

ITALIAN MACHINE TOOLS, ROBOTICS & AUTOMATION INDUSTRY ~ NEWS

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PIATTAFORMA INDIA PROJECT

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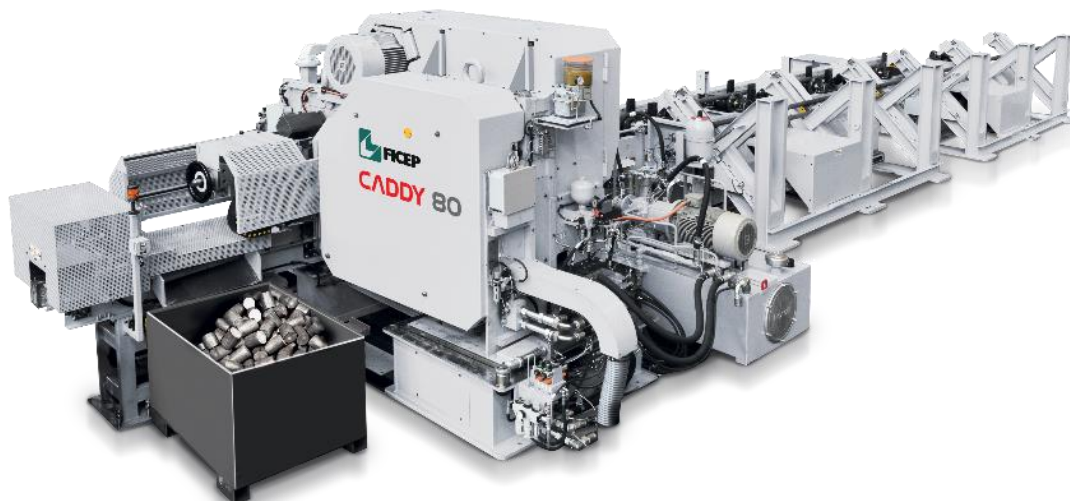
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FICEP CADDY: THE RANGE OF HIGH-PRODUCTIVITY MECHANICAL BILLET SHEARS FOR CUSTOMERS WHO NEED TO GET PERFECT PARTS IN WEIGHT AND SIZE

CADDY range of mechanical shears is the most efficient solution for producing perfectly cut parts, fully automatically, from the bar bundle to the selection and unloading of billets.

The ability of this range of machines to meet the needs of the industries it is aimed at - **automotive, petrochemical, aerospace, earthmoving and others** - comes from our deep-rooted experience, gained over nearly a century in the forging and stamping industry: we are, in fact, able to offer all the technologies necessary for the development of a complete line, from bar cutting - with the ultra-performance shears for hot, semi-hot and cold cutting of round and square bars in different sizes and materials, or with the range of high-speed disc saws - to the different lines of presses for forging.



CADDY range of mechanical horizontal slide shears can cut any type of material and, within the forging and stamping production cycle, is placed at the head of the process bringing a high contribution in terms of efficiency in the most varied fields of application, meeting the needs of:

- **high productivity:** up to 120 cuts per minute
- **cutting quality:** best quality in terms of parallelism, flatness, roughness or absence of burrs
- **precision of the finished part in terms of weight and dimensions:** maximum precision with less billet waste
- **production cost optimization:** state-of-the-art technology for the lowest cost per cut
- **shop space optimization:** no foundation required
- **safe and healthy working environment:** fully automatic systems with minimum operator effort

In many industrial areas of application of the various technologies proposed by FICEP, the quality of the cut is one of the main drivers guiding production choices: **obtaining perfectly cut parts, while limiting the deformation of the cut part to a minimum, is a priority.** CADDY's design and engineering go right to this end.

In fact, CADDY mechanical shear has a unique design that can **minimize distortion of the bar being processed and keep the volume of the cut piece constant.** The shearing blades are made and mounted to conform to the outer diameter of the bar and minimize roll, during the shearing process. The dual traction roller system with end bar detection by encoder allows bar stability during cutting, facilitating the operation of the blades. CADDY is designed with a horizontal slide that allows the effective cutting plane to be adjusted so that it remains perpendicular to the longitudinal axis of the bar being processed: the shear, in fact, can be rotated on its vertical axis with a suitable inclination to compensate for blade clearance and any rake angle, allowing cut surfaces to be obtained with superior quality. This provides a perfectly orthogonal cut with respect to the longitudinal plane of the bar and greater uniformity of the sheared end.

The possibility of integrating the **laser detection station for bar tolerances** before the cutting operation, guarantees an additional upgrade in cutting accuracy, which is highly appreciated where production standards are very demanding. Also in the case of high production standards, especially in connection with the cutting of critical materials with very high hardness, the system for preheating the bars, which enables crack-free cutting, is particularly suitable.

On the outfeed side of the blades, the self-positioning hydraulic gauge device, together with the hold-down, keep the bar in a straight position and eliminate rolling during cutting, further reducing bar distortion.

The mechanical action of the shear - unlike pneumatic or hydraulic drives - can ensure a high rate of productivity (up to 120 cuts per minute) while maintaining a constant, high quality of cut.



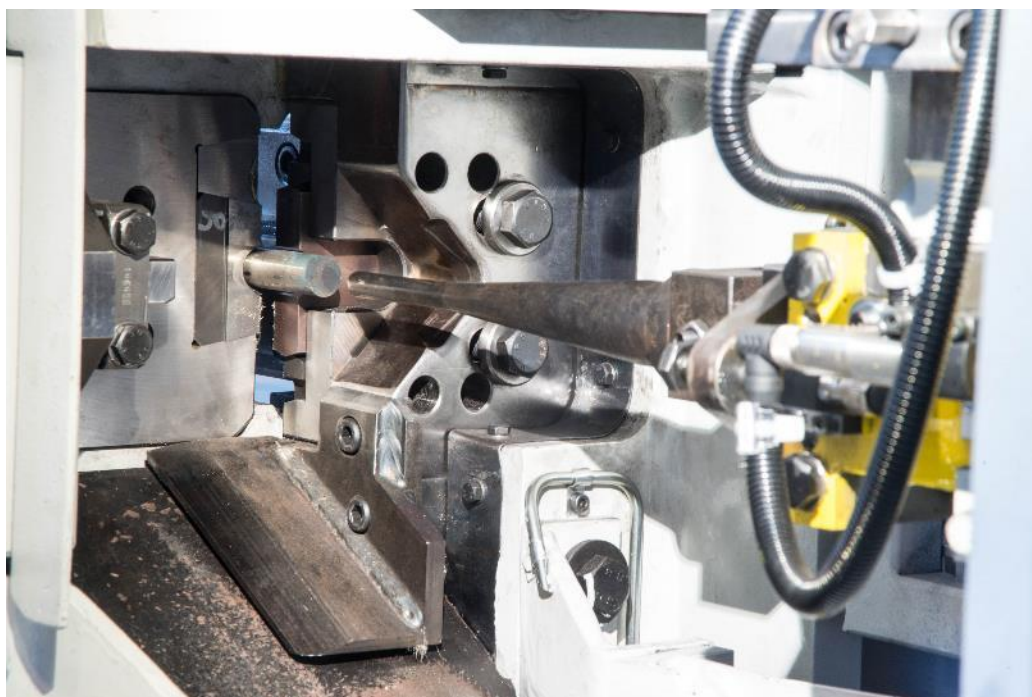
The line's boost in automation contributes to the productivity of the processing cycle: for example, the automatic system that separates head and tail sections from finished parts rules out any manual sorting intervention by the operator. Meanwhile, the automatic loading table for rounds and squares feeds the conveyor belt to maintain continuous operation and eliminate any loss of productivity. To complement the automatic bar loader, FICEP proposes to combine both automatic magazines and AGV shuttles for laser-guided transfer of bar bundles from the steel stock to the machine table. The integration of all these highly automated solutions enables the company to offer increasingly high-performance and efficient cutting lines.

An interesting optional feature, which is increasingly in demand, is the **automatic weighing system**: after the pieces are cut, a conveyor belt with built-in scales performs a check of the actual weight of each piece, continuously recording the measured values; depending on production requirements, the cutting length can be automatically adjusted to keep the weight of the pieces within the tolerances set by the operator. The unloading belt with multiple outlets for the selection of different weight classes, in conjunction with the non-stop automatic changeover device of the part collection bins and the function of optimizing the filling of the bins, extremely efficiently automate the unloading of parts, destined for the subsequent forging and stamping stages.

Many other optional can be integrated to make the technology even more performant, such as, for example, oversized benches to increase the autonomy of unmanned use, bar pre-heating system, bar washing stations, magnetic unloading devices for long parts, etc.

Finally, the HMI with which CADDY is managed allows simple and highly intuitive use of the production by the operator: the great attention that FICEP pays to the integration of its systems means that the different machines can communicate and exchange data. This continuous flow of information is available and usable through dedicated video pages that allow shop managers to calibrate production and optimize it according to different needs.

Discover more about our CADDY series on <https://ficepgroup.com/en/products/caddy/>



FICEP company profile

FICEP is the world's leading machine tool manufacturer for the fabrication of structural steel and forging industry, with an experience of over 9 decades. Our extensive and innovative product range and its aggressive penetration of the world market has been achieved by the creation of many subsidiaries all over the world.

Located next to the Alps in Varese, Italy, we have specialized production facilities. The main location in Gazzada Schianno, which comprises over 100.000 sqm, also contains Headquarters, R&D, Academy of Technology, Showroom and the main after sales service departments.

Our mission is to satisfy the demand of machinery and systems for the high quality processing of metal profiles in the most profitable markets on a global basis, promoting the Ficep brand and trademark with prestige. Our wide range of machinery fully satisfies always more demanding requests and cover all needs in the structural steel and fabrication industry.

Find out more on <https://ficepgroup.com/en/>



The project Piattaforma India has been promoted by UCIMU – Association of Italian Machine Tools Manufacturers and AMAPLAST – Italian Plastics and Rubber Processing Machinery and Moulds Manufacturers Association. The two associations agreed on the idea that promoting a network of associations and entrepreneurs who have developed knowledge and experience on the Indian market, can be useful in favoring of new paths of development for business. The Indian companies who are interested to form JV, cooperation, technical tie up, purchase machinery etc from/with Italian companies can contact below mentioned address for any assistance:

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