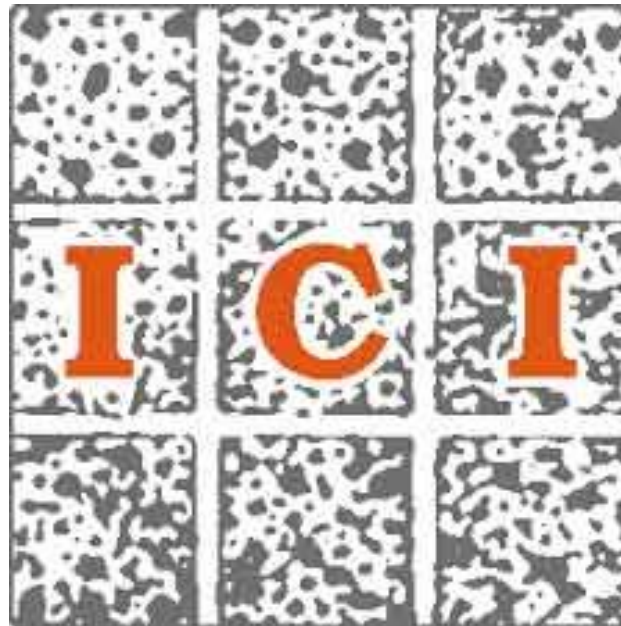
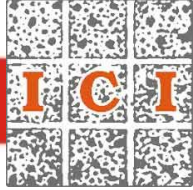


# Selection & Importance of Concrete Flooring Tools

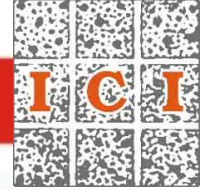




# Beton Tool Company srl

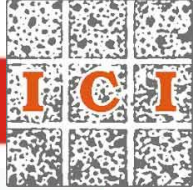
Via Meucci 3 - 36028 ; Rossano Veneto (VI) - ITALY





# Leading Italian manufacturer of:





## Various Concrete Finishing Tools:



BIG BLUE FLOAT



FRESNO BROOMS



BULLFLOAT



Screed



CHANNEL FLOAT



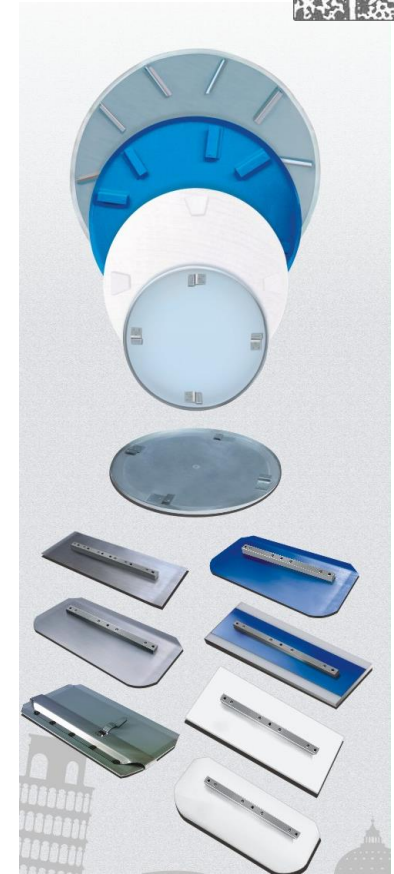
HEAVY DUTY  
BUMPCUTTER



CONCRETE SQUEEGIE



Vibrator



PROFESSIONAL HAND  
TOOLS



TEXAS PLACER

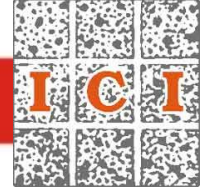


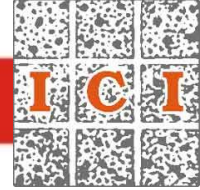
OZZIE



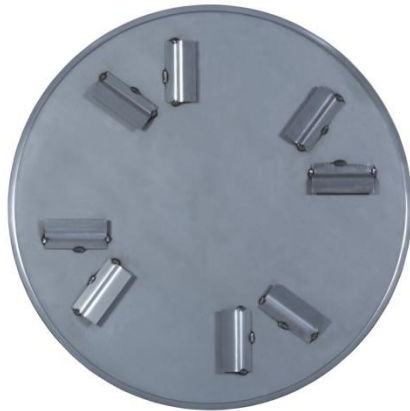
Check-Rod







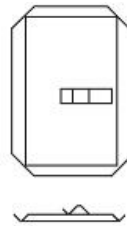
# Why is so important to have Perfect Blade & Pan!!!



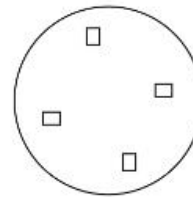
Finish



Combination

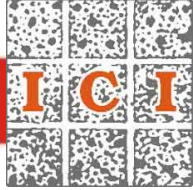


Float



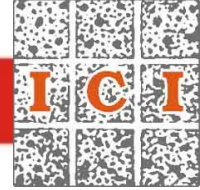
Disc





# Power Trowel





## Float Pan / Disc:

### Application:

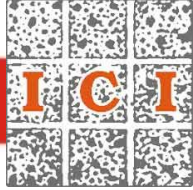
- Used on first pass
- Used to embed aggregate
- Used to compact and consolidate concrete

### PAN Selection Criteria:

- For Walk-behind or Ride-on
- Thickness of pan
- Material flexibility
- Uniformity of Dish shape (Regular shape or mild shape & Diff)
- Flatness
- Manufacturing Process (Spinning or Pressed)



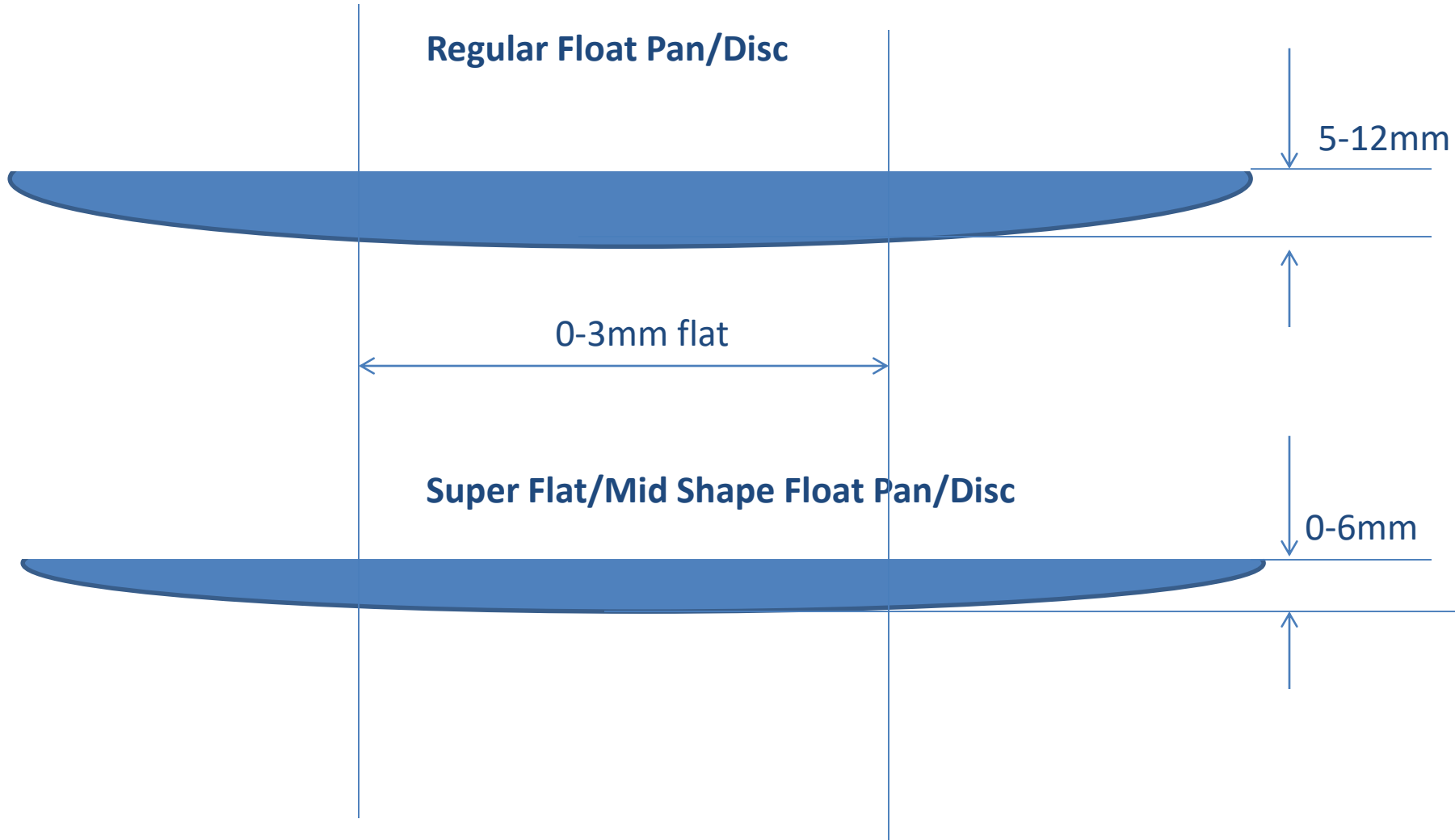
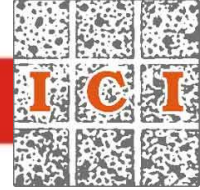




## Check-point:

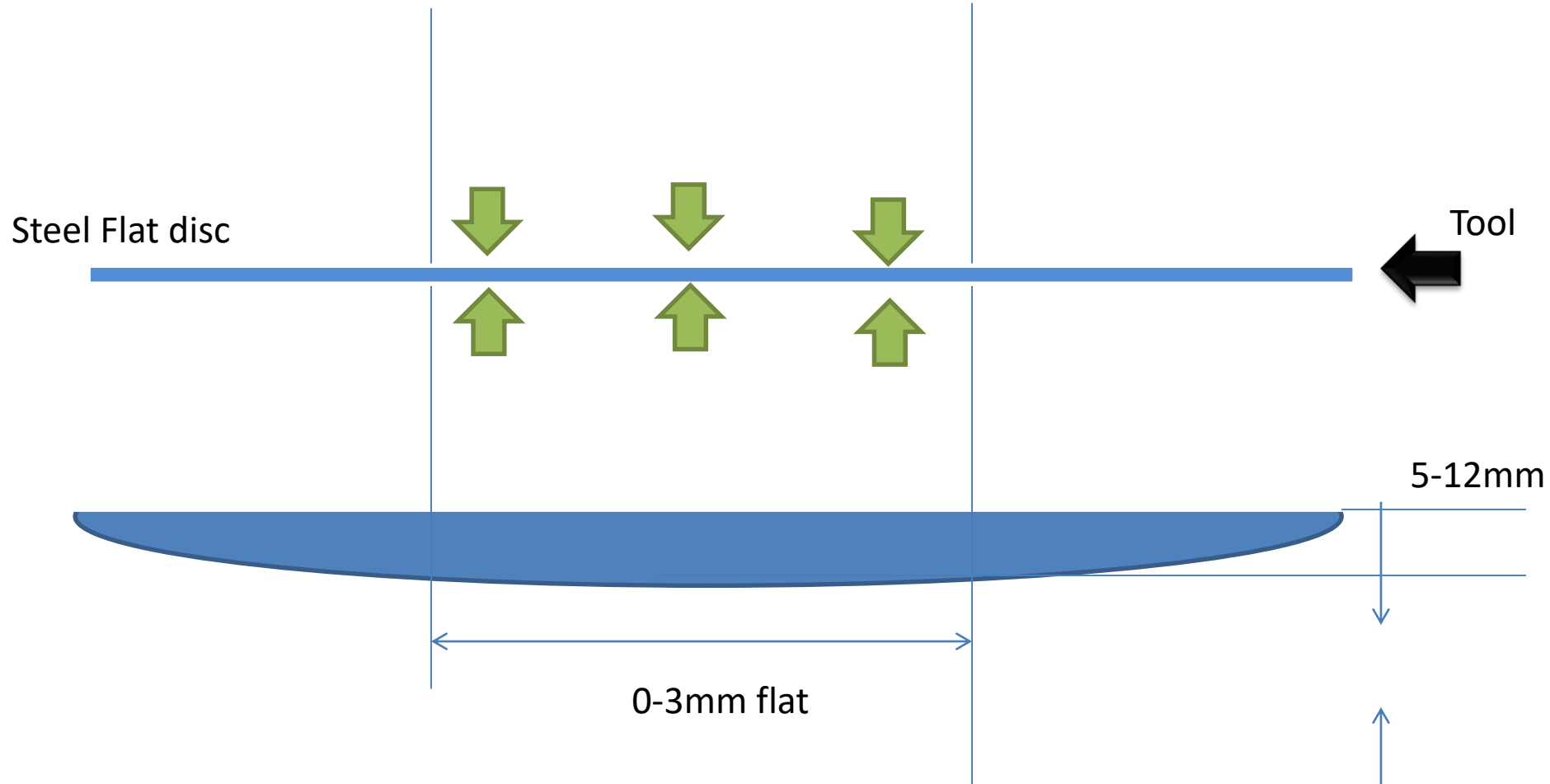
- Did you ever placed disc on surface plate and rotated to check how much offset is it?

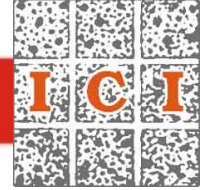






## Right Manufacturing Procedure for Float Pan





# Float Pan / Disc Selection Criteria:

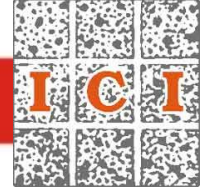
Criteria	Walk-Behind				Ride-On		Remark
	600mm	750 mm	900mm	1200mm	900mm	1200mm	
Thickness of Pan	2mm	2.5mm	3mm	3mm	3mm	3mm & 4 mm	Thickness has been defined for operator to have control on machine and movement and life
Material Flexibility	Material Should be flexible enough to have movement on surface and same time should not be hard too much						
Uniformity of Dish Shape Regular shape or mild shape	Regular Shape				Regular or Mild Shape		For ROT Mild recommended
Mid-Section Flatness	Should have 25% mid section between 0-3mm and further depend on selection of regular or mild						
Manufacturing process Spinning or Pressed	All Pans should be manufactured with Spinning process and not with Press as Pressed Pans are offset						

## Check-point:

- Did you ever placed disc on surface plate and rotated to check how much offset is it?



Offset Rotation.3 GP



## Why Polyethylene Pans?

### Polyethylene PAN/Disc:

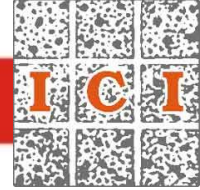
- This Pan should be made out of Polyethylene material with 20mm thickness.
- No Steel Clip, should have plastic welded clip to use maximum thickness
- Flat on floor. No curve. No dish shape.



The function of Polyethylene pan is same as Steel Pan.

Further advantages are

- Comparatively very Very less line marks
- Long life due to no rust and Harder material
- No rust and hence every time its like new on surface.
- Steel pan cant be used on coloured and epoxy floor.



Offset Pans



Good Quality Steel Pans



Polyethylene Pans



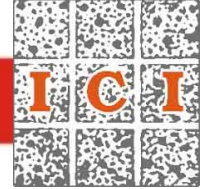


# Trowel Blades:

## Trowel Blade Selection Criteria:

- Material Grade
  - Hardness / flexibility of material
  - Material Grain Structure
  - Carbon percentage
  - Chrome Percentage
  - Flatness of blade
  - Riveting strength
  - Rivet Positioning
- **Type of blades**
  - Difference between Finish/Combination/Wide finish/float/blue blades
- **Polyethylene Plastic Blades & its uses?**

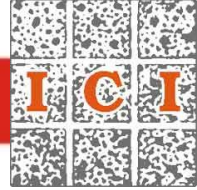




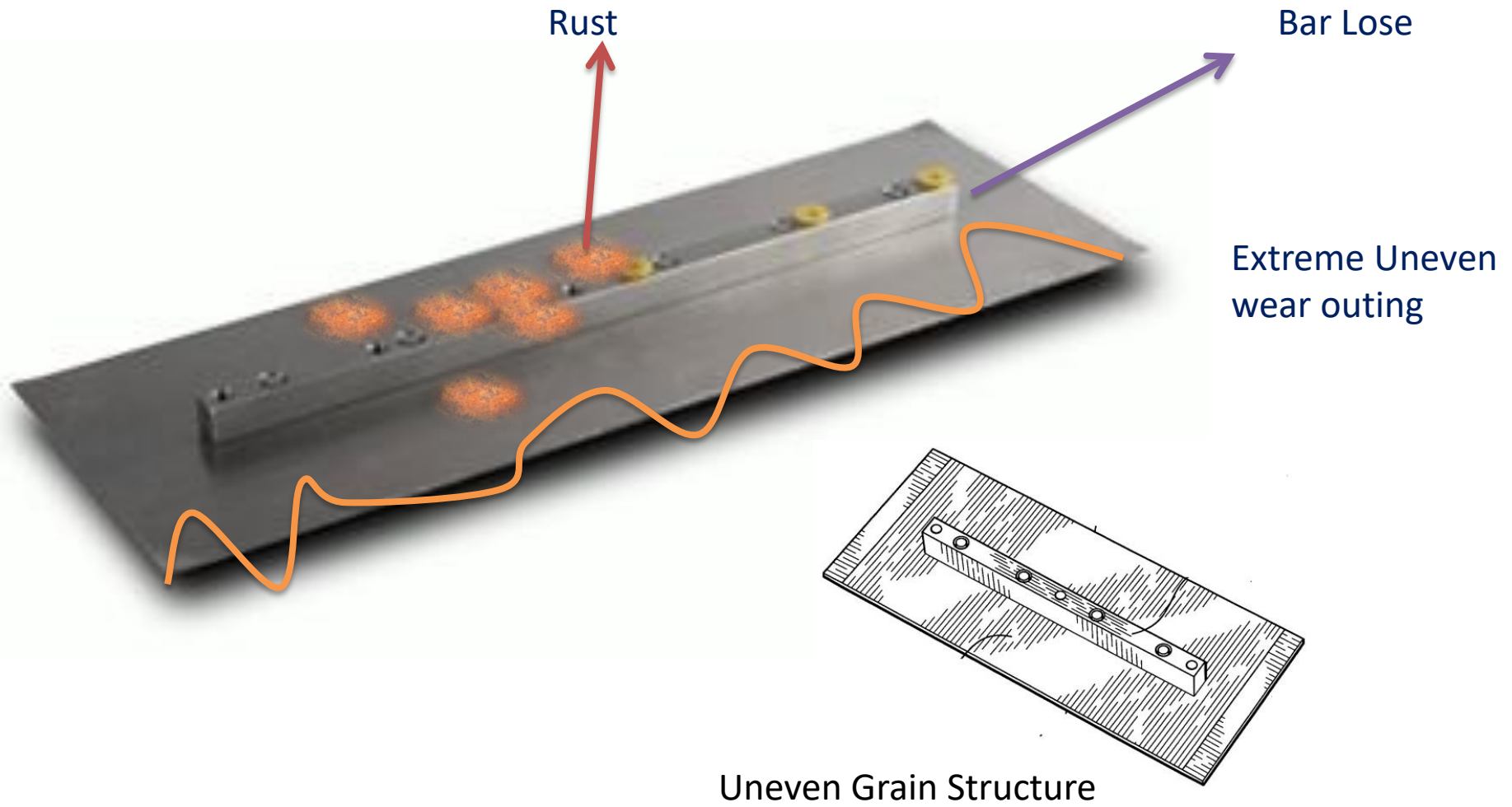
# Trowel Blade Selection Criteria:

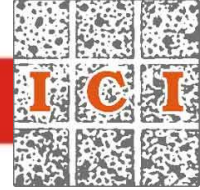
Criteria	Standard Blades	Blue-Series Blades	Gold-Series Blades	Remark
Material Grade	Hardened & Tempered Spring steel			
Carbon %	0.70-0.80			If carbon is less than 0.70 means its too soft and if more than 0.80 means its too hard
Chrome %	min 0.20			Chrome is very important element to increase corrosive resistance of the material
Matreial Thickness	Finish: 1.6mm Wide-Finish: 2mm Combi: 2mm	Finish: 1.8mm Wide-Finish: 2.2mm Combi: 2mm		
Hardness, Flexibility of material	42-46 HRC, It should be hardened and tempered material	45-48 HRC, It should be hardened and tempered material, with Extra quenching stress reliving process		If Hardness is less than 42 its too soft and wear out fast and more than 48 means it too hard and do not have flexibility
Material Grain Structure	Uniform across Surface			
Flatness	being a H&T material it should be flat on the surface			
Riveting & Position	Should be round top Countersunk head with Blade and not Press-pull		Rivet should be in 0-1+/- mm blade surface tolerances	





## Trowel Blades:





## Trowel Blades:

Low Carbon  
Low- distracted Hardness  
No Chrome  
Distracted Grain Structure



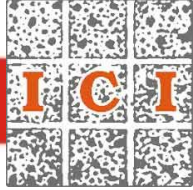
### Result:

Low Life of blade  
Trowel Line Marks  
Damaging flatness



Good Quality Blade



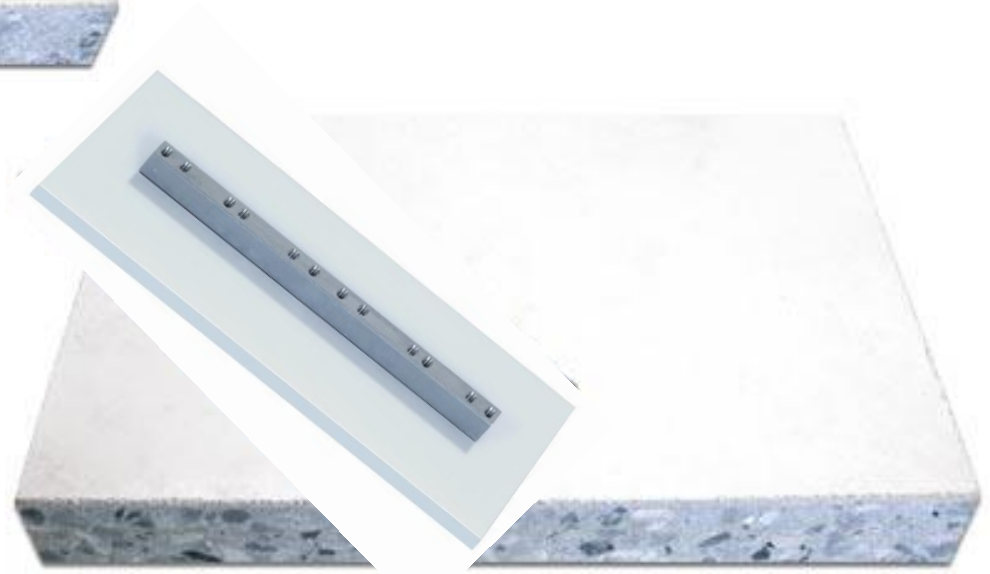


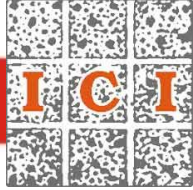
## Polyethylene Blades:



- leave undesirable dark burnish marks which discolor the floor

- Very less burnish marks
- Mandatory colored concrete, epoxies





## Why Polyethylene Blades?

### Polyethylene Trowel Blades:

- Should be use on Epoxy floor and on coloured hardener floor
- If are been used on regular concrete floor then should be use for last 2 passes after steel blades to have better finish and less line marks.





## When is the right time to begin power floating with a trowel and how do I get started?

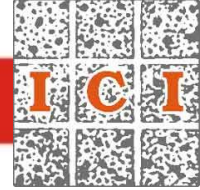
- A Thumb rule for starting your first pass with a power trowel is when you leave only a 0.5-1mm mm deep footprint on the surface.
- Many variables affect this decision including the size and weight of the machine, the rate the concrete is drying, the speed and efficiency of the operator and the specifications of the particular slab.
- The first pass should be with float blades, combo blades or float disks.
- The blades should almost be flat with a slight pitch. Consecutive passes should be made perpendicular to the previous one.
- This ensures a flatter floor. As the floor sets, the pitch of the blades should increase.

## What's better, a float pan or float blades?

- Its recommend to use Float blades for walk-behind and Pans for Ride-On
- Float pans can achieve a flatter floor than float blades. The drawback is that pans can be difficult to control, especially on a walk-behind machine.
- The increased friction of the pans can fatigue an operator quickly.

## Will high-speed power trowels improve my finishing work?

- A high speed/performance power trowel such as a variable drive machine can improve the quality of slab work.
- It will give you a harder, more resilient surface that is also easier to maintain.



**Can you explain the different blade and pans styles; float, finish, combination and the advantages and disadvantages of each?**

### **Float Blade:**

The float blade/Pan is designed to “lay down” the concrete, that is, to do the first passes while the concrete is still wet. It has the most surface area of all the blades and is used at a relatively flat pitch and a slow rate of speed. The float blade is ideal for smoothing and evening out the surface of the slab. This blade also works well to break open the surface, allowing bleed water to evaporate. It does not perform well in the later stages of the finishing process.

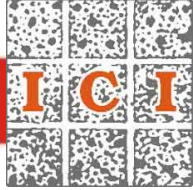
### **Finish Blades/Wide-Finish Blades:**

The finishing blade is designed to “burn” or finish the slab. It has less surface area than the float blade and is used at a higher rate of speed, when the concrete has set up. The finish blade is ideal for sealing and burning the slab in the final passes. It does not work well on wet concrete.

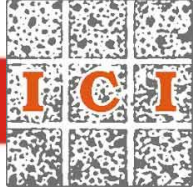
### **Combination Blade:**

The combination blade is a cross between the float and finish blades. It is not as large as a float, yet not as small as a finish blade. This blade is designed to do both jobs. It can lay down the wet concrete and then finish the slab. The combination blade does not perform as well as the other two blades at their respective tasks but does a good enough job at each to meet many jobsite requirements. The combo blade can save a contractor time and money by allowing more time to be spent on the slab and less time changing blades.





# OTHER TOOLS



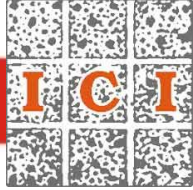
# BETON EURO-SCREED

*Ensuring efficiency*

- Fast, efficient and economical way for accurate screed concrete
- Light weight design
- Ergonomic and stable with adjustable handle for easy control
- Guarantees optimal vibration on machines that are even 4.85 meters long







## BETON EURO-VIBRO



*Compact and comfortable*

### **APPLICATION**

For vibrating slabs, footings, stairways and footpaths.

### **PORTABLE POWER**

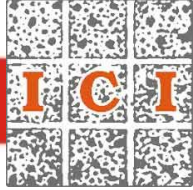
Euro-Vibro provides the solution to vibrating concrete with an easy to use portable unit. There is no need for electricity supply or separate drive units. The Honda four-stroke motor provides hassle free operation and in comparison to a two-stroke motor uses less fuel, has reduced engine emissions and no need for mixed fuel.

### **LIGHTWEIGHT**

The unit is light and balanced, and is fitted with an adjustable handle and carry strap for user comfort and complete control.

### **EASY TO USE**

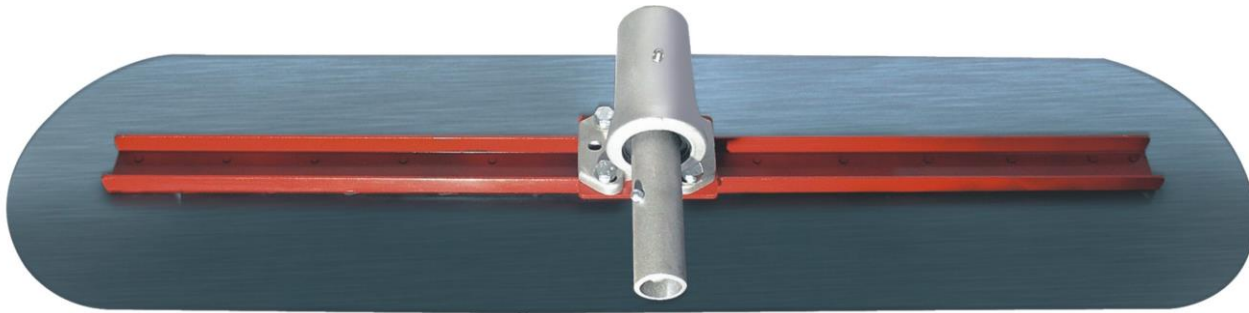
A convenient on/off switch and throttle control built into the handle.

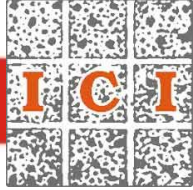


## BIG BLUE FLOAT

*Finest finish and quality*

- A blue carbon steel float to provide a super smooth finish
- Made with highly flexible abrasive resistant blue steel
- When it's used in combination with a screed machine, power float is often deemed unnecessary





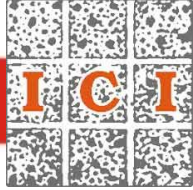
## BULL FLOAT

*Finest finish and quality*



- Light weight bull floats made from the finest extruded material
- Multi-ridged for strength
- Round-end blades option to prevent digging in the concrete or square-end if desired

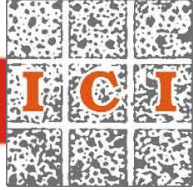




## CHANNEL RADIUS FLOAT

- Much more rigid than a traditional bull float
- An ideal tool to pass over the concrete immediately after screeding. Ensures improved flatness and tolerance right from the start
- Comprises of a rounded end for floating and a sharp back edge for cutting



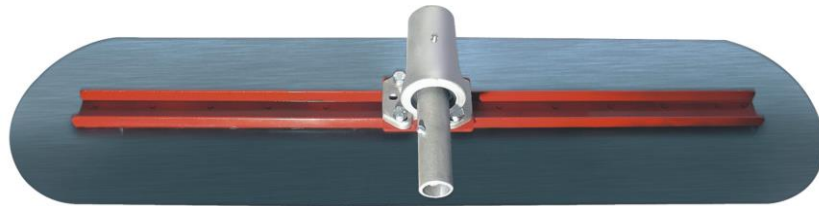
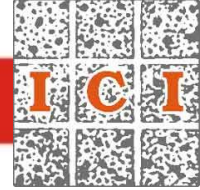


## FRESNO

*Finest finish and quality*

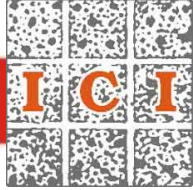
- Made from highly flexible, abrasive-resistant carbon steel





Which one you select?





## HEAVY DUTY BUMPCUTTER

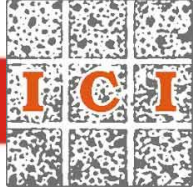
- Heavy duty designed for high tolerance floors
- Cuts down bumps and fills low areas after concrete slab has been float
- Especially useful with Laser screed machines, where the bumpcutter should be used at 90° to the concrete power screed pass



## CHECK-ROD

- Reduces bumps and fills low areas while the concrete is still plastic





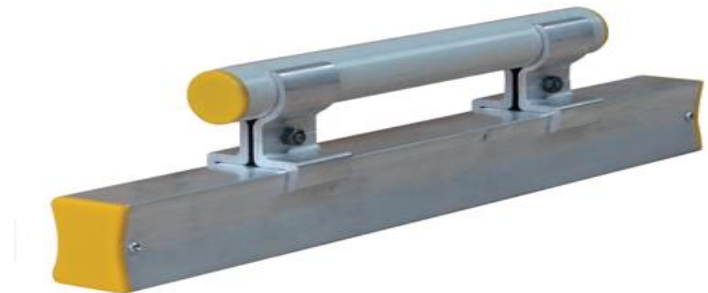
## TEXAS PLACER



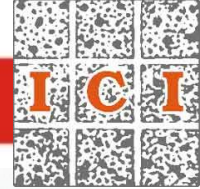
## ALUMINIUM MANUAL SCREED



## OZZIE SCREED (Aussie Hand-Screed)







## Various Concrete Finishing Tools:



BIG BLUE FLOAT



FRESNO BROOMS



BULLFLOAT



Screed



CHANNEL FLOAT



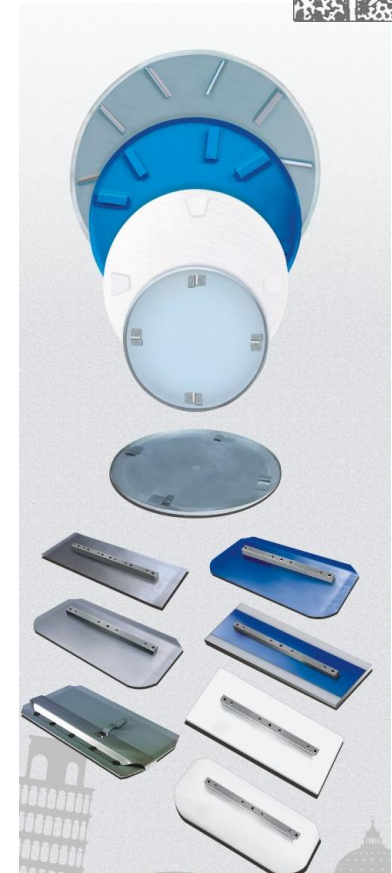
HEAVY DUTY  
BUMPCUTTER



CONCRETE SQUEEGIE



Vibrator



PROFESSIONAL HAND  
TOOLS



TEXAS PLACER



OZZIE

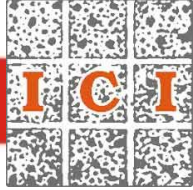


Check-Rod





**Beton Tool Company**



## Contact Us

### **Beton Tool Company srl**

Via Meucci 3 - 36028

Rossano Veneto (VI) - ITALY

Phone+39.0424.84627 / +919769205862

Fax +39.0424.548315

Email: [rajeshbonde@betontool.com](mailto:rajeshbonde@betontool.com)

website : [www.betontool.com](http://www.betontool.com)