

◀ WATCHMAKING ▶



# HRP 730

Vertical transfer **for high production.**



# A CONCEPT OF EXPERIENCE

The concept of the HRP use the great experience of **PIBOMULTI** multiple spindle heads and the machining principle of our EMISSA PNC03 machine which is, since several years, used by the most renowned watch movement's manufactures.

This principle allow :

- **High positionning accuracy** (< à 0.003 mm)
- **High cutting depths accuracy** (< à 0.003 mm)
- **High productivity** (24 work stations/ 80 simultaneous operations)

Thanks to the use of autonomous multiple spindle heads, this principle ensure a great flexibility of use and allow modifications with lower cost. All multiple spindle heads have an independant motor.

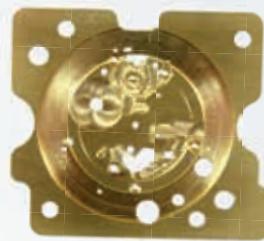
# CONFIGURATION

Each spindle is provided with modular tool holders for pre-setting outside the machine. Evenmore an integrated system allow a fine adjustement directly in the machine without opening tool.

All machining are carried by the top, but with a turning station it's possible to machine the 2 faces of the plate.

This new concept of machine optimize the production by incorporating interchangeable multiple spindle heads dedicated to machining several types of pieces, and a quick reconfiguration of the machine.

## PLATES



## BRIDGES



## CROWNS



### Parts machined on HRP 730 :

Watch movement's plates, bridges, dials, winder crowns and other small movement components...



#### 1 Work area

26 workstations with independent motorized multi-spindle heads. Possibility of 80 simultaneous operations.

#### 2 Powerful CNC

FANUC 01-MD

#### 3 Electrical cabinet

Complies with all current safety rules. Ventilated.

#### 4 Filtration

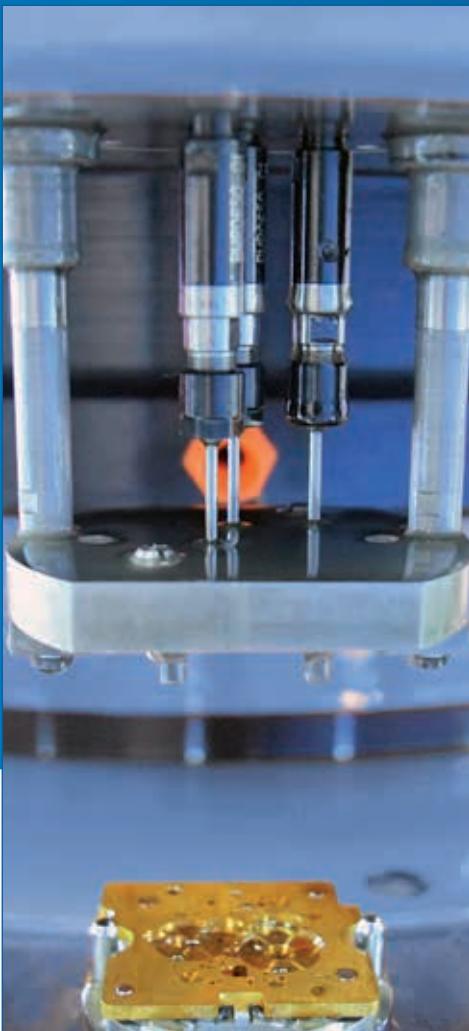
Filtration tanks are easily accessible and removable.



## CLAMPING / PLATING LOAD & UNLOAD

Loading or unloading can be manual, automatic or robotized. The 24/24 automatic production can be ensured by a big autonomy load and unload system and a control system.

- Turntable indexions, driven by servomotor.
- The descent is ensured by ball screw and servomotor.
- For high accuracy, all fitting are floating and self-centered in the working position.



## MODULAR SPINDLE TYPE BMR

Our BMRB concept, is **the smaller and most accurate** in the world of quick change tool holder.

With its dimensions, it's possible to reduce the spindle spacing, allowing to build multiple spindle units with **small spindle spacing**



## INDEPENDENTS MULTISPINDLES

- All multiple spindle of HRP 730 are with **proven technology**.
- Each spindle has an independent motorization.
- Each spindle can be adjusted in depth +/- 1 mm.
- Spindle speed up to 15 000 rpm.
- Spindles allow all machining operations of a plate : **wheels arc, counter bore, drilling, chamfering, tapping, gorgeage...**
- Approximately 80 tools at work.



Load/unload system of HRP 730



The **PIBOMULTI BMRB** toolholder with clamp



Setting screw

# TECHNICAL DATA

## Basic machine

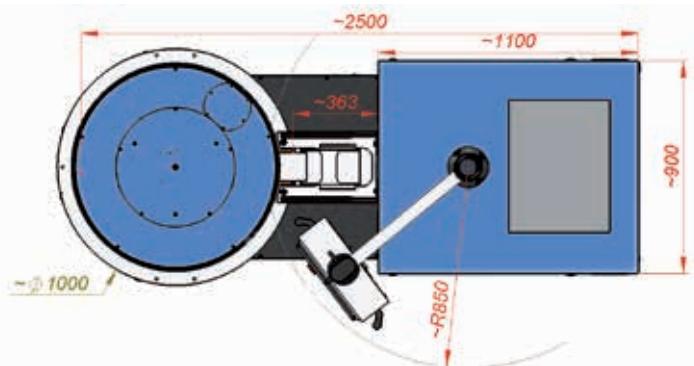
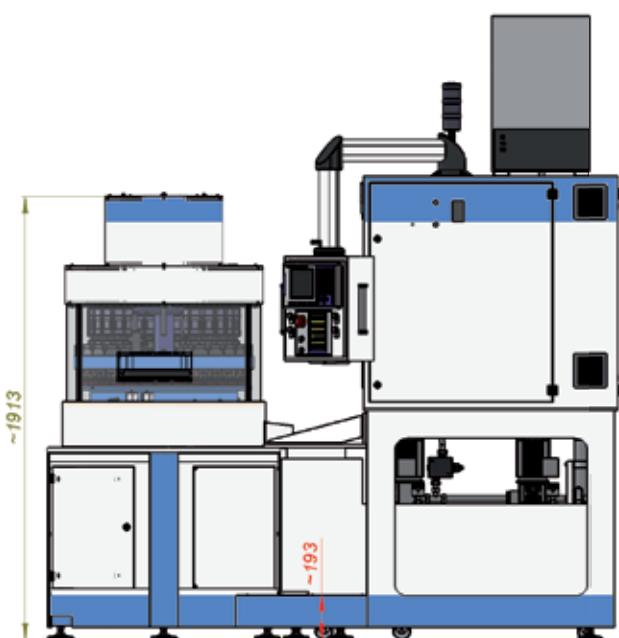
Strokes	Standard
Number of work units	26/28
Loading / Unloading / Turning position	4
Productivity	12 000 pieces / day
Nbr of simultaneous operations	70 / 80
Applications	Watch industry, Automotive, Telecommunications
Simple indexing time	0.8 sec
Double indexing time	0.9 sec
Speed of multiple spindle heads	15 000 rpm
Power supply	400 V AC / 50Hz / 63A
Dimensions L x l x h	2500 x 1000 x 2690 mm
Total weight	3000 kg

## Heads

Tapping head : Yes (with 'patronne' system)

Recessing head : Yes

# IMPLANTATION



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