

HBFM-90 Machine has successfully proven to be a state of the art technology within the last 13 years!

VINCENT INDUSTRIE's (VI), worldwide known equipments perfectly combine performance, quality and price.



# Hydro Bar Forming Machine 90x30 (HBFM)

The **HBFM** has been designed for your manufacturing projects of copper bars for power generators and motors



# Quality

VI machines take into account the industry's most drastic reliability regulations.

With VINCENT INDUSTRIE, you will beneficiate from our products quality, all the expertise of a specialized machinery company and our 35 years extensive know-how in the field of industrial processes.

# Performance

VI designs only top technology equipment and constantly updates innovating features to our new machines. A token of reliability and performance only VI can assure.

#### Reliability

Top energy market leaders rely on with over 300 hundred machines all around the world. VI can also take care of installing equipment, training your employees and maintaining all our products in order to ensure an optimal usage.

This machine robustness is a guaranty of longevity.

# Flexibility

Every VI machine is adaptable to better suit our client's needs and to perfectly incorporate into your workshop.

### **HBFM**

It is the 3<sup>rd</sup> link in the chain of an automated manufacturing line for power generator and motor bars. Manufacturing process automation increases precision and productivity in addition to a far better production control at every step.

#### **Functioning**

Once a bar has been formed and insulated, it can be installed in a stator slot of a generator or motor. The HBFM-90 is capable of forming Hydro or Motor Bars in X, Y and Z axis with 7 different and extremely accurate shaping movements. Bars dimensions are established conforming to your requirements.

#### Main advantages

- Ability to manufacture any kind of Hydro or Motor bars;
- Speed of execution, 3 min for forming the two bar extremities;
- Wide range of bar design, due to its ability also to incurve evolvent parts of the bar with an optional software.

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SPECIFICATIONS			
Dimensions			
Machine (Example)		5000	6000
Installed (L x W x H)	[m]	9,7 x 4,1 x 3	10,7 x 4,1 x 3
Technical specifications (Min – Max)			
Section height (H)	[mm]	30 – 90	30 – 90
Section width (W)	[mm]	12 – 30	12 – 30
Copper section surface	[mm <sup>2</sup> ]	200 – 2500	200 – 2500
Tool radius	[mm]	30 – 60	30 – 60
Bar length (L)	[mm]	1600 – 5000	1600 – 6000
Slot part length Simultaneous forming	[mm]	1200 – 3900	1200 – 4900
Evolvents area length (L)	[mm]	50 – 650	50 – 650
Evolvents area width (W)	[mm]	-600 – +600	-600 – +600
Evolvents area height (H)	[mm]	-240 – +150	-240 – +150
Cycle time	[min]	3/5	3/5
Average adjustment time	[min]	5 – 15	5 – 15
Weight	[T]	11,8	12,8





