IPERMATI TEP

UK

P M R F
PRECISION MATERIAL

REMOVAL FINISHING















TEP

Modello Model	N.° mand. x Cap./vascl Nr. drills x Cap. / tubs	ne [telaio] - fatt. [frame] - fact.	Compatib. Moduli/Opzioni Compatib. Mudules/Opt. M6- QF- DM			Vasca Mat.rivest. Tank Mat. lining		Potenza Power		
TEP-LAB	4 x 1 dm³ / 1	[Tmf-Lab] - 4	No/not	Si/yes	No/not	Acciaio	Steel	0,75 KW		
TEP-LAB-GM	4 x 1 dm ³ / 1	[Tmf-Lab] - 4	No/not	Si/yes	No/not	Acciaio	Steel	0,75 KW		
TEP-LAB-N	4 x 1 dm ³ / 1	[Tmf-Lab] - 4	No/not		No/not	Nylon	Nylon	0,75 KW		
TEP-LAB-N-GM	4 x 1 dm ³ / 1	[Tmf-Lab] - 4	No/not	-	No/not	Nylon	Nylon	0,75 KW		
TEP-LAB-X	4 x 1 dm ³ / 1	[Tmf-Lab] - 4	No/not	Si/yes	No/not	Acc. Inox		0,75 KW		
TEP-LAB-X-GM	4 x 1 dm ³ / 1	[Tmf-Lab] - 4	No/not	Si/yes	No/not	Acc. Inox	Stainl.Steel	0,75 KW		
TEP-LAB-SHIFT	4 x 1 dm ³ / 2	[Tmf-Lab] - 4	No/not	Si/yes	No/not	Acciaio	Steel	1 KW		
TEP-LAB-SHIFT-X	4 x 1 dm ³ / 2	[Tmf-Lab] - 4	No/not	Si/yes	No/not	Acc. Inox	Stainl.Steel	1 KW		
TEP-LAB-SHIFT3	$4 \times 1 dm^3 / 3$		No/not		No/not	Acciaio	Steel	1 KW		
TEP-LAB-SHIFT3-X	$4 \times 1 dm^3 / 3$		No/not		No/not	Acc. Inox	Stainl.Steel	1 KW		
TEP-200-HD	3 x 6 dm ³ . / 1	[Tmf-250] - 18	Si/yes	Si/yes	No/not	Acciaio	Steel	3 KW		
TEP-200-HD-N	3 x 6 dm ³ . / 1	[Tmf-250] - 18	Si/yes		No/not	Nylon	Nylon	3 KW		
TEP-200-HD-P	3 x 6 dm ³ . / 1	[Tmf-250] - 18	Si/yes	Si/yes	No/not	PU Spr.	Spray PU	3 KW		
TEP-200-HD-W	3 x 6 dm ³ . / 1	[Tmf-250] - 18	Si/yes	Si/yes	No/not	PU Cast	Casted PU	3 KW		
TEP-200-HD-Clinix	3 x 6 dm ³ . / 1	[Tmf-250] - 18			No/not	Acc. Inox	Stainl.Steel	3 KW		
TEP-300-HD	4 x 6 dm ³ . / 1				Si/yes	Acciaio	Steel	3 KW		
TEP-300-HD-N	4 x 6 dm ³ . / 1	[Tmf-250] - 24	Si/yes		Si/yes	Nylon	Nylon	3 KW		
TEP-300-HD-P	4 x 6 dm ³ . / 1	[Tmf-250] - 24	Si/yes		Si/yes	PU Spr.	Spray PU	3 KW		
TEP-300-HD-W	4 x 6 dm ³ . / 1	[Tmf-250] - 24	Si/yes	Si/yes	Si/yes	PU Cast	Casted PU	3 KW		
TEP-300-HD-DM	4 x 6 dm ³ . / 1	[Tmf-250] - 24			Si/yes	Acciaio	Steel	4,5 KW		
TEP-300-HD-DM-N	4 x 6 dm ³ . / 1	[Tmf-250] - 24			Si/yes	Nylon	Nylon	4,5 KW		
TEP-300-HD-DM-P	4 x 6 dm ³ . / 1	[Tmf-250] - 24				PU Spr.	Spray PU	4,5 KW		
TEP-300-HD-DM-W	4 x 6 dm ³ . / 1	[Tmf-250] - 24				PU Cast	Casted PU	4,5 KW		
TEP-300-HD-Clinix	4 x 6 dm ³ . / 1	[Tmf-250] - 24				Acc. Inox	Stainl.Steel	3 KW		
TEP-300-EF	1 / 1				No/not	Acciaio	Steel	4,5 KW		
TEP-300-EF-N	1 / 1			•	No/not	Nylon	Nylon	4,5 KW		
TEP-300-EF-P	1 / 1				No/not	PU Spr.	Spray PU	4,5 KW		
TEP-600-HD	6 x 14 dm ³ . / 1	[Tmf-380] - 84		Si/yes		Acciaio	Steel	7,5+0,72KW		
TEP-600-HD-N	6 x 14 dm ³ . / 1	[Tmf-380] - 84	Si/yes		No/not	Nylon	Nylon	7,5+0,72KW		
TEP-600-HD-P	6 x 14 dm ³ . / 1	[Tmf-380] - 84	Si/yes		No/not	PU Spr.	Spray PU	7,5+0,72KW		
TEP-600-HD-W	6 x 14 dm ³ . / 1	[Tmf-380] - 84	Si/yes		No/not	PU Cast	Casted PU	7,5+0,72KW		
TEP-600-HD-HS	6 x 14 dm ³ . / 1	[Tmf-380] - 84	-	•	No/not	Acciaio	Steel	7,5+0,72KW		
TEP-600-HD-HS-N	6 x 14 dm ³ . / 1	[Tmf-380] - 84			No/not	Nylon	Nylon	7,5+0,72KW		
TEP-600-HD-HS-P	6 x 14 dm ³ . / 1	[Tmf-380] - 84			No/not	PU Spr.	Spray PU	7,5+0,72KW		
TEP-600-HD-HS-W	6 x 14 dm ³ . / 1	[Tmf-380] - 84			No/not	PU Cast		7,5+0,72KW		
TEP-600-HD-HS3	3 x 14 dm ³ . / 1	[Tmf-380] - 42			No/not	Acciaio	Steel	7,5+0,72KW		
TEP-600-HD-HS3-N	3 x 14 dm ³ . / 1	[Tmf-380] - 42			No/not	Nylon	Nylon	7,5+0,72KW		
TEP-600-HD-HS3-P	3 x 14 dm ³ . / 1	[Tmf-380] - 42			No/not	PU Spr.	Spray PU	7,5+0,72KW		
TEP-600-HD-HS3-W	3 x 14 dm ² . / 1	[Tmf-380] - 42	Si/yes	Si/yes	No/not	PU Cast	Casted PU	7,5+0,72KW		
[DM] : Doppia motorizzazione - i satelliti della testa e la testa ruotano con rapporti indipendenti e controllabili da PLC : Double motorization - satellites of the head and the head rotate with independent reports and controlled by PLC										

The Ipermatic-TEP range represents the Rollwasch $^\circ$ solution for drag-finishing, or polytropic frame finishing, with many innovative solutions.





	Modello Model	N.° mand. x Cap./vasche Nr. drills x Cap. / tubs	e [telaio] - fatt. [frame] - fact.	Compatib. Moduli/Opzioni Compatib. Mudules/Opti. M6- QF- DM		Vasca Mat.rivest. Tank Mat. lining		Potenza Power	
I	TEP-700-HD	8 x 14 dm ³ . / 1	[Tmf-380] -112	Si/yes	Si/yes	No/not	Acciaio	Steel	7,5+0,72KW
ı	TEP-700-HD-N	8 x 14 dm ³ . / 1	[Tmf-380] -112	Si/yes	Si/yes	No/not	Nylon	Nylon	7,5+0,72KW
ı	TEP-700-HD-P	8 x 14 dm ³ . / 1	[Tmf-380] -112	Si/yes	Si/yes	No/not	PU Spr.	Spray PU	7,5+0,72KW
ı	TEP-700-HD-W	8 x 14 dm ³ . / 1	[Tmf-380] -112	Si/yes	Si/yes	No/not	PU Cast	Casted PU	7,5+0,72KW
ı	TEP-700-HD-HS	8 x 14 dm ³ . / 1	[Tmf-380] -112	Si/yes	Si/yes	No/not	Acciaio	Steel	7,5+0,72KW
ı	TEP-700-HD-HS-N	8 x 14 dm ³ . / 1	[Tmf-380] -112	Si/yes	Si/yes	No/not	Nylon	Nylon	7,5+0,72KW
ı	TEP-700-HD-HS-P	8 x 14 dm ³ . / 1	[Tmf-380] -112	Si/yes	Si/yes	No/not	PU Spr.	Spray PU	7,5+0,72KW
ı	TEP-700-HD-HS-W	8 x 14 dm ³ . / 1	[Tmf-380] -112	Si/yes	Si/yes	No/not	PU Cast	Casted PU	7,5+0,72KW
ı	TEP-700-HD-HS4	4 x 14 dm ³ . / 1	[Tmf-380] -56	Si/yes	Si/yes	No/not	Acciaio	Steel	7,5+0,72KW
ı	TEP-700-HD-HS4-N	4 x 14 dm ³ . / 1	[Tmf-380] -56	Si/yes	Si/yes	No/not	Nylon	Nylon	7,5+0,72KW
ı	TEP-700-HD-HS4-P	4 x 14 dm ³ . / 1	[Tmf-380] -56	Si/yes	Si/yes	No/not	PU Spr.	Spray PU	7,5+0,72KW
ı	TEP-700-HD-HS4-W		[Tmf-380] -56	Si/yes	Si/yes	No/not	PU Cast	Casted PU	7,5+0,72KW
ı	TEP-700-SHIFT	$8 \times 14 \text{ dm}^3$. / 2	[Tmf-380] -112	Si/yes	Si/yes	No/not	Acciaio	Steel	7,5+0,72KW
ı	TEP-700-SHIFT-P	8 x 14 dm ³ . / 2	[Tmf-380] -112		Si/yes	No/not	PU Spr.	Spray PU	7,5+0,72KW
ı	TEP-700-SHIFT-HS	$8 \times 14 \text{ dm}^3$. / 2	[Tmf-380] -112	Si/yes	Si/yes	No/not	Acciaio	Steel	7,5+0,72KW
ı	TEP-700-SHIFT-HS-		[Tmf-380] -112		Si/yes	No/not	Nylon	Nylon	7,5+0,72KW
ı	TEP-700-SHIFT-HS-		[Tmf-380] -112		Si/yes	No/not	PU Spr.	Spray PU	7,5+0,72KW
ı	TEP-700-SHIFT-HS-		[Tmf-380] -112	Si/yes	Si/yes	No/not	PU Cast	Casted PU	7,5+0,72KW
ı	TEP-700-SHIFT-HS4		[Tmf-380] -56	Si/yes	Si/yes	No/not	Acciaio	Steel	7,5+0,72KW
ı	TEP-700-SHIFT-HS4		[Tmf-380] -56	Si/yes	Si/yes	No/not	Nylon	Nylon	7,5+0,72KW
	TEP-700-SHIFT-HS4		[Tmf-380] -56	Si/yes	-	No/not	PU Spr.	Spray PU	7,5+0,72KW
ı	TEP-700-SHIFT-HS4	I-W 4 x 14 dm ³ . / 2	[Tmf-380] -56	Si/yes	Si/yes	No/not	PU Cast	Casted PU	7,5+0,72KW
П									

Estensione sigle per modelli ulteriori, rispetto alla tabella - Extension ID for further models, respect to the above list:

[M6-] : ogni mandrino della testa rotante, viene sostituito da una piccola testa «MultiSix» con sei mandrini satellitari;

: each drill of the rotary head, is replaced with a small head «MultiSix» having six satellitic drills;

[QF-] : la struttura di sostegno della testa è munita di corolla con apposita guarnizione anti polvere, completa di un collettore da collegare all'impianto di aspitazione e abbattimento polveri presente in loco (centralizzato) o da fornire separatamente.

: The head support structure is provided with an additional appendix that acts as a lid. It is completed with a collector

to be connected to a suction and dust filtration plant if available otherwise has to be supplied separately.

[HD-HS] : Heavy Duty - High Speed - sono costruite con un rapporto testa/satelliti tale da assicurare una rotazione molto più elavata ai satelliti rispetto alla testa.

: Heavy Duty - High Speed - are designed with head/satellite ratio so that the rotation speed of the satellite is higher than the head one.

The Ipermatic-TEP range represents the Rollwasch® solution for drag-finishing, or polytropic frame finishing, with many innovative solutions.

TEP

La testa scende nella vasca fissa

La vasca sale e scende, rispetto alla testa fissa

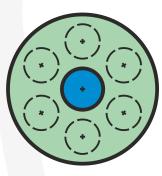
The head descends in the fixed bowl

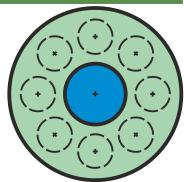
The tank rises and falls, with respect to the fixed head











 $3 \times 5,5 = 16,5 \text{ l}.$

TEP-200-HD

 $4 \times 5,5 = 22 I.$

TEP-300-HD

4 x 1 = 4 l.

TEP-LAB

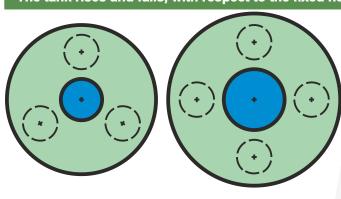
 $6 \times 14 = 84 \text{ I}.$

TEP-600-HD TEP-600-HD-HS $8 \times 14 = 112 I.$

TEP-700-HD TEP-700-HD-HS

La vasca sale e scende, rispetto alla testa fissa

The tank rises and falls, with respect to the fixed head



 $3 \times 14 = 42 I.$

TEP-600-HD-HS3

 $4 \times 14 = 56 I$.

TEP-700-HD-HS4

The series Ipermatic TEP and the main distinctions between the models, depending on the setting of the rotating heads, of the satellite spindles and of various operative dynamics.

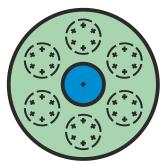


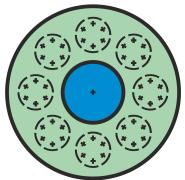
TEP

Versioni con soluzione MultiSix - M6 - Versions with MultiSix solution - M6

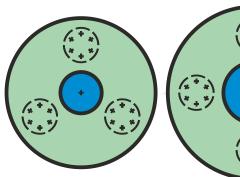


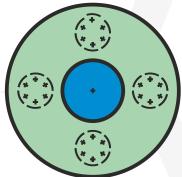






Versioni con soluzione MultiSix - HS3-M6 ed HS4-M6 Versions with MultiSix solution - HS3-M6 & HS4-M6







The series Ipermatic TEP and the main distinctions between the models, depending on the setting of the rotating heads, of the satellite spindles and of various operative dynamics.

Above we can see how we distinguish the different HD models based on satellite spindles on each head.

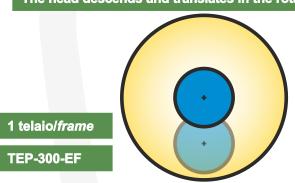
We can also see how we distinguish the models **HD-M6 MultiSix** based on multi-spindle heads to six satellites, arranged in place of each spindle of the **HD** version - for this series of multi-spindle machines see also page 13. Finally, for the models up to 300, the rotating head goes up and down, into the tank; while for the bigger models it is the tank that goes up and down, and the rotating head is fixed at the top.



ΓEP

La testa scende e trasla nella vasca rotante

The head descends and translates in the rotary bowl



Processes and machines and equipment "**Eccentric Finishing**» Rollwasch are exclusive - patent pending - I.







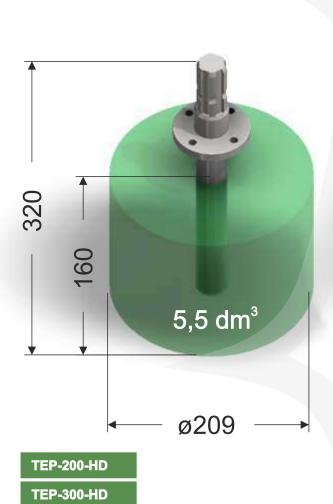
The TEP-EF «Eccentric Finishing» represents a new technological breakthrough of Rollwasch[®] which completes the series HD.

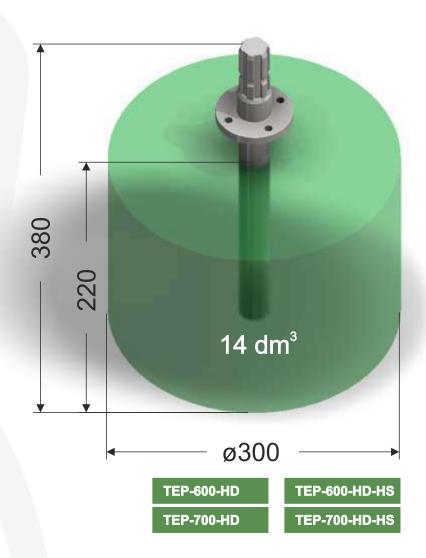
In the three pictures here above it is highlighted the movement up and down of the tank for the models TEP-600-HD and TEP-700-HD. In fact, for these models, the head remains fixed while the tank containing the finishing media raises at the beginning of the working cycle and go down at the end.

In the diagram above is instead shown the operating dynamics of machines EF (Eccentric Finishing), where it is important to remind that the frame can be swapped in and out of the machine with the help of a robot in a plant consisting of multiple units TEP-EF.

IPERMATIC Tep







The machines Ipermatic TEP are designed to handle two types of frames, of 5,5 and 14 liters of maximum volume in which to contain the pieces to be finished.

The machines Ipermatic TEP, if we exclude the small laboratory model TEP-Lab, is divided into two categories:

- a) those frames sized to approx. 5.5 liters;
- b) for those frames sized approx. 14 liters;

The intake of the volumetric parameter has the purpose of providing, on one hand, the dimensional limits within which can be mounted the pieces to be finished; from another side can give an idea of the mass of the volume that the machine has to exercise, or of the power that must be able to develop the greater is the volume to be moved to exert drag finishing.



ΓEP



The range Ipermatic-TEP represents the Rollwasch® solution for drag-finishing, or polytropic frame finishing, with many innovative solutions.

The TEP-HD versions were born between 1998 and 2000 and since then they have won the favor of the European market for their reliability and competitiveness. A medium sized frame moves a volume of approx. 5,5 dm³, while a larger frame approx. 14 dm³. - Every machine TEP-HD has a potential that corresponds to the product of the spindles for the volume of each frame.

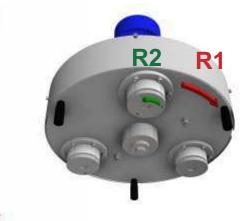
The individual frames, always made tailored and according to the workpieces, can be simple and fixed or variable angle, for carrying out various types of finishes also very complex.













TEP-HD series, which stands for "Heavy Duty", is the basic program of machines for high load operating, that Rollwasch® has perfected over the last decade.

The programme of Rollwasch Ipermatic TEP machines and accessories is extremely wide and complete. The series TEP-HD, which is probably the best-selling range in the last decade, is characterized by "single frames" that are connected in their rotating spindles. The main rotating head follows the movement R1 (red) while the spindles, which can be 3, 4, 6 or 8, follow the counter-movement R2 (green). All models are equipped with programmable inversion, such as 20 'minutes clockwise and 20' in reverse (just as an example).



TEP



TEP-HD series can do the job equivalent of a finishing robot, reducing the inconvenience of washing parts afterwards, because they come out mostly bright and free of traces of finishing paste.

The program of machines and accessories Ipermatic TEP-HD is extremely diversified and complete. It should however be pointed out that a strength of these solutions is to offer a high specific productivity investments, much smaller than standard solutions like robotized islands or mechanized cleaning stations. Moreover, the cost of the processes through the use of media and high-quality compounds, is very low and ensure high quality finishes at very low cost.

TEP





The dry Roto Dry* finishing processes provide a solution to optimize dry finishing.

* Patent pending - I



Flowbooster* allows to optimize the distribution of the forces acting on the pieces during finishing * Patent pending - I



Media Smart is a series of devices for the automatic replacement of the media.







The functional dynamic that Rollwasch® has perfected for the machines Ipermatic-TEP can be a "single frame" TEP-HD or "multi drill" TEP-HD-M6.

TEP-HD-M6 versions are available for all models above TEP-200. The rotating dynamic of all machines of new series corresponds to the diagram reproduced in this page. The main rotating head follows the movement R1 (red) while the "multi-drill" heads (for example: M6), which can be 3, 4, 6 or 8 per each machine, follow the counter-movement R2 (green). Finally the single spindles follow the counter-rotation R3 (yellow).

All models are equipped with programmable inversion.



TEP









The TEP-LAB series allows to do in laboratory the equivalent job of an industrial type machine.

The series TEP-LAB is built with a tank of small capacity and spaces destinated to the frames with unit volume of 1 dm³. Therefore it is suitable for finishing small volume batches of small parts. As well, this kind of machines are suitable to make several laboratory test of pre-series or protothypes of small parts, by using a very small quantity of media and relative finishing compound each time.

TEP-LAB: version with Touch Screen control board TEP-LAB-GM: versione with control board MP type

TEP













The Ipermatic TEP LAB offers a new skyline to lab finishing and of small production batches.

The series **TEP LAB** has the process tank with upward and downward movement, electro-actuated automatically. The spindles allow quick fixing of each shaft/frame (not included) with a simple "click" (photo 1, 2, 3). The frames (picture 4) can be made individually as it is sufficient that they have a terminal # 9x9 mm. and tube with diam. of 12 (design with max sizes is available as a guideline). The control panel, touch screen, is multi-language and allows the change in velocity, the automatic change of rotation and programmable timing cycles are fully automatic. In the picture 5 the model TEP-LAB-SHIFT with two tanks.



TEP



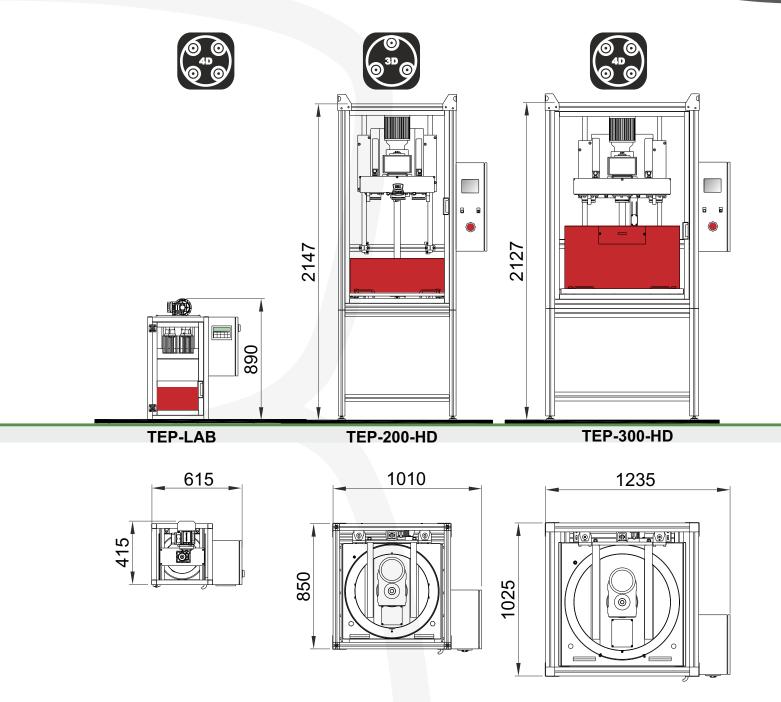
The TEP-SHIFT series represents the program of industrial machines for automatic management of double step finishing process, that Rollwasch® has perfected over the last times.

Machine with polytropic fixture of the IPERMATIC TEP series new "SHIFT" design complete with 8 rotating spindles. The new "SHIFT" design grants two tanks replacement operations towards AUTOMATIC SHIFTING DEVICE, enclosed into a long security cell assuring space to three positions, as follows:

- 1. Front loading safety cell empty when machine is in "stand by" position (awaiting a new process to be started), where the operator normally enter to load the frames on the head (one head, with 8 spindles) or, at the end of all the finishing process, to pick-up the frames with the finished items;
- 2. Central cell where the rotary head is placed, with its 8 drills and where either the first, or the second tank, one after the other, are shifting to be under the head and do, for example, first 60' of smoothing with the tank nr.1, then, after an intermediate quick automatic cleaning operation of the shafts from the granulate of smoothing (with compressed air nozzles), second 30' minutes of polishing with the tank nr.2, then, after a final quick automatic cleaning operation of the shafts from the granulate of polishing (with compressed air nozzles), all the tanks shift again backwards to make the loading/unloading area free for the operator that can enter only in safe way in the front loading safety cell.



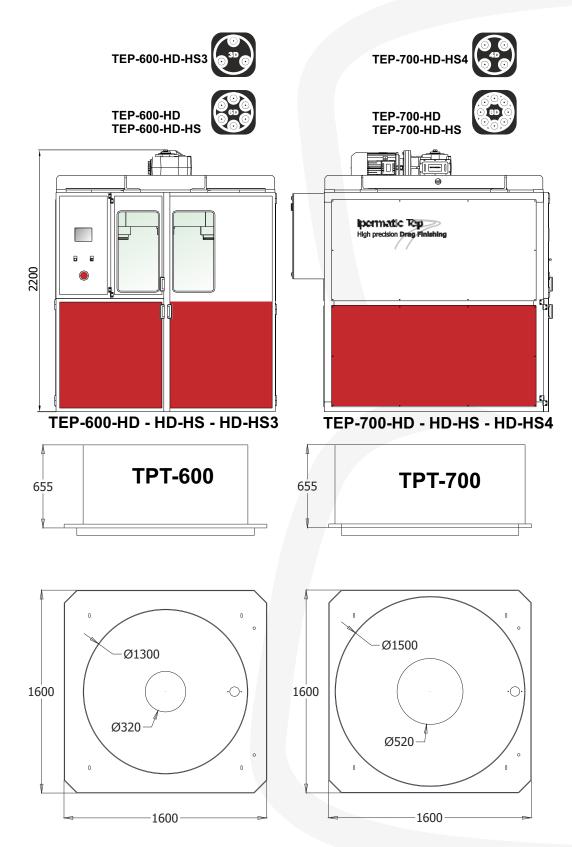




The TEP-HD and SHIFT series is here resumed, with the main technical characteristics and overall dimensions.



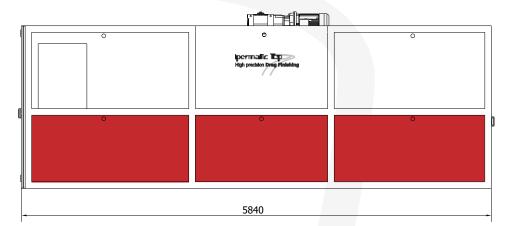
TEP

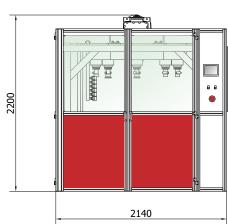


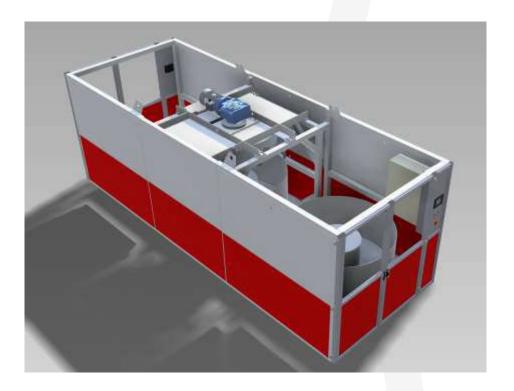
The TEP-HD and SHIFT series is here resumed, with the main technical characteristics and overall dimensions.















The TEP-HD and SHIFT series is here resumed, with the main technical characteristics and overall dimensions.

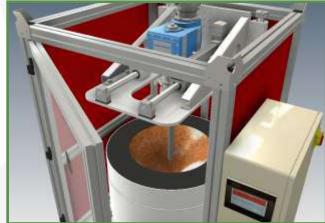
The series Ipermatic \mathbf{TEP} is also available in version \mathbf{DM} - Twin Engine (double motor) - electronically controlled independently on all the variables of rotation.



ΓΕΡ







TEP-EF series - Eccentric Finishing (patent pending - I) revolutionizes the drag finishing technology, combining it suitably with the wave finishing and with the innovative Carving Finish;

TEP-EF is a faster machine, compared to a classical TEP, because the work tank is motorized and non-static.

This leads to an increase of density of the media used and, in parallel, the opening of a sort of chasm in the center of the tub. The frame, single and central, exploits this opening to descend in the mass, and thereafter move in an eccentric manner, to the media which rotates in the opposite direction. The chassis is fitted with a quick connector.

Thanks to the Carving Finish technology the whole head, in addition to ascend, descend and move eccentrically, it can be tilted electronically.

IPERMATIC TEP





TEP-EF series - Eccentric Finishing (Patent pending - I) allows a high degree of automation, in robotic systems - also in version TEP-EF-CF - Carving Finish (Patent pending - I);

TEP-EF is designed to be usable both, either with loading and unloading of the frame by an operator, either as part of a robotic island and therefore of a safety perimeter, within which a robot may tend two or more units TEP-EF, uploading and downloading from each frame in a fully automatic way.

For more complete information on the programs of finishing machines robotic flow, it is appropriate to refer to the specific catalog and updated series RoboTEP.



IPERMATIC TEP



The series MEDIA-SMART represents a series of devices designed for assisting the operator during the removal of the media from the tank or from the tanks of finishing.

MEDIA-SMART is a family of more or less complex projects, of which the model shown here, MS-5200-STD-BB-SS-5/F (ver. 2014), is almost the entry-level for efficiency and easiness of operation.

For each model are available, in accordance with the procedures and expected frequencies of use, both the basic version or the silent version, also available are also multiple versions atex, based on the ratings of area, which are also both in basic version or silent.

The availability of the equipment on wheels or fixed frame, further distinguish the options available for this family of accessories very useful and interesting.

TEP













The Ipermatic-TEP range is manufactured and sold from over a decennia in several countries and, in the time, it has been enriched of modular accessories Modultek, specifically designed to improve its performances.

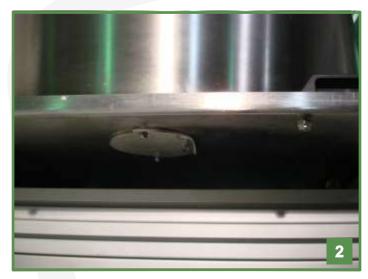
Few examples:

- 1. Trolley complete with tank unit **TEP-CUBE-300-HD** for TEP-300-HD; for the TEP-200-HD the model is **TEP-CUBE-200-HD**. It is also available the simply tank **TPT-300** or **TPT-200**.
- It is also available the only trolley structure CUBE-200 and CUBE-300.
- 2. and 3. examples of tank substitution towards trolley, similar for TEP-300-HD and TEP-200-HD.
- 4. Reference for clipping of trolley to the TEP.
- 5. An example to substitute of additional optional tank **TPT-700** with transpallet, on a TEP-700-HD.



ΓEP









Some components are resumed into machine versions, like version CLINIX in stainlless steel, or the «multi six» version M6.

Few examples:

- 1. interchangeable tank in stainless steel for TEP-300-HD-CLINIX;
- 2. out-let valve for periodical discharge of granulate from a tank in stainless steel (identic to the valve for standard tank in steel painted);
- 3. protection carter of the rotary turret in stainless steel for TEP-200-HD-CLINIX;
- 4. trolley for frames holding type CUBE-TMF-8, shown in this photo with different frames positioned for the operation of assembling and disassembling of the workpieces;

TEP



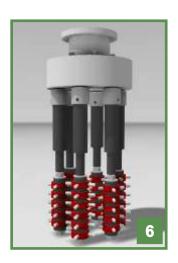












TEP-HD series, which stands for "Heavy Duty", is the basic program of machines for high load operating, that Rollwasch® has perfected over the last decade.

Few examples:

- 1. frames tailores for the client during the try-out phase to check quality and quantity;
- 2. one frame tailored for complex items which are difficult to be finished with classic methods;
- 3. a unified connector for frames of medium size;
- 4. one TEP-700-HD during the test of one type of frame per each item, 8 in total;
- 5. the design of a multidrill head M6 with mounted frames;
- 6. the design of a multidrill head M6 with mounted frames;



VIA SAN CARLO, 21 20847 ALBIATE (MB) - ITALIA



TEL. +39 0362 930334

FAX. +39 0362 931440

E-MAIL INFO@ROLLWASCH.IT



WWW.ROLLWASCH.COM

PERFECT SURFACES SINCE 1950



