



NX FULCRUM

冲床 - punching machines
装卸系统 - loading/unloading system



LAG-RAINER SRL

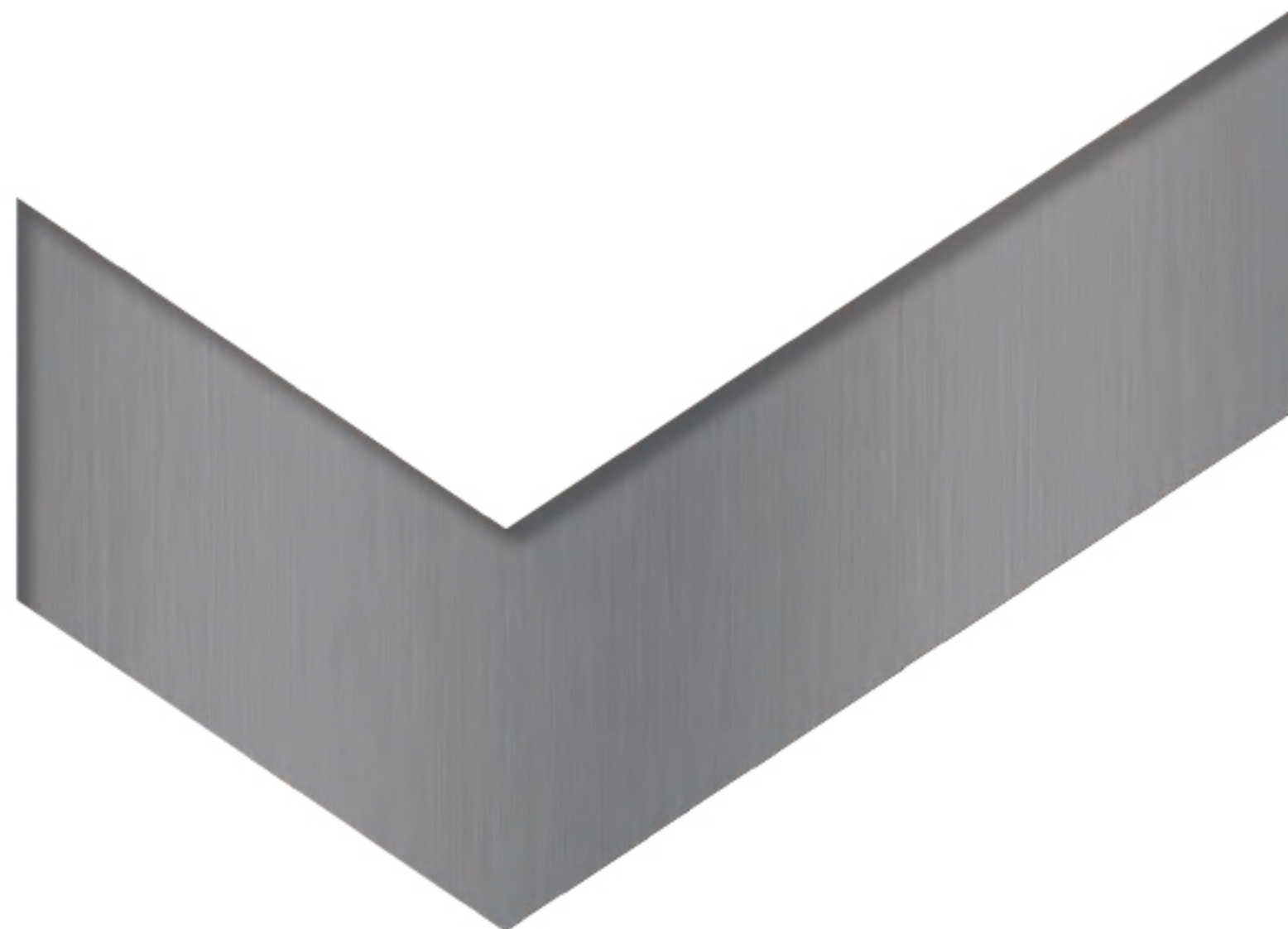
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采用雷诺技术的冲床系统使之成为高精度、高速度和高可靠性特点的伺服轴。

就是由于这些特点，雷诺技术的冲床中心在金属板处理市场的众多机器中脱颖而出，得到公认。

雷诺技术的可靠性是建立在使用的各个部件高质量、优秀设计以及组装简单化基础之上的，该系统采用高功率扭矩电机来启动。

With the RAINER technology the Punching System has become an electrical axis with high characteristics of accuracy, speed and reliability.

Thanks to these characteristics RAINER punch press centers are confirmed among the more interesting machines on the sheet metal working market.

The reliability of RAINER technology is based on the quality of the components used, on the brilliant design and simplicity of assembly; the system is activated by high power torque motor.



NX

RAINER

高速度

高效率

高可靠性

降低能源消耗

环境清洁

**Speed, productivity, reliability,
low consumption and
respect for the environment**



偏心转塔系统，可配置、几何结构控制装置

Orbital system, configurable, geometry controlled unit

拥有先进理念的模块化转塔完全可以进行配置。事实上，为了充分满足终端用户的需要和要求，也可以对其进行个性化配置。

由于再加工，偏心转塔系统大大缩短了机器的停机时间。转塔采用偏心安装并且模具转塔比冲床转塔要大；这样可以直接接触模具，以做出变化并使操作员工作更简易。

方便检查模具的锋利度并降低工具方向发生错误的可能性。

几何结构控制型转塔配置带有四个支架，确保了冲床和模具精确对准。

The modular turret of advanced concept is totally configurable. In fact it is possible to personalize it in order to fully satisfy the needs and requirements of the end user.

The ORBITAL SYSTEM drastically reduces the machine down-time due to the retooling.

The turrets are eccentrically mounted and the die turret is larger than the punch one; this allows direct access to the dies to change and make the operator's job easier.

The check of the dies' sharpness is facilitated and the possibilities of error in the tools' orientation are reduced.

The exclusive Geometry controlled turret configuration with four supports assures the perfect punch and die alignment.

数控系统

CNC control

与世界上最先进的数控设备生产商的合作使之开发出极其先进的雷诺冲床加工中心软件以及加工周期的管理软件。用户界面简单、完整。

数控可以使用网络卡获得并且已预设为“电子诊断”。

The cooperation with the best numerical controls' producers have led the development of an extremely advanced software for the management of RAINER punch press centres and machining cycles. The user interface is simple and complete.

The numerical control is available with a network card and it is preset for the "telediagnosis".

The machine can be integrated in the user's network and it is present for remote access.



编程软件

Programming software

编程软件LAG-RAINER CAM是一种高级的模块式及可扩展软件，有多种配置。

用户界面、编程简易及可配置性是Rainer-CAM最特别、最受赏识的特点。当然，Rainer-CAM的主要优势和特点则是“筑巢”；筑巢采用交互式，作为一个几何结构进行管理并且与机器序列无关。

因为所有可用轮坯均可用于筑巢，所以对于每项工作来说，都有降低碎屑比例的可能性。

可以在不同轮坯尺寸中确定优先选择及改变不同零部件的方向进行冲孔。

LAG-RAINER CAM的开放式、模块化结构具有一大优点，即购买机器时不一定勉强终端用户定义软件；事实上，必要时，该软件可轻松升级。

The programming software LAG-RAINER CAM is an advanced modular and expandable software, available in different configurations.

The user interface, the ease of programming and configurability are the most peculiar and appreciated characteristic of the LAG-RAINER CAM.

The main advantage and characteristic of LAG-RAINER CAM is certainly the "nesting"; the nesting is interactive, managed as a geometry and it is not related to the machine sequence.

For each job it is possible to reduce the percentage of scrap because all the blanks available can be used for the nesting. It is possible to define priorities among different blank sizes to choose from and change the orientation of the different parts to punch.

The open and modular structure of the LAG-RAINER CAM has the great advantage not to necessarily force the end user to the definition of the software when the machine is purchased, the software can in fact be easily upgraded when necessary.



FULCRUM L

Fulcrum-L是零部件卸载、安装和选择的模块化系统。零件卸载可以在X和Y方向进行优化。

Fulcrum-L有许多不同的配置并且具有良好的性能和灵活性。

FULCRUM LF

Fulcrum-LF是通过简单、合理及符合人体工程学方法实现加工操作自动化的超紧凑系统。同时，特别是该系统具有极紧凑的布局。

FULCRUM RS

Fulcrum-RS是解决最苛刻自动化要求的方案。零部件可通过机器人进行实际卸载、嵌套和堆垛，而无任何限制。Fulcrum-RS是当今现有的最先进的自动化系统。

FULCRUM LX

Fulcrum-LX自动化系统可以配备所有Rainer技术冲床中心。

Fulcrum-LX的紧凑型、模块化结构可以根据终端用户的要求以非常具有竞争力的价格使该系统具有个性。使用板材二次堆垛的自动装载可以进一步增加其装载能力。以这种方式，也可以对不同尺寸和材料的板材进行操作。同时，塔形刀库（TOWER MAGAZINE）可以向该系统增加更多空间来执行工作，无任何限制；甚至可获得一个完整系列的塔形刀库。

FULCRUM L

The Fulcrum L is a modular system for loading, unloading and selection of parts. The parts unloading can be optimized in both the X and Y directions. The Fulcrum L is available in many different configurations and it is quite performing and flexible.

FULCRUM LF

The Fulcrum LF is an ultra compact system to automate the machining operations with simple, rational and ergonomic approach. And, above all, with an incredibly compact layout.

FULCRUM RS

The Fulcrum RS is the solution for the most demanding requests of automation. The parts are unloaded nested and stacked practically without any limitations by means of a robot. The Fulcrum RS is the most advanced automation system available today.

FULCRUM LX

The automation system Fulcrum LX may equip all RAINER punch press centres. The compact and modular structure of Fulcrum LX allows to personalize the system according to the requirements of the end user at a very competitive price. The loading capacity may be furtherly increased with the automatic loading of a second stack of sheets. In this way it is possible to run jobs also with sheets of different size and material. Also, the Tower Magazine can add further capacity to the system to run jobs without any limitation; a complete range of tower magazine is needed available.

技术参数

Technical details

		NX-1	NX-2	NX-3
工作范围	毫米	2452x1310	2452x1564	3048x1564
电冲压力	千牛	200	300	300
最大板材速度	米/	108	108	215
最大冲压/步冲速度	冲程/每分钟	430/870	430/870	500/900
转塔类型		偏心系统	偏心系统	偏心系统
转塔站	数量	16-18个	16-18个	18个
转塔上最大工具数量		72 (60 自动旋转工位)	72 (60 自动旋转工位)	72 (60 自动旋转工位)
索引站D/E类型	数量	6个	6个	6个
攻丝站	数量	0-4个	0-4个	0-4个
轴插补		X-Y-C-Z	X-Y-C-Z	X-Y-C-Z
板材箱体		内部	前面	前面
双Y轴系统		-	选项	标准
板材夹具	数量	2-3个自动装置	2-3个自动装置	2-3个自动装置
数控系统		B&R CNC 系统	B&R CNC 系统	B&R CNC 系统
X轴直线电机		-	-	有
能耗	千瓦时	5	8	8

