

# UNDERSTANDING WATCHES



# OVERVIEW

Have you ever wondered what makes a watch tick? Or what those extra dials and knobs on your watch are actually used for? This module will dive into the nuts and bolts of a watch and how you can leverage this knowledge when helping customers find a watch. You'll also learn about the functions, materials and movements most commonly used in today's watches.

Ready to become a watch guru like us? Let's begin.

## WATCH COMPONENTS

This illustration explains the common features and components of a watch.



## WATCH FUNCTIONS

We are a tried-and-true watch company that has been around for years, so we have something for everyone! Some styles stop at the time, while others tell you the current date, day of the week and seconds. But it doesn't stop there. Many of our watches offer even more functionality The icons below explain each function and how they fit into your customer's lifestyle:

#### FUNCTION DESCRIPTION

Ani-digi



Shows the time and other information with hands (analog display) and numbers (digital display).

**Battery Life** 



The period of time that a battery will provide power. Life begins at the point when the factory initially installs the battery in the watch—they typically last for 2–3 years.

Chronograph



A stopwatch that measures intervals of time. Most have two or three subdials, and can measure partial seconds, minutes and/or hours.

Multifunction



Movement that measures day, date and 24-hour time; a multifunction simulates the appearance of a chronograph, but does not have pushers on the case.

**Topring** 



A functional component that surrounds the crystal and dial. They can also be used on sport watches for additional measurement.

## **WATER RESISTANCE**

Water resistance is the level of protection a watch has from water damage. US federal statute prohibits the use of the term "waterproof." Water resistance is measured in ATMs, or atmospheres, and represents the amount of water a watch can withstand before leaking. For example, a water resistance rating of 3 ATM means the watch is resistant to water at an equivalent of about 3 times the ordinary atmospheric pressure. Look at each ATM level below to see what each level of water resistance can stand.









Level of water resistance is usually noted on the watch's dial or case back



## **WATCH MATERIALS**

Now that you have an understanding of basic watch components and functionality, let's take the opportunity to discuss the materials they are made of. Many different types of straps, bracelets and cases are used on watches today, while some types are more durable and some more decorative than others. The materials help build the perfect watch to fit any customer's needs. Read below to learn more.

## STAINLESS STEEL

- The most common alloy used for watches today because of its durability and anti-erosion properties
- Very durable, hypoallergenic metal that can take on a brushed, polished or matte look
- Can be plated in a variety of colors

#### **Bottom line:**

Stainless steel is very durable and very versatile



**BRUSHED** 



**MATTE** 



**POLISHED** 





## **ACETATE**

- A synthetic material made from organic polymers such as polyethylene, PVC, nylon, etc.
- Hypoallergenic and resistant to scratching, tarnishing and corrosion
- Used mostly in sport styles and can take on many designs and colors

#### **Bottom line:**

Acetate is a lightweight, durable, synthetic material



## **CERAMIC**

- An inorganic, non-metallic compound that is created from clay or other similar material
- Can be customized into a variety of shapes, colors and finishes
- Considered a luxury material because of its weight and glossy luster
- Highly resistant to temperature and water but not impact resistant

#### **Bottom line:**

Ceramic is a heavy and lustrous material that should be handled with care

## **PLATINGS**

There are many type of platings for watch cases and bracelets. Each requires a different plating process that allows the coloring to adhere better to the metal. Read below to learn about some commonly used types of plating.

## **ANODIZING**

Anodized plating is a form of corrosion protection that utilizes aluminum as the principal plating material. This type of plating provides a great level of protection for aluminum. Some watches feature aluminum components which have anodized plating.

## **ELECTRO-PLATING**

A process where watch components are dipped into a solution containing dissolved plating materials and exposed to an electric current. After time, the plating adheres to the component.

## **ION PLATING**

lon plating is a way of applying a film of color and finish to metal, usually stainless steel. The coating material is vaporized and ionized into electrically-charged particles, then forced onto the metal watch material at high speeds. This obviously takes some pretty specialized equipment.

Ion plating is durable, wear-resistant and retains a high level of brightness.

Platings can be used to achieve an array of different colors and tones for its watches. Take a look at the following page for some examples.



#### YELLOW GOLD-TONE PLATING

Yellow gold is the only natural form of gold. However, gold is too soft in its pure form, so it is usually made into an alloy by mixing it with other metals. Most fashion watches use gold-tone plating which is NOT real gold.

#### **BENEFITS**

Available in a variety of styles and variations (mono-color, two-tone or tri-tone).
Popular choice as a common fashion accessory color.



### **ROSE GOLD-TONE PLATING**

A type of gold with a soft pink hue that contains the same metals as yellow gold, but with a higher concentration of copper. It was developed in Russia and is a popular color in Europe. Rose gold-tone is often seen in retro styling or in tri-color or gold-tone versions. Most fashion watches use rose gold-tone plating which is NOT real gold.

#### **BENEFITS**

Available in a variety of styles and variations (mono-color, two-tone or tri-tone).
Popular choice as a common fashion accessory color.

### OTHER PLATINGS

Beyond yellow gold-tone and rose gold-tone, many other plating colors and textures may be used, including blue, smoke and black. These additional plating options give our guests more selections to ensure they can find the perfect watch for any occasion or lifestyle.



## STRAPS & BRACELETS

Let's continue exploring the materials used in watches by looking closer at straps and bracelets. With so many strap and bracelet materials and styles, there are nearly endless options to fit every customer's tastes and lifestyle. So, does your customer prefer metal, leather or acetate? Read about the following strap or bracelet types to learn more about their features and benefits.



### **LEATHER STRAPS**

- · Flexible, soft and versatile; leather works well in both casual or formal settings
- Not as durable or water resistant as metal bracelets
- Remains a popular option due to simplicity, convertibility, style and comfort
- · Many of the leather straps offered in our stores are interchangeable



## SILICONE STRAPS

- Some customers prefer the laid back, sporty or casual look
- Offers the comfort of leather plus extra durability and ultra waterproof capabilities
- Inexpensive and available in a variety of styles, colors and textures
- Almost as durable as metal bracelets, and offers a longer life span
- Many of the silicone straps offered in our stores are interchangeable, which allows customers to build their own unique watch and change out straps whenever they want



## **FIELD STRAPS**

- A popular option due to the casual, lightweight look and waterproof strap
- Available in a variety of colors and patterns that change seasonally
- All field straps carried in our stores are interchangeable, which allows customers to build their own unique watch and change out straps whenever they want

## **METAL BRACELETS**

- Metal bracelets are more durable than other materials
- Stainless steel handles wear and tear well
- Metal bracelets are versatile and go with any look: dress, casual or sporty
- Plated bracelets are available in a variety of colors

### **CERAMIC**

- An inorganic, non-metallic compound that is created by heating (or pressurizing) then cooling raw materials
- Can be customized into a variety of shapes, colors and finishes
- Considered a luxury material because of its weight and luster
- Hypoallergenic



- A synthetic material made from a wide range of organic polymers such as polyethylene, PVC, nylon, etc., that can be easily molded into shapes
- Used mostly in sport styles and in lower-priced, mass-market watches
- Highly resistant to scratching, tarnishing and corrosion
- Hypoallergenic









Watch crystals were designed to be as hard as possible to protect the watch against shock? Softer materials scratch and break easily, which devalues the watch, and if shattered, can damage the face beyond repair. These are the most popular crystal types and how they hold up in everyday life.

CRYSTAL TYPE	DURABILITY
Acrylic Crystal	Composed of plastic composite that is generally less expensive and less durable than a sapphire or mineral crystal.
Mineral Crystal	Glass that is heat-treated to create an unusual hardness to aid in resisting scratches. More scratch resistant than acrylic crystals, a mineral crystal will still scratch and is difficult to polish.
Sapphire Crystal	The hardest, most durable and expensive crystal. Sapphire is three times harder than mineral crystal and 20 times harder than acrylic crystals.
Sapphlex Crystal	A highly scratch-resistant crystal that is a fusion of sapphire and mineral glass crystal.

## **WATCH MOVEMENTS**

At the heart of a watch is its movement. Take a closer look at the common watch movements listed below.



## **QUARTZ MOVEMENT**

The majority of watches sold today have quartz movements. Quartz movement is powered by a battery—the battery works in conjunction with a quartz crystal which allows the watch to keep time without being wound.

#### Advantages:

- Affordability—more cost effective for the manufacturer and consumer
- A more accurate timekeeper than an automatic
- No winding necessary

#### Key thing to be aware of:

Battery must be periodically replaced

There are 2 types of mechanical movements primarily used: automatic and hand-wound.



### **AUTOMATIC MOVEMENT**

Automatic watches have mechanical movements that harness the energy produced by the wearer. This motion causes the rotor to rotate back and forth in a circular fashion to wind the spring, which means the wearer does not need to wind the watch every day or purchase a battery.

#### Advantages:

- Detailed construction
- Durability
- No battery needed
- No need for winding if the watch is worn every day

#### Key things to be aware of:

- If not worn, it will keep ticking for 46 hours
- May gain or lose a few minutes per month and may need to be
- · adjusted periodically
- Requires periodic cleaning and lubrication



### HAND-WOUND MOVEMENT

Hand-Wound movement is completely mechanical and is powered by winding the watch. The crown must be rotated clockwise to wind it. Hand-Wound watches run up to 40 hours before needing to be wound again.

#### Advantages:

- Detailed construction
- Durability
- No battery needed

#### Key thing to be aware of:

- The watch needs to be wound at least once every 40 hours – once a day is recommended
- When the watch is fully wound, the wearer will feel resistance, so it's important to stop there

## TWIST MOVEMENT

A combination of quartz battery and automatic movements. Typically used in a watch where the movement is visible for cosmetic reasons. Only the second hand is powered by the automatic movement so the watch retains its accuracy even when not wound.

#### Advantages:

- Significantly extends the life of the battery
- Some designs show inner workings of the watch
- The watch still keeps time even when not wound, so only the second hand will stop moving

#### Key thing to be aware of:

- Battery must be periodically replaced
- · Inner workings of the watch are
- more delicate



# did you KNOW

Most watch movements are designed and manufactured in Switzerland or Japan? Swiss watchmakers set the standard for quality, although Japanese-made movements have increased in quality in recent years. Here's a cheat sheet on Swiss-made vs. Swiss movement and so on:





#### JAPANESE MOVEMENT

A Japanese watch means the watch parts are made and assembled in Japan, Taiwan or China.

#### **SWISS MOVEMENT**

A Swiss watch consists of "Swiss parts" meaning the movement is assembled in Asia using kits that partially consist of Swiss components.

#### **SWISS MADE**

Swiss made watch parts are made and assembled in Switzerland. A watch is considered Swiss made if:

- Its movement is Swiss
- Its movement is encased in Switzerland
- The manufacturer carries out the final inspection in Switzerland

# WRAP-UP

Now you know what makes a watch tick! You have a deeper understanding of watch anatomy and how your knowledge can assist with your customer's needs and questions when purchasing a watch. We encourage you to practice putting your new knowledge into action everyday.



