

# Manual and Press Marking



**PRYOR Marking Technology**  
Egerton Street, Sheffield S1 4JX, UK Tel: +44 (0)114 276 6044 Fax: +44 (0)114 276 6890  
Email: [enquiries@pryormarking.com](mailto:enquiries@pryormarking.com) Web: [www.pryormarking.com](http://www.pryormarking.com)

**Pryor Marking Technology Group Companies**  
Absolute Vision Ltd - UK web: [www.absolutevision.co.uk](http://www.absolutevision.co.uk)  
Mecagrav Industrie S.A. - France web: [www.mecagrav.com](http://www.mecagrav.com)  
Marks Pryor Marking Technology PVT. Ltd - India web: [www.markspryor.com](http://www.markspryor.com)  
Monode Pryor Traceability LLC - USA web: [www.monodepryortraceability.com](http://www.monodepryortraceability.com)

*Pryor provide a single source of supply for marking products, services and support. Manufacturers of a complete portfolio of marking goods, Pryor's success is built on providing solutions for all types of marking applications ranging from those requiring only a simple hand operated punch through to fully integrated computer controlled turnkey marking systems. Supported by a network of distributors worldwide, Pryor offer a total commitment to quality and service.*

*The difference is Pryor knowledge*

**[www.pryormarking.com](http://www.pryormarking.com)**



Pryor® Steel Hand Stamps / Punches

A range of low cost, hand held stamps used for marking single characters by indenting suitable for all engineering and industrial applications

**Pryor® Premium Punches** are the choice of the professional engineer, offering a wide choice of character sizes and character formations ideal for a whole range of marking uses on anything from Aluminium to Stainless Steel up to a maximum hardness of 38 Rockwell C.

All the stamps in this range are hardened and tempered to precise limits, nickel plated for rust protection thus giving maximum safety in use, long product life and value for money.

**Standard Punches** have sharp faced characters to produce clear positive impressions. Available in sets of 27 Letters (A-Z,&), Scandinavian and Cyrillic sets of 30 Stamps, plus, Figure sets of 10 stamps (0-9)

**Reverse Punches** have sharp faced characters and are used when a clear negative impression is required, particularly in moulding or cast applications. Available in sets of 27 Letters (A-Z,&) plus, Figure sets of 10 stamps (0-9)

**Heavy Duty Punches** have a larger blank giving greater strength allowing a heavier blow to be struck making these ideal for prolonged or industrial use. Available in sets of 27 Letters (A-Z,&) plus, Figure sets of 10 stamps (0-9)

**Lowstress Punches** are specially engineered for use in the Aircraft, Nuclear and Gas Industries or where reduced stress marking is required. Available in sets of 26 Letters (A-Z) plus, Figure sets of 10 stamps (0-9) in two character formations, namely **MiniStress™**, a continuous line character or for even greater reduced stress levels **DotStress™** style where the character is impressed in a dot formation.



DotStress™ Style



3mm Standard and Heavy Duty Punches

	Size Range										
Style	1.0mm	1.50mm	2.0mm	2.5mm	3.0mm	4.0mm	5.0mm	6.0mm	8.0mm	10.0mm	12.5mm
	.040"	1/16"	5/64"	3/32"	1/8"	5/32"	3/16"	1/4"	5/16"	3/8"	1/2"
Standard	•	•	•	•	•	•	•	•	•	•	•
Reverse		•	•		•	•	•	•	•		
Heavy Duty					•		•	•	•	•	•
Lowstress - MiniStress™					•		•	•			
Lowstress - DotStress™					•		•	•	•		



**Pryor® Symbol Stamps** the 'off the shelf' alternative to custom stamps for inspection applications. Ideal as a unique identifier to convey information and or identify responsibility or testing. Available to purchase as single stamps or as a full set of 27 symbols.

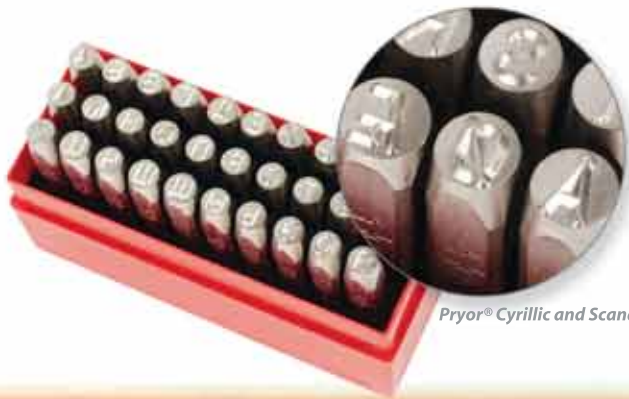
**Pryor® Micro Marker** the pocket sized versatile centre punch with optional 2.5mm character inserts making this another perfect tool for inspection applications. 2.5mm Character inserts available in A-Z, 0-9 and a range of symbols (details available upon request)

**Pryor® Impression™ Punches** general purpose punches for marking that does not require the durability and precision of the PRYOR® Premium Quality Punch. Available with Sharp Faced characters for positive indenting in sets of 27 Letters (A-Z,&), Figure sets of 10 stamps (0-9) and unique to the range a combination set of letters and figures in the most popular sizes for added user convenience. Supplied in a Blue treated finish.

**Pryor® Punch Safety Grip** is an item designed for use with all sizes of Punch in the Pryor® Premium & Impression™ Ranges which will keep the hammer a safe distance away from the fingers of the user and also allow the user to make a more controlled and confident strike.



Punch Safety Grip



Pryor® Cyrillic and Scandinavian Punches

Impression™ Punch Combination Set



Pryor® Micro Marker



Reverse characters appear positive to indent a negative impression

	Size Range									
Style	1.50mm	2.0mm	2.5mm	3.0mm	4.0mm	5.0mm	6.0mm	8.0mm	10.0mm	12.5mm
	1/16"	5/64"	3/32"	1/8"	5/32"	3/16"	1/4"	5/16"	3/8"	1/2"
Impression™ Punch										
Letter and Figure sets	•	•	•	•	•	•	•	•	•	•
Combination Sets	•		•	•	•	•	•			
Symbol Stamps				•		•	•			



## Interchangeable Steel Type & Holders

**Provides the perfect answer for all batch and general purpose marking. Simply build a series of characters into a holder and with just one strike produce a multi-character mark quickly with uniform legibility.**

**Pryor® Type** offers precision ground blanks and a clear character style to give quality marks of consistent depth. Each blank is hardened to precise limits and Nickel plated to give optimum life, maximum safety in use and value for money.

**Pryor® Type** can be used in a hand holder for manual hand and hammer use, or, for faster throughput, can be used in a machine holder and Press.

**Pryor® Type** is available in two styles, namely

**Pryor® Standard Type** with sharp faced characters to produce clear positive impressions into most metal and many plastics up to 38 Rockwell C.

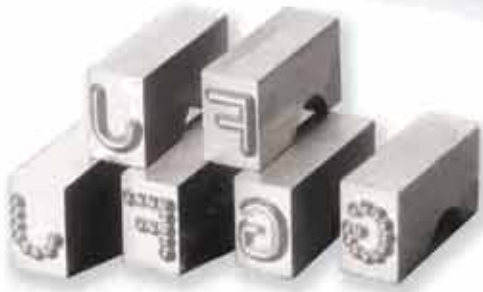
**Pryor® Lowstress Type** specially engineered for use in the Aircraft, Nuclear, Oil and Gas Industries or where reduced stress marking is required.

Available in two character formations, namely

**MiniStress™** a continuous line character

**DotStress™** for even greater reduced stress levels, where the character is impressed in a dot formation.

Both Standard & Lowstress Type are available in 100 piece Fount Sets, 26 piece Letter Sets (A-Z), 10 piece Figure Sets (0-9) and individual pieces.



Lowstress Type



Type Fount Sets



**Type Holders** are available for use by hand and hammer or for faster throughput Machine Holders are available for Press Marking.

Each style offers a wide choice of one and multi-line options with various capacities to suit all Type sizes. (details available on request).

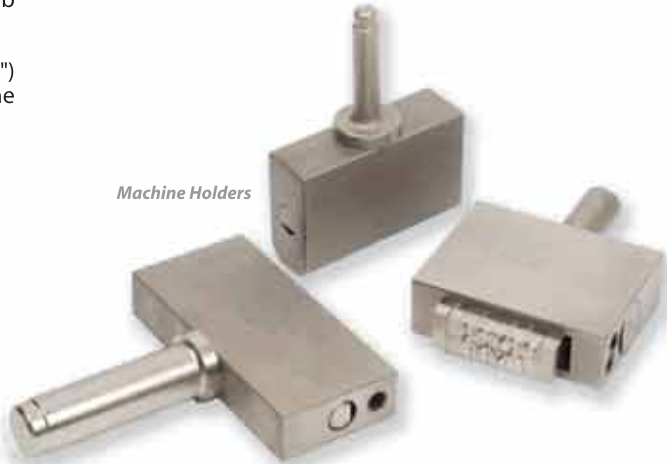
The **Safety Type Holder** with an extended handle keeps the hammer a safe distance away from the fingers of the user and also allows the user to make a more controlled and confident strike.

Type pieces 1mm - 5mm are held firmly in place by means of a grub screw (Hexagon Key supplied) for safety in use.

Hand Holders for the larger Type sizes of 6mm (1/4") and 10mm (3/8") are designed with a retaining pin that fits through a groove in the Type pieces for added user safety.



Handholders



Machine Holders



Machine Holders with dovetail fitting for use with the Pryor® range of Hydro-Pneumatic Presses



Safety Holder





Numberers

**Manual and Automatic indexing units ideal for random changing inscriptions and batch marking of parts. Simply rotate the wheels to any given inscription using the Tell-tale characters for guidance and make a mark of consistent quality every time.**

Numberers are quick and easy to use and will mark sharp faced, positive impressions into most metals and many plastics up to 38 Rockwell C

Units available with a wide choice of character sizes and a variety of indexing options, to suit many low to medium volume marking of parts.

Versatile and durable can be use by hand and hammer, ‘one piece’ frames for heavy industrial use or for even quicker throughput for mounting into a machine.

Numberers come complete with sharp faced 0-9 wheels as standard.

**Manual Numberers** offer choice of use by hand and hammer or press. The wheels are rotated to any value by hand (no tools required) and locked into position. A complete inscription can be changed in seconds, making these an ideal tool for random changing inscriptions.

**Finger Release Units** for use in a press are ideal when marking a code which remains fixed for a number of operations. Simply press the lever of the wheel you would like to change to release and rotate by hand to the required digit.

**Finger Pawl Units** for press use gives maximum user flexibility when marking a diverse range of batch numbers or identification codes. Each wheel has to it attached a lever or pawl to individually actuate each wheel.

Indexing wheel on Manual Number and Manual Hand Numberers



**Manual Numbers** The chart below shows the combination of characters size and number of wheels that are available for assembly using standard frames and standard style 0-9 wheels

Character Size		Number of wheels													
mm	inch	2	3	4	5	6	7	8	9	10	11	12	13	14	
1.5	1/16"	•	•	•	•	•	•	•	•	•	•	•	•	•	
2.0	5/64"	•	•	•	•	•	•	•	•	•	Hand/Hammer or Machine use				
2.5	3/32"	•	•	•	•	•	•	•							
3.0	1/8"	•	•	•	•	•	•								
4.0	5/32"	•	•	•	•	•	•	•	•	•	Hand/Hammer Only				
5.0	3/16"	•	•	•	•	•	•	•							
6.0	1/4"	•	•	•	•	•	•								

**Finger Release & Finger Pawl Numberers** - Standard frames and standard style 0-9 wheels allow any combination of assembly from 2-20 wheels in character sizes 1.0mm, 1.5mm, 2.0mm, 2.5mm, 3.0mm, 4.0mm, 5.0mm, 6.0mm and 8.0mm (10mm Finger Release Unit only)

**Automatic Numbering Heads** will fit most types of marking machines and fly presses and allow fast, accurate and consecutive serial numbering of parts with the minimum or effort. An Automatic Numbering Head is fitted with an actuating lever that when pressed by hand, trip lever or pneumatic valve will rotate the wheels to give a consecutive numbering sequence.

**Custom Numberers** PRYOR<sup>®</sup> have the design skills and manufacturing capabilities to produce special wheels and numbering units to meet any industry need

Custom options include

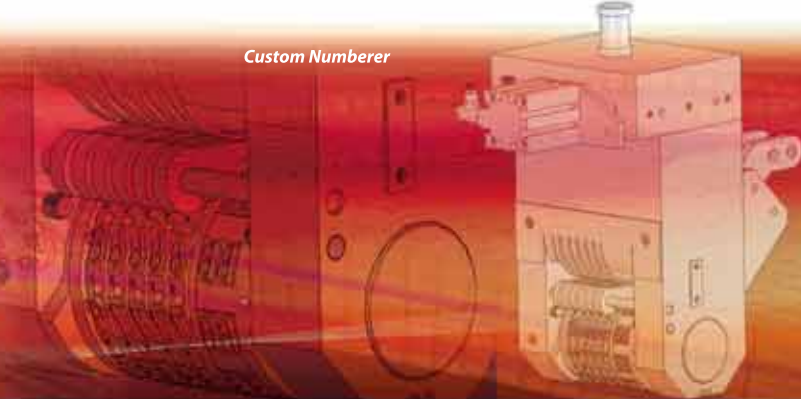
**Special Engraved Wheels** Any character can be engraved into a blank wheel (within size limits) to mark logos, symbols and letters providing the solution for exact numbering requirements.

Character forms can be Sharp faced, Flat faced, MiniStress™ or DotStress™ Characters can be condensed or broad to any special style Concave and convex characters can also be provided

**Indexing options** Special Heads can be supplied to actuate every second or third stroke of the machine plus other variants

**Pryor<sup>®</sup> will also consider manufacture of :-**

- Larger character sizes
- Heads with a greater number of wheels
- Special Frames
- Frames with slots to accept Interchangeable Steel Type or Engraved Dies



**Automatic Numbering** The chart below shows the combination of characters size and number of wheels that are available for assembly using standard frames and standard style 0-9 wheels

Character Size		Number of wheels										
mm	inch	2	3	4	5	6	7	8	9	10	11	12
1.5	1/16"	•	•	•	•	•	•	•	•	•	•	•
2.0	5/64"	•	•	•	•	•	•	•	•	•		
2.5	3/32"	•	•	•	•	•	•	•	•			
3.0	1/8"	•	•	•	•	•	•	•				
4.0	5/32"	•	•	•	•	•	•	•				
5.0	3/16"	•	•	•	•	•	•	•	•			
6.0	1/4"	•	•	•	•	•	•					

**Please note** – the information in both tables is for guidance only, suitability for use will depend on the material being marked



Auto Numbering Heads



Tell-Tale characters in the wheel grooves show the actual characters in the marking position - particularly helpful when a Numberer is used in a machine.





## Numbering Head for Hot Foil Marking

**Provides the perfect solution for direct marking of many surfaces or using coloured transfer foils will mark bright inscriptions on a diverse range of plastic or wood products.**

Hot foil marking compensates for an uneven surface plus the lower marking load avoids plastic displacement.

Numberers are electrically heated by an internal heating element with a power rating of 400W.

This type of marking head has a number of benefits for the user, including speed of the applied mark, material and surface versatility, easy maintenance and a rugged and hard-wearing construction.

The hot foil marking numbering head can be mounted into suitable manual and actuated presses and also be integrated into customer manufacturing applications.

Simply rotate the wheels to the required inscription using the finger levers, press into the component either directly or through foil and the combination of heat and load will make the mark.

Units available with 0-9 Sharp faced and Flat faced character styles as standard

Special engraved wheels to mark logos, symbols and letters can be engraved to match specific requirements and further enhance the look of a product.



*Flymark, suitable for use in a percussion or pneumatic press custom engraved to your specification.*



## Percussion Presses

**An extensive range of compact hand operated and powered percussion presses robust enough for the toughest workshop environments. Designed with the operator in mind, these presses are easy and safe to operate with high productivity yet low initial cost.**

Bench mounted stand alone machines and modules suitable for fitting into automated production lines and machines available to suit a wide range of industrial applications.

All machines are precision engineered with low maintenance needs, supplied complete with a comprehensive 12 Months Parts and Labour Warranty and operating manual.

An ideal solution for fixed and serial number applications to achieve consistent quality marks on a variety of different shaped components.

Interchangeable Steel Type, Numberers and custom marking dies can all be used in the presses which may also be used for certain bending, fixing and forming operations.

**Hand Operated Percussion Presses** are tough and portable and therefore can be used anywhere in the factory and, as these are manually operated machines, guarding is not legally required in most countries.

The machine has a large worktable with tee slots to enable easy fitting of workholding fixtures

Marking is achieved by compressing and releasing a spring loaded ram; spring compression (and therefore marking load) can be easily and quickly adjusted.

Hand Operated Machines come complete with 3 varying strength load springs plus, hexagon keys and spanners.

Three models available 0-600kgs, 0-3000Kgs and 0-6000Kgs



Manual Numberer

Holder Body

Automatic Numbering head

Hand Operated Percussion Press

The chart below shows the combination of characters size and number of wheels that are available for assembly using standard frames and standard style 0-9 wheels

Character Size		Number of wheels											
mm	inch	2	3	4	5	6	7	8	9	10	11	12	
2.0	5/64"	•	•	•	•	•	•	•	•	•	•	•	
2.5	3/32"	•	•	•	•	•	•	•	•	•	•	•	
3.0	1/8"	•	•	•	•	•	•	•	•	•	•		
4.0	5/32"	•	•	•	•	•	•	•	•	•			
5.0	3/16"	•	•	•	•	•	•						
6.0	1/4"	•	•	•	•	•							

**Please note** – the information is for guidance only, suitability for use will depend on the material being marked

### General Guide - Marking capacity chart (indented figures)

Material / Character Height	Marking Load		
	0 - 600 Kgs	0 - 3000Kgs	0 - 6000Kgs
Aluminium	Maximum number of characters		
1.5mm	10	48	96
2.0mm	7	36	72
2.5mm	6	28	57
3.0mm	5	24	48
5.0mm	3	14	29
Mild Steel	Maximum number of characters		
1.5mm	4	12	24
2.0mm	3	9	18
2.5mm	2	7	14
3.0mm	1	6	12
5.0mm	-	3	7

The above maxima are based on an average depth of 0.1mm in a bright finish. More characters can be marked if less depth is acceptable  
**NOTE** Figures are for guidance only- PRYOR® will be pleased to offer specific recommendations on Press capacity once full details of application are received.



Percussion Presses

**Pneumatically Powered Bench Presses** are similar in design to the Hand Operated Press and work on the same principles but with the addition of an air cylinder to actuate the ram.

Supplied with a foot actuation pedal and some pipework, simply attach to an on site air supply or compressor.

Pneumatically Powered Presses come complete with 3 varying strength load springs plus, hexagon keys and spanners.

Detachable hand lever also gives the option of manual operation if required.

Actuation by foot pedal makes these less physically demanding on the operator compared to a Hand Operated Press.

Three models available 0-600kgs, 0-3000Kgs and 0-6000Kgs

**Powered Integrator Presses** are compact and versatile and the ideal solution for fitting into automated production lines and machines

The **PF** flange mounting design has the benefit of a removable hand lever for manual operation if required plus the air cylinder to actuate the ram.

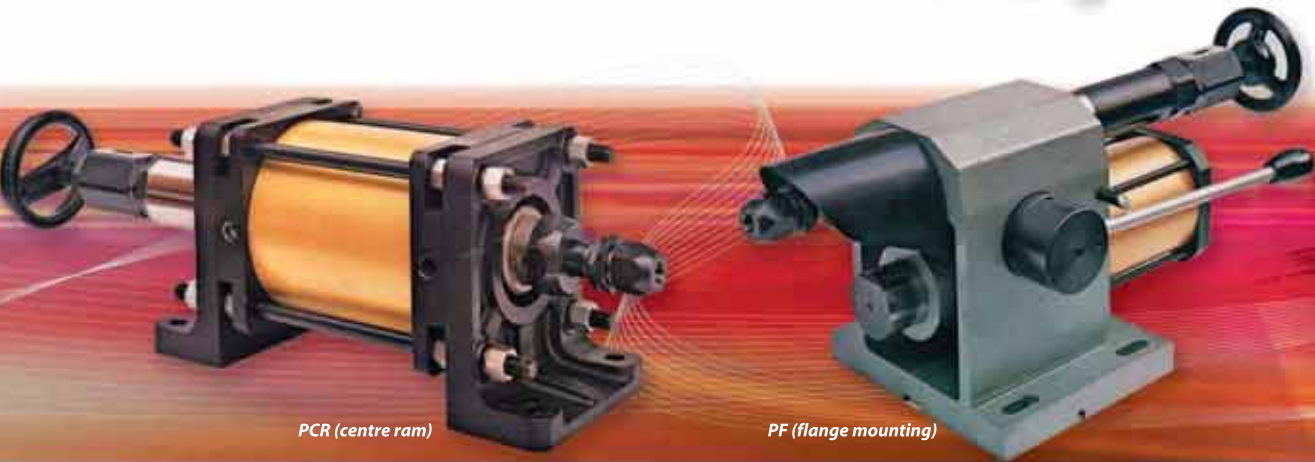
The **PCR** centre ram design consists of a co-axial module and provides maximum power in the smallest space.

Three models available 0-600kgs, 0-3000Kgs and 0-6000Kgs.



Marking load adjusted by compressing or releasing the load spring

Pneumatically Powered Press



PCR (centre ram)

PF (flange mounting)

**Hydro-Pneumatic Presses** are compact and powerful delivering loads up to 25,000Kgs. The perfect solution for marking multi-character line inscriptions in one stroke or deeper marking of tough or rough surface components.

Hydro-Pneumatic Presses are versatile and can operate in the normal upright position, or horizontally, or at any angle between these two positions.

The cylinder and head with air service unit, can also be removed and used as a remotely activated module on an automatic production line.

The marking load is easily adjusted by regulating the air supply.

Three models available 4000kgs, 10,000Kgs and 25,000Kgs

PRYOR® have the design skills and manufacturing capabilities to produce tooling for these machines including

- Standard fixed guards
- Pull down guards to actuate the machine cycle
- Push/ Pull slides to transfer workpiece in and out of guarded area
- Auto feed fixtures to transfer vertically stacked workpieces one at a time to marking fixture and then eject by chute
- Actuation by push button, pedal valve or roller operated valve
- Remote operation by pneumatic pilot valve or electrical solenoid
- Workpiece counting including automatic shut-off on completion of batch

Design to Order Presses

Although PRYOR® has a comprehensive range of standard machinery to suit most applications, if one of these standard products does not fulfil your requirements, on-site mechanical and electronics engineers will work in partnership with you to produce and commission a system to suit your specification.

Press Marking Dies

PRYOR® has the expertise to manufacture custom dies with complex and intricate inscriptions to suit various press machinery and holders.



Press Marking Dies  
PRYOR® has the expertise to manufacture custom dies with complex and intricate inscriptions to suit various press machinery and holders



General Guide - Marking capacity chart (indented figures)

Material / Character Height	Marking Load		
	0 - 600 Kgs	0 - 3000Kgs	0 - 6000Kgs
Aluminium		Maximum number of characters	
1.5mm	10	48	96
2.0mm	7	36	72
2.5mm	6	28	57
3.0mm	5	24	48
5.0mm	3	14	29
Mild Steel		Maximum number of characters	
1.5mm	4	12	24
2.0mm	3	9	18
2.5mm	2	7	14
3.0mm	1	6	12
5.0mm	-	3	7

These Table maxima are based on an average depth of 0.1mm in a bright finish. More characters can be marked if less depth is acceptable  
**NOTE** Figures are for guidance only- PRYOR® will be pleased to offer specific recommendations on Press capacity once full details of application are received.

General Guide - Marking capacity chart (indented figures)

Material / Character Height	Marking Load		
	4000 Kgs	10,000Kgs	25,000Kgs
Soft Aluminium		Maximum number of characters	
1.5mm	80	200	500
2.5mm	48	120	300
3.0mm	40	100	250
5.0mm	24	60	150
Bright Mild Steel		Maximum number of characters	
1.5mm	20	50	125
2.5mm	12	30	75
3.0mm	10	25	62
5.0mm	6	15	37
18/8 Stainless Steel		Maximum number of characters	
1.5mm	10	25	62
2.5mm	6	15	37
3.0mm	5	12	31
5.0mm	3	7	18