a great selection of pre-set cocktails, spanning from all-time classics to featured and event-specific ones. Various payment methods can be activated.
System status (drinks ready, queue time, etc.) and user-generated content are processed on a cloud server and displayed in real-time on the four LED walls at the sides of the bar, through animated infographics.

A  DRINK STATUS
Whenever a drink is in production, the LED walls display in real-time each action the robots are performing: following the recipe, every ingredient and action is described with text and motion graphics;

B  INSTAGRAM FEED
Throughout the event, all the photos taken and shared on Instagram with a pre-set hashtag are displayed in an animated carousel during the intervals between drinks;

C  INFOGRAPHICS
A huge amount of data is collected during the event and shown on the LED walls as colorful infographics: the number of drinks served and of ice cubes used, the most ordered cocktails, the most popular ones based on age, and much more.
Many parts of the Makr Shakr® aesthetics and experience can be personalised to better fit each event and sponsor’s needs.

**DOORS STICKERS**

Four areas, 1890x502 mm (74,41"x19,76 inches) above the LCD walls on the front and back sides can be customised with vinyl stickers applied on a white back-lighted Plexiglass surface.

Stickers size: 1890x502 mm

**INSTAGRAM HASHTAG**

Below the LED walls are other four areas which normally contain instructions for the clients on how to order drinks from Makr Shakr®. These include an invite to share pictures on Instagram with a customisable hashtag: all the pictures will be then shown thanks to a live feed on the LED walls.

Stickers size: 540x72 mm

**QR CODE TICKETS**

The payment of the drinks can be managed by pre-selling or giving away a set of tickets with unique QR codes: each ticket will allow to order and unlock a drink. The tickets will need to include a QR code and instructions on one side, and can be customised on the back.

Graphics size: 85x55 mm
D  CUPS
Makr Shakr® automatically picks up and delivers drinks into plastic cups. These cups, model SOLO SC TP-12, can be customised on both sides.

Logo/graphics size: 40x40 mm, black/white or color

E  ROBOTIC ARMS
Stickers can also be attached on the two robotic arms (biceps and forearm) and on the plastic cover at the base.

Stickers size: 165x60 mm

F  LED WALLS
The four high-brightness LED walls normally show the infographics loop described in section “10 Infotainment” on page 13. The content can be replaced with images, videos or custom-built web pages.

G  DRINK NAMES
All the cocktail recipes available in the Makr Shakr® app can be tweaked and customised with any name, and new recipes can be added without a number limit.

J  INGREDIENTS
Makr Shakr® can hold 140 different bottles of spirits: these can be changed along with the juices and sodas. Once paired through the system, all the new ingredients will be available to all users in the ‘drink builder’ section of the app and their consumption will be tracked.
CUSTOMISATION EXAMPLES
MOST POPULAR SHARED PICTURES AND POSTS

Robotic bartenders
More Videos by Tech Insider

Tech Insider
These robotic bartenders will never screw up your drink order.

Bionic Earl Robotic Bartenders Mix Drinks on Quantum of the Seas - Royal Caribbean

Royal Caribbean @RoyalCaribbean · Jan 28
Our bionic bartenders are front and center at this weekend's #BobeWTF.
For more information on shipping time and pricing, and other general inquiries contact us at:
write@makrshakr.com
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