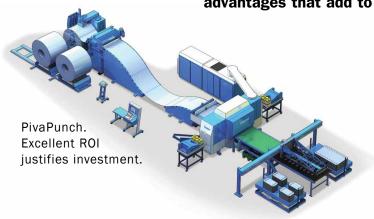


# Pivatic Punching Centers utilize coil for automated manufacturing at high speed.

Simple set up, exceptional manufacturing speed and substantially lowered material costs are just some advantages that add to the bottom line.

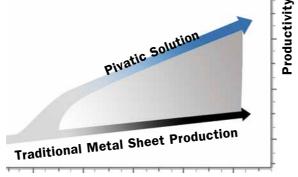




# PivaPunch. Punched parts, made straight from coil with minimum handling, create a leap in productivity for both small and large manufacturers.

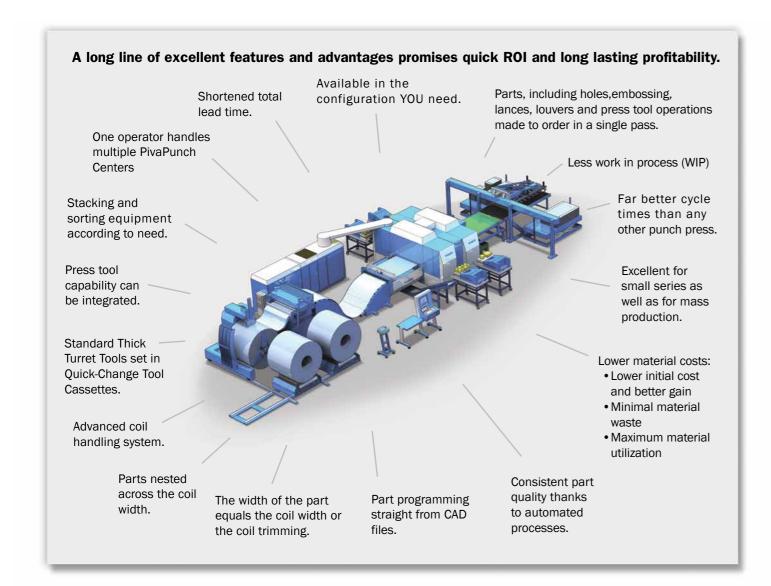
PivaPunch is the most efficient and versatile coil punch on the market.

Smaller manufacturers will find it useful to be able to run smaller product series back-to-back or nested together fully automatically. Larger manufacturers will find PivaPunch's better cycle times more profitable. PivaPunch is non-operator dependent, making it possible to run 24/7 with minimal assistance.



#### Time

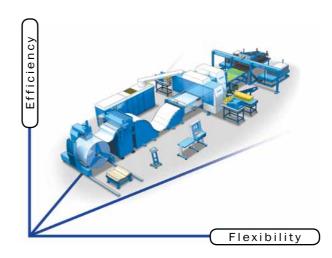
PivaPunch increases productivity more than any other punching method.





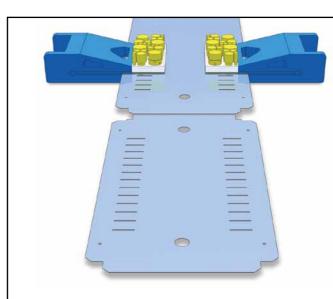
#### Industries that use PivaSystems:

Office Furniture, Heating & Ventilation, Air Conditioning, Domestic Appliances, Shelving, Lighting Fixtures, Electronics, Vehicle, Accessories, Telecommunications, Subcontracting, Enclosures



#### PivaPunch is more efficient than any other punching method because it makes parts, including press tool operations, made to order in a single pass.

PivaPunch is more **efficient** than any other punching method because it works straight from coil fully automatically. PivaPunch is more **flexible** than other punch methods because it uses an advanced and freely programmable CNC coil punch system.



#### PivaPunch benefits:

- 100% of time is actual punching
- No tool change time all tools active
- Double Tool Punch Feature, two holes or corners of a symmetrical pattern punched at the same time
- Strip fed from hit-to-hit non-stop
- No loading time with continuous coil feeding
- Stacking of punched blanks during punching time
- No dead punching zones

#### PivaPunch and PivaBend Centers.

Fully automated Bending Line can be integrated with Pivatic Punching Center.

This makes it possible to produce finished parts straight from coil automatically and at a high production speed.



2.

#### The strength behind PivaPunch is in the combination of

#### a simple machine layout and it's advanced technology.

the x-axis. Punching stations

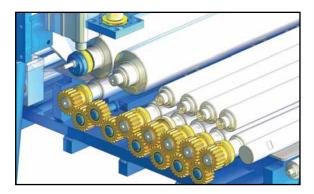
#### Pivatic Punching Center for Coils in basic configuration includes:

- Coil handling equipment is selected per customer's need.
- Punching station TT capable of punching, nibbling, embossing and cut-to-length (more about the various stations on the next spread).
- Automated stacking equipment configured to customer's need. A stacker makes it possible to run PivaPunch unattended.

#### Coil handling systems for various applications.

PivaPunch can be configured with various decoil options enabling different levels of speed and automation.

- The decoiler picks up the coil from a stand.
- Two coil cars for fast coil change.
- Multi-station coil storage for long independent production.

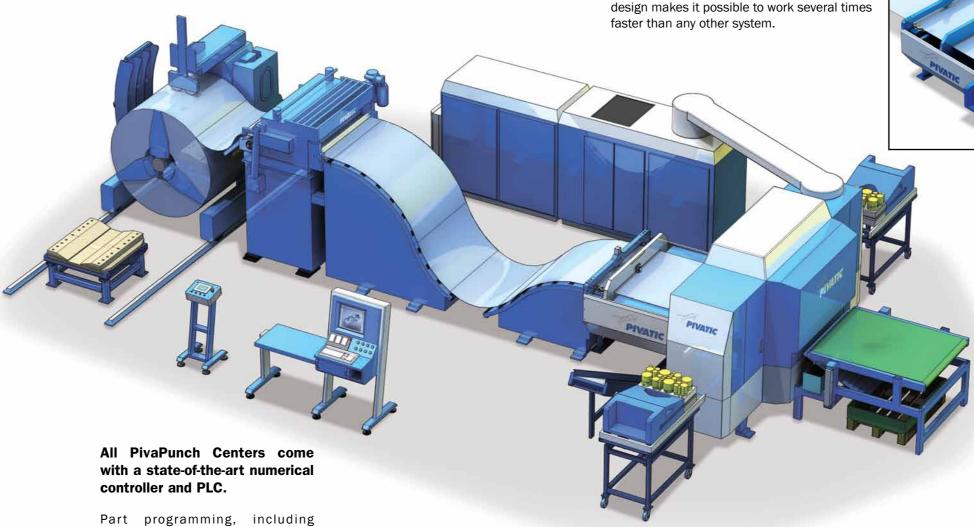


#### Coil tension is eliminated in a straightener.

- Thoroughly calculated and tested roll diameter - distanced for optimum results
- · Upper part adjusted as a block on entry and exit sides
- · All straightening rolls are supported
- · Drive on all lower rolls for smooth running
- · A breaker roll increases deformation and improves results
- Manual or motorized adjustments of the rolls
- Opens for convenient maintenance









#### PivaPunch cassette configuration offers many advantages.

At the heart of PivaPunch is a simple tool cassette.

Rather than being built to rotate and move great distances between each

punch, the tool cassettes are built to move as little as possible. It moves only

in the Y-axis over the sheet metal. The sheet metal, in its turn, moves only in

Punching power is transmitted from the ram plate through striker pins driven by tool selectors to a tool in each tool cassette consecutively or at the same time when punching symmetrical patterns.

Pivatic's patented technology offers high hit rate, DTP (Double Tool Punch), two-tool-hit at the same time for symmetrical hole patterns, and programmable stroke and attachments for a variety of tool cassettes.

PivaPunch utilizes standard Thick Turret Tools that are available from suppliers world wide.



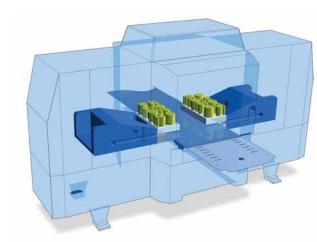
from CAD files.

nesting option, is carried out

using PivaCam software straight

### PivaPunch offers a variety of Quick-Change Tool Cassettes for each type of punching station.

All tools in the tool cassettes are active at all times. When a project needs a separate set of tools, these tools are set-up in another cassette which takes only a few minutes to change. Pivatic offers an expanded line of tool cassettes and special tools.



#### PivaPunch concept allows for extremely short cycle times while keeping precise tolerances.

The tool cassettes come in a variety of configurations making PivaPunch versatile and efficient for both simple and complex projects. As we proceed, you can see the most common tool cassette configurations.

#### Stations A to F (.5" to 6" diameter) Thick Turret Tools can be set in the tool cassettes.

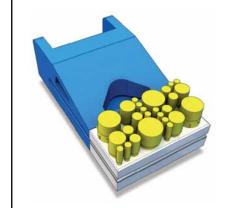
The configuration of the tool cassettes determines what kind of tools the punching station can use and what kind of jobs it is capable of executing.

Color Code	Diameter up to								
•	Α	Ø 0.500"	Ø 12.7 mm						
0	В	Ø 1.250"	Ø 31.8 mm						
0	С	Ø 2.000"	Ø 50.8 mm						
	D	Ø 3.500"	Ø 88.9 mm						
	Ε	Ø 4.500"	Ø 114.3 mm						
	F	Ø 6.000"	Ø 152.4 mm						

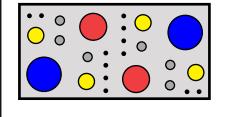
#### Tool cassettes for punching stations TT & TTi

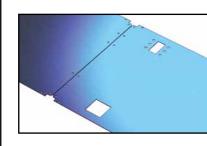
PivaPunch Centers are versatile because the Quick-Change Tool Cassettes are made for:

- Greater number of tools
- Tools of different sizes
- Fixed tools
- Auto-indexed tools



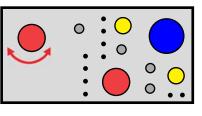
Tool Cassette TT is configured for 26 fixed tools: 12 A, 6 B, 4 C, 2 D and 2 E 1 auto-indexing tool:

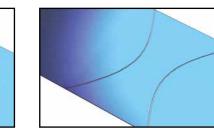


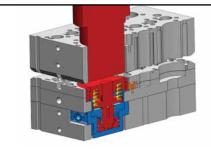




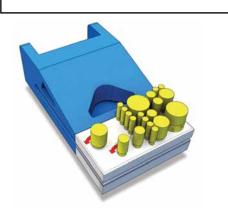
Tool Cassette TTi is configured for 18 fixed tools and 10 A, 4 B, 2 C, 1 D and 1 E fixed stations and 1 indexing D station.





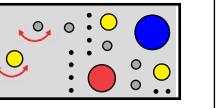


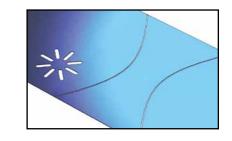
PivaPunch up-stroking tool stations allow for embossing without causing any damage to the surface of the part.Between hits, the embossing tool lays below the surface.



Tool cassette TTii is configured for 18 fixed tools and 2 autoindexing tools:

10 A, 4B, 2C, 1D and 1E fixed and 1 indexing B and C station.

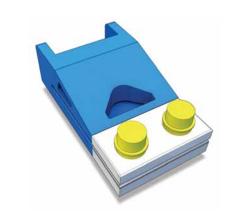




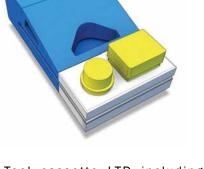
#### Tool cassettes for punching station LT (Large Thick Turret Tools for CNC punching)

PivaPunch LT punching offer the capability of large standard tools and dedicated tools for CNC punching:

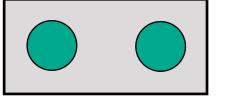
- Corner notching, standard hole patterns
- Trimming of strip to run more from the same coil
- Slitting of parts nested beside each other

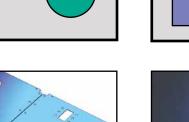


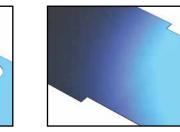
Tool cassette LTT for versatile jobs including 2 F-Station tools.



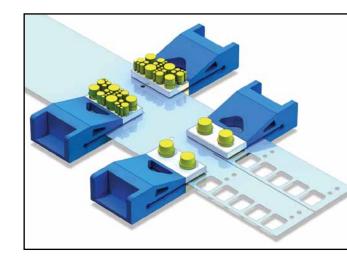
Tool cassette LTD including 1 F-station tool and 1 dedicated tool up to 200\*225 mm (7.87 \* 8.85"), gap 225 mm (8.85").





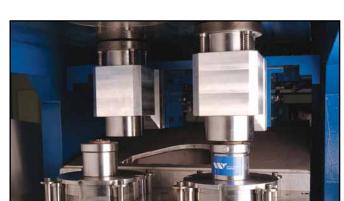


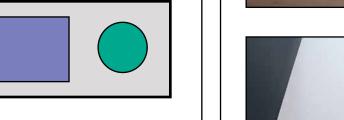
#### The combination of two punching stations placed in a row increases both versatility and production speed for more complex projects.



#### **Combination of TT station and LT station offers large Thick Turret Tool capacity:**

- CNC punched parts, hole groups, embossings, slitting
- CNC Coil Punch also for large tools up to 6" diameter • Thick Turret type and dedicated tooling for trimming
- and notching



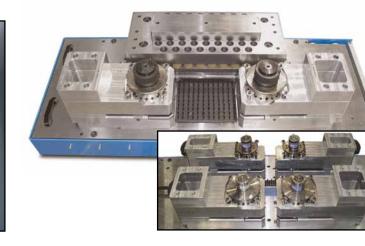




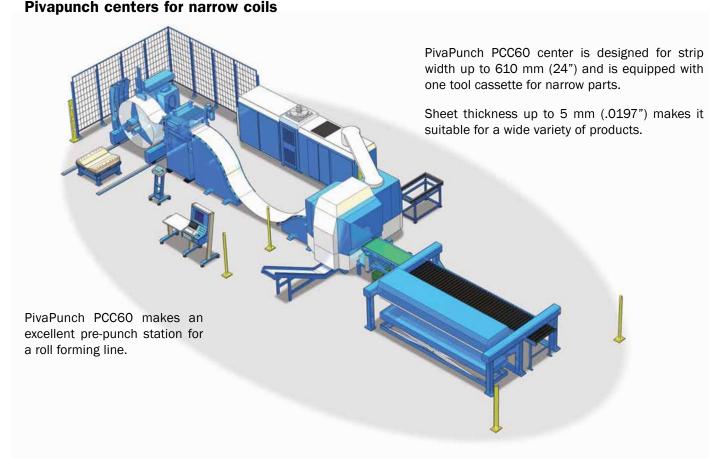


- CNC punched parts, perforation, large cut-outs
- CNC coil punch and press tool capabilities
- Cycle times affected by tooling selection





## PivaPunch PCC60 Pivapunch centers for narrow coils



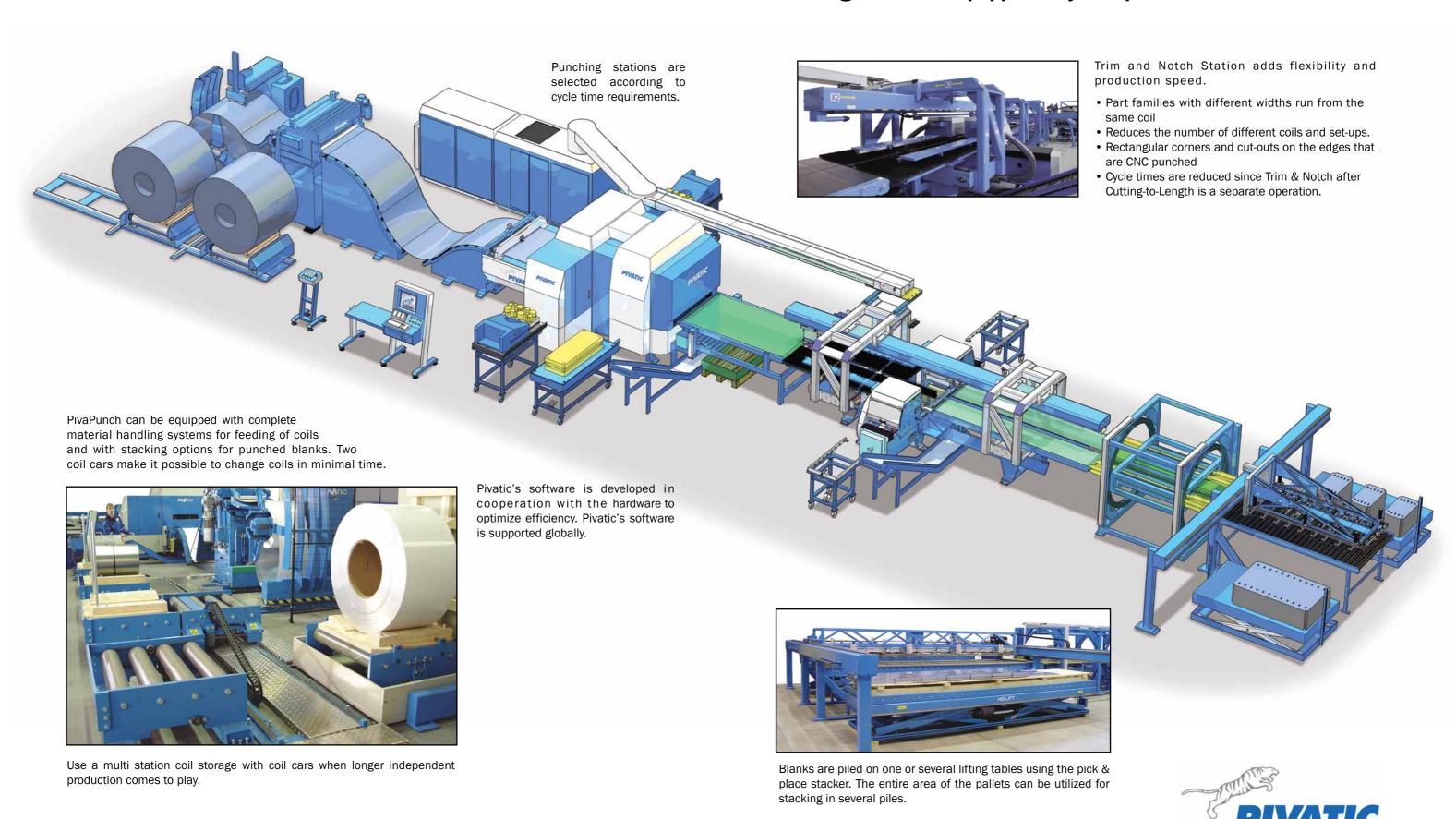
#### **PivaPunch Specifications**

Туре	Strip Width		heet ckness		Punching Stations Available					Stacker	
									Trim &	Standard Blank	
	mm	Inches	mm	inches	Type TT	Type TTi	Type LT	Type HT	Notch	Lengths	
										mm	inches
PCC60	60610mm	2.3624 inches	0,52	.019078	One Tool Cassettes	One Tool Cassettes				2250, 3000, 5000mm	89, 118, 197 inches
			0,55	.019196	One Tool Cassettes	One Tool Cassettes				2250, 3000, 5000mm	89, 118, 197 inches
PCC60	60610mm	2.3624 inches	0,52	.019078	Two Tool Cassettes	Two Tool Cassettes	Х	Х	Х	2250, 3000, 5000mm	89, 118, 197 inches
			0,55	.019196	Two Tool Cassettes	Two Tool Cassettes	Х	Х		2250, 3000, 5000mm	89, 118, 197 inches
PCC80	60815mm	2.3632 inches	0,52	.019078	Two Tool Cassettes	Two Tool Cassettes	Х	X	X	2250, 3000, 5000mm	89, 118, 197 inches
			0,54	.019157	Two Tool Cassettes	Two Tool Cassettes	Х	X		2250, 3000, 5000mm	89, 118, 197 inches
PCC100	601016mm	2.3640 inches	0,52	.019078	Two Tool Cassettes	Two Tool Cassettes	Х	X	Х	2250, 3000, 5000mm	89, 118, 197 inches
			0,54	.019157	Two Tool Cassettes	Two Tool Cassettes	Х	X		2250, 3000, 5000mm	89, 118, 197 inches
PCC125	601250mm	2.3649 inches	0,52	.019078	Two Tool Cassettes	Two Tool Cassettes	Х	X	Х	2250, 3000, 5000mm	89, 118, 197 inches
			0,53,5	.019137	Two Tool Cassettes	Two Tool Cassettes	Х	Х		2250, 3000, 5000mm	89, 118, 197 inches
PCC150	601525mm	2.3660 inches	0,52	.019078	Two Tool Cassettes	Two Tool Cassettes	Х	Х	Х	2250, 3000, 5000mm	89, 118, 197 inches
			0,53	.019118	Two Tool Cassettes	Two Tool Cassettes	Х	Х		2250, 3000, 5000mm	89, 118, 197 inches
Sheet Thickness (Material strength 400 N/mm <sup>2</sup> )											



## PivaPunch – The most efficient and versatile Coil Punch customized to your needs.

Your PivaPunch can be delivered either in the basic configuration or equipped to your special needs.



10.

Flexible Sheetmetal Solutions

## Pivatic empowers productivity in sheet metal fabrication.

Pivatic is a global provider of high-end solutions for sheet metal manufacturers. We base our service and solutions on more than 100 years of being on the forefront of the metal forming industry. Our solutions are at the top of today's industry and give our customers a leap in productivity that leads to a healthy return on their investments. Pivatic is a pioneer in manufacturing solutions based on coil.



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